To the Accreditation Council of the Eurasian Centre for Accreditation and Quality Assurance in Education and Health Care 05/17/2024

# **REPORT**

OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE EVALUATION OF THE EDUCATIONAL PROGRAMME ME

"'7R01112 NEUROLOGY (ADULT, CHILDREN'S)"

OF THE NON-COMMERCIAL JOINT-STOCK COMPANY "MEDICAL UNIVERSITY OF KARAGANDA" FOR COMPLIANCE WITH THE STANDARDS FOR ACCREDITATION OF POSTGRADUATE EDUCATION PROGRAMMES (RESIDENCE SPECIALTIES) OF MEDICAL EDUCATIONAL ORGANIZATIONS

period of external expert evaluation: 05/15-17/2024. 2024

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# LIST OF DESIGNATIONS AND ABBREVIATIONS

Abbreviation	Designation
AMEE	An international association for medical education
CBL	Cased – based learning
ECTS	European Credit Transfer System
GPA	Grade point average
PBL	Problem-based learning
RBL	Research-based learning
TBL	Team-based learning
PhD	Doctor of Philosophy
SWOT	Strengths, weaknesses, opportunities, threats
AIS	Automated information system
AC	Academic committee
AP	Academic policy
AMP	Administrative and managerial staff
WFME	World Federation for Medical Education
EEC	External expert commission
SCES	State compulsory education standard
DAA	Department of academic affairs
DHRM	Department of human resources management
USHEM	Unified system of higher education management
UPHE	Unified platform of higher education
ECAQA	Eurasian centre for accreditation and quality assurance in education and
	health care
FCC	Final certification commission
End-of-course	End-of-course assessment
assessment	
IT	Information technology
IEP	Individual educational plan
IWP	Individual work plan
EC	Elective component
CIS	Control and measuring tools
IMIS	Integrated medical information system
QACS	Quality assurance commission Schools
KOP	Committee of educational programmes
CED	Catalogue of elective disciplines
MOH RK	Ministry of Health of the Republic of Kazakhstan
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
LEA	Local executive authority
MEO	Medical education organization
MES RK	Ministry of Education and Science of the Republic of Kazakhstan
MTB	Material and technical base
IAAR	Independent accreditation agency and rating
NJSC "MUK"	Non-profit joint-stock company "Medical University of Karaganda"
RW	Research work
CME	Continuous medical education
LSI	Laws and Statutory Instruments
CPD	Continuous professional development

CERD	
STP	Scientific and technical programs
NCIE	National centre for independent examination
RCCH	Regional children's clinical hospital
RCH	Regional clinical hospital
EP	Educational programme
AAR	Assessment of admission rating
OSCE	Objective structured clinical examination
MD	Major disciplines
PC	Profile competence
PHC	Primary health care
Academic staff	Academic staff
RSCI	Russian scientific citation index
RK	Republic of Kazakhstan
LO	Learning outcome
WC	Working curriculum
Mass media	Mass media
SSS	Student support service
IWR	Independent work of residents
IWRT	Independent work of residents with teachers
PMS	Employee performance management system
TVET	Technical and vocational education
TC	Typical curriculum
EMC	Educational and methodological complex
CSET	Center for Simulation and Educational Technologies
SR and PD	School of Residency and Professional Development
EC	Expert Council

# 1. Composition of the External Expert Commission

In accordance with the order of the ECAQA No. 15 dated 02.05.2024, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external evaluation of the educational programme of residency in the specialty "7R01112 Neurology (Adult, Children's)" in the period from 15 to 17.05.2024, consisting of the following members:

No.	Status in the EEC	Full name	Academic degree/title, position, place of work/place of study, year, specialty
1	Chairman	Zhanalina Bakhyt	Doctor of Medical Sciences/Associate
1	Chairman	Sekerbekovna	Professor, Professor of the Department of
		Sekerbekovila	Surgical and Paediatric Dentistry of the
			West Kazakhstan Medical University
			named after Marat Ospanov.
2	International	Nasyrov Ruslan	Doctor of Medical Sciences, Professor,
2	Expert	Abdullaevich	Vice-Rector for Research, Head of the
	Expert	Abdullacvich	Department of Pathological Anatomy with
			a Course in Forensic Medicine of the St.
			Petersburg State Paediatric Medical
			University of the Ministry of Health of the
			Russian Federation, Member of the New
			York Academy of Sciences.
3.	International	Troinich Yana	Vice-Rector for Educational and Training
<i>J</i> .	Expert	Nikolaevna	Affairs of the Armenian-Russian
	Lapert	TVIKOIaeviia	International University "Mkhitar Gosh",
			Translator of Medical Literature -
			Logosfera Publishing House.
4.	Academic Expert	Zhumalina Akmaral	Doctor of Medical Sciences, Professor,
7.	Academic Expert	Kanashevna	Head of the Department of Paediatric
		Kanashevna	Diseases with Neonatology of the West
			Kazakhstan Medical University named
			after Marat Ospanov.
5.	Academic Expert	Madyarov Valentin	Doctor of Medical Sciences, Head of the
] 3.	7 teadenne Expert	Manarbekovich	Department of Surgery with a Course in
		Wianar bekovien	Anaesthesiology and Resuscitation of the
			Kazakhstan-Russian Medical University.
6.	Academic Expert	Nugmanova Aigul	Doctor of Medical Sciences, Head of the
0.	7 teadenne Expert	Maratovna	Department of Paediatrics with the Course
		Williamoviia	of CID NJSC "Kazakh-Russian Medical
			University".
7.	Academic Expert	Apbasova Saulesh	Candidate of Medical Sciences, Assistant
'.		Akhatovna	of the Department of Pathological
			Anatomy and Forensic Medicine named
			after Professor Yu.V. Pruglo of the NJSC
			"Semey Medical University".
8.	Academic Expert	Yesetova Gulstan	Candidate of Medical Sciences, Head of
.		Utegenovna	the Department of Pulmonology of the
		,	NJSC "Kazakh National Medical
			University named after S.D.
			Asfendiyarov".
9.	Academic Expert	Sadykova Ainur	Candidate of Medical Sciences, Associate

10		Maralovna	Professor of the Department of Infectious and Tropical Diseases of the NJSC "Kazakh National Medical University named after S.D. Asfendiyarov".
10.	Academic Expert	Tuksanbaeva Gulfariza Usenbaevna	Candidate of Medical Sciences, Associate Professor, Acting Professor of the Department of Neurology, Psychiatry, Rehabilitation and Neurosurgery of the "South Kazakhstan Medical Academy".
11.	Academic Expert	Iztleuov Yerbolat Maratovich	Candidate of Medical Sciences, Head of the Department of Radiology of the NJSC "West Kazakhstan named after Marat Ospanov Medical University", internal auditor of the management service.
12.	Academic Expert	Pak Laura Alekseevna	MD, PhD, Associate Professor, Head of the Department of Clinical Oncology and Nuclear Medicine of the NJSC "Semey Medical University".
13.	Academic Expert	Kamhen Vitaly Bronislavovich	PhD, Associate Professor, Associate Professor of the Department of "Health Policy and Organization" of the NJSC "Al- Farabi Kazakh National University".
14.	Employer Expert	Daniyarova Bayan Lashinovna	Deputy Director for Strategic Development of the MSE "Regional Clinical Hospital" of the Health Department of the Karaganda Region.
15.	Student Expert	Dyusembek Nazira Askerbekkyzy	Second-year resident in the specialty "Neurology for Adults, Children" of the NJSC "Astana Medical University".
16.	ECAQA Observer	Umarova Makpal Aldibekovna	Head of the Accreditation and Monitoring Department of the NI "Eurasian Centre for Accreditation and Quality Assurance in Education and Health Care".

The EEC report includes a description of the results and the conclusion of the external evaluation of the educational programme "7R01112 Neurology (Adult, Children's)" version 2 EP 7R01112 "Neurology for Adults, Children" in accordance with the amendments to the State Compulsory Educational Standards, based on the order of the Ministry of Health of the Republic of Kazakhstan dated July 4, 2022 No RK MOH - 63 "On approval of state mandatory standards for levels of education in the field of health care" for compliance with the Standards for Accreditation of postgraduate education programmes (residency specialties) of medical educational organizations and conclusions (hereinafter referred to as the Standards for Accreditation), recommendations of the EEC for further improvement of approaches and conditions for the implementation of the abovementioned educational programme and recommendations for accreditation for the Accreditation Council of the ECAQA for accreditation.

### 2. General part of the final report

2.1 Presentation of the educational programme of residency in the specialty "7R01112 Neurology (adult, children's)"

Name of the organization, legal form	Non-profit Joint-Stock Company	"Medical University of	.
of ownership, BIN	Karaganda", BIN: 190140033600		

Management body	Sole shareholder - Ministry of Health of the Republic of
	Kazakhstan, Management body - Board of Directors,
	executive body - Management Board
Full name of the first director	Turmukhambetova Anar Akylbekovna, Chairman of the
	Management Board - Rector
Date of establishment	The University was founded in 1950.
	RSE on the REM "Karaganda State Medical University"
	was reorganized into NJSC "Medical University of
	Karaganda" on the basis of order No. 82 of the Ministry of
	Finance of the Republic of Kazakhstan dated 01/25/2019
Location and contact details	Republic of Kazakhstan, Karaganda region, Karaganda, st.
	Gogolya, 40, 100008
State license for educational	License for educational activities No. KZ32LAA00016018
activities in residency (date, number)	dated 06.05.2019
Year of commencement of the	Start year - 2019
implementation of the accredited	Total number of graduates since the beginning of the
educational programme (EP)	residency programs - 60
Duration of training	2 years
Number of residents in the current	1 course - 30 residents, 2 course - 22 residents
academic year	
Quality indicators in residency	Number of residents in the programme "Neurology for
	adults, children" expelled over a period of 5 years - 19
	people, including for academic failure - 0 people.
	Employment rate, % in dynamics over 5 years:
	2019 - 0% 0 (there were no graduates)
	2020 0% 0 (there were no graduates)
	2021 - 100%
	2022 100%
	2023 – 100%
Full-time teachers/part-time workers	Total number of teachers – 15 people, including full-time –
involved in the implementation of	4 people, part-time (clinical mentors) – 11 people.
the EP, incl. % of Sedateness	
	Sedateness, % - 12.5%
	Categorization, % - 75%

## 2.2 Information about previous accreditation

In 2019, the educational programme in the residency specialty 6R111500 "Neuropathology, including paediatric" was accredited by the NI "Independent Agency for Accreditation and Rating" (hereinafter referred to as IAAR) and has an accreditation certificate AB No. 2588, the validity period of the accreditation certificate: 06/14/2019-06/13/2024. (https://muk.qmu.kz/ru/muk-official/korporatinnoe-upraylenie/)

# 2.3 Brief description of the results of the analysis of the self-assessment report of the educational residency programme in the specialty "7R01112 Neurology (adult, children's)" and conclusions on the completeness

The self-assessment report of the educational residency programme in the specialty "Neurology (adult, children's)" (hereinafter referred to as the report) is presented on 108 pages of the main text,

annexes on \_\_13\_\_\_pages, copies or electronic versions of 29\_documents located at the link\_(https://muk.qmu.kz/ru/ob-universitete/).

The report is characterized by completeness of answers to all 9 main standards for accreditation and criteria, structured taking into account the recommendations of the Guidelines for conducting self-assessment of the educational programme provided to the educational organization by the accreditation centre - ECAQA, as well as internal unity of information. Attached to the report is a cover letter signed by the rector Turmukhambetova Anar Akylbekovna, which confirms the reliability of the quantitative information and data included in the self-assessment report.

Self-assessment of the educational programme "Neurology (adult, children's)" was carried out on the basis of order No. 396 dated October 17, 2023 "On approval of the composition of the working group for conducting self-assessment of educational programmes". All standards provide the University's actual practice of training residents in the specialty "Neurology (Adult, Children's)" taking into account the start of student admission in 2024, substantiated data, examples of the implementation of the educational programme objectives, national and international events, methodological support, confirming compliance with the requirements of standards for accreditation.

The description in the self-assessment report is quite complete and updated in terms of the number of residents, teachers, administration, information on selection and admission, training results, knowledge and skills assessment results, the material and technical base of the university and clinical sites, contractual obligations with partners (universities, associations, bases), financial information, development and improvement plans.

The report is submitted to the ECAQA in its completed form, with data adjustments based on the above recommendations, written in literate language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, the tables contain links in the text and are numbered continuously.

### 3. Description of the external expert evaluation

The external expert work within the framework of the evaluation of the educational programme "7R01112 Neurology (adult, children's)" was organized in accordance with the Guidelines for the external evaluation of educational organizations and educational programmes of the ECAQA / Dates of the visit to the organization: May 15-17, 2024. The sequence of the visit over 3 days is presented in detail in Annex 3 to this report.

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

- interviews with management and administrative staff 33 people;
  - interviews with residents 47 people; study of the website <a href="https://muk.qmu.kz/ru/ob-universitete/">https://muk.qmu.kz/ru/ob-universitete/</a>;
- interviews 35 teachers, employers 17, graduates 24;
- questionnaires of teachers, master's students and residents 53, 9 and 39, respectively;
- observation of training of residents: visited the Regional Children's Clinical Hospital: practical lesson for 1st year residents, group: 8-002 Nev (Russian), on the subject of "Outpatient and polyclinic neurology", teacher clinical mentor is Bagdavadze T.M. neurologist of the highest category, MSE "Regional Children's Clinical Hospital";
- practical lesson for 1st year residents, group: 8-002 Nev (polylanguage), on the subject of "Outpatient and polyclinic neurology", teacher clinical mentor is Grodnikova O.V. neurologist, head of the department for young children with CNS lesions of the MSE "Regional Children's Clinical Hospital";
- practical lesson for 1st year residents Group: 8-001 Nev (Kazakh) on the subject "Outpatient and polyclinic neurology", teacher clinical mentor is Tlemisova D.S. neurologist of the highest category, head of the neurology department of the MSE "Regional Children's Clinical Hospital";

- visited the MSE on the REM "Multidisciplinary Hospital named after prof. Kh.Zh. Makazhan":
- practical lesson for 2nd year residents, group 9-002 Nev (Russian) on the subject "Visualization methods of research in neurology", teacher clinical mentor is Mazurchak M.D.
- neuropathologist of the highest category, head of the neuro-stroke service of the KGP "Multidisciplinary Hospital named after prof. Kh.Zh. Makazhan";
- Practical lesson for 2nd year residents, group 9-003 Nev (Russian) on the subject "Visualization methods of research in neurology", teacher clinical mentor is Shuptar S.A., neurologist of the highest category, head of the neurology department of the MSE "Multidisciplinary hospital named after Professor Kh.Zh. Makazhan";
- Practical lesson for 2nd year residents, group 9-001 Nev (Kazakh) on the subject "Visualization methods of research in neurology", teacher clinical mentor is Kozha L.M., neurologist of the stroke department of the MSE "Multidisciplinary hospital named after Professor Kh.Zh. Makazhan";
- Review of resources in the context of fulfilling standards for accreditation: a total of 7 clinical sites, of which 3 practice/clinical engagement sites were visited, including the MSE on the REM "Multidisciplinary hospital named after Professor Kh.Zh. Makazhanova", MSE "Regional Clinical Hospital" of the Health Department of the Karaganda Region, MSE "Regional Children's Clinical Hospital" of the Health Department of the Karaganda Region, where training is conducted under the educational programme "Neurology (Adult, Children's)" with the participation of 4 full-time teachers / 11 part-time workers;
- study of educational and methodological documents in the amount of 39 units, both before the visit to the organization and during the visit to the departments (the list of documents studied in **Annex 2**).

The staff of the accredited organization ensured the presence of all persons specified in the visit program and in the lists of interview sites and interviews (Table 1).

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

No.	Position	Quantity
1.	Members of the Board	3
2.	Heads of structural divisions	11
3.	School deans	2
4.	Heads of educational programmes	11
5.	Members of the Academic Committee of the Senate, the School Quality Assurance Commission for educational programmes (Master's program, residency)	6
6.	Teachers	35
7.	Students	47
8.	Employers	17
9.	Graduates	24
	Total	156

On the last day of the visit to the organization, a meeting of the EEC members was held on the results of the external evaluation. A final discussion of the results of the external evaluation of the educational programme, examination of documents, interview results, and questionnaires was held. The EEC members began drafting the final report of the EEC. Generalizations of the external evaluation results were made. The experts individually filled out the "Quality Profile and Criteria for External Evaluation of the Educational Programme "Neurology (Adult, Children's)" for compliance with the ECAQA Standards for Accreditation." The EEC members did not make any comments. Recommendations for improving the educational programme were discussed and the chairperson,

B.S. Zhanalina, held a final open vote on the recommendations for the ECAQA Accreditation Council.

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 the University's corporate culture, the high degree of openness of the team in providing information to the ECAQA members.

When conducting a survey of residents, 88.89% rated the work of the External Expert Commission for Accreditation as positive, 11.11% as satisfactory. The majority of respondents (100%) believe that it is necessary to accredit an educational organization or educational programme s.

According to 78.57% of teachers, the survey conducted by the ECAQA is useful for developing recommendations for improving key areas of activity of the accredited educational organization.

At the end of the visit, the chairman of the EEC announced recommendations for the management and employees of the educational organization based on the results of the external evaluation as part of the specialized accreditation.

# 4. Analysis of compliance with standards for accreditation based on the results of the external evaluation of the residency educational programme in the specialty "7R01112 Neurology (adult, children's)"

Further, evidence of implementation and compliance with standards and substandards is presented, as well as deficiencies identified during the external evaluation, a conclusion on compliance with standards for accreditation and recommendations for improving the quality of the educational programme.

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

#### 1.1 Mission Statement

The mission of the educational programme "Neurology for adults and children" is aimed at training highly qualified specialists who are able to meet the needs of society in providing medical care to patients with a neurological profile, apply and develop advanced innovative technologies in medicine, science and practice, use the achievements of information and communication technologies, improve the health of the population, specialists must be ready to adapt to changing conditions of the healthcare system at the level of the state and the world community, continue learning throughout life, and contribute to the development of society.

In the implementation of the program activities, namely, based on the results of interviews with the first head of the organization, members of the advisory body (Board of Directors), Managing Director, Vice-Rector for Academic Affairs, Vice-Rector for Strategic Development and International Cooperation, Vice-Rector for Scientific and Clinical Affairs 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 programme, took part in the formation of proposals for formulating the mission, while the mission was communicated to potential residents through the website, social networks, information letters to medical organizations. The strategic plan of the organization for 5 years, 2024-2028, was reviewed, including such areas as educational, clinical and research, which confirms the fulfilment of the standard for accreditation and demonstrates the goals, objectives and prospects of the organization. From interviews with residents it was established that before classes start, teachers inform about the mission, work plans of the educational organization, tell where to get the necessary information about the educational programme, teachers, training bases.

During the visit to the departments of the educational organization of the NJSC "MUK", experts noted the strengths of the educational organization in relation to the accredited educational programme. In the NJSC "MUK", there are departments that are directly related to the educational programme "Neurology (adult, children)", which can be noted as the best practice in education,

namely, there is a close connection between the Department of Neurology, Psychiatry and Rehabilitation with practical health care with (health care institutions) medical institutions of the city and the region (7) in the form of clinical bases and the presence of 11 clinical mentors, as well as 100% employment of graduates - residents, which corresponds to the mission of the EP "Neurology for adults, children".

In 2022, the EP "Neurology for adults, children" was updated, during which the mission of the EP was again discussed at a meeting of the Council of the School of Residency and Professional Development with the participation of employers and students (minutes No. 11 of July 7, 2022), subsequently approved at a meeting of the Quality Assurance Commission of the School of Residency and Professional Development (hereinafter referred to as the QACS) (minutes No. 3 of July 5, 2022), and approved by the decision of the Board of NJSC "MUK" (minutes No. 16 of July 13, 2022), included in the list of educational programmes of NJSC "MUK" meeting of the Board of Directors (minutes No. 37 of May 27, 2022).

The results of the documentation study demonstrate that the mission of the NJSC "MUK" and the mission of the educational programme "Neurology for adults, children" is aimed at training highly qualified specialists who are able to meet the needs of society in providing medical care to patients with a neurological profile, and the educational process is built in accordance with the State Educational Standard and current LSI in postgraduate education and healthcare.

NJSC "MUK" conducts training of residents in the following clinical bases and departments:

- 1. MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh. Makazhanova", stroke department;
  - 2. MSE "Regional Clinical Hospital" of the Healthcare Department of the Karaganda Region, neurology department;
  - 3. MSE "Regional Children's Clinical Hospital" of the Healthcare Department of the Karaganda Region, department for young children with CNS damage;
  - 4. MSE on the REM "Shakhtinsk City Hospital" Health Department of the Karaganda Region, Karaganda Region, Shakhtinsk, neurological department;
  - 5. MSE on the REM "Temirtau City Multidisciplinary Hospital", Temirtau, neurological department;
  - 6. Limited Liability Partnership "Neurorehabilitation Center "Luch";
  - 7. Limited Liability Partnership "Epi-Lab", Karaganda, Amanzholova Street, 3,

where a patient-oriented approach is provided through patient supervision, consultations, duty shifts in departments and from the standpoint of evidence-based medicine, including appropriate and effective measures aimed at the treatment and prevention of diseases. NJSC "MUK" pays due attention to the safety and autonomy of patients by monitoring and training residents with clinical mentors from practical health care and academic mentors from the full-time staff of the Department of Neurology, Psychiatry and Rehabilitation.

Experts have established that residents have appropriate working conditions to support their own health, since the educational organization and clinical bases have conditions for residents to rest in their free time, take hot meals, and work with literature. Residents comply with the sanitary and epidemiological regime, both on the territory of the University and at the clinical bases. If necessary, residents can contact the medical centre on the territory of the University. There are recreation centres in Topar and Karkaralinsk. Cooperation with clinical bases is also ensured, which carry out organizational and technical measures for the safety and labour protection of students, provide them with the personal protective equipment necessary for work. Before starting work, residents undergo instruction and sign a familiarization sheet on safety precautions. To work at clinical sites, residents issue and maintain personal medical records, in accordance with the order of the Ministry of Health of the Republic of Kazakhstan dated November 16, 2020 No RK MOH-196 "On approval of the Rules for issuing, recording and maintaining personal medical records".

Such basic competencies of residents in the accredited specialty as clinical skills, communications, professionalism, regulatory knowledge, research, personal and professional

development, as well as special competencies that include clinical skills, professionalism, teamwork, personal and professional development, help the educational organization to apply innovative forms of training. In the EP "Neurology for adults, children", modern educational teaching methods (CBL, work in small groups, RBL, interdisciplinary training with discussion of clinical cases) and assessments are actively used, and innovative teaching technologies are being introduced. Innovative technologies used in training are aimed at expanding and deepening competencies and achieving the final learning outcomes of the EP. Innovative technologies such as CBL, interdisciplinary training with discussion of clinical cases allows the resident to act as a practicing physician, a specialist physician of the relevant profile with an interdisciplinary approach. The introduction of an interdisciplinary council contributes to the acquisition and deepening of teamwork skills. By carrying out scientific projects (RBL), residents develop the skills of a researcher, medical expert, manager. This will allow residents to develop such skills and qualities as making clinical decisions on diagnostics and treatment in various clinical situations by residents and taking into account individual preferences, needs and wishes of patients.

The educational organization encourages residents to strive to participate in research in the chosen specialty through the study and analysis of scientific material, best practices, international recommendations for diagnostics and treatment (PubMed, Elsiver, Cochrane Library, Clinical Trials), the implementation of scientific projects, presentations and posters, published research results in peer-reviewed journals, conference proceedings indexed by Scopus, RSCI, CCES, and also ensures the participation of residents in such academic events as national and international scientific and practical conferences, forums.

# 1.2 Professionalism and professional autonomy

Experts have determined that the formation of professionalism includes the acquisition of competencies in the educational process, which ensures the ability to demonstrate the qualities necessary to maintain continuous personal and professional growth, continuous improvement of patient care based on continuous self-assessment and lifelong learning, as well as commitment to the performance of professional duties, compliance with ethical principles and the use of the most effective methods to ensure a high level of safety and quality of medical care. The educational organization promotes the professional autonomy of residents by providing them with the opportunity to participate in the organization of the specialty curriculum during direct discussion and approval of the EP, at the level of developing the IEP and elective disciplines at meetings of the Council of the SR and PD.

The experts have established that NJSC "MUK" fully exercises autonomy in relation to the selection of residents for the accredited specialties (According to the order of the Ministry of Health of the Republic of Kazakhstan "On approval of the rules for placing a state order, admission to training and training of medical personnel in residency" dated December 15, 2020 No RK MOH-270/2020 (https://adilet.zan.kz/rus/docs/V2000021802), educational organizations in accordance with subparagraph 6) of paragraph 2 of Article 43-1 of the Law of the Republic of Kazakhstan dated July 27, 2007 "On Education) determine the admission procedure, form, exam program and (or) a passing score of at least 75 points for applicants, taking into account the specifics of training specialties), development of an educational programme, determination of approaches to assessing residents (Regulations on the management of the educational programme of NJSC "MUK" dated 09. 09. 2020. Protocol No. 14), since the assessment of residents' achievements is carried out by various forms of control, which are determined by the university independently. Responsible employees demonstrated to the experts a document defining the requirements for teachers of the residency program (Residency Regulations of NJSC "MUK" dated "23" August 2022. Protocol No. 18). Employment of residents is regulated and carried out through the portal of the Electronic Labour Exchange (https://www.enbek.kz), which is a single digital platform for employment, providing opportunities for job search and assistance in personnel selection. Annual monitoring of graduate employment at the places of distribution is carried out by the head of the EP, Schools together with the Commission for personal distribution of graduates/young specialists, JSC "Financial Centre" of the Ministry of Education and Science of the Republic of Kazakhstan, city and regional health departments, as well as employers, and the indicator is 100% (using other specialties as an example: EP "Neurology for adults, children").

To verify Standard 1, a meeting was held with the head of the organization, Anar Akylbekovna Turmukhambetova. During the conversation, the experts asked the following questions: which stakeholders participate in the discussion of the EP mission; how is the academic freedom of residents manifested; is the university autonomous in formulating the mission, etc. During the answers, the director of the organization confirmed that the university is autonomous in formulating the mission, internal and external stakeholders take an active part in discussing the mission, and residents have great opportunities and conditions for engaging in scientific research. According to the Academic Policy of NJSC "MUK" (approved by the Senate of Directors on August 31, 2023, Protocol No. 1), the university has autonomy and, in accordance with the license for the right to conduct educational activities within the framework of groups of educational programme s according to the classifier of training areas, develops EPs based on the current State Compulsory Educational Standards and TC. The EPs are developed in accordance with the National Qualifications Framework, professional standards, Dublin descriptors and the European Qualifications Framework. The EPs are developed based on the principles, methodology and procedure for developing modular training, in which the effectiveness of learning outcomes is achieved by adhering to an integrated approach, when both the EPs themselves and the curricula and academic disciplines are formed according to the modular principle.

At the stage of developing the EP, it is agreed upon with the representatives of the employer (medical organizations or other) in the field of training students in this area of training to take into account the opinions and wishes of the future employer. The EP "Neurology for adults, children" was agreed upon with the chief neurologist of the Karaganda region, head of the stroke department of the MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh. Makazhanova" M.D. Mazurchak and the chief freelance paediatric neurologist of the Karaganda region, the department of paediatric neurology of the MSE "Regional Children's Clinical Hospital" D.S. Tlemisova. (https://drive.google.com/drive/folders/1d8M37LKFUbEy52lcxQPFa2ceMvJXY ng?usp=drive link). The quality assessment of the EP project is carried out by the QACS of the SR and PD, if the quality assessment is positive, the draft educational programme is discussed at the Council of SR and PD with the participation of students and employers (https://drive.google.com/file/d/17F7\_J-mrCGVdWEqzcXNdvZ1CupOcRxlA/view?usp=drive\_link).

The academic freedom of residents is manifested in the opportunity to participate in the organization of the curriculum of the specialty during the direct discussion and approval of the EP, at the level of developing the IEP and elective disciplines at the meetings of the Council of the SR and PD, where they are regularly invited to meetings of advisory bodies and take part in the discussion of issues in the context of this specialty and is provided by the organization of education through such mechanisms as proposals and recommendations of students are necessarily taken into account by members of the advisory bodies and are taken into account when forming the final decision of the meeting. The decisive right in approving candidates from among residents for the School Council and the Senate is held by the employees of the SR and PD and is described in the document "Internal Students" Rules for of **NJSC** "MUK" (https://www.qmu.edu.kz/media/qmudoc/AcademPolitika.pdf) and the agreement for the provision of educational services, which is concluded with each student upon enrolment in the residency. Residency students are regularly invited to meetings of advisory bodies and take part in the discussion of issues in the context of this specialty. Suggestions and recommendations of students are necessarily taken into account by members of the advisory bodies and are taken into account when forming the final **decision of the meeting**. In this case, the determining criterion is the academic performance and active life position of the resident. Resident-neurologist Abishev Adil, taking into account positive personal characteristics, excellent academic performance, is a member of the Council of the SR and PD (https://cloud.mail.ru/public/ShDa/JVxAeRo9k).

At the request of medical organizations and taking into account the wishes of residents, an onsite residency is organized, the procedure for organizing which is determined by the Regulation on the residency of NJSC "MUK" (<a href="https://cloud.mail.ru/public/QKZ7/RMAeGTB5K">https://cloud.mail.ru/public/QKZ7/RMAeGTB5K</a>). Residents, at their own discretion, choose the areas of research activities, scientific and practical events (conferences, congresses, forums, etc., journals) for the presentation and publication of the results of research activities. All of the above types of work are carried out by residents under the supervision of the head of the EP.

While conducting a survey of 39 residents (on the resource <a href="https://webanketa.com/">https://webanketa.com/</a>), out of 22 questions, a number were devoted to the quality of the educational process and the educational programme. It was found that 89.74% of residents would recommend studying in this educational organization to their acquaintances, friends, and relatives. And 97.44% of respondents believe that the heads of the educational programme and teachers are aware of the problems of students related to training. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", 97.44% of residents answered positively, 2.56% are not sure about this, 0% could not yet answer this question and 0% would like to believe it.

The 25 teachers surveyed (21 questions in the questionnaire) also responded that 80% are satisfied with the organization of work and the workplace in this educational organization, and 20% partially agree with this statement. The experts determined that the organization has a healthy microclimate, since the manager is quite accessible to both residents and employees, responds promptly to requests and resolves any issues. According to 88%, in the educational organization, a teacher has the opportunity to realize himself as a professional in his specialty. For your information, a total of 25 people responded, while teaching experience up to 10 years - 16%, over 10 years - 84%.

# 1.3 Final learning outcomes

The final learning outcomes are defined and included in the document of the educational programme in the specialty "Neurology for adults, children", which was developed on the basis of the State Compulsory Educational Standard of the Republic of Kazakhstan for residency, the Order of the Minister of Health of the Republic of Kazakhstan No RK MOH-63 dated 04.07.2022 "On approval of state compulsory educational standards at all levels of education" and approved at a meeting of the department on 13.03.2022. Informing stakeholders about the final learning outcomes of residents in the specialty "Neurology for adults, children" is carried out through oral discussion at an extended meeting of the department, by surveying external stakeholders. The experts were convinced that the professional behaviour and communication skills of residents are formed through the development of professional competencies by the resident and are reflected in the corresponding document of the educational programme in the specialty "Neurology for adults, children".

The learning outcomes of the educational programme "Neurology for adults, children" are posted in the register of educational programmes of the UAHE of the Republic of Kazakhstan (<a href="https://epvo.kz/register/education\_program/application/31217">https://epvo.kz/register/education\_program/application/31217</a>) and are available to the general public, as well as to all interested parties in the healthcare and education sectors.

Teachers and residents are informed about the code of ethics. You can familiarize yourself with the content of the code of ethics at the <u>Code of Academic Integrity of NJSC "MUK"</u> (Academic <u>Policy of NJSC "MUK"</u>, approved by the decision of the Senate on August 31, 2023, protocol No. 1), the <u>Code of Business Ethics of NJSC "MUK"</u> (decision of the Board of Directors dated August 24, 2019, protocol No. 4).

While determining the final learning outcomes, the DAA employees took into account the previous learning outcomes in the bachelor's degree and internship, and also took into account the goals and objectives of subsequent continuous professional development in the chosen specialty. The educational organization provides training in additional and non-formal education (continuous professional development), including programs in the specialty of the accredited educational programme. For example, programs have been developed and implemented on the topics: "Demyelinating and neurodegenerative diseases of the central nervous system" 180 hours, "Modern

aspects in diagnostics and tactics of management of autoimmune diseases of the nervous system" 120 hours, "Methods of traditional medicine in vertobrology" 180 hours, Modern methods of medical rehabilitation for the consequences of ACVA, "Autoimmune diseases of the nervous system: multiple sclerosis, myasthenia, autoimmune encephalitis polyneuropathy. Issues of diagnostics and treatment", are lasting 120-216 hours.

The surveyed teachers answered that 64% are fully satisfied with the level of previous training of residents, and 32% are partially satisfied.

The experts 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 33 programs of additional education, including for the specialty "Neurology for Adults, Children". Residents are informed about this.

99% of the teachers-respondents believe that students of this educational organization have a high level of knowledge and practical skills after completing the training program, and 1% partially agree with this.

# 1.4 Participation in formulating the mission and final outcomes

In developing the goals and objectives of the educational programme "Neurology for Adults, Children", residents, employers, administrative and managerial personnel, Academic staff, external stakeholders (chief neurologist of the Karaganda region, head of the stroke department of the MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh. Makazhanova" M.D. Mazurchak and chief paediatric neurologist of the Karaganda region, head of the paediatric neurology department of the MSE "Regional Children's Clinical Hospital" D.S. Tlemisova), as well as the Council of the SR and PD, were involved in the development of the goals and objectives of the educational programme "Neurology for Adults, Children", are invited to meetings of the departments, which is confirmed by the document in the "Regulations on the management of the educational programme", "

https://drive.google.com/file/d/1KRKDBk11LY5BTevEjzTdzxLLfrkbYfYv/view?usp=sharing , EP on specialty "Neurology for adults and children". Proposals were made such as the inclusion of elective courses of choice, on the most pressing and diagnostically complex issues. While updated LSI and orders in education and health care are issued, the developers of the educational programme take into account the new information and make appropriate changes.

*Conclusions of the EEC on the criteria.* Comply out of 14 standards (including 9 basic, 5 improvement standards): fully -14.

### **Standard 2: EDUCATIONAL PROGRAMME**

### 2.1 Framework parameters of the postgraduate medical education programme

The model of the educational programme for the specialty "7R01112 Neurology for Adults, Children" is determined on the basis of the final learning outcomes of residents, therefore it includes the following: a total of 4200 hours (140 credits). The list of disciplines of the compulsory component is determined by the TC, indicating the complexity of each academic discipline in credits and academic hours, each type of educational activity, and an exam. The working curricula are developed strictly in accordance with the State Compulsory Educational Standard of the Republic of Kazakhstan 2022. The TC and EP, including disciplines of the compulsory component and the elective component, are developed taking into account the modular training technology. The list of disciplines of the elective component is determined by the university independently. The elective component is 120 hours / 4 credits (ECTS) of the total volume of core disciplines; the final certification is 60 hours / 2 credits (ECTS). Duration of study is 2 years. The EP is presented on the UAHE website of the Ministry of Science and Higher Education of the Republic of Kazakhstan. The systematicity and transparency of training is guaranteed by the fact that the assessment procedure is ensured by placing the policy and assessment criteria, a list of control and measuring tools in the syllabi. To standardize approaches to assessing students, the University has developed standardized

approaches to assessing students using the automated systems "Session", "Platon", which determine the assessment criteria for the student in mastering the necessary learning outcomes.

To implement the educational programme in the specialty "Neurology for Adults, Children", the organization's documents contain EMCD, which defines the goal, takes into account the integration of practical and theoretical components, independent work. Compliance with the State Compulsory Educational Standard and standard requirements has been established, including those approved by the order of the Minister of Health of the Republic of Kazakhstan dated May 25, 2021 No RK MOH - 43 "On approval of the list of medical specialties of residency programmes".

While attending a practical lesson on the subject "Outpatient and polyclinic neurology, paediatric" on the topic: "Speech delay", 180 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 their skills in etiology, pathogenesis, clinical manifestations, diagnosis, treatment of speech delay in children. The organization ensures compliance with ethical aspects in the implementation of the educational programme, since the experts studied the code of ethics (decision of the Board of Directors dated 08/24/2019, protocol No. 4) and during the interview, the residents responded that they were informed about the content of this document.

Analysis of educational activities showed that the scientific basis and all scientific achievements in the relevant disciplines are taken into account, additions are made to the bibliography of the educational and methodological complex and syllabuses, and teachers use them in the classroom.

The mentoring system described in the <u>Regulation on the residency of the NJSC "MUK"</u> approved by the Decision of the Board of the NJSC "MUK" dated August 23, 2022, Protocol No. 18 was evaluated. There are 11 mentors in total, whose tasks are to assist students in planning their educational trajectory; in making decisions when choosing disciplines, departments; in orientation and adaptation to the educational process within the university; in the formation of future professional focus. They create conditions for maximum individualization of students' training with a focus on the requirements of the State Compulsory Educational Standard and the curriculum of the educational programme. They introduce the requirements for the specialty being studied, labour protection and compliance with the internal labour regulations. They ensure high-quality training in compliance with ethics and deontology. The clinical mentor periodically provides feedback to the teacher, the head of the educational programme on the resident's achievements.

The procedure for informing residents about their rights and obligations are reflected in the "Academic Policy" of NJSC "MUK" dated 31.08.2022. Residents of NJSC "MUK" are familiarized with the academic policy at the beginning of their residency training by viewing it on the university website, and academic and clinical mentors also familiarize them with this document.

The residency programme complies with international requirements and level 7R of the national qualification framework in medical education and the Framework for Qualifications in the European Higher Education Area.

The teachers use such methods of teaching residents as traditional teaching (clinical analysis of thematic patients, solving situational problems, discussing issues on the topic of the lesson in accordance with the thematic plan), and active teaching methods CBL, work in small groups, interdisciplinary learning, learning based on errors (TAME), multidisciplinary council, intellectual quest game, simulation training, including training on emergency conditions in the CSET, research-based learning (RBL). The list of teaching methods is described in the educational programme "Neurology for adults, children". Thanks to these methods, residents can participate in providing medical care to patients. Teachers can provide a resident with supervision of approximately 6 thematic patients per day and 24 per month. For example, residents of the educational programme in the specialty "Neurology for Adults, Children" upon completion of training can perform such manipulations as examining the patient's neurological status, performing a lumbar puncture,

interpreting the results of studies such as EEG, ultrasound Doppler imaging of the brachiocephalic vessels, echocardiography, MRI, CT of the brain and spinal cord, PET of the brain and spinal cord.

Experts have found that the principles of academic honesty and anti-plagiarism are fully implemented in the educational organization. This is reflected in the document <u>Code of Academic Integrity of NJSC "MUK"</u> (Academic Policy of NJSC "MUK", approved by the Senate on August 31, 2023, Protocol No. 1). Academic honesty is applicable at all stages of resident training. And anti-plagiarism is applicable when residents are engaged in scientific and clinical research. Residents are trained to promptly collect informed consent from patients for any diagnostic and therapeutic procedures. Experts noted that the medical records contain a corresponding document signed by the patient. Thus, by the end of 2 years of training, residents will acquire the basic skills and abilities in the profession of "Adult, paediatric neurologist", which will allow them to work in institutions such as a Clinical hospital (hospital) or an outpatient clinic (**ESG 1.2**).

The experts did not find any violations regarding the principle of equality in postgraduate education and continuous professional development, since the educational organization complies with the Constitution of the Republic of Kazakhstan, the Law on the Languages of the Peoples of the Republic of Kazakhstan and other regulatory legal acts in the field of education and health care. For example, 1082 people work in the educational organization, of which 74% are women and 26% are

The educational organization has a mechanism for regularly adapting teaching and learning methods to the requirements of modern science and education, as well as to the current needs of practical healthcare. This mechanism includes the use of innovative methods, the introduction of new technologies, new diagnostic methods, new treatment methods. This indicates compliance with Standard 2 in terms of adapting training to the needs of residents.

### 2.2 Scientific method

The educational programme includes scientific foundations and methodology of medical research, clinical research and clinical epidemiology. During the conversation with 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 methods of critical evaluation of literature, articles and scientific data, the use of scientific developments. The study of the methodology of medical research, including clinical research and clinical epidemiology is carried out in the process of performing the IWR, and is reflected in the syllabi of disciplines / modules. Residents of the EP "Neurology for Adults, Children" study the standards of scientific research, the organization of scientific research, work in a research team, the study of the elements of a research project, a systematic approach to planning, formulating a research question and hypothesis, research design and methodology, collecting information, evidence-based medicine and international databases, information technology, data processing and analysis, publication of results. Residents actively use scientific literature data in the university library, electronic resources, electronic scientometric databases (Scopus, PubMed, Elsevier, Cohhrane library), Internet technologies to carry out scientific work, in preparation for classes on SRR, in analysing literature, international recommendations on topical issues of neurology, completing tasks to solve clinical cases of patients. In 2023, two research projects were submitted within the framework of grant funding from the Ministry of Education and Science of the Republic of Kazakhstan with the participation of 1st-year neurology residents Li I.A., 2nd-year Amirkhanov G.A.

In the first year of study, the resident, together with the head of the EP, responsible teachers, and clinical mentor, determines the directions and topics of scientific projects that are reflected in the resident's IEP and approved at a department meeting (<a href="https://cloud.mail.ru/public/DeXq/DtTWv8hZE">https://cloud.mail.ru/public/DeXq/DtTWv8hZE</a>), and are consistently implemented by residents in accordance with the research design. Through the University's website, residents have access to the Cochrane Library databases, where they study international databases on evidence-based medicine, clinical protocols; scientometric databases (Scopus, Elsevier).

While surveying residents, it was found that the educational organization has access to the participation of students in research work and 87.18% of people are completely satisfied with this, 5.13% are partially satisfied, and 0% are not satisfied. Residents should engage in R&D and in response to the questionnaire, 87.18% wrote that they are already engaged in R&D, 5.13% are planning to start, 0% are looking for a topic for R&D, and 0% are not engaged.

### 2.3 Structure, content and duration of the residency programme

There are documents containing requirements for the structure and content of educational programme s, including the State Compulsory Educational Standard, in accordance with the order of the Ministry of Health of the Republic of Kazakhstan dated July 4, 2022 No RK MOH - 63 "On approval of state compulsory standards for levels of education in the field of health care" (<a href="https://adilet.zan.kz/rus/docs/V2200028716">https://adilet.zan.kz/rus/docs/V2200028716</a>), the order of the Ministry of Health of the Republic of Kazakhstan dated January 9, 2023 No. 4 "On approval of standard curricula for medical and pharmaceutical specialties" (Annex 18 to the Typical Curriculum for Postgraduate Education in Medical and Pharmaceutical Specialties). The duration of residency training in the specialty "Neurology for Adults, Children" is 2 years and includes 4200 academic hours, which is 140 credits (at the rate of 1 credit equals 30 academic hours). The EP consists of modules/disciplines of the compulsory component, as well as an elective component. The EP includes the study of specialized disciplines of the compulsory component (134 credits/4020 hours), an elective component (4 credits/120 hours), and end-of-course assessment (2 credits/60 hours).

The structure of the EP "Neurology for Adults, Children" is formed from various types of classroom and extracurricular work. The volume of classroom work (CW) is 20% of the volume of each discipline, IWRT - 70%, IWR - 10%.

The working curriculum, educational programme reflects the logical sequence of mastering modules/disciplines that ensure the formation of competencies. The head of the department is responsible for the selection and implementation of innovations in the educational process.

The content of the work programs and the catalogue of elective disciplines reflect the needs of the healthcare system, including such diseases as epilepsy in children, demyelinating diseases at the primary health care level, dizziness, as well as acupuncture and the basics of oriental medicine, as well as the specifics of research and development and the scientific achievements of teachers. For the successful implementation of the educational programme in the specialty "Neurology for Adults, Children", the organization has resources for organizing the assessment of the practical skills of residents, where a standardized approach to assessing students has been developed: "Assessment forms of independent work of a student in a medical university" (Certificate of state registration of rights to a copyright object No. 99 dated 01/22/2015), including residents (Assessment sheet "Maintaining medical records / medical history" in a therapeutic hospital; Assessment sheet "Night / day duty" in a therapeutic hospital; Assessment sheet "Soo"-assessment of a resident", conducting a clinical and written exam (Assessment sheet of a clinical exam, Assessment sheet of a written exam) (https://cloud.mail.ru/public/Q2V2/tDMascEvZ).

The theoretical component of the educational programme is 20% - 2 hours, including all disciplines. Practical component consists 80% of the educational programme. Possible future roles of a residency graduate, namely, a medical expert, a manager are formed through such disciplines as "Neurology in hospital, adult; Neurology in hospital, children; Instrumental methods of research in neurology; Emergency conditions in neurology and neuroreanimation; Outpatient neurology, adult; Visualization methods of research in neurology." Legal aspects of the doctor's activities are discussed in classes on the discipline "Outpatient neurology, children; Neurorehabilitation." The scientific component in the training of residents is formed through the implementation of research in the independent work of the resident.

The organization of education guarantees the adjustment of the structure, content and duration of the educational programme in the event of any changes in various sciences, demographic, as well

as in response to the needs of the healthcare system. For this purpose, there is a mechanism for updating and amending the EP.

Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, in which 94.87 are fully satisfied, 5.13% are partially satisfied, 0% are not satisfied.

The organization has its own clinical base, the Clinic of the Medical University of the NJSC "MUK", and has also concluded 7 contracts with medical organizations.

Training is conducted in the stroke and neurological departments of the MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh. Makazhanov", the neurological department of the MSE "Regional Clinical Hospital", the neurological and rehabilitation departments of the MSE "Regional Children's Clinical Hospital", the neurological department of the MSE on the REM "Multidisciplinary Hospital of the City of Temirtau", the Clinic of Professional Health of the NJSC "MUK", LLP "Neurorehabilitation Centre "Luch". There are agreements with all clinical sites; they are available for the educational process (https://cloud.mail.ru/public/o3MW/ZWkor1JWC).

And to the question of the questionnaire "Is there enough time for practical training (patient supervision, etc.)", 98% of residents answered with full agreement, \_2% partially agree, 0% disagree. At the same time, 100% of residents claim that after the end of classes, the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, work on mistakes).

At the same time, to the question "Do residents' representatives participate in the development of educational programmes?", the experts received the following answer: residents take an active part, are part of collegial bodies. A resident in the specialty "Neurology for Adults, Children" is a member of the Council of the SR&PD.

89.74% of the surveyed residents are completely satisfied with the schedule of classes.

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

The management of the educational process, reflected in the self-assessment report (Standard 2) and general approaches to management were confirmed during a visit to clinical sites, the Department of Neurology, Psychiatry, Rehabilitation of the NJSC "MUK" and conversations with the head and staff. At the same time, verification of Standard 2 showed that the definition of the clinical base for training a resident is carried out in accordance with the discipline of the OP studied by the resident. The choice of the clinical base is based on the availability of the necessary clinical environment for mastering in accordance with the program of clinical/practical skills. Thus, in disciplines requiring the clinical environment of the inpatient stage, training is conducted in the stroke and neurological departments of the MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh.Makazhanov", the neurological department of the MSE "Regional Clinical Hospital", the neurological and rehabilitation departments of the MSE "Regional Children's Clinical Hospital", the neurological department of the MSE on the REM "Multidisciplinary Hospital of the City of Temirtau", the Clinic of the Medical University of the NJSC "MUK", the Clinic of Professional Health of the NJSC "MUK", LLP "Neurorehabilitation Center "Luch". There are agreements with all clinical bases; they are available for the educational (https://cloud.mail.ru/public/o3MW/ZWkor1JWC).

The experts got acquainted with the work of the departments, including clinical bases, a total of 2 meetings were held and during the cross-interview it was established that the material and technical equipment of the clinical bases contributes to the residents in the specialty "Neurology for Adults, Children" obtaining a high level of knowledge, skills and abilities. During the training at the clinical bases, residents have the opportunity to be present during various diagnostic and therapeutic manipulations and procedures.

Thus, the responsibility for choosing the base for clinical training and practice of a resident in the specialty "Neurology for Adults, Children" is assigned to the head of the department of neurology, psychiatry, rehabilitation and the department of postgraduate education. The experts

analysed the information on the accreditation of the clinical bases and concluded that all clinical bases are licensed.

The training of residents in the specialty "Neurology for Adults, Children" is aimed at meeting the needs of practical healthcare, since the analysis of the shortage of specialists for 2022 revealed that the insufficient number of neurologists - stroke specialists, epileptologists is associated with an increase in the frequency of acute cerebrovascular accidents among diseases of the vascular circulation and patients with epilepsy (paroxysmal syndromes) in children in the Republic of Kazakhstan. Therefore, this organization is specialized in the field of training neurologists, and provides a lot of opportunities and conditions for qualified training of specialists in residency in the specialty "Neurology for Adults, Children". Thus, during a conversation with the management of the organization, experts received information that residents expand and deepen their skills in managing patients with a neurological profile, work at the level of the emergency room, manage comorbid patients, participate in interdisciplinary consultations, pregnancy consultations, are on duty in the hospital with the definition of diagnostic and treatment tactics, provide emergency care to patients with neurological pathology, and teachers confirmed that the training of residents is carried out directly in the clinical departments (planned neurological, stroke). Residents of this specialty can supervise patients with diseases such as strokes of various types of the brain and spinal cord, chronic cerebral ischemia, epilepsy, neurodegenerative, demyelinating, hereditary with damage to the nervous system, damage to the peripheral nervous system, etc.

This is facilitated by mentoring, which is carried out in the organization of NJSC "MUK". While visiting a practical lesson - a seminar on the topic: "Computer tomography of the head", with a volume of 240 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.

Integration between training and the provision of medical care (training on the job) is carried out through a neurological examination, diagnostic principles, and the appointment of therapeutic measures. Training is carried out in accordance with clinical protocols. The main freelance specialists of the region, heads of departments, doctors of the highest / first qualification category with more than 5 years of experience, whose activities are related to the focus of the residency programme being implemented, were selected as mentors (<a href="https://cloud.mail.ru/public/rNGA/SPvkp6kaP">https://cloud.mail.ru/public/rNGA/SPvkp6kaP</a>).

Of the 39 residents surveyed, 89.74% responded that teachers use active and interactive teaching methods in classes quite often, 7.69% believe that they rarely or sometimes.

The following employees took part in planning, discussing, approving and reviewing the educational programme in the specialty "Neurology for Adults, Children": faculty, employers, doctoral students, neurologists, residents, members of collegial bodies and other interested internal and external stakeholders.

*Conclusions of the EEC on the criteria.* Of 22 standards (including 19 basic, 3 Standard improvements): fully - 21, partially - 1.

# Recommendations for improvement:

1) To expand the catalogue of elective disciplines taking into account the inclusion of clinical research and clinical epidemiology of the scientific activities of the department (2.2.1).

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

#### 3.1 Assessment methods

A study of the assessment tools (tests, tasks, oral survey, written assessment (essay or report), comprehensive control, case studies, homework presentations, assessment at the "workplace", mastering practical skills in the CSET, completing tasks on the platform) showed that the organization has implemented an appropriate assessment policy that allows for a comprehensive assessment of the academic achievements of residents. During the interview, residents talked about the forms of assessment, for example, that they are assessed in points on a 100-point scale,

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corresponding to the internationally accepted letter system with a digital equivalent (positive grades, in descending order, from "A" to "D", and "unsatisfactory" - "FX", "F") and grades according to the traditional system, and that they are satisfied with everything. They also receive regular feedback from teachers.

Formative assessment of students' academic performance is carried out for each task completed by the resident (an integrated task that includes all types of academic work (classroom and extracurricular), including mastering practical skills using simulation technologies, patient management, duty at clinical sites, etc.).

Formative assessment is assessed using assessment sheets that allow assessing various types of resident activities.

End-of-course assessment and midterm assessment of residents at NJSC "MUK" is carried out in accordance with the academic calendar, WC and syllabi. The WC contains a list of disciplines and a form of final monitoring during the academic period. (https://cloud.mail.ru/public/Tt7b/S7f2QSeUD).

The period of the midterm assessment is approved by the Chairman of the Board - Rector of the NJSC "MUK", the schedule of the end-of-course assessment and midterm assessment - by the Vice-Rector for Academic Work. The end-of-course assessment is carried out upon completion of the discipline / module in the form of a comprehensive 2-stage exam - Stage 1 - a written exam, in the final years - testing (50%), Stage 2 - a clinical exam (certification of practical skills) (50%). The clinical exam is carried out in the form of certification of practical skills "at the patient's bedside", according to the assessment sheet "Evaluation sheet of the clinical exam".

The written exam is held on the session.kgmu.kz platform with a check of the resident's written answer for originality in the Strikeplagiarism.com system (Antiplagiat system of the Polish company Plagiat.pl), as well as with the coding of the residents' works, ensuring the objectivity of the assessment. Computer testing is conducted using the Platon information system for final-year residents. Discipline grades are entered into electronic reports in the Platon system. Control forms, specification of final control assignments, detailed assessment criteria, examples of assignments, and assessment sheets presented svllabuses. are (https://drive.google.com/file/d/1zUTwdnY\_5CeexBkoFaXYHn39pjvpsUJl/view?usp=drive\_link, https://drive.google.com/file/d/1Ecg8ltzOm8CDwVnGDnlZXD7yA21t4maf/view?usp=drive\_link). The teaching and methodological kit of disciplines/modules is provided to residents in electronic form on the student portal. A student is admitted to the exam subject to completing the curriculum for the discipline and receiving at least 50% of the AAR for the discipline.

The portfolio defence is carried out at the end of each academic year to assess the resident's mastery of the competencies provided for by the EP, according to the form of the assessment sheet established at the university ("Portfolio Assessment Sheet") by a commission consisting of the head of the EP, teachers of departments, clinical mentors, representatives of practical health care.

The organization of final control and midterm certification (development of a draft schedule, coordination with structural divisions, posting of the approved schedule on the student portal of the University) is assigned to the registrar's office unit.

Upon completion of the discipline, the AIS "Platon" generates a statement of the AAR of the academic performance. The AAR of the academic performance consists of the assessment of the current monitoring of academic performance and makes up 60% of the end-of-course assessment of knowledge in the discipline. The registrar's office records the academic achievements of residents, ensures the organization of all types of final control (40%) and the calculation of the academic rating of students. The end-of-course assessment examination form is printed out in the office registrar department, which is responsible for accounting and registering the academic rating of students throughout the entire period of study.

Upon completion of the study of a discipline/module, the teacher conducts a survey of residents as one of the forms of assessing the process and methodology of training (https://cloud.mail.ru/public/onty/FawqX1oWB).

The form and procedure for conducting end-of-course assessment for each academic discipline/module are discussed annually at a meeting of the department and the Council of the SR&PD and is established no later than one month from the beginning of the academic period (academic year) at a meeting of the Council of the SR&PD.

The system of appealing the assessment results is reflected in the document "Residency Regulations" and there have been no precedents of appeal during the period of work of the NJSC "MUK". The assessment covers not only knowledge and skills, but also professional behaviour and communication skills, which is confirmed by the following: assessment sheets have been developed to control various types of resident activities: extracurricular activities of the resident "Maintenance of medical records/medical history"), "360°- assessment of the resident", for conducting midterm certification - a checklist for assessing the written exam, "Portfolio assessment sheet", which define the criteria for assessing the student for mastering the necessary learning outcomes. The criteria for admission to the end-of-course assessment are: students who have completed the educational process in accordance with the requirements of the WC and EP, who have completed a scientific project, as well as having an admission rating of 50% or higher are admitted. If the admission rating is less than 50%, the entry "not admitted" is made in the examination report opposite the student's name. This is documented in the "Regulations on the rating system for assessing the academic performance of students in NJSC "MUK".

Admission to independent examination of residents is an admission rating of 50% or higher. In the practice of NJSC "MUK", residents (including other specialties) pass the independent examination positively in 100% of cases.

Validation and assessment of the reliability of resident assessment methods (tests, tasks, and cases) is carried out as follows: compliance with the order of the Ministry of Health of the Republic of Kazakhstan dated December 11, 2020 No RK MOH–249/2020 "On approval of the rules for assessing the knowledge and skills of students, assessing the professional readiness of graduates of educational programmes in the field of health care and specialists in the field of health care", as well as internal regulatory documents: "Regulations on the residency of NJSC "MUK", "Rules for the rating system for assessing students' academic performance" of the Academic Policy of NJSC "MUK".

The educational organization has a practice of involving external examiners in assessing residents, which is documented in the minutes of the departmental meeting. This ensures the independence and objectivity of the assessment results.

Thus, to verify the **Standard 3** data, the experts asked questions to the head of the department of neurology, psychiatry, rehabilitation Grigolashvili M.A. and checked the documents and methods for assessing residents.

The organization has control and measuring tools for conducting formative and end-of-course assessment, including extended clinical tasks for a written exam, test tasks based on a clinical situation, 2 and 3 levels of difficulty with multiple-choice answers (MCQ), assessment sheets for monitoring various types of resident activities: extracurricular activities of a resident - "Maintaining medical records/medical history" in a neurological hospital), "Night/day duty" in a neurological hospital, "360° - resident assessment", for conducting midterm certification - "Clinical Exam Assessment Sheet", a checklist for assessing a written exam, "Portfolio Assessment Sheet", which define the criteria for assessing a student for mastering the necessary learning outcomes. Assessment sheets are presented in syllabuses by disciplines/modules, which makes the assessment clear, transparent and objective. Formative assessment is used by the faculty regularly to monitor current academic performance and is carried out in the form of oral/written feedback when assessing the completion of tasks, assessing the practical skills of residents at the "bedside/at the workplace", etc. to develop recommendations for improvement. Based on the results of the final control (summative assessment), including a 2-stage comprehensive exam and midterm certification (portfolio defence), a decision is made on the transfer of the resident to the next course of study or admission to the final certification. CIS in the form of 1000 test tasks, 30 tasks were approved at the meeting (minutes No.

1 dated 08/31/2023). The control and measuring tools were reviewed by the head of the department of neurology, psychiatry, rehabilitation and neurosurgeon of SKMA Zharkinbekova N.A. The head of the department of neurology, psychiatry, rehabilitation responded that additions and updates to the control and measuring tools are planned to be made annually. The control and measuring tools are updated annually by 30%. The responsible teacher for the discipline / module coordinator imports the examination material into the AIS "Platon" or AS "Session" a week before the start of the final control

The results of the assessment of residents are documented in the academic electronic database of the AIS "Platon", where each student has access with a personal login and password. This program allows the student to monitor their achievements.

There is a document on appealing the results of the assessment "Residency Regulation", which was approved on 08/23/2022, protocol No. 18. To date, there have been no appeals from residents.

There is a document on appealing the assessment results - the Regulations on the residency of the NJSC "MUK"), which was approved on August 23, 2022. To date, there have been no appeals from residents. During a visit to the organization and an interview with the employee, the head of the department of neurology, psychiatry, rehabilitation Grigolashvili M.A., the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and employees, and includes documents such as annual operational plans, annual reports, the regulations on the residency of the NJSC "MUK", agreements with teachers and residents, clinical bases, and educational and methodological documentation (work program, working curricula, syllabuses, journals), assessment tools (checklists, statements), certificates, and evidences. A review of the website showed that its pages contain the necessary documents for residents: the IPR, the educational programme, the WC, the schedule and other information documents, which are updated regularly.

During a visit to the organization, the management was asked: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" And the answer was received that when taking practical skills "at the patient's bedside", external examiners from practical health care, experienced doctors with experience, are necessarily involved.

### 3.2 Relationship between assessment and training

While interviewing 4 teachers of the Department of Neurology regarding assessment methods, experts received convincing information that automated systems (Platonus, Session, etc.) are successfully used. Residents also shared their opinions on the timeliness of testing, pre-exam consultations, clarity of the entire assessment procedure and its fairness. For example, residents said that all this is spelled out in the documents - the regulations on the residency of NJSC "MUK", the Academic Policy of NJSC "MUK", etc. The experts inspected the resources for organizing the assessment of knowledge and practical skills, namely: computer classes, clinical bases, availability of training rooms, a library, a lecture hall, a simulation centre.

The experts determined that the choice of resident assessment methods is based on practical skills, since the practical part of training is the main one. For example, such methods of current assessment as a neurological examination of a patient, diagnostics, appointment of additional research methods, treatment contribute to inter-professional training. A method such as clinical diagnosis demonstrates the integration of training and an emphasis on clinical skills. The established assessment methods ensure that the resident has mastered all sections of the educational programme and acquired the necessary practical skills.

Feedback from the resident based on the results of their assessment is collected in the form of an online questionnaire and published on the university website and reported at meetings of collegial bodies. In an interview, residents confirmed that they are provided with feedback after completing their training.

The 5 interviewed representatives of employers of clinical sites also indicated that the training of graduates corresponds to the modern development of medical practice and science, since the theoretical and practical parts of the classes are fully consistent with the State Compulsory Educational Standard 2022 and the TC, as well as the needs of world neurology. The employers said

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that they themselves participate in the assessment of residents, since they are included in the examination committee. Employers believe that they wanted to see the following skills in residency graduates in "Neurology for Adults, Children", such as diagnostics and neurological diagnosis and knowledge of neurology" as the strongest.

At the same time, there are difficulties in developing control and measuring tools, including the lack of sufficient time to compile them.

*Conclusions of the EEC on the criteria* correspond to 9 standards (including 6 basic, 3 Standard improvements): fully – 9.

#### **Standard 4: RESIDENTS**

### 4.1 Admission and selection policy

The educational organization has a policy for the admission of residents, which is called "Policy admission students "MUK" for the ofto NISC (https://www.qmu.edu.kz/media/qmudoc/PolitikaP.pdf). Approaches to the admission of residents are based on the requirements of the country and internal regulations, namely, developed in accordance with the Model Rules for training in educational organizations implementing educational programmes of higher and postgraduate education (Order of the Ministry of Education and Science 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 Kazakhstan No RK MOH-270/2020 dated December of https://adilet.zan.kz/rus/docs/V2000021802

Transparency of the selection procedure and equal access to residency programs are achieved through the website of NJSC "MUK". <a href="https://www.qmu.edu.kz/ru/contents/list/1608">https://www.qmu.edu.kz/ru/contents/list/1608</a>, and is confirmed on the basis of: Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 "Standard rules for admission to training in educational organizations implementing educational programme s of higher and postgraduate education". Law of the Republic of Kazakhstan dated July 27. 2007 No. 319-III "On Education", Order of the Ministry of Health of the Republic of Kazakhstan dated July 4, 2022 No RK MOH-63 "On approval of state mandatory standards for levels of education in the field of health care", Order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No RK MOH-270/2020 "On approval of the rules for placing a state order, admission to training and training of medical personnel in residency" - Academic Policy of NJSC "MUK".

The document reflects approaches to the admission of residents with disabilities, for example, in the paragraph "Regulations on Inclusive Education in the NJSC "MUK" dated December 9, 2020 (minutes No. 26). "Regulations on Inclusive Education in the NJSC "MUK" allow students with disabilities to have access to quality education in a joint educational environment with students who do not have such limitations. There are no such people among neurology residents.

The document takes into account the requirements for residency applicants in terms of their previous achievements in undergraduate and internship (for example, what prerequisites have been mastered, what GPA scores), and also describes the requirements for safety (for example, health status, availability of certificates from drug treatment and psychiatric centres, etc.).

Admission of persons entering the NJSC"MUK" for educational programmes in residency is carried out upon their applications on a competitive basis based on the results of the entrance examination. For the period of the entrance examinations to the residency, examination and appeal commissions are created for specialties (https://cloud.mail.ru/public/Wbic/xavQ8zoqP).

The educational organization has created a barrier-free learning environment, including ramps, call buttons, elevators, and toilets for the disabled.

Approaches to the admission and transfer of residents from other educational organizations are reflected in accordance with the Rules for the provision of public services in the field of technical and vocational, post-secondary education. A resident is transferred or reinstated provided that the first

academic period of the mastered program is fully completed, according to the individual academic year, regardless of the timing of expulsion upon reinstatement. The transfer of residents studying on an educational grant to another university is carried out with the preservation of the educational grant. Transfer of resident doctors from other universities to a national university or another university is carried out subject to additional payment by students of the difference in the cost of the educational order.

The appeal procedure for the results of admission to residency is prescribed in the <u>"Policy for the admission of applicants to postgraduate educational programmes"</u> of NJSC "MUK". To date, there are no precedents for appeal.

Representatives of students, namely residents who are members of the Council of the SR&PD, the Senate of NJSC "MUK", are included in the process of developing the policy for the admission and selection of residents. Feedback is provided to residents on this issue.

Revision of the policy for admission and selection, the number of residents is carried out annually; the Board of Directors of NJSC "MUK" is responsible for this. Revision of the policy for admission to residency is carried out periodically in accordance with the regulatory documents of the authorized body, internal decisions of NJSC "MUK" taking into account social and professional data. Thus, in 2022, additional criteria were included in the rules for admission to residency: experience in the field of healthcare, research work in the profile of the EP (Program of the entrance exam for the residency programme, approved by the Chairman of the Board, the Rector on May 12, 2022). The entrance exam program in 2023 will include comprehensive testing, including questions on biomedical and clinical sciences in the specialty profile.

Thus, the experts validated the data according to **Standard 4.** In general, all criteria are met. The experts reviewed the documentation on the admission of residents, including the capabilities of the department and clinical sites. According to the capabilities, it is possible to train up to 10 residents. All documents are well drawn up.

### 4.2 Number of residents

For the period 2019-2023, 1,790 residents were accepted to all educational programmes, including the program in the specialty "Neurology for Adults, Children". The total number of residents graduating on the dates of the start of admission to residency in all specialties was 1,369 people, including the accredited educational programme "Neurology for Adults, Children". The educational organization analysed the need of practical healthcare for neurologists and determined that the annual admission to the educational programme in the specialty "Neurology for Adults, Children" will be 20 people. This figure corresponds to resource capabilities. The sources of information on the need for specialists in the specialty "Neurology for Adults, Children" are applications from the Ministry of Health of the Republic of Kazakhstan for practical healthcare.

# 4.3 Resident support and consulting

The practice of academic consulting, personal support of residents and development of not only professional skills were assessed by experts through interviews with residents.

The following information was obtained during interviews with residents and graduates: for social and personal support of students, there is a youth department, a compliance officer, a student service centre, which are structural units implementing the state youth policy, civic-patriotic, legal, moral, professional, aesthetic, ethno- and multicultural education of residents. The compliance officer organizes work on the formation of an anti-corruption culture, on issues of compliance with integrity and ethics, on identifying and reducing corruption risks, implementing the main directions of the anti-corruption legislation of the Republic of Kazakhstan. On the website of NJSC "MUK" on the main page there are tabs "Rector's Reception Online", "Rector's Blog". The School of Residency and Professional Development holds meetings and gatherings with residents, where various issues related to training, the work of the student support service, etc. are also discussed. The Student Support Service (hereinafter referred to as SSS) provides psychological adaptation and information support to students (the university has full-time psychologists). The Student Republic "Samruk" is a student self-government body in the field of implementing the State Youth Policy of the Republic of

Kazakhstan. The university also has a Council of Young Scientists and Students, which functions in accordance with the Regulation on the Scientific Society of Young Scientists and Students of the University.

The educational organization has a resident development program, which includes support for residents in career planning and employment issues directly by the University, the faculty of the department and clinical mentors. The Career Development Centre operates under the Youth Affairs Department, which promotes the employment of graduates. NJSC "MUK" provides support in improving the professionalism of residents. In particular, residents participate in scientific conferences, professional webinars, forums, and projects. Residents are included in such advisory bodies as the SR and PD.

Financial support for residents is provided through the issuance of a scholarship in the amount of 117,000 tenge and additional financial support for residents, as set out in the document "Regulations on the payment of scholarships / 10.10.2022". Psychological support for residents is provided through consultations with a psychologist at the Clinic of the Medical University of the NJSC "MUK", which is confidential.

The employment rate of graduates of all residency programs in 2022 was 100%.

### **4.4 Representation of residents**

The following consultative and advisory bodies operate in the NJSC "MUK": the Council of the SR and PD, the QACS and the Senate, in which neurologist residents take part, namely, 2nd year neurologist resident Adil Abishev. Residents have a real opportunity to participate in the organization of the specialty curriculum during a direct discussion of the educational programme, at the level of developing an individual curriculum and choosing elective disciplines. Mechanisms for rewarding residents for social work include making decisions on the processes, conditions and rules of training and preparation based on an individual approach to mastering the Educational programme, choosing a clinical base and elective disciplines, academic mobility, participation in scientific projects, conferences.

While interviewing residents, experts found that residents take an active part in making many decisions.

### 4.5 Working conditions

Residents receive a monthly stipend in accordance with the document Decree of the Government of the Republic of Kazakhstan No. 799 dated October 10, 2022 "Rules for the appointment, payment and amount of state scholarships" (https://adilet.zan.kz/rus/docs/P080000116).

Residents are given the opportunity to work outside of school hours, which is reflected in the document - the Regulation on the residency of the NJSC "MUK" based on the order of the Ministry of Health of the Republic of Kazakhstan dated December 21, 2020 No RK MOH-305 "On approval of the nomenclature of specialties and specializations in the field of health care, the nomenclature and qualification characteristics of the positions health workers" (https://adilet.zan.kz/rus/docs/V2000021856) residency students have the opportunity to work additionally as a resident physician under the guidance of a clinical mentor in the chosen field of medicine for 0.5 rates in medical organizations, or according to a specialist certificate received upon completion of the relevant internship. There are currently 56% of such residents. In total, the educational organization in the specialty "Neurology for Adults, Children" has 7 clinical bases for training residents, and each hosts various events in which residents participate. For example, they provide inpatient care to patients with a neurological profile, conduct outpatient and polyclinic reception, conduct preventive measures, informational and explanatory work, participate in laboratory and instrumental studies, and are on duty at the clinical bases of the NJSC "MUK" at least four times a month. As a rule, residents supervise 6 patients per day, and 24 people per month. Residents make thematic reports, such as "Modern methods of diagnosis and treatment of multiple sclerosis", "Current aspects in the therapy of chronic cerebral ischemia". Participate in health education work: resident neurologist Shayakhmetova Ye.V. within the framework of the "Tutoring" program at the CSET, she worked on the scientific projects "Choosing the Most Sensitive Marker of Physical Development in Modern Schoolchildren", "Assessment of the Improvement of Medical Institutions for People with Disabilities", "Diagnostics of Parasitic Diseases in Students Studying at KSMU" and repeatedly held educational master classes for students and teachers of comprehensive schools on the basics of first aid. (https://www.instagram.com/p/CVXlCOrKJx-/). Resident neurologists took an active part in organizing and holding an open day for the population dedicated to World Stroke Day, and at the Professional Health Clinic of the NJSC "MUK" they conducted health education work among the population on preventive measures and risk factors for stroke. In the health school "Stroke Prevention", they assessed the risk of stroke according to international scales. They taught patients in the health school "Stroke Rehabilitation" how to restore the main lost functions and skills in everyday life. In the health school "Stroke and Speech" together with a speech therapist, they taught methods of restoring speech disorders. In the health school "Stroke without Depression" they taught ways to effectively cope with stress, form in patients a sustainable motivation for healthy lifestyle and clearly follow doctor's orders (https://cloud.mail.ru/public/gSCY/ooXVbyQ8c).

Under special circumstances (for example: residents due to illness, lasting from 6 to 12 months, based on the conclusion of the medical advisory commission at the hospital or outpatient clinic (hereinafter - CMAC) according to form No. 026 / u, approved by the order of the Ministry of Health of the Republic of Kazakhstan, in case of conscription for military service based on a summons for conscription for military service in the form according to the Rules for military registration of persons liable for military service and conscripts; for childbirth and childcare until he or she reaches the age of three years based on a birth certificate). To apply for an academic leave, the student submits to the Digitalization Department an application addressed to the Chairman of the Board-Rector, the original and a copy of the document that is the basis for granting an academic leave (the conclusion of the CMAC, or a summons for military service, or a birth certificate). Upon returning from academic leave, the student continues his/her studies under the same educational programme, from the same year (and academic period) from which he/she applied for this leave.

There were no neurology residents who needed training under an individual program at NJSC "MUK". However, if necessary, students under an individual programme have enough tools to conduct a full training programme and ensure the required quality of training.

*Conclusions of the EEC on the criteria.* Compliant out of 20 standards (including 14 basic, 6 improvement standards): fully -20.

# Standard 5: ACADEMIC STAFF 5.1 Admission and selection policy

There are 15 employees in total, including 4 full-time teachers and 11 part-time teachers. The requirements for residency programme teachers take into account the Personnel Policy, 11.01.2021, the Regulation on the performance management system of employees of the NJSC "MUK", 26.08.2019, the Regulation on the rating of departments and assessment of the activities of the Academic staff, 23.05.2019, the Internal Labour Regulations in the NJSC "MUK", 11.03.2021.

The percentage of those with a degree is 50%, 53% having the highest category, and 43% have the first category. The training of residents in the specialty "Neurology for Adults, Children" is carried out by the following employees: Grigolashvili M.A. - Assist professor, PhD, highest category, 28 years of experience;

Tursynov N.I. - Professor, MD, highest category, 43 years of experience

Shatokhina T.P. - assistant, highest category doctor, 40 years of experience

Beisembayeva M.B. - first category doctor, 12 years of experience - on the basis of the Clinic of the Medical University of the NJSC "MUK" and the Clinic of Professional Health of the NJSC "MUK".

On the basis of the MSE Regional Clinical Hospital, neurological department:

Bagdavadze T.M. - highest category doctor;

Yevstafieva N.A. - highest category doctor; On the basis of the MSE Regional Children's Clinical Hospital, neurological department:

Grodnikova O.V. - head of the department for young children with CNS damage Tlemisova D.S. - doctor of the highest category, head of the neurological department; MSE "Multidisciplinary Hospital named after Professor Kh.Zh.Makazhanov": Shuptar S.A. - doctor of the highest category, head of the neurological department; Mazurchak M.D. - doctor of the highest category, head of the neuro-stroke service; Kozha L.M. - neurologist of the stroke department;

The experts got acquainted with the job descriptions of the head of the department, professor, associate professor, assistant, clinical mentors and the regulations of the University's Personnel Policy, the rules for hiring employees upon employment, the Rules for competitive replacement of vacant positions, and the order of the Ministry of Education and Science of the Republic of Kazakhstan dated July 13, 2009 No. 338 "On approval of standard qualification characteristics of positions of teaching staff and persons equivalent to them. The experts were familiar with the personnel policy (University Personnel Policy, January 11, 2021), the Regulation on mentors, the Regulation on the performance management system of employees of the NJSC "MUK", August 26, 2019. The ratio of teachers to residents is 1:3. The motivation system for teachers and clinical mentors includes the following: incentive bonuses for publishing scientific papers in journals with an impact factor of more than 1, in international peer-reviewed scientific publications (indexed in the Web of Knowledge, Scopus), additional payment for teaching classes in English by the faculty with an IELTS certificate (5.5 points and above) or TOEFL (5.5 points and above) in the amount of 100% of the BOS (including external part-time workers (master's students, doctoral students), support for young teachers under 30 years of age in the form of a monthly incentive payment, awarding with certificates of honour, letters of gratitude, medals and awards. Information on the results of work assessment and recognition of achievements in all types of activities is presented at meetings of the Senate, on the university website and in the periodical "MEDIK". The principles of ethics and academic honesty of teachers are reflected in the document – the Code of Business Ethics. During a conversation with the teachers, they confirmed their awareness of this issue. In order to verify the Standard 5 data, external experts obtained the opinion of teachers on the personnel policy, which includes the procedure and rules for selecting potential employees in accordance with the requirements of the standard qualification characteristics of positions of medical education workers. The search and selection of highly qualified specialists is carried out on the basis of submitted resumes and interviews. The decision to hire employees is made collegially, by a commission for interviewing candidates for employment. The commission considers the candidate's compliance with the stated requirements; the commission's decision is formalized in a protocol. The interview with Grigolashvili Marina Archilovna, Head of the Department of Neurology, Psychiatry, and Rehabilitation, included such questions as "What criteria do you use to select employees of clinical sites? How do you motivate clinical mentors?" and allowed the experts to learn about approaches to attracting employees of clinical sites for teaching (there are 11 such teachers in total), about the strategy and tactics of recruiting residents, information support for the educational programme, and to identify problems in human resource management and development. The teaching staff and clinical mentors regularly undergo advanced training in educational, clinical, and scientific areas of activity. Every year, NJSC "MUK" conducts relevant courses to improve pedagogical qualifications free of (https://cloud.mail.ru/public/QrNP/p1RoMRrVK, charge

https://cloud.mail.ru/public/T2To/qtxYgoaRw).

While surveying teachers, it was found that the majority (80%) are completely satisfied with the organization of work and the workplace in this educational organization, but 20% are partially satisfied. In this educational organization, teachers have the opportunity to engage in scientific work and publish the results of R&D - 84% completely agree, 16% partially. Salary is satisfactory - 56% completely agree, 28% partially.

### 5.2 Obligations and development of teachers

In order to verify the Standard 5 data, during a meeting with the head of the HR department and during interviews with teachers, experts obtained an opinion on approaches to developing the

pedagogical competence of teachers, motivation to work with residents, mentoring, which includes internships, seminars, an internal system of advanced training, courses in the state and English languages, cooperation with foreign universities and recognized experts from near and far abroad in the specialized specialty within the framework of academic mobility programs, highly developed information and communication technologies. There is a developed system of social support - sports infrastructure, preferential services in the Dental Clinic, an active trade union, catering.

The experts determined that teachers and residents have enough time for teaching, mentoring and training. The work schedule of teachers is established in accordance with the standards of the Labour Code, time standards for calculating the volume of academic work approved by the Senate decision (Senate Decision of 05.04.2023), the average teaching load of the Academic staff, instructions of the head of the department on the types and volume of academic workload and the implementation of other sections of the plan. Distribution of types of activities is carried out on the basis of job descriptions, in which 20% is for research work, 70% for educational work, and 10% for the social activities of the university. The share of types of educational work in residency is distributed as follows: classroom - 20%, work with a clinical mentor - 70, and independent work of the resident - 10%. The average teaching load of the Academic staff implementing the educational programme in residency is reviewed annually, which amounted to 650 hours for the teaching staff for the 2023-2024 academic year, and 1,500 hours for clinical mentors (Senate Resolution of 05.04.2023, Protocol No. 8).

While considering the dynamics of the average annual teaching load of the Academic staff conducting classes in residency over the past 5 years, the following was revealed: the teachers' workload for the 2019-2020 academic year was 780 hours, in 2020-2021 - 700 hours, and from 2021 to the present - 650 hours. For clinical mentors, it has not changed from 2019 to the present and is 1,500 hours. Working hours: 08:00-16:00. Teachers conduct seminars once a week for 2 hours. Time for clinical reviews, clinical rounds - 2 hours. On duty is 4 times a month. The experts received responses about the advanced training program for teachers, which is held annually, and 4 teachers participating in the implementation of the educational programme were trained in 2023, including teachers of the accredited educational programme in the specialty "Neurology for Adults, Children" -4 people. These activities are financed by the educational organization. The expert checked the certificates of teachers on topics such as "Educational technologies in teaching clinical disciplines". https://cloud.mail.ru/public/T2To/qtxYgoaRw ). The salary fund of teachers consists of the state budget and extra-budgetary funds. There is also differentiated payment, based on the Regulation on the department rating and assessment of the activities of the teaching staff based on the Regulation on the department rating and assessment of the activities of the teaching staff According to the Regulation on remuneration of NJSC "MUK" (approved by the Chairman of the Board - Rector of NJSC "MUK" on 11/17/2023), additional payment is made to the author's team for publishing an article with an impact factor of more than 1, in international peer-reviewed scientific journals (indexed in Web of Science, Scopus). If the indicators are successfully met, the Academic staff is stimulated annually in the form of a bonus. Additional payment is paid for conducting classes in English to the Academic staff with an IELTS certificate (5.5 points and above) or TOEFL (525 points and above) in the amount of 100% of the BOS (including external part-time workers (master's students, doctoral students).

Mentors are financed in accordance with the Regulation on remuneration of NJSC "MUK" (approved by the Chairman of the Board - Rector of NJSC "MUK" on 11/17/2023).

Experts have found that teachers initiate research topics for residents stimulate the need for additional training and independent work with literature, medical documentation. In 2019-2023, residents of the EP "Neurology for Adults, Children" published 2 articles in publications included in the Scopus database; 3 articles in the CCES publication, the Medicine and Ecology journal; 9 publications in publications included in the RSCI database; 12 works in collections of scientific and practical conferences; of which the results of research were reported at 7 scientific and practical conferences (4 oral reports, 3 poster reports).

(https://drive.google.com/drive/folders/1aXoJd0rbKGcpOq5HYc45AoL\_VngMO4AH?usp=drive\_li\_nk\_). There is an opportunity for career growth and development of teacher competencies in the educational organization - 84% of the surveyed teachers answered, and 16% partially agreed with this. Studied in programs for improving professional qualifications - 84% less than 1 year ago, 16% during the current year, 0% more than 3 years ago, 0% more than 5 years ago and 0% answered "I do not remember when it was".

The organization implements social support programs for teachers - 64% answered that "yes, such programs exist", 4% "I have already used this", 0% of respondents answered that there are no such programs, and 28% of respondents do not know about it.

*Conclusions of the EEC on the criteria.* Comply with 8 standards (including 7 basic, 1 Standard of improvement): fully - 8.

#### Standard 6: EDUCATIONAL RESOURCES

### 6.1 Material and technical support and equipment

Residents are trained at the Clinic of the Medical University of the NJSC "MUK", including residents of the accredited educational programme in the specialty "Neurology for Adults, Children" at the MSE "Regional Clinical Hospital", the Clinic of the Medical University of the NJSC "MUK", MSE "Regional Children's Clinical Hospital", MSE on the REM "Multidisciplinary Hospital named after Professor Kh. Zh. Makazhanova". There are 9 classrooms, 2 conference halls for seminars and magazine clubs, 3 laboratories, a library of the "MUK" for 443 seats, a computer class for 113 seats, a testing centre for places.

The experts visited the library, which provides access to the Internet for residents and employees. To implement the educational process on the educational programme "Neurology for adults and children", the availability of primary and secondary literature is 100%. In total, there are 886 pieces of literature on the accredited specialty "Neurology for adults and children" on paper, of which the total number of textbooks is 429, including 169 copies in Kazakh, 240 in Russian, 20 in English, 438 copies of scientific literature (42 in Kazakh, 376 in Russian, 20 in English), 8 periodicals, 11 electronic publications (<u>Table</u> 8). The Wi-Fi zone is distributed throughout the library. There are 2 scanners installed for users in the electronic resources room. The interactive room is equipped with a short-focus projector. For students, there is a Research Fellow's Room equipped with 15 computers connected to the Internet, which allows access to all information resources of the University. There is access to international databases: "Cochrane Library", "EBSCO", "BMJ Best Practice", "BMJ Learning", "CBS eBooks". Residents are aware of this.

Before the start of the relevant discipline of the educational programme, the resident receives a syllabus from the teacher and knows what skills he should acquire and develop during the training. Updating the material and technical base is reflected in the syllabuses for modules / disciplines. In the future, as the necessary literature arrives, a map of educational and methodological support for literature on the disciplines of the EP is formed.

The MUK website has a "Library" section in Kazakh, English and Russian, in which, on the "Links to information resources" page, there are links to user guides for electronic resources. Additionally, user guides for the university's electronic resources are posted on the "Student Portal" in the "Library" section.

The material and technical base, including the library background, is updated once a year. For 5 years, the university has been subscribing to the electronic libraries "Student Consultant", "Doctor Consultant", "Lan", "Epigraph", "Aknurpress", "RIEL", which include more than 10,000 titles of electronic educational, educational-methodical and additional publications on various disciplines in the state, Russian and English languages.

### **6.2 Clinical bases**

The clinical bases used to implement the program "7R01112 Neurology for adults and children" are 9 medical institutions of city and regional significance:

- MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh. Makazhanova» DPH KO
  - MSE «Regional Clinical Hospital» DPH KO
  - MSE «Regional Children's Clinical Hospital» DPH KO
  - MSE on the REM «Multidisciplinary Hospital of the City of Temirtau» DPH KO
  - MSE on the REM «Hospital of the City of Shakhtinsk» DPH KO
  - LLP "Neurorehabilitation Centre "Luch"
  - LLP "Laboratory for Diagnostics and Treatment of Epilepsy «Epi-Lab»
  - Clinic of the Medical University of NJSC «MUK»
  - Clinic of Professional Health of NJSC «MUK»

The review of resources showed that they correspond to the goals and objectives of educational activities, thus, the clinical bases were visited: MSE on the REM «Multidisciplinary Hospital named after Professor H.Zh. Makazhanova" DPH KO, MSE "Regional Clinical Hospital" DPH KO, MSE "Regional Children's Clinical Hospital" DPH KO, and the employees of the educational organization ensure collegial and ethical relations with the medical staff, the management of the clinical base to achieve the final results of residents. A sufficient number of thematic patients (for example, with acute, chronic cerebrovascular accidents, demyelinating diseases such as multiple sclerosis, polyneuropathy against the background of diabetes mellitus, degenerative diseases, etc.) is provided, modern equipment and demonstrates accessibility to students, teachers provide high-quality training in compliance with ethics and deontology. During the visit to the clinical sites (MSE on the REM "Multi-profile hospital named after Professor Kh.Zh. Makazhanova" of the DPH KO, MSE "Regional Clinical Hospital" of the DPH KO, MSE "Regional Children's Clinical Hospital" of the DPH KO), the experts conducted a survey of the resources, their compliance with the training programs, accessibility for teachers and residents, how modern this equipment is and how it meets the needs of students and practical healthcare.

In order to validate the implementation of the self-assessment report data and obtain evidence of the quality of the programs, interviews were conducted with residents. The experts asked questions about satisfaction with training, sufficiency of time for patient supervision, work with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents who need it, participation in "Journal Clubs", and the availability of resources of international databases of professional literature. In general, residents are satisfied with the training, assessment methods, and purposefully entered this organization, as they believe that the educational organization has good resources, image and international connections.

There is a simulation centre, equipped with equipment, including devices for mastering practical skills in the specialty Body Interact - a virtual simulator of a patient with stroke, which is a training tool for accelerating critical thinking, developing clinical reasoning abilities and decisionmaking skills; for providing emergency care in the practice of an internist: a medical educational robot simulator (APALON) for simulating medical situations. A model of the real-sized ambulance of the KARUS Group of Companies for practicing emergency medical care skills; a SimMan patient simulator with software for performing intensive care skills in various clinical situations; a virtual simulator for training ultrasonography SonoSim; a virtual ultrasound simulator with a LiveScan SONOSIM sensor, allowing you to practice ultrasound skills for adults and children of different ages; Phantoms for practicing peripheral and central (Nasco, LF01012U) vein catheterization skills in adults and children; oro- and nasotracheal tracheal intubation in adults, children and infants (AirSim Standard); Mannequins for training in BLS, ACLS (BT-CPEA), PALS (a mannequin of a new-born, a 5-year-old child for practicing cardiopulmonary resuscitation skills in paediatrics); NENASIM (Infant Simulator, Epona) for realistic multidisciplinary group or individual simulation training in caring for an infant patient, mannequins for practicing lung and heart auscultation skills, an electrocardiograph, a defibrillator; 3B Scientific simulator for practicing cricotracheotomy skills; electrocardiographs; defibrillators. The universal platform for practicing practical skills OPUS MINI allows you to create an interactive environment for performing various medical procedures (in

particular, central venous catheterization) under ultrasound control. Residents of the educational programme in the specialty "Neurology for adults and children" can practice practical skills. Providing emergency care to patients with stroke, epileptic status, myasthenia crises, etc. is also included in the training programme.

Residents demonstrated 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, the opportunity to participate in research, and funding. The experts studied the documents of residents (portfolio, results of resident assessment checklists, and results of the resident survey).

## **6.3 Information technology**

The experts evaluated the access of residents and teachers to the necessary web resources, including a student portal, an additional information resource - the "Platonus" platform for obtaining information on the results of current and final academic performance (table 9 as well as access to electronic media (Cochrane Library, CBS, eBooks, EBSCO, BMJ Best Practice, BMJ Learning).

Residents confirmed that they can use the Electronic Library of the Medical University "Student Consultant", Electronic Medical Library "Doctor Consultant", Electronic Library System "Lan", Electronic Library "Epigraph", Portal of Multimedia Textbooks "Epigraph", including when preparing for classes. Information and communication technologies are represented by the following: Cochrane Library, CBS, eBooks, EBSCO, BMJ Best Practice, and BMJ Learning. The educational programme uses such technologies as the Electronic Library of the Medical University "Student Consultant", Electronic Medical Library "Doctor Consultant", Electronic Library System "Lan", Electronic Library "Epigraph", Portal of Multimedia Textbooks "Epigraph". During independent study, residents use Cochrane Library, CBS, eBooks, EBSCO, BMJ Best Practice, and BMJ Learning). Residents confirmed that they can use the Electronic Library of the Medical University "Student Consultant", the Electronic Medical Library "Doctor Consultant", the Electronic Library System "Lan", the Electronic Library "Epigraph", the Portal of Multimedia Textbooks "Epigraph". Access to patient data and the health information system is carried out through IMIS.

A resident supervises 6 patients per day, including filling out the necessary documentation under the supervision of a teacher.

### **6.4 Clinical Teams**

In order to develop the experience of working in a team among residents, the educational organization holds events such as inter-professional conferences. The experts attended a meeting of the journal club on the topic: "Topical issues in the diagnosis and treatment of patients with polyneuropathy", where the results of the teamwork of residents in the following specialties are presented: neurologists, therapists, surgeons, endocrinologists.

Inter-professional interaction is also carried out through interdisciplinary consultations. The collegiality of the residents' work is reflected in their joint clinical thinking, assignment of laboratory, instrumental, neuroimaging diagnostic methods, and treatment. Residents can conduct health education activities among patients and training activities among interns. For example, neurology residents took an active part in organizing and holding an open day for the population dedicated to the World Stroke Day; they conducted health education work among the population on stroke prevention measures and risk factors at the Professional Health Clinic of the NJSC "MUK". The risk levels of stroke development were assessed according to international scales at the Stroke Prevention Health School. Patients were taught how to restore basic lost functions and everyday skills at the Stroke Rehabilitation Health School. Speech and Stroke Health School were taught methods of speech disorder restoration together with a speech therapist. In the health school "Stroke without depression" they taught ways to effectively cope with stress, develop sustainable motivation for a healthy lifestyle in patients and clearly follow doctor's orders (https://cloud.mail.ru/public/gSCY/ooXVbyQ8c).

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 100% of teachers completely agree with this.

### 6.5 Medical scientific research and achievements

The NJSC "MUK" conducts research work in the following areas: BR 11065386-OT-22 "COVID-19: Scientific and technological substantiation of the response system to the spread of new respiratory infections, including coronavirus infection." Scientific Director of the program is MD, Turmukhambetova A.A. (2021-2023).

Over 5 years, success has been achieved in research work. In the period 2020-2021, the Department of Neurology, Psychiatry, and Rehabilitation conducted a scientific study on the topic: "Prognostic assessment of the influence of clinical and genetic factors on the risk of development and the nature of the course of the disease in spontaneous intracerebral haemorrhage."

Residents of both the 1st and 2nd years of study are involved in the implementation of scientific work (or fragments). Residents of the specialty "Neurology for adults and children" have the opportunity to perform R&D during the resident's extracurricular work within the framework of the IWR. They perform such types of work as working with case histories during the collection of clinical material, with scientific literature - library collection, electronic resources, collecting laboratory data for collective use, etc.). All information about the scientific work is included in the resident's portfolio, the structure of which is based on the Regulation on the residency of NJSC "MUK".

In the educational programme "Neurology for adults and children" there are topics where residents study research methods in medicine ("Instrumental research methods in neurology", "Visualization research methods in neurology"). At the same time, the total number of hours is 480 hours. If residents perform scientific and practical research, they are provided with access to instrumental and laboratory equipment. For example, in the specialty "Neurology for adults and children", it is planned to conduct research work on the topics: "Study of the effectiveness of using serum biomarkers and transcranial Doppler sonography in the early diagnosis of acute cerebrovascular diseases", "The role of intestinal permeability disorders, intestinal microbiota and neuroinflammation in the formation of Parkinson's disease symptoms". The Academic staff of the Department of Neurology participate in competitions for grant funding for scientific research of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan for 2023-2024.

This information was obtained during interviews with teachers and the head of the Department of Neurology, Psychiatry, Rehabilitation of the NJSC "MUK".

An interview with 35 teachers, including 4 full-time, showed that there are both successes and problems in education management, depending on a specific base (admission of residents to equipment, a sufficient number of thematic patients, time for maintaining medical records, independent work).

### 6.6 Expertise in the field of education

Expertise in education includes the following areas: bachelor's degree, internship, residency, master's degree and doctoral studies, which are designed in the form of research, including residency in the specialty "Neurology for adults and children".

Expertise of the EP in the NJSC "MUK" is carried out at the stages of development, approval and updating of the EP. The policy and procedures for the examination of the EP are regulated by the Regulation on the management of the EP of the NJSC "MUK". EPs in residency areas are developed by the head of the EP in accordance with the National Qualifications Framework, professional standards, Dublin descriptors and the European Qualifications Framework. The examination of the EP Concept is carried out by the Academic Committee of the Senate of the NJSC "MUK".

EPs undergo internal examination in the Quality Assurance Commission under the SR&PD. The composition of the commission is approved at a school meeting and includes faculty from the school, representatives of practical healthcare (employers) and residents.

The residency programmes are approved by the Board. The programs are included in the Unified State Register of Higher Education Institutions upon approval by external expert reviewers.

Sociological surveys, including issues of education quality, have become one of the

mechanisms for education expertise in NJSC "MUK". The expertise is carried out in the form of an analysis of the need for specialists, an analysis of resident training methods, and the results allow us to draw conclusions about the quality of innovative changes in postgraduate education. For example, the educational programme "Neurology for adults and children" is regularly evaluated by receiving feedback from residents, faculty and employers, as well as analysing the academic achievements of residents. Questioning of residents and residency graduates is used as feedback for events and corrective action plans to improve the program. The sources of information are the results of students' academic performance in disciplines, questionnaire results, reports of departments, schools, the office registrar, acts of external and internal audits, and reports of the FSC. Analysis of these sources allows identifying weaknesses and determining further ways improve EP (https://drive.google.com/file/d/1IG99C6lolA6icYiINXRdIbtL8VauJio7/view?usp=drive\_link).

Mechanisms for motivating and developing the interest of employees and teachers in conducting research in the field of postgraduate education are incentive bonuses for publishing scientific papers in journals with an impact factor of more than 1, in international peer-reviewed scientific journals (indexed in Web of Science, Scopus). Additional payment for psycho-emotional stress (for psycho-emotional and physical stress, employees of clinical units of NJSC "MUK" are entitled to additional payment in proportion to the position held, upon the provision of the chief physician of the clinic). Additional payment is paid for conducting classes in English to the Academic staff with an IELTS certificate (5.5 points and above) or TOEFL (525 points and above) in the amount of 100% of the BOS (including external part-time workers (master's students, doctoral students). Resources for clinical training are updated annually.

Resources for clinical training are updated annually in the residency in the specialty "Neurology for adults and children".

## **6.7** Training in other institutions

The academic policy for training residents includes the possibility of training in alternative organizations if the existing clinical bases do not cover all the topics of the educational programme. At the same time, training of residents in the specialty "Neurology for adults and children" is carried out at the bases of:

- MSE on the REM "Multidisciplinary Hospital named after Professor Kh.Zh. Makazhanova" DPH KO
  - MSE "Regional Clinical Hospital" DPH KO
  - MSE "Regional Children's Clinical Hospital" DPH KO
  - MSE on the REM "Multidisciplinary Hospital of the City of Temirtau" DPH KO
  - MSE on the REM "Shakhtinsk City Hospital" DPH KO
  - LLP "Neurorehabilitation Centre "Luch"
  - LLP "Laboratory for Diagnostics and Treatment of Epilepsy "Epi-Lab"
  - Clinic of the Medical University of NJSC "MUK"
- Clinic of Professional Health of NJSC "MUK", which has planned and stroke departments. Such disciplines of the educational programme as "Neurology in hospital, adult; Neurology in hospital, children; Outpatient neurology, adult; Neurorehabilitation; Neurology in hospital, children; Outpatient neurology, children; Emergency conditions in neurology and neuroreanimation; Instrumental research methods in neurology; Visualization methods in neurology; Acupuncture and the basics of oriental medicine; Diagnostics, tactics and algorithms for managing patients with demyelinating diseases of the central nervous system at the primary health care level; Dizziness in neurology; Epilepsy and other paroxysmal conditions in children in neurology, residents study in clinics.

Preparation of scientific publications is carried out under the guidance of a teacher and does not require additional training bases. Residents can participate in academic mobility within the country, for example, an agreement has been concluded with NJSC "MUS", NJSC "AMU", etc. on the basis of the "Regulations on the organization of academic mobility" in the Academic Policy of NJSC "MUK". There is a document on the transfer and offset of learning outcomes between educational

organizations: Academic Policy.

In terms of academic mobility and development of the educational programme "Neurology for adults children", according the academic to (https://cloud.mail.ru/public/syHn/6waDS1YK7) incoming and outgoing mobility of residents to partner universities and visiting professors are provided. For example, in March 2022, as part of academic mobility, PhD, Associate Professor of the Department of Nervous Diseases with a course in neurosurgery at the Kazakh National Medical University named after S.D. Asfendiyarov, Mukhambetova Gulnar Amerzaevna conducted a series of practical classes for neurology residents. In June and October 2023, the head of the Department of Neurology, Psychiatry, Rehabilitation and Neurosurgery, PhD, Professor of the South Kazakhstan Medical Academy N.A. Zharkinbekova conducted a series for first- and second-year residents. Within the framework of academic mobility, memorandums of cooperation in the field of healthcare, medical education and science have been concluded with 24 medical universities of Kazakhstan, with 83 universities of the near and far abroad (Table 11).

For example, in the specialty "Neurology for adults and children" of the accredited educational programme, international cooperation is carried out with the Federal State Budgetary Educational Institution of Higher Education "Yaroslavl State Medical University" of the Ministry of Health of the Russian Federation under a joint educational programme for the period 2023-2028.

As part of the development of strategic partnership, a memorandum of cooperation was signed in 2016 with Lund University, Sweden. More than 1,000 students and employees of the University took part in international academic mobility programs.

Every year, more than 300 students take part in international scientific conferences and research. Thus, on the initiative of the university, since 2012 the Central Asian International Conference on Medical Education has been held, the main goal of which is to exchange experience in improving medical education in the countries of Central Asia.

The university participates in the implementation of republican programmes and projects of scientific research in the field of health care, international multicentre studies SMART, METALL, UTIAP.

Conclusions of the EEC on the criteria. Comply with 18 Standards (including 11 basic, 7 improvement standards): fully -18.

### Standard 7: ASSESSMENT OF THE EDUCATIONAL PROGRAMME

### 7.1 Monitoring and evaluation mechanisms

Monitoring of the educational programme includes planning, data collection, analysis/conclusions, necessary improvements with subsequent monitoring of changes, which ensures transparency of the process and results. Accordingly, the AP NJSC "MUK" in monitoring the EP involves all university structures involved in the implementation and quality management of the EP. Each stage and level in the EP quality assurance system is regulated by the relevant regulatory documents. The decision on issues related to the management of the educational programme is assigned to school councils, the quality of the EP is ensured by the participants in its implementation: the Dean of the School, the Head of the EP, module coordinators responsible for the discipline, heads of departments, teachers. Since the 2020-2021 academic year, the Commission for Quality Assurance of the EP has been created, the main function of which is to monitor the implementation of the educational programme and evaluate the satisfaction of all stakeholders (Regulations on the EP Management). An annual analysis of the educational programme will allow the educational organization to make adjustments and improve the content. Initially, the educational programme "Neurology for adults and children" was reviewed by the SR&PD and it was noted that the content of the educational programme, teaching methods, assessment of knowledge and skills, and availability of resources are aimed at training highly qualified specialists capable of meeting the needs of society, applying and developing advanced technologies in medicine, science, and practice. Subsequently, the

residency program was approved at a meeting of the SR&PD (minutes No. 11, dated July 7, 2022). The School Council regularly assesses the quality of the educational programme by monitoring the analysis of the results of the midterm and end-of-course independent assessment, which is carried out in the form of a comprehensive exam with the involvement of external examiners.

While evaluating the programme, the goals and objectives of training, the final learning outcomes (through the assessment of residents, independent examination) are taken into account. The process of implementing the educational programme is assessed through feedback from residents and teachers and the achievements of graduates. For example, a survey of 2-year residents in the specialties "Neurology for adults and children" demonstrated the following: all the courses taken fully reflect the needs of practical neurology.

The assessment of approaches to the admission of residents is carried out by determining the material and technical capabilities of the university, human resources, availability of literature, and the throughput capacity of clinical bases.

The selection and compliance of teachers and teaching methods is also carried out through feedback from residents. For example, the results of a survey of residents in 2022 and 2023 showed that they were satisfied with the quality of the educational process and the educational programme.

The assessment of methods for assessing the knowledge and skills of residents is carried out through testing, solving situational problems on electronic platforms and demonstrates the transparency and objectivity of the knowledge gained. The assessment of the sufficiency and quality of educational resources is carried out through a survey of stakeholders, which is carried out by the strategic development department, the results of which are monitored by the SR&PD and the department and show that changes are made to the EP based on the survey.

### 7.2 Feedback from teachers and residents

NJSC "MUK" regularly collects feedback from teachers, residents, and employers. Every year in September, questionnaires are sent to employers. The questionnaire contains 15 questions and they are devoted to the educational programme, teaching methods, assessment, and so on. The results of the employer survey conducted in 2022 and 2023 showed that 84% of respondents were quite satisfied when answering the question "Do graduates have enough knowledge and skills necessary for the high-quality and effective performance of their duties?" The resident survey is conducted once a year and is devoted to such topics as "Are you satisfied with the quality of teaching at the university?" "In general, are you satisfied with the content and organization of the material of the disciplines in the training management system?" etc. A questionnaire was developed for the survey of teachers, including 30 questions, including on the specialty "Neurology for adults and children". The resident survey is conducted by means of a questionnaire after each completed discipline.

### 7.3 Results of residents and graduates

The results of residents and graduates are indicators of the quality of educational programme s. The final results of the assessment of residents in various specialties in 2022 show the following: 32 residents of the discipline "Neurology, including paediatrics" participated in the survey, of which 17 were residents of the 1st year of study, 15 of the second. Satisfaction with the quality of teaching at the department was 89.4% among residents of the 1st year of study, 88% among residents of the second vear. 15

(https://drive.google.com/file/d/1IG99C6lolA6icYiINXRdIbtL8VauJio7/view?usp=drive\_link).

A total of 32 employers were surveyed (response rate 71.1%). The level of achievement of the required competencies by graduates was 4.5 points out of 5, the level of satisfaction with the quality of training of graduates was 90%, and not a single employer rated the quality of training as low.

In 2023, 226 employers from different regions of the country were surveyed, where, based on the results of the analysis of the responses, an assessment of the overall satisfaction with the quality of training of resident graduates was presented, an average score of 4.7 or 95% (Report on the results of the assessment of employer satisfaction with graduates of NJSC "MUK" for the 2022-2023 academic year dated November 30, 2023).

The SR&PD, together with the Head of the EP, conducts annual monitoring of the employment

of residency graduates. The percentage of employment of graduates in the specialty "Neurology for adults and children" was 100%. The Department of Strategic Development and Management conducts an annual survey of employers on their satisfaction with the quality of training of graduates. The SR&PD and the heads of the EP receive feedback from students, representatives of practical health care in the form of survey results, letters of thanks.

The respondents gave Recommendations for improving the quality of training in terms of practical classes, increasing the number of hours in specialized disciplines and practical skills, especially the development of communication and manual skills. Also, expand the volume of training with foreign organizations (master classes, trainings) and international cooperation with other universities. A large number of respondents noted the need for more practices and improving the quality of training. Monitoring of residency program graduates is carried out through employer surveys. The percentage of employment in dynamics over 5 years was from 90% to 100%.

Since the entire process of training and monitoring residents is concentrated in the Senate of the SR&PD, the results of the assessment of the clinical practice of residents and graduates are immediately sent to the responsible persons. The SR&PD are responsible for the residency programmes. In order to improve the educational process in the last 2-3 years, the following has been undertaken: strengthening feedback with graduates, residents and employers to improve educational programmes.

#### 7.4 Involvement of stakeholders

NJSC "MUK" has approaches to involve teachers and residents in the evaluation of the educational programme and monitoring its implementation. Thus, neurology residents are included in the advisory body "Senate of the SR and PR" and participate in the discussion of all issues of the educational process. The results of the evaluation of the educational programme are announced at a meeting of the Council of the SR&PD. The structural unit responsible for the implementation and effectiveness of the residency programme is the SR&PD. All stakeholders (faculty, residents, and employers) are involved in the program evaluation process through representation in the relevant structures. The issues of organizing and implementing residency programs are resolved at meetings of the Council of the SR&PD, which is a collegial body that includes heads of departments implementing resident training, heads of EPs in residency specialties, employers, and residents. At the stage of developing and approving the EP, it is coordinated with leading specialists in the residency from practical healthcare. After their (https://drive.google.com/file/d/1gRlzGG\_Rz6KQeNxfx2dJgvl8FOKhWmv\_/view?usp=drive\_link

Interviews with 17 employers were conducted offline and included questions such as: knowledge of the university mission, participation in the development of the mission and proposals for the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in training residents through mentoring, providing the department and residents with the necessary resources for practical training and the formation of clinical thinking, problems of interaction with departments and universities in general, 100% employment of residency graduates in the specialty "Neurology for adults and children".

# 7.5 Procedure for approval of educational programmes

The educational organization has established a system for documenting the educational process, including approval of the educational programme , which includes the following: development in accordance with the license for the right to conduct educational activities within the framework of groups of educational programme s according to the classifier of training areas, in accordance with the "Regulations on the management of the educational programme" and the Academic Policy of NJSC "MUK". In the process of developing educational programme s and monitoring educational activities within the EP, all stakeholders are involved, including students and employers. The development of the EP is based on the principles of constructing educational programme s: student-oriented approach; competence-based approach; result-oriented approach; modular structure of educational programme s; scientifically oriented learning. At the stage of developing the EP, an assessment of the EP is simultaneously carried out, as it is discussed at meetings of departments, the

School of Medicine, undergoes an examination of the Quality Assurance Commission of the School of Residency and Professional Development and is approved at a meeting of the Board. The University has formed a pool of experts who conduct an examination of educational programmes, including at the planning stage.

The educational programme is approved by the Senate of the NJSC "MUK" based on such criteria as compliance with the 2022 State Compulsory Educational Standard and the Technical Regulations. The interested parties involved in the approval of the educational programme are the Academic staff, students, employers, neurologists from practical healthcare.

A system for monitoring the quality and compliance of clinical sites, material and technical equipment and educational resources has been developed and implemented, which includes the following: provision of classrooms, offices, availability of technical training equipment and equipment. Residents are trained at clinical sites of medical organizations based on agreements (Order of the Minister of Health of the Republic of Kazakhstan dated December 21, 2020 No RK MOH-304/2020 "On approval of the provisions on the clinical site, clinic of the organization of education in the field of health care, university hospital, residency site, integrated academic medical centre and the requirements imposed on them"). While preparing agreements between the clinical site and the MUK, the characteristics of the site, the profile of the departments, and the availability of an accreditation certificate certifying the compliance of the clinical site with the standards for accreditation in the field of health care of the Republic of Kazakhstan are considered. According to the agreement, clinical sites are jointly and severally responsible for the quality of training of future specialists, providing departments with high-quality educational facilities, ensuring access to patients and modern diagnostic equipment. The head of the EP controls the updating of the above documents.

Conclusions of the EEC on the criteria. Comply with 10 standards (including 7 basic, 3 Standard improvement): fully -10.

# Standard 8: MANAGEMENT AND ADMINISTRATION 8.1 Management

Residency training is conducted in accordance with the requirements of such regulatory rules regarding the admission of residents as the "Model rules for admission to training in educational organizations implementing educational programmes of higher and postgraduate education", approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600. Assessment of knowledge and skills is carried out on the basis of entrance examinations; examination committees for groups of educational programmes are created by order of the Chairman of the Board-Rector. Admission of persons to residency is carried out on a competitive basis based on the results of entrance examinations. Persons entering the residency pass an entrance exam in the profile of a group of educational programmes.

To implement the educational programme, the NJSC "MUK" has an organizational structure in which the educational sector is represented by the SR&PD. The experts familiarized themselves with the documents on the completion of training of residents, including the certificate of completion of residency. The certificate of completion of residency is issued to residents by the Department of Academic Affairs in the form of assigning a specialist qualification for the relevant educational programme and issuing a specialist certificate.

The NJSC "MUK" operates an internal quality assurance system in accordance with the requirements of the international Standard ISO 9001:2015, Standards and recommendations for quality assurance in the European Higher Education Area (ESG). Training of a resident physician of the EP "Neurology for adults and children" is carried out in accordance with:

- State Compulsory Educational Standard for levels of education in the field of healthcare Order of the Ministry of Health of the Republic of Kazakhstan No. 63 dated July 4, 2022
- Typical curriculum (hereinafter TC) for medical and pharmaceutical specialties Order of the Ministry of Health of the Republic of Kazakhstan No. 4 dated January 9, 2023

- Typical curriculum (hereinafter TC);
- Instructional letter No. 8 "On the development of educational and methodological documentation in educational organizations of the Republic of Kazakhstan implementing residency training" (2010);
  - Working curricula;
  - Modular educational programmes;
  - Academic calendar;
  - Individual work plans of a residency student.

Ensuring the quality of the educational process in residency is determined by the fulfilment of mandatory requirements for the level of training (SCES, EP) and the creation of a system for monitoring the effectiveness of the Academic staff and the implementation of the resident's individual educational programme. Monitoring the quality of the educational process is carried out by the School Quality Assurance Commission, heads of educational programmes, the School (Organizational structure of NJSC "MUK" / 03.10.2022)

# 8.2 Academic leadership

The responsibilities and duties of the management of NJSC "MUK" and employees of postgraduate medical education, which are assigned to the SR&PD and are enshrined in the document "Regulations on the residency of NJSC "MUK", are defined. Transparency of management and decision-making in the educational process is ensured through questionnaires, audits, which are reflected in the document "In accordance with the requirements of the documented procedure DP NJSC "MUK" 9.3-08 "Analysis by management".

The educational organization evaluates the management of the educational process and employees in relation to the achievement of the mission of the residency program, the expected final learning outcomes by conducting feedback with residents and teachers (see Section 7.2 of the report), conducting in accordance with the rules for certification of the teaching staff and research associates of NJSC "MUK", certification of scientific and pedagogical personnel is carried out in order to determine the compliance of the teachers and research associates of the university with the qualification requirements imposed on the teaching staff and research associates of NJSC "MUK", at least once every three years.

To the question of the questionnaire "Do the organization's managers listen to your opinion regarding issues related to the educational process, research, clinical work", 72% of teachers answered that they do so systematically, 28% answered "sometimes".

### 8.3 Budget for training and resource allocation

The unit responsible for planning and distributing finances in residency programmes is the economic block of NJSC "MUK" - the Department of Economics and Finance. The scope of duties, responsibilities and powers are reflected in the job descriptions of the economic block, approved by the Senate of NJSC "MUK".

A financial plan is drawn up annually, including a target budget for training, which is 926,568 tenge for 2023.

The financial plan corresponds to the strategic plan for the period 2023-2025. The share of funding for residency programs, taking into account the expansion of residency specialties, has increased from 728,873 thousand in 2021 to 926,568 thousand in 2023. Most of the funds are spent on the purchase of equipment.

The process of forming the university budget for the current year includes determining the revenue and expense base. The revenue part of the university budget is formed due to financial receipts from the following items:

- main educational activities (educational grant and income from educational activities on a paid basis);
- other activities (implementation of research work, publishing and printing services, medical services, dormitory accommodation services, etc.) (<u>Table 13</u>). The salary fund is 6,368,708.89 thousand tenge.

A financial report is submitted annually, which is approved by the Senate of the MUK and demonstrates, among other things, the distribution of educational resources in accordance with the needs and coverage of all types of expenses for the implementation and development of the residency programme.

# **8.4** Administration and management

There are an appropriate administrative (95 people) and Academic (987 people) staff, including management: 1082. In order to effectively manage the educational process, the employees of the Department of Neurology, Psychiatry, Rehabilitation of NJSC "MUK" underwent advanced training in 2023 on the topic: "Educational technologies in conducting clinical disciplines". In order to effectively manage the educational process, the employees of the DAA, SR&PD underwent advanced training in 2023 on the topics: "Drawing up the EP", "Innovations in the educational process", and "Application of artificial intelligence in the educational process".

Experts found that the quality management system (QMS) was introduced in 2005 and includes regular internal and external audits, including those that ensure the residency program of processes. The Department of Strategic Development and Quality Management is responsible for the implementation and monitoring of the QMS. Teachers are aware of the QMS, which is confirmed during their interviews. The main documents of the QMS are the following: "Regulations on the management of the educational programme of NJSC MUK".

To assess the effectiveness of the university, a system of key performance indicators (KPI) of senior management, school deans, and heads of departments, educational and other divisions of the university operates. The assessment of the administration and management of the educational process as a whole and the educational programme of the residency in the specialty "Neurology for adults and children" is carried out through internal audit (QMS), self-assessment (accreditation), fulfilment of key performance indicators (KPI), which leads to continuous improvement and self-improvement of education.

## 8.5 Requirements and regulations

NJSC "MUK" complies with the recommendations of national authorized bodies, including the Ministry of Science and Higher Education of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan. Thus, in accordance with the classifier of residency specialties (On approval of the Classifier of areas of training personnel with higher and postgraduate education; Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569), in the educational organization at the beginning of the 2023-2024 academic year, training is provided in 33 specialties and training in 33 specialties is planned. All educational programme s are provided with relevant educational and methodological documents and teachers.

*Conclusions of the EEC on the criteria.* Comply with 11 standards (including 8 basic, 3 Standard improvement): fully - 11.

## **Standard 9: CONTINUOUS RENEWAL**

The procedure for updating the organizational structure is reflected in the Development Program of the NJSC "Medical University of Karaganda" for 2024-2028, approved on December 11, 2023 by the Decree of the Government of the Republic of Kazakhstan No. 1105 (<a href="https://adilet.zan.kz/rus/docs/P2300001105">https://adilet.zan.kz/rus/docs/P2300001105</a>) and in 2023 such changes were made as requirements for the design and content of educational programmes with an annual update of the Regulation on residency, the Regulation on the rating system for assessing student performance, Process Maps, Instructions, Documented procedures, Management structures, then, in order to bring to the attention of university employees, updated regulatory documents are posted on the corporate website of the University, and are also sent to corporate mail of the divisions OutlookWebApp.

Updates to the educational programme are based on prospective studies and analyses, taking into account the results of our own experience, studying the literature on medical education and studying the needs of the labour market and are accompanied by the development of changes to the

EP and are presented in the <u>Regulation on the management of the educational programme</u>. <u>https://cloud.mail.ru/public/xnK3/8E1rt5zoG</u>.

NJSC "MUK" annually allocates resources for continuous improvement. For the targeted improvement of the educational process, sociological research is conducted, including an annual analysis of the strategic plan for the development of activities in accordance with the documented procedure for the implementation plan of the Operational Plan of NJSC "MUK" and monitoring its implementation, and literature on postgraduate medical education is studied (Regulation on the management of the educational programme. <a href="https://cloud.mail.ru/public/xnK3/8E1rt5zoG">https://cloud.mail.ru/public/xnK3/8E1rt5zoG</a>.). In the process of such analysis, approaches to teaching in residency were revised, and such methods as revision of control forms, 30% update of test questions, written assignments taking into account new concepts of diagnostics and treatment were introduced. Thus, in the 2021-2022 academic year, interim certification of residents was introduced in the form of portfolio defence at the end of the academic year. The results of the analysis, recommendations of the certification committee determine the need to improve the EP.

Conclusions of the EEC on the criteria. Comply out of 2 standards (including 1 basic, 1 improvement Standard): fully - 2.

**CONCLUSION:** during the external evaluation of the educational programme, it was found that out of 114 standards (including 82 basic standards and 32 improvement standards), 113 standards for accreditation demonstrate full compliance, including 81 basic standards and 31 improvement standards. 1 basic standard is partially fulfilled. No non-compliance with standards was found.

- 5. Recommendations for improvement of the educational programme "7R01112 Neurology (Adult, Children's)" of the NJSC "Medical University of Karaganda":
- 1) To expand the catalogue of elective disciplines taking into account the inclusion of clinical research and clinical epidemiology of the scientific activities of the department (2.2.1).

# 6. Recommendation to the Accreditation Council of the ECAQA

The members of the EEC established the compliance of the educational programme of the residency in the specialty "Neurology (Adult, Children's)" of the NJSC "Medical University of Karaganda" with the Standards for Accreditation and came to a unanimous opinion to recommend the Accreditation Council of the ECAQA to accredit this program for a period of 5 years.

	Full name	Signature
Chairman	Zhanalina Bakhyt Sekerbekovna	Spendy
International Expert	Nasyrov Ruslan Abdullaevich	100
International Expert	Troinich Yana Nikolaevna	lm
Academic Expert	Zhumalina Akmaral Kanashevna	1 _ <del>p</del>
Academic Expert	Madyarov Valentin Manarbekovich	
Academic Expert	Nugmanova Aigul Maratovna	duch
Academic Expert	Apbasova Saulesh Akhatovna	angl
Academic Expert	Yesetova Gulstan Utegenovna	Scent
Academic Expert	Sadykova Ainur Maralovna	Sal
Academic Expert	Tuksanbaeva Gulfariza Usenbaevna	Ar .
Academic Expert	Iztleuov Yerbolat Maratovich	
Academic Expert	Pak Laura Alekseevna	Hon
Academic Expert	Kamhen Vitaly Bronislavovich	-65
Employer Expert	Daniyarova Bayan Lashinovna	Day
Student Expert	Dyusembek Nazira Askerbekkyzy	proof

Приложение 1.

# Профиль качества и критерии внешней оценки образовательной программы (обобщение)

					)ценка	
Standard	Критерии оценки	Количество стандартов	БС*/СУ	Полностью соответствует	<b>Частично</b> соответствует	Не соответствует
1.	миссия и конечные	14	9/5	9/5		
	РЕЗУЛЬТАТЫ		1010		1.10	
2.	<b>ОБРАЗОВАТЕЛЬНАЯ</b>	22	19/3	17/4	1/0	
	ПРОГРАММА					
3.	ОЦЕНКА РЕЗИДЕНТОВ	9	6/3	5/4		
4.	РЕЗИДЕНТЫ	20	14/6	14/6		
5.	АКАДЕМИЧЕСКИЙ	8	7/1	7/1		
	ШТАТ/ПРЕПОДАВАТЕЛИ					
6.	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ	18	11/7	11/7		
7.	ОЦЕНКА ОБРАЗОВАТЕЛЬНОЙ	10	7/3	7/3		
	ПРОГРАММЫ					
8.	УПРАВЛЕНИЕ И	11	8/3	8/3		
	АДМИНИСТРИРОВАНИЕ					
9.	НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ	2	1/1	1/1		
		114	82/32	79/34	113	

# Список документов, изученных членами ВЭК в рамках проведения внешней оценки образовательной программы резидентуры

№	Наименования документов/дата утверждения	Количест во
1.	Образовательная программа на русском и казахском языках/ 13.03.2022г.	2
2.	Расписание занятий по резидентуре/18.01.2024	1
3.	Рабочий учебный план/06.12.2023	1
4.	Положение о резидентуре НАО «МУК»/23.08.2022	1
5.	План развития образовательной программы «Неврология взрослая, детская» на 2023-2026гг./15.09.2023г.	1
6.	Академическая политика НАО МУК/ 31.08.2022	1
7.	Закон об образовании/ 27.07.2007	1
8.	Кодекс о здоровье народа и системе здравоохранения/07.07.2020	1
9.	Об утверждении правил размещения государственного заказа, приема на обучение и подготовки медицинских кадров/ 15.12.2020	1
10.	Распоряжение №7 Декана школы резидентуры и профессионального развития/15.09.2023	1
11.	Программа развития НАО МУК/14.02.2023	1
12.	Об утверждении перечня медицинских специальностей программы резидентуры/ 25.01.2021	1
13.	Об утверждении видов документации об образовании, форм документов об образовании государственного образца и правил их учета и выдачи, основных требований к содержанию документов об образовании собственного образца и правил их учета и выдачи, формы справки, выдаваемой лицам, не завершим образование в организациях образования/ 28.01.2015	1
14.	Кодекс академической честности/ 20.08.2021	1
15.	Об утверждении государственных общеобразовательных стандартов по уровням образования в области здравоохранения/04.07.2022	1
16.	Об утверждении положений о клинической базе, клинике организации образования в области здравоохранения, университетской больнице, базе резидентуры, интегрированном академическом центре и требований, предъявляемых к ним/ 21.12.2020	1
17.	Кодекс деловой этики НАО МУК/ 24.08.2019	1
18.	Об утверждении Правил организации учебного процесса по кредитной технологии обучения/ 20.04.2011	1
19.	Об утверждении Правил оценки знаний и навыков обучающихся, оценки профессиональной подготовленности выпускников образовательных программ в области здравоохранения и специалистов в области здравоохранения/ 11.12.2020	1
20.	Об утверждении Правил подготовки медицинских кадров в интернатуре/ 18.09.2018	1
21.	Об утверждении Типовых правил приема на обучение в организации образования, реализующие образовательные программы высшего и послевузовского образования/ 31.10.2018	1
22.	Об утверждении государственных общеобразовательных стандартов	1

	высшего и послевузовского образования/ 20.07.2022	
23.	Положение о повышении квалификации сотрудников/ 11.01.2021	1
24.	Об утверждении номенклатуры специальностей в области	1
	здравоохранения, номенклатуры и квалификационных характеристик	
	должностей работников здравоохранения/ 21.12.2020	
25.	Анализ анкетирования по удовлетворенности обучающихся ОП,	1
	выписка из протокола №9 заседания Совета ШР и ПР/ 13.04.2023,	
26.	Положение о выплате стипендий/ 10.10.2022	1
27.	Кадровая Политика/ 11.01.2021	1
28.	Положение о системе управления эффективностью сотрудников НАО	1
	МУК/ 26.08.2019	
29.	Правила приема сотрудников при трудоустройстве в НАО МУК/	1
	11.01.2021	
30.	Положение о рейтинге кафедр и оценке деятельности ППС/ 23.05.2019	1
31.	Правила трудового внутреннего распорядка в НАО МУК/ 11.03.2021	
32.	Правила конкурсного замещения вакантных должностей НАО МУК/	1
	05.04.2022	
33.	Положение о конкурсе на присуждение звания «Лучший по	1
	профессионал НАО МУК»/ 18.02.2021	
34.	Закон о науке/ 19.02.2021	1
35.	Об утверждении типовых учебных программ по медицинским и	1
	фармацевтическим специальностям/ 09.01.2023	
36.	Об утверждении Типовых квалификационных характеристик	1
	должностей педагогов/ 13.07.2009	
37.	Положение об управлении ОП в НАО МУК/ 09.09.2020	1
38.	О вопросах создания НАО МУК/ 16.10.2018	1
39.	Организационная структура НАО МУК/ 03.10.2022	1