

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

**REPORT
OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE
EVALUATION OF THE EDUCATIONAL PROGRAMME
7R01126 "THERAPY" OF THE NJSC "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: May 15-17, 2024

Karaganda, 2024

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LIST OF DESIGNATIONS AND ABBREVIATIONS

Abbreviation	Designation
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Education and Health Care
WFME	World Federation for Medical Education
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
AC	Academic Committee
AP	Academic Policy
CPS	Certification of Practical Skills
HEI	Higher Education Institution
SCES	State Compulsory Education Standard
DAA	Department of Academic Affairs
DET	Distance Educational Technologies
DI and ID	Department of Informatization and Infrastructure Development
DHRM	Department of Human Resources Management
UHEMS	Unified Higher Education Management System
FCC	Final Certification Commission
End-of-course assessment	End-of-course assessment
IEP	Individual educational plan
IWP	Individual Work Plan
CDD	Clinical Diagnostic Department
CDC	Clinical Diagnostic Center
IMIS	Integrated Medical Information System
CED	Catalog of Elective Disciplines
QACS	Quality Assurance Commission of the School of Residency and Professional Development
MSE	Municipal State-Owned Enterprise
MOH	Ministry of Health
LEA	Local executive authorities
NJSC MUK	Non-Commercial Joint-Stock Company "Medical University of Karaganda"
NCIE	National Center for Independent examinations
RW	Research work
STP	Scientific and technical project
RCCH	Regional Children's Clinical Hospital
RCH	Regional Clinical Hospital
EP	Educational programme
ICU	Intensive care unit
ARA	Admission Rating Assessment
EDI	Especially dangerous infections
MC	Major competencies
Academic staff	Academic staff
LO	Learning outcome
WC	Working curriculum
SSS	Student support service
IWR	Independent work of residents

IWRT	Independent work of residents with teachers
SRC	Student research club
Mass media	Mass media
CSET	Center for simulation and educational technologies
SR and PD	School of residency and professional development
CBL	Case-based learning
ECTS	European Credit Transfer and Accumulation System

1. Composition of the External Expert Commission

In accordance with the order of the ECAQA No. 15 dated 02.05.2024, the External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external evaluation of the educational programme of the residency in the specialty 7R01126 "Therapy" of the NJSC "Medical University of Karaganda" in the period from May 15 to 17, 2024, in the following composition:

No.	Status in the EEC	Full name	Academic degree/title, position, place of work/place of study, year, specialty
1	Chairman	Zhanalina Bakhyt Sekerbekovna	Doctor of Medical Sciences, Professor of the Department of Surgical and Paediatric Dentistry of the NJSC "West Kazakhstan Medical University named after Marat Ospanov"
2	International Expert	Nasyrov Ruslan Abdullaevich	Doctor of Medical Sciences, Professor, Vice-Rector for Research, Head of the 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 Expert	Troinich Yana Nikolaevna	Vice-Rector for Social and Educational Work of the Armenian-Russian International University "Mkhitar Gosh", translator of medical literature - Logosfera Publishing House. Member of the Student Scientific Society at the Department of Histology of the Perm State Medical University. Head of the Student Scientific Society at the Department of Histology of the Perm State Medical University.
4	Academic Expert	Zhumalina Akmaral Kanashevna	Doctor of Medical Sciences, Professor, Head of the Department of Paediatric Diseases with a Course in Neonatology, NJSC "West Kazakhstan Medical University named after Marat Ospanov "
5	Academic Expert	Madyarov Valentin Manarbekovich	Doctor of Medical Sciences, Head of the Department of Surgery with a Course in Anaesthesiology and Resuscitation, NJSC "Kazakh-Russian Medical University"
6	Academic Expert	Nugmanova Aigul Maratovna	Doctor of Medical Sciences, Head of the Department of Paediatrics with a Course in CID, NJSC "Kazakh-Russian Medical

			University"
7	Academic Expert	Apbasova Saulesh Akhatovna	Candidate of Medical Sciences, Assistant of the Department of Pathological Anatomy and Forensic Medicine named after Professor Yu.V. Pruglo, NJSC "Semey Medical University"
8	Academic Expert	Yesetova Gulstan Utegenovna	Candidate of Medical Sciences, Head of the Department of Pulmonology, NJSC "Kazakh National Medical University named after S.D. Asfendiyarov"
9	Academic Expert	Sadykova Ainur Maralovna	Candidate of Medical Sciences, Associate Professor of the Department of Infectious and Tropical Diseases, NJSC "Kazakh National Medical University named after S.D. Asfendiyarov". Member of the working groups for preparation and participation in the National Ranking of Educational Programmes of the National Chamber of Entrepreneurs "ATAMEKEN", for conducting institutional accreditation.
10	Academic Expert	Tuksanbaeva Gulfariza Usenbaevna	Candidate of Medical Sciences, 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, NJSC "West Kazakhstan Medical University named after Marat Ospanov ", member of the local ethics commission on research work, internal auditor of the quality management service
12	Academic Expert	Pak Laura Alekseevna	PhD, Director of the Department of Higher Education of NJSC "Semey Medical University", Chairman of the State Unitary Enterprise Committee for the specialty "Oncology"
13	Academic Expert	Kamhen Vitaly Bronislavovich	PhD, Associate Professor, Associate Professor of the Department of "Health Policy and Organization" of NJSC "Kazakh National University named after Al-Farabi"
14	Employer Expert	Daniyarova Bayan Lashinovna	Head of the MSE "CDC Regional Clinical Hospital" of the Health Department of the Karaganda Region
15	Student Expert	Dyusembek Nazira Askerbekkyzy	Resident of the 2nd year of study in the specialty "Adult and Pediatric Neurology" of the NJSC "Astana Medical University"

The EEC report includes a description of the results and the conclusion of the external evaluation of the educational programme 7R01126 "Therapy" for compliance with the Standards for Accreditation for 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 above-mentioned educational programme and recommendations for accreditation for the ECAQA Accreditation Council for Accreditation.

2. General part of the final report

2.1 Presentation of the educational residency programme in specialty 7R01126 "Therapy" of the NJSC "Medical University of Karaganda"

Name of the organization, legal form of ownership, BIN	Non-profit Joint-Stock Company "Karaganda Medical University of 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 Akyzbekovna, 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 activities in residency (date, number)	License for educational activities No. KZ32LAA00016018 dated 06.05.2019
Year of commencement of the implementation of the accredited educational programme (EP)	Start year - 2022 Total number of graduates since the beginning of the residency programmes - 4 people.
Duration of training	2 years
Number of residents in the current academic year	1st year - 1 residents 2nd year – 0
Quality indicators in residency	Number of residents in the program "Therapy" expelled over a period of 5 years - 3 people, including for academic failure - 0 people. Employment rate, % in dynamics over 5 years: 2019 г. -0 (there were no graduates). 2020 г. -0 (there were no graduates). 2021 г. -0 (there were no graduates). 2022 г. - 0 (there were no graduates).
Full-time teachers/part-time workers involved in the implementation of the EP, incl. % of Sedateness	Total number of teachers - 8, including full-time - 8, part-time - 0. Sedateness – 100% Categorization – 100%..

During the existence of the educational program in the specialty "Therapy", the resident cohort consisted of 4 individuals: in the 2022–2023 academic year, there was 1 resident (funded by the Local Executive Body of the Karaganda Region), and in the 2023–2024 academic year, there were 3 residents (all funded by the Local Executive Body of the Karaganda Region). The resident enrolled in the 2022–2023 academic year withdrew voluntarily. Additionally, 2 residents admitted in the 2023–2024 academic year also withdrew voluntarily.

Currently, 1 first-year resident continues their studies. As of November 14, 2023, the therapy resident went on maternity leave (Order No. 284PO).

The Head of the educational program is Associate Professor R.Zh. Toyynbekova, who also serves as the Chair of the Educational Programs Committee for the specialty "Therapy" under the Educational and Methodological Association (EMA) of the Republic of Kazakhstan in the field of "Healthcare".

The implementation of the educational program is carried out by 5 university departments: Internal Medicine; Oncology and Radiology; Infectious Diseases and Phthisiology; Neurology, Psychiatry, and Rehabilitation; Emergency Medical Care, Anesthesiology, and Resuscitation.

The structure of NJSC "MUK" is presented on the university's [official website](#).

2.2 Information about previous accreditation

To date, the educational program 7R01126 "Therapy" has not been accredited.

2.3 Brief description of the results of the analysis of the self-assessment report of the educational programme of residency in the specialty 7R01126 "Therapy" of the NJSC "Medical University of Karaganda" and conclusions on the completeness

The self-assessment report of the residency educational program in the specialty 7R01126 "Therapy" (hereinafter referred to as the report) consists of 98 pages of the main text, 5 pages of appendices, and 25 copies or electronic versions of documents available via the link: <https://drive.google.com/file/d/1t7KPIBWoeLnFQlhAqqHI3XhanHH8uAUA/view>.

The report provides comprehensive answers to all 9 main accreditation standards and criteria. It is well-structured in accordance with the recommendations of the Educational Program Self-Assessment Guide provided to the educational institution by the accreditation center – ECAQA, and it maintains internal consistency of information. The report is accompanied by a cover letter signed by Rector Anar Akyzbekovna Turmukhambetova, confirming the accuracy of the quantitative data and information included in the self-assessment report.

The report contains a list of 7 members of the internal self-assessment commission, specifying each member's area of responsibility, as well as information about the organization's representative responsible for conducting the self-assessment of the educational program – Madina Abdullayevna Ernazarova, Chief Specialist of the Department of Strategic Development and Quality Management.

The self-assessment of the 7R01126 "Therapy" educational program at NJSC "MUK" was conducted based on Order No. 274 dated September 16, 2022, "On the Approval of the Working Group for Conducting the Self-Assessment of Educational Programs."

Each standard in the report reflects the university's actual practices in training residents in the specialty 7R01126 "Therapy", taking into account the start of student admissions in the 2022–2023 academic year. The report presents well-reasoned data, examples of the implementation of the program's objectives, participation in national and international events, and methodological support, confirming compliance with accreditation standards.

The self-assessment report provides complete and up-to-date information on the number of residents, faculty, and administrative staff, details on selection and admission, learning outcomes, the university's material and technical resources, clinical bases, contractual obligations with partners (universities, associations, clinical sites), financial information, and development and improvement plans.

The report was submitted to ECAQA in its final form, with adjustments made according to the aforementioned recommendations. It is written in clear and professional language, with well-defined and understandable formulations for each standard, described in line with accreditation criteria. Tables, diagrams (schemes, photographs), and figures are properly referenced in the text and are sequentially numbered.

3. Description of the external expert evaluation

The external expert evaluation of the educational program 7R01126 "Therapy" was organized in accordance with the ECAQA Guide for Conducting External Evaluation of Educational

Organizations and Programs. The site visit to the organization took place from May 15 to 17, 2024. The detailed schedule of the three-day visit is presented in Appendix 3 of this report.

To obtain objective information, the members of the External Evaluation Committee (EEC) used the following methods and obtained the following results:

- Interviews with the administration and management staff – 33 individuals;
- Interviews with residents – 47 individuals;
- Review of the university’s website: <https://muk.qmu.kz/ru/ob-universitete/>;
- Interviews with 35 faculty members, 17 employers, and 24 graduates;
- Surveys of faculty members, master's students, and residents – 53, 9, and 39 participants, respectively;
- Observation of resident training was not possible due to the absence of residents in the department during the visit;
- Review of 33 educational and methodological documents both prior to the visit and during the site visit to various departments (the list of reviewed documents is provided in **Appendix 2**).

The staff of the accredited organization ensured the presence of all individuals specified in the visit program and the interview and discussion participant lists (Table 1).

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

№	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 programme, 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 assessment. A final discussion of the results of the external assessment of the educational program, examination of documents, interview results, questionnaires was held. The EEC members began drafting the final report of the EEC. Generalizations of the external assessment results were made. The experts individually filled out the "Quality Profile and Criteria for External Assessment of the Educational Program "Therapy" for compliance with the ECAQA Accreditation Standards". The EEC members did not make any comments. Recommendations for improving the educational program 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.

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

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 staff 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 an external evaluation of the educational programme of residency in the specialty 7R01126 "Therapy" of the NJSC "Medical University Karaganda"

Standard 1: MISSION AND FINAL OUTCOMES

1.1 Mission statement

During the implementation of the program activities, namely, following interviews with the organization's chief executive, members of the advisory body (Academic Senate Committee, Quality Assurance Committee of the School at various educational levels – Master's and Residency), staff of structural units (compliance officer, library director, director of the Department of Human Resource Management, deputy director of the Department of Economics and Finance, head of the Strategic Development and Quality Management Unit, head of the Center for Simulation and Educational Technologies (CSET), head of the Career Development Center, head of the Informatization Department, head of the Youth Affairs Department, specialist in the International Cooperation Department), as well as interviews with residents and faculty, compliance with the criteria of **Standard 1** was established. All participants in the educational process are aware of the mission of the educational program, and they participated in forming proposals for its formulation. The mission is communicated to potential residents through the website, social media, and informational letters to medical organizations. The organization's 5-year strategic plan, which includes educational, scientific, and clinical directions, has been reviewed, confirming compliance with the accreditation standard and demonstrating the organization's goals, objectives, and prospects. Interviews with residents revealed that before classes begin, instructors inform them about the mission, work plans of the educational organization, and where to access necessary information about the educational program, instructors, and training bases.

During the visit to the units of NJSC “Karaganda Medical University,” experts noted the strengths of the educational organization concerning the accredited educational program. These include the functioning units directly related to the educational program “Therapy”, identified as best practices in education: DAA, CSET, library, Career Development Center, Informatization Department, video studio, research laboratory, and library. This conclusion was drawn based on visits to these structural units during the visit.

The results of the document review demonstrate that the organization's mission and the mission of the educational program “Therapy” and the educational process are built in accordance with the SCES and current regulatory legal acts (RLA) in postgraduate education and healthcare.

The educational organization conducts resident training at the following clinical bases and departments: the MUK Clinic and the SCE "Regional Clinical Hospital" / Regional Multidisciplinary Hospital of the Healthcare Administration of Karaganda Region (renamed as of 01.02.23). Training takes place in the Intensive Care and Resuscitation Unit, Admission and Diagnostic Unit, and Consultative and Diagnostic Office, providing a patient-centered approach to learning directly "at the patient's bedside" in a comfortable clinical learning environment. The development of these competencies during training is achieved by meeting the learning outcomes aimed at mastering general medical skills, collecting medical histories, examining patients, identifying clinical symptoms and syndromes, diagnosing with differential diagnosis, providing urgent specialized medical care for life-threatening conditions, disease prevention, patient monitoring, conducting health education to promote a healthy lifestyle, and applying modern methods of treatment for therapeutic diseases as reflected in the “Therapy” educational program.

The educational organization pays due attention to patient safety and autonomy in accordance with Article 48 “Health Protection of Students” of the Law of the Republic of Kazakhstan “On

Education” and Section 4 “Safety and Health Protection” of the Labor Code of the Republic of Kazakhstan. It undertakes to provide safe and healthy conditions for residents during training at clinical bases, including the therapeutic department of the MUK Clinic and specialized departments of the Regional Clinical Hospital. All clinical bases implement organizational and technical measures to ensure the safety and health protection of students and provide them with the necessary personal protective equipment for their work. Residents are required to obtain and maintain sanitary books (health records) for their activities at clinical bases, demonstrating care for health.

The core competencies of residents in the accredited specialty, such as clinical skills, communication skills, professionalism, knowledge of legal and regulatory frameworks, and research capabilities, along with special competencies, including patient-centered and personal-professional development, help the educational organization apply innovative teaching methods. This fosters the development of skills and qualities in residents, such as teamwork and the ability to make quick, well-informed decisions.

The educational organization encourages residents to engage in research within their chosen specialty through the analysis of international guidelines for diagnosing and treating internal organ diseases, theoretical discussions of key principles during practical classes, participation in scientific and practical conferences, and instilling continuous improvement skills through lifelong learning. Additionally, it ensures residents’ involvement in academic activities such as journal clubs, conferences, and symposia.

Experts have determined that residents are provided with appropriate working conditions to support their health, as NJSC “MUK” offers favorable working conditions for quality education. The Clinic assumes unconditional responsibility for providing healthy and safe conditions for any type of activity conducted on its premises. Therefore, full responsibility for any harm caused to the life and/or health of students, staff of the parties, and third parties during activities on the Clinic's territory rests entirely with the Clinic. Additionally, "the provision of personal protective equipment necessary for work in specialized departments of the university hospital is ensured for academic staff and students of higher and/or postgraduate medical education organizations".

Residents are regularly invited to meetings of advisory bodies and participate in discussions on issues related to their specialty. Suggestions and recommendations from students are always considered by members of the advisory bodies and are taken into account when forming final decisions at meetings. The decisive authority in approving candidates from among the residents for inclusion in the School Council and Senate lies with SR and PD staff. Academic performance and an active life position of the student are the key criteria in this selection.

At the same time, experts identified a potentially low motivation for choosing this educational program, evidenced by the absence of students in the specialty for various reasons (voluntary withdrawal, family circumstances, academic leave due to pregnancy or childcare).

1.2 Professionalism and professional autonomy

Experts have established that the educational organization fully exercises autonomy in relation to the selection of residents for accredited specialties in accordance with the Order of the Ministry of Health of the Republic of Kazakhstan dated 15.12.2020 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" (<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" (https://online.zakon.kz/Document/?doc_id=30118747&sub_id=43010000&pos=2034;-54#pos=2034;-54) 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. This determines the autonomy of the university in key areas such as the selection and admission of residents.

Admission of persons entering the NJSC "MUK" for educational programs in residency is carried out upon their applications on a competitive basis based on the results of the entrance exam, by placing a state educational order at the expense of the republican budget or local budget, as well as

payment for tuition at the expense of the student's own funds and other sources not prohibited by the legislation of the Republic of Kazakhstan, in accordance with the [Regulation on the residency of the NJSC "MUK"](#).

Responsible employees demonstrated to the experts a document defining the requirements for teachers of the residency program, the regulation on the residency of the NJSC "MUK", "Regulation on clinical mentors". Employment of residents is regulated by the career development centre and the indicator is 100% for this specialty.

To verify **standard 1** a meeting was held with the head of the organization - Chairman of the Board - Rector Turmukhambetova A. A. During the conversation, the experts asked questions regarding the autonomy of the university in matters of determining the mission / vision of the university, the use of financial resources, and the development of educational programs.

The relationship between the University and students is regulated by several documents, such as the "Internal Rules for Students", "Academic Policy" and the agreement for the provision of educational services, which is concluded with each student upon enrolment in residency. The agreement describes in detail the rights and responsibilities of students at the University, including the right to freely express their views, beliefs, freedom of conscience and access to information.

The University pursues a policy of representation of students and their participation in the development, management and evaluation of educational programs. This is reflected in the Academic Policy of NJSC "MUK"

While conducting a survey of 39 residents (on the resource <https://webanketa.com/>), out of 24 questions, a number were devoted to the quality of the educational process and educational program. It was found that 89.74% of residents would recommend studying in this educational organization to their acquaintances, friends, relatives. And 97.4% 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.

The 25 teachers surveyed (question 24 of the questionnaire) also answered 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, and responds promptly to requests. In the questionnaire, 92% of teachers are satisfied with the microclimate of the organization, and 8% are partially satisfied. 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 (there are 25 on staff in total), while teaching experience up to 5 years - no, up to 10 years - 16%, over 10 years - 84%.

1.3 Final learning outcomes

The final learning outcomes are defined and included in the educational programme, syllabuses. The learning outcomes of the EP "Infectious Diseases of Adults and Children" are posted in the register of the UHEP RK (EPVO) and are available to the general public, as well as to all stakeholders in the healthcare and education sector, which was developed and approved on July 13, 2022. Stakeholders are informed about the final learning outcomes of residents in the specialty "Therapy" through the website <https://muk.qmu.kz/ru/obrazovatelnye-programmy/rezidentura/infektsionnye-bolezni-vzroslye-detskie/>. The experts were convinced that the professional behaviour and communication skills of residents are formed through studying the code of ethics and are reflected in the relevant document - the Code of Ethics. Teachers and residents are informed about the code of ethics. You can read the content of the code of ethics on the website of the NJSC "MUK" University <https://muk.qmu.kz/upload/medialibrary/muk-official/korporativnye-dokumenty/kodeks.pdf>.

While determining the final learning outcomes, the employees of the department of academic work 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 program.

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 outcomes of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 60 programs of additional education, including for the specialty "Therapy". Residents are informed about this.

80% of the respondent teachers believe that students of this educational organization have a high level of knowledge and practical skills after completing the training program, and 20% partially agree with this.

1.4 Participation in the formulation of the mission and final outcomes

While developing the goals and objectives of the educational program "Therapy", the Academic staff, employers, and students took part, which is confirmed by the document - the minutes of the meeting of the council of the SR and the QAC of the SR. When updated regulations and orders in education and healthcare are issued, the developers of the educational programme take into account all the additions and suggestions made and make appropriate changes.

At the same time, when talking with residents and employers, experts received a clear answer to the question "Do you participate in formulating the mission and goals of the organization, educational program?" Residents answered this question that they take an active part, and employers answered as follows that they participate and, if necessary, if there are suggestions, they voice them at advisory bodies.

Conclusions of the EEC on the criteria. Compliant with 14 standards (including 9 basic, 5 improvement standards): fully - 14, partially - 0, does not comply - 0.

Recommendations for improvement: none

Standard 2: EDUCATIONAL PROGRAMME

2.1 Framework parameters of the postgraduate medical education programme

NJSC "MUK" has developed a model of residency graduate competencies, approved at a meeting of the Academic Committee of the School of Professional Development and Residency (minutes No. 4, dated 07.06.2019). The residency programme provides for residents to master 6 key competencies:

1. Clinical skills: Provide effective patient-centred care from the standpoint of evidence-based medicine, including appropriate and effective measures aimed at treating and preventing diseases.

2. Communications: Demonstrate interpersonal and communication skills that lead to effective information exchange and cooperation with patients, their families and health care workers, including the use of information technology.

3. Professionalism: Demonstrate commitment to the performance of professional duties, compliance with ethical principles and use the most effective methods to ensure a high level of safety and quality of medical care.

4. Regulatory knowledge: Recognize responsibility for their actions within the framework of the current regulatory framework of the healthcare system and be guided by them in their practical activities to ensure optimal medical care.

5. Research: Capable of researching and evaluating the results of treatment of their patients, evaluating and implementing treatment principles based on scientific evidence.

6. Personal and professional development: Demonstrate the qualities necessary to maintain continuous personal and professional growth, continually improving patient care based on ongoing self-assessment and lifelong learning

The “Therapy” educational program (EP) is developed based on a competency-based approach and credit-modular learning technology using credits. It includes a modular structure for the EP, the use of ECTS credits to assess workload, a point-rating system for knowledge evaluation, an increased proportion of hours allocated to independent study in the form of IWRT (Independent work of residents with teachers) and IWR (Independent work of residents), and the opportunity to create an individualized learning trajectory. According to the competency model for residency graduates, the learning outcomes of the “Therapy” EP have been defined. The final learning outcomes for residents in the “Therapy” specialty are aimed at mastering professional competencies reflected in the EP.

The achievement of key competencies and final learning outcomes is ensured through a practice-oriented approach to specialist training. This approach involves acquiring knowledge, skills, and abilities in clinical learning environments and employing traditional and active teaching methods, simulation-based and interdisciplinary technologies, including emergency condition training at CSET, as well as research-based learning. The teaching methods used in the educational process are designed to achieve each learning outcome of the EP.

Residency training is conducted in clinical specialties approved by the Order of the Minister of Health of the Republic of Kazakhstan dated May 25, 2021, No. RK MOH-43 “On the Approval of the List of Medical Specialties for Residency Programs.”

The structure and content of the “Therapy” residency EP comply with the State Compulsory Education Standard of the Republic of Kazakhstan for 2018 and 2022 (Order No. 647 dated July 31, 2015, with amendments and additions dated February 21, 2020, and the Order of the Minister of Health of the Republic of Kazakhstan dated July 4, 2022, No. RK MOH-63; registered with the Ministry of Justice of the Republic of Kazakhstan on July 5, 2022, No. 28716). <https://adilet.zan.kz/rus/docs/V2200028716>

The EP is aimed at mastering the key competencies of residents in this specialty and provides them with the opportunity to plan and implement an individualized learning trajectory, allowing for the acquisition of deeper knowledge and skills in the specialty by selecting elective disciplines. When designing the learning trajectory, the sequence of modules/disciplines is maintained, taking into account prerequisites and post-requisites, ensuring a step-by-step approach to acquiring knowledge, skills, and abilities. The final learning outcomes for residents in the desired specialty are achieved throughout the educational program within the modules and disciplines studied. To acquire deeper knowledge and skills in the specialty, in addition to studying elective disciplines, residents participate in scientific and practical conferences, schools, seminars, and masterclasses related to their specialty.

Residents are informed about the required competencies, which are reflected [in the EP](#) and [syllabi](#) and [are accessible](#) on the university website via a provided link.

Residents who complete their training and successfully pass the final attestation are awarded the qualification of Physician in the specialty “Therapy” and receive a residency completion certificate, a state-recognized document approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated January 28, 2015, No. 39 "On Approval of Types and Forms of State-Issued Education Documents and the Rules for Their Issuance" (with amendments and additions as of May 4, 2020). According to the educational program “7R01126 – Therapy”, the resident is awarded the qualification of “Therapist Physician.”

The residency EP meets international requirements and corresponds to Level 7R of the National Qualifications Framework in medical education and the Qualifications Framework of the European Higher Education Area. During the training process, residents receive clear explanations regarding the qualifications obtained upon completing the “Therapy” EP (meetings with the Vice-Rector for Clinical Work, the Dean, and the EP Manager).

Practice-oriented training in the residency program is aimed at gaining practical experience to achieve professionally and socially significant competencies. The educational program ensures a close integration of practice and theory, allocating 80% of the EP hours to independent work (IWRT and IWT), involving the resident’s personal participation in providing medical and diagnostic care at healthcare facilities.

As part of extracurricular activities, residents perform the following tasks: managing/receiving patients (therapeutic, diagnostic, and preventive work); completing medical documentation, including work in the Integrated Medical Information System (IMIS); participating in morning medical conferences, consultations, and discussions on critical patients; attending clinical case reviews; being on duty at clinical bases; participating in additional laboratory and instrumental examinations; mastering practical skills specified in the training program for the specialty; developing communication skills; conducting informational and explanatory work among the population; preparing abstracts and presentations; working in libraries and internet classrooms; and participating in scientific and practical conferences, as well as promoting a healthy lifestyle among patients. Clinical work during the residency is conducted under the guidance of clinical mentors.

When studying core disciplines at clinical bases, residents are assigned to specific departments and manage a certain number of patients. While managing patients, residents complete medical records in the Integrated Medical Information System (IMIS) and utilize the resources and facilities of the clinical base.

To improve their skills, residents use simulation centers. At the CSET, residents independently register for IWR sessions, practice their skills on simulators and mannequins, and receive feedback on video recordings of their practical skills from instructors.

To enhance the educational process and achieve the final educational outcomes, teaching methods within the EP, as outlined in the Residency Regulations, include traditional methods (bedside teaching, clinical case reviews, solving situational tasks, and discussing topics in accordance with the syllabus) and active learning methods such as Case-Based Learning (CBL), small group work, interdisciplinary education, Teaching and Assessing Medical Errors (TAME), multidisciplinary consultations, journal clubs, simulation training (including emergency response training at the CSET), and Research-Based Learning (RBL).

An essential feature of active learning methods is their focus on creating a diverse educational environment to nurture the talents of learners. Relying on the talent, creativity, and initiative of residents is a crucial resource for economic and social development. Active learning methods are designed to foster and develop clinical thinking in residents, enhance their ability to independently search for information, work in teams, make patient management decisions, and cultivate initiative, creativity, teamwork, and leadership qualities.

Thus, the teaching methods used in the educational process are aimed at active and independent learning by residents, contributing to the formation of key competencies.

The residency educational program ensures the integration of practice and theory, encompassing the structure and sequence of a resident physician's training with defined learning goals and outcomes based on completing assignments and providing medical care to the population. The integration of training and the provision of medical services implies, on one hand, the proper delivery of healthcare by the resident physician, and on the other hand, learning opportunities embedded in professional functions. Training is practice-based, involving resident physicians in the direct provision of services and taking responsibility for patient care activities in medical organizations recognized as residency training bases. Horizontal integration involves the sequential study of disciplines within the educational program (EP). Vertical integration is reflected in the EP through the specification of prerequisites and postrequisites for disciplines. At the university, the training of a physician-therapist is structured as integrated and interprofessional learning. In practical clinical work, residents are daily engaged in processes of interprofessional interaction with physicians from various specialties, including therapeutic and pediatric profiles, anesthesiologists, obstetricians-gynecologists, urologists, functional diagnostic specialists, radiologists, nursing staff, etc. They participate in morning medical, pathological, and anatomical conferences, consultations, and multidisciplinary teams.

The educational program "7R01126 - Therapy" is implemented in accordance with the [Code of Academic Integrity, which is part of the Academic Policy](#) of NJSC "MUK." The goal of this Code is to establish rules governing the behavior of all participants in the educational process to ensure academic

integrity and foster a sustainable ethical stance that eliminates any manifestations of dishonesty or ethical violations. The objectives of implementing the academic integrity policy include promoting the quality of training for specialists and scientific-pedagogical staff, creating conditions to ensure academic integrity among students, faculty, and staff, and preventing breaches of academic integrity by resolving problematic issues and situations. Participants in the educational process (residents, faculty, clinical mentors, administrative staff, and auxiliary personnel) bear disciplinary responsibility for violating the principles of academic integrity. Works that violate these principles are not accepted or evaluated.

Transparency and accessibility of assessment procedures are ensured through the inclusion of assessment policies and criteria, as well as a list of evaluation tools in syllabi.

To standardize approaches to student assessment, the university has developed automated systems such as "Session" and "Platon", which define criteria for evaluating students based on the achievement of the required learning outcomes.

The department develops assessment tools to evaluate residents' knowledge, skills, and competencies in the discipline, including standardized tests and extended clinical tasks for written exams. Written exams are conducted on the platform session.kgmu.kz with the coding of residents' work to ensure objectivity in assessment. Written responses are checked for originality using the Strikeplagiarism.com service to identify borrowings in academic and scientific works, generating a report indicating the percentage of similarity. When interpreting the similarity report, the threshold values should not exceed 50% for Similarity Index 1 and 5% for Similarity Index 2. It is recommended to review the list of the "10 longest phrases", examine documents containing similar fragments, particularly those exceeding Similarity Index 2, and pay attention to the presence of footnotes and references to authors.

At NJSC "MUK", the principles of a student-centered approach are implemented through the use of the credit technology system. According to this system, 80% of the total hours are allocated to independent learning, incorporating active learning methods that stimulate responsibility and enhance the learner's motivation for their educational process and the achievement of learning outcomes.

Throughout the training period, each resident independently forms an Individual Learning Plan (ILP) based on the working curriculum, reflecting the trajectory of studying core disciplines and determining elective disciplines within the elective component. According to the State Compulsory Education Standard of the Republic of Kazakhstan (SCES RK) for 2022, the elective component accounts for 4 credits (120 hours). Residents select elective disciplines based on the Elective Disciplines Catalog (EDC). The student portal provides access to the educational and methodological complexes (EMC) of disciplines/modules, enabling residents to independently familiarize themselves with the goals and learning outcomes to be achieved by the end of the training. Residents can independently select topics for scientific projects, taking into account their scientific and practical interests. The clinical work performed by residents directly in departments under the guidance of clinical mentors stimulates and creates conditions for learners to take responsibility for their learning process, applying knowledge, skills, and competencies in practice. This enhances accountability in decision-making related to patient management.

The resident mentorship system is defined by the Regulation on Residency, approved by the decision of the NJSC MUK Board dated August 23, 2022, Protocol No. 18. Residency training is conducted under the guidance of academic staff and clinical mentors, whose activities are regulated by the "Job Description for Clinical Mentors." Clinical mentors are selected from qualified healthcare professionals working at residency bases, holding valid certificates, and having at least 5 years of experience in the relevant specialty. Clinical mentors specializing in "Therapy" are physicians with the highest or first qualification categories. The mentor shares their experience and professional knowledge, facilitating the development of practical skills during joint clinical work. Clinical mentors periodically provide feedback to the instructor and the program leader regarding the resident's achievements.

Throughout the academic year, instructors stimulate the resident's activities and provide consultations for the creation of a portfolio. Responsible instructors and clinical mentors, in their daily work, offer recommendations for further professional development, mastering medical ethics and deontology standards, improving general education and cultural levels, and engaging in the social life of the department and clinical base.

After the completion of a discipline, the department conducts surveys of residents using university-developed postgraduate education questionnaires to analyze satisfaction with the quality of training, identify strengths and weaknesses, and determine the reasons for dissatisfaction with the learning process. Additionally, at the end of the calendar year, the Department of Strategic Development and Quality Management conducts a survey of university students, including residents, using the "Satisfaction with the Educational Process among Students" questionnaire. The results of the residents' surveys are discussed at department meetings, as well as at the Council for SR and PD, followed by decisions on the organization and content of the program to improve it. For the [2022-2023 academic year \(implementation in 2023 based on LAI*\)](#), the residency program aims to instill ethical principles in residents to ensure a high level of safety and quality in medical care. Information about the program, residents' rights and responsibilities, including policies on discipline and ethical obligations, is communicated by the program leader and instructors. It is also available for independent study in syllabi for modules/disciplines, which are accessible on the NJSC MUK student portal.

The educational program of the residency has formulated 6 main core competencies, including personal and professional development, according to which residents receive the necessary skills and abilities that affect the personal development of the student and his professional growth. For example, by acquiring research skills, in the future, residents can continue their studies in doctoral studies in their specialty.

Residency training in the EP "Therapy" is carried out in compliance with the principles of equality in relation to staff and students, regardless of gender, ethnic origin, religion, sexual orientation, socio-economic status and physical abilities, as defined by the Law of the Republic of Kazakhstan "On Education" (Article 8 "State guarantees in the field of education") and the Charter of NJSC "MUK".

At NJSC MUK, a Code of Business Ethics has been developed and approved to foster an atmosphere of goodwill and tolerance within the university. This environment promotes the scientific and creative potential of staff and students. The NJSC MUK Code establishes ethical principles that are mandatory for all students and employees of the university.

Residency training prepares residents for the doctor-patient relationship, taking into account gender, cultural, and religious considerations. These aspects are reflected in the key competencies of "Professionalism" and "Communication", which include: demonstrating interpersonal and communication skills that lead to effective information exchange and collaboration with patients, their families, and healthcare workers, including the use of information technologies; and demonstrating a commitment to professional responsibilities, adherence to ethical principles, and the use of the most effective methods to ensure a high level of safety and quality in medical care. Respect for human dignity, regardless of gender, cultural, or religious differences, is embedded in the Ethical Code, compliance with which is mandatory for both residency students and academic academic staff. NJSC MUK's membership in the League of Academic Integrity also supports effective communication at a sufficient level, eliminating gender and other issues in interactions. Additionally, NJSC MUK hosts international projects, student conferences, and scientific initiatives aimed at fostering barrier-free communication in the scientific community and at a universal human level.

Due to the unfavorable epidemiological situation, approaches were revised, and new communication and information platforms for distance learning were adopted in 2020, including Microsoft Teams and Zoom, followed by Webex Cisco in 2021.

Information and communication technologies, combined with digital educational resources, serve as tools in the education system that make lessons more informative, engaging, and accessible to modern learners.

2.2 Scientific method

The EP "Therapy" provides for the development of the competence "Research" (PC5). <https://muk.qmu.kz/ru/obrazovatelnye-programmy/rezidentura/terapiya/>

The introduction of scientific foundations and methodology of medical research in the OP is carried out on the basis of the Law of the Republic of Kazakhstan "On Science", <http://law.gov.kz/api/documents/57365/rus/download/pdf> "Development Program of the Non-Commercial Joint-Stock Company "Medical University of Karaganda" for 2024 - 2028", one of the areas of which is Leadership in Research. As part of the implementation of this area, a program for the development, support and promotion of university researchers is being developed and implemented through the involvement of students, interns, residents, young scientists under 35 years of age in the implementation of research programs and projects.

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, which are reflected in the resident's individual work plan and approved at a department meeting, and are consistently implemented by residents in accordance with the research design.

For residents who wish to study research management in more depth and continue their education in doctoral studies, the EP in the specialty provides training in the discipline of the elective component "Research Project".

In the process of completing the IWR, residents study educational and scientific literature in the university library, use electronic resources, electronic scientometric databases (Scopus, PubMed, Elsevier, Cohhrane library) to complete scientific work.

Formation of residents' knowledge, consolidation and expansion in the field of scientific research methodology, clinical and epidemiological studies, statistical processing of material and evidence-based medicine, allows critically assessing medical information for rational use in practical activities, instilling the skills of scientific research activities. Access provided to residents to the clinical databases of the department - Clinics of the Medical University, Clinic of Professional Health of the NJSC "MUK", Regional Medical Center of the Karaganda region, Regional Clinical Hospital provides the opportunity to work with case histories, in the laboratory of collective use, access to information resources, a rich library fund, allows to fully implement scientific projects.

During their training, residents present the results of their research activities in the form of oral and poster presentations at Student Science Clubs (SSC), scientific conferences, publications in collections of scientific congresses, and peer-reviewed journals.

The EP "Therapy" is aimed at achieving the final learning outcome: Critically analyze professional literature, effectively use international databases in their professional activities, participate in the work of a research team.

Residents actively use scientific literature, databases of evidence-based information of a scientific nature (Medline, Cochrane Library, PubMed, Google scholar, etc.) in preparation for classes on IWR, in analysing literature, international recommendations on current issues of infectious diseases, and completing assignments to solve clinical cases of patients.

While passing the specialized disciplines, practical classes are carried out on the basis of the principles of evidence-based medicine, residents study clinical protocols for the diagnosis and treatment of RK, International consensuses in infectious diseases, clinical recommendations of leading international organizations in order to implement treatment and diagnostic measures based on evidence-based medicine. Thus, during clinical analyses of supervised patients, international recommendations, clinical protocols, consensuses are discussed together with the teacher in relation to solving the problems of a specific patient.

Through the University website, you can get access to the Cochrane Library databases, where residents study international databases on evidence-based medicine, clinical protocols; scientometric databases (Scopus, Elsevier). Improvement of scientifically based practice is also implemented during practical classes using active teaching methods (CBL, interdisciplinary, project-based learning), the

Department's Journal Club, the opportunity for residents to participate in scientific and practical conferences, seminars, adopting the experience of international experts in the field of infectology.

During their training, residents present the results of their research activities through presentations at scientific conferences, publications in collections of scientific congresses, and presentations. The training program for residents in the specialty "Therapy" is aimed at achieving the final learning outcome: demonstrating the ability to research and evaluate the results of treatment of their patients, evaluate and implement treatment principles based on scientific data and the principles of evidence-based medicine.

There is an opportunity to train residents who wish to study research management in more depth and continue their education in doctoral studies.

The share of scientific work in the assessment sheet of the portfolio in residency is 20%, the results of personal achievements - 2%, which affects the final assessment of the resident and is a mechanism for activating students in this section of work.

During a conversation with the head of the EP, it turned out that separate hours are not allocated for scientific activities, while all scientific work is carried out jointly with the teacher, within the framework of certain disciplines. The teachers said that they teach residents methods of critical evaluation of literature, articles and scientific data, the application of scientific developments. This form of training is organized in the form of a "journal club", which is held once a month.

While surveying residents, it was established that residents should be engaged in R&D in an educational organization, and in response to the questionnaire, 87.18% wrote that they were already engaged in R&D, 5.13% were planning to start, 5.13% were not engaged, and 2.56 were unsure about answering.

2.3 Structure, content and duration of the residency programme

The educational program (EP) is implemented in accordance with the State Compulsory Education Standard (SCES) of 2020 and 2022. The duration of residency training in the "Therapy" specialty, as per the SCES of the Republic of Kazakhstan, is 2 years, consisting of 4,200 academic hours, which equates to 140 credits (based on 1 credit equaling 30 academic hours). The EP consists of modules/disciplines of the mandatory component as well as the elective component. The EP includes the study of core disciplines in the mandatory component (134 credits/4,020 hours), the elective component (4 credits/120 hours), and final certification (2 credits/60 hours). The content and scope of the mandatory component disciplines are strictly regulated by the SCES of the Republic of Kazakhstan and the Typical Curriculum of the specialty, as reflected in the EP and the Working Curriculum (WC).

The "Therapy" EP allows residents to plan and implement an individual learning trajectory throughout their training, preparing them for work in their chosen specialty. One of the key factors in shaping the Catalog of Elective Disciplines (CED) is the recommendations of the clinical mentor to update the EP in line with the needs of practical healthcare.

The Catalog of Elective Disciplines is formed in accordance with the list of elective component disciplines reviewed annually at a department meeting and approved at the meeting of the SR and PD Council. The elective component (4 credits) can be chosen from the following disciplines: "Management of Pregnant Women with Somatic Pathology (Extragenital and Pregnancy-Associated)", "Modern Approaches to the Treatment of Heart Failure", and "Research Project." The number of elective component credits, their proportion to mandatory disciplines, is regulated by the Typical Curriculum and the SCES of the Republic of Kazakhstan. The overall structure, list of modules/disciplines, the proportion of classroom and extracurricular work, and the volume of final certification are reflected in the WC.

According to the SCES of the Republic of Kazakhstan, the structure of the "Therapy" EP consists of various types of classroom and extracurricular activities. Classroom work accounts for 20% of each discipline's volume, independent clinical work under the guidance of a clinical mentor accounts for 70%, and IWR accounts for 10%.

Practical skills of residents are reinforced through clinical work as part of their IWRT and IWR at the department's clinical bases. This ensures the integration of the theoretical material acquired in the program with its practical application.

The training of specialists in the residency program for the "Therapy" specialty is aimed at providing the healthcare sector with qualified personnel capable of delivering medical care to patients with internal organ diseases, in compliance with national legislative requirements.

Documents outlining the requirements for the structure and content of educational programs are available, and they are guided by the following key principles for developing educational programs:

1. Student-centered approach;
2. Competency-based approach;
3. Outcome-oriented approach to designing and implementing the educational program;
4. Modular structure of educational programs with "horizontal" or "vertical" integration of disciplines;
5. The principle of spiral (vertical) structuring of curricula and programs, based on clinical cases and tasks;
6. Research-oriented learning.

The responsibility for selecting and implementing innovations in the educational process lies with the educational program leader and the academic staff involved in the implementation of the program.

When developing the educational program, the needs of employers, practical healthcare, and the priorities of the State Healthcare Development Program of the Republic of Kazakhstan for 2020–2025 are considered. Annually, the educational program leader collaborates with clinical mentors and representatives of practical healthcare to discuss and compile a list of elective disciplines for the formation of the Catalog of Elective Disciplines. Syllabi for disciplines are reviewed annually to incorporate new diagnostic and treatment methods, international recommendations, and updated protocols for the diagnosis and treatment of therapeutic diseases. The discipline's resource map is also updated with relevant educational and methodological literature.

There were no difficulties in planning, developing and approving educational programs. Experts found that the educational program took into account the requirements of the legislation, including those related to residents.

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, demographics, as well as in response to the needs of the healthcare system. *Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, in which 94.87% are completely satisfied, 5.13% are partially satisfied, 0% are not satisfied.*

The organization has its own clinical base with 195 beds and corresponding outpatient visits. To the question of the questionnaire "Is there sufficient time for practical training (patient supervision, etc.)", 97.44% of residents answered with complete agreement, 2.56% partially agree. At the same time, 92.3% of residents claim that after the end of classes, the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, and works 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 that they are members of advisory bodies and actively participate in the development of educational programmes.

The surveyed residents are completely satisfied with the schedule of classes (89,74%).

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

The organization of the educational process of residents at clinical sites is regulated by the "Academic Policy of the NJSC "MUK", "Regulations on the residency of the NJSC "MUK".

The vice-rector responsible for the educational activities of the residency is the vice-rector for scientific and clinical work. The departments of the NJSC "MUK, headed by the head of the

department, determine the clinical sites where the resident will be able to get maximum access to patients according to his profile of the educational programme of the residency with the conclusion of an agreement on joint activities of the NJSC “MUK with the clinical site. Agreements with clinical sites are updated annually [to implement the EP of the residency](#) in accordance with its profile.

According to the Order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020, No. RK MOH-304/2020, “On the Approval of Regulations on Clinical Bases, Clinics of Educational Organizations in Healthcare, University Hospitals, Residency Bases, Integrated Academic Medical Centers, and Requirements for Them,” and the State Compulsory Education Standard (SCES), Order of the Ministry of Healthcare of the Republic of Kazakhstan dated July 4, 2022, No. RK MOH-63, the determination of the clinical base for residency training is conducted in accordance with the discipline being studied within the residency program. The selection of a clinical base is based on the availability of the necessary clinical environment for mastering the clinical/practical skills outlined in the program.

The clinical bases of the departments that train residents in the "Therapy" specialty are multidisciplinary medical organizations providing primary and specialized medical care to the adult population with internal organ diseases at both outpatient and inpatient stages. These include the Regional Clinical Hospital (State Municipal Enterprise), the Clinic of the Medical University under NJSC "MUK", and the Occupational Health Clinic under NJSC "MUK."

At these clinical bases, residents can engage in practical activities in close collaboration with physicians of related therapeutic and surgical specialties, participate in multidisciplinary consultations, and ensure continuity of patient management at various levels, including inpatient care and transitions between inpatient and outpatient settings. These clinical bases are well-equipped with auxiliary departments (endoscopic, morphological, radiological, functional, and laboratory diagnostics).

The university's clinical bases create favorable conditions for establishing an educational environment for resident training.

The department actively employs modern educational methods (CBL, small group work, RBL, simulation training, interdisciplinary learning, and MOODLE platform-based learning), assessments, and integrates innovative teaching technologies such as Training Against Medical Error (TAME), multidisciplinary consultations, and journal clubs. The department staff has developed standardized approaches to student assessment (Certificate of State Registration of Copyright No. 99 dated January 22, 2015, for "Assessment Forms for Independent Work of Students in a Medical University", authored by Dosmagambetova R.S., Laryushina E.M., Turgunova L.G., et al.), including resident evaluations. These include: Assessment form for "Medical Documentation/Patient History Management" in a therapeutic inpatient setting; Assessment form for "Night/Day Duty" in a therapeutic inpatient setting; 360° Resident Evaluation form; Assessment forms for clinical and written examinations ("Clinical Exam Assessment Form", "Written Exam Assessment Form").

The CSET (Center for Simulation and Educational Technologies), functioning within the university structure, creates favorable conditions for enhancing the pedagogical competencies of the academic staff. The academic staff has access to full-text journals in the field of medical education.

An important principle of quality management in education is consumer orientation. Residents are active participants in the educational process and collaborate with instructors to evaluate it by participating in meetings of the SR and PD Council and annual surveys. Residents can influence the organization of the educational program (e.g., selection of academic staff, clinical bases, and departments) through direct verbal or written appeals to the department head or by providing feedback via surveys conducted after completing each discipline. The survey results are discussed in departmental meetings.

While studying the diagnostic and treatment protocols for the most common diseases approved by the Ministry of Healthcare of the Republic of Kazakhstan, standards of medical care, and mastering practical medical skills under the guidance of TS and clinical mentors at the departments' clinical bases and CSET under NJSC "MUK", an educational strategy is implemented that integrates learning elements with the provision of medical care to the population.

To achieve the desired learning outcomes, clinical bases are selected according to the specialty profile, and agreements are concluded with medical organizations where residents, during their training, fulfill the requirements of the organization and contribute to the provision of specialized medical care.

Clinical bases that train residents in the "Therapy" specialty provide opportunities to master patient management tactics for various therapeutic-profile diseases and understand the specifics of their progression. 70% of the total volume of each discipline is allocated to independent work by residents under the supervision of clinical mentors.

Residents are engaged in the diagnostic and therapeutic process by directly managing patients, completing medical records, drafting examination and treatment plans, and performing night shifts. During training at clinical bases, residents have the opportunity to observe and participate in various diagnostic and therapeutic manipulations and procedures.

While managing patients, residents expand and deepen their practical skills by working in emergency departments, managing comorbid patients, participating in interdisciplinary and pregnancy-related consultations, and performing inpatient shifts where they determine diagnostic and treatment tactics and provide emergency care to patients with various pathologies. The multidisciplinary nature of clinical bases allows residents to refine their differential diagnostic skills, determine examination plans, and develop effective treatment strategies for patients.

Thus, the therapy residents, while training at clinical bases, have the opportunity to master the full range of key competencies required for graduates of the residency program in "Therapy".

The duration of training in the specialty is determined in accordance with the SCES and the competencies achieved upon completion of basic medical education. The disciplines of the EP are logically interconnected and sequentially studied by residents. Continuity with basic medical education is ensured through the prerequisites of the disciplines. The implementation of specialized disciplines in the EP demonstrates the professional orientation of the curriculum. The distribution of disciplines by academic period is reflected in the Working curriculum (WC), according to which the Department of Academic Affairs prepares the class schedule for the academic year.

The duration of the "Therapy" residency program is 2 years. The academic year consists of 44 weeks, amounting to 70 credits or 2,100 hours, and includes theoretical and clinical training, culminating in interim assessments. In the final year, a comprehensive final assessment worth 2 credits is included.

As part of academic mobility, residents have the opportunity to study at other institutions offering residency programs. At NJSC MUK, an annual academic mobility plan for students is developed based on applications from EP managers and implemented in organizations with memorandums of understanding with NJSC MUK.

Experts reviewed the work of various departments, including the admission and diagnostic department, intensive care and resuscitation unit, pulmonology department, nephrology, cardiology, neurology, endocrinology, rheumatology, and others. Five meetings were held, including cross-interviews with clinical mentors such as the heads of the admission and diagnostic department, pulmonology department, and all departments involved in the academic structure of the "Therapy" EP. It was established that residents actively participate in inpatient work: they conduct patient examinations, complete medical histories, prescribe laboratory and instrumental tests, and provide treatment at the level of the admission and diagnostic department. In addition, residents participate daily in morning rounds and consultations in the departments, substantiate clinical diagnoses, maintain documentation, and complete medical histories, discharge summaries, and recommendations under the guidance of clinical mentors. During the visit, residents from related specialties were also present.

Integration between training and the provision of medical care (training in the workplace) is carried out by supervising patients in departments, participating in consultations, and participating in night shifts at the hospital. Training is carried out in accordance with clinical protocols.

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.

Conclusions of the EEC on the criteria. Of 22 standards that comply (including 19 basic, 3 improvement standards): fully - 20, partially - 2, does not comply - 0.

Recommendations for improvement: No

Standard 3: ASSESSMENT OF RESIDENTS

3.1 Assessment methods

The policies and procedures for assessing the academic achievements of residents at NJSC “MUK” are carried out in accordance with the set goals and learning outcomes for the implementation of the EP and the assigned qualifications within the framework of the current rating system and control of the educational process, in accordance with directive, regulatory and internal documents:

- 1) Law of the Republic of Kazakhstan No. 319-III "On Education" dated July 27, 2007;
- 2) Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 "Model Rules for Admission to Study in Educational Organizations Implementing Higher Education Programs";
- 3) 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 Study and Training of Medical Personnel in Residency";
- 4) By order of the Minister 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"
- 5) By order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152. "On approval of the Rules for organizing the educational process using credit technology of education";
- 6) By order of the Minister 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 programs in the field of health care and specialists in the field of health care";
- 7) "Residency Regulations of NJSC "MUK", approved by the decision of the Board dated August 23, 2022, protocol No. 18 (Annex 2).
- 8) "Academic Policy of NJSC "MUK".
- 9) Order of the Minister of Health of the Republic of Kazakhstan dated January 25, 2024 No. 46. "On approval of professional standards in the field of health care" (<https://cloud.mail.ru/public/QYWp/8xmZPQpqqz>).

A comprehensive assessment of the academic achievements of residents at the university is regulated by the "Rules of the rating system for assessing student performance" (section 5-7 of the Academic Policy of NJSC "MUK"), compliance with which is mandatory for all students and structural divisions of the university - participants in the educational process.

The study of control and measuring tools (480 tests (in Russian and Kazakh languages), 16 tasks (in Russian and Kazakh languages) 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, current control, midterm and end-of-course assessment, and that they are satisfied with everything. They also receive regular feedback from teachers. The system of appealing the assessment results is reflected in the Academic Policy document and there have been no precedents of appeal during the period of operation of the educational organization. The assessment covers not only knowledge and skills, but also professional behaviour and communication skills, which is confirmed by the following: assessment sheets.

Current monitoring of residents' academic performance is carried out for the purpose of formative, systematic assessment and implies monitoring of knowledge, skills and abilities in classroom (practical) classes, completing assignments within the framework of the IWRT and IWR.

The curriculum of the discipline defines various types of current monitoring of students' academic performance: oral survey, written control, tests, comprehensive control, case studies, homework presentations, assessment at the "workplace", mastering practical skills in, assessment of assignments on the Moodle platform, etc.

Residents' scientific activity is assessed during the academic year, according to the assessment sheet, in which fragments of scientific work are assessed, as well as during the midterm assessment during the portfolio defence. In the portfolio assessment sheet, 20% of the total final assessment is allocated for assessing scientific work (publications in Web of Science, Scopus, Publications in the Russian Science Citation Index, Committee for Quality Assurance of Education and Science, prizes in scientific conferences, competitions, Olympiads).

Current monitoring 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 care, shifts at clinical sites, including night shifts, etc.). The policy for assigning grades for the task, indicating its components, content, criteria and terms for assessing assignments in disciplines are reflected in the syllabus.

While determining and implementing new assessment methods, responsibility is distributed between the department and the Council of the SR and PD, DAA. Thus, since 2020, a written exam has been introduced on the session.kgmu.kz platform, based on solving clinical cases with a check of the resident's written response for originality, as well as with coding of residents' work, ensuring the objectivity of the assessment. In the 2021-2022 academic year, a new form of portfolio assessment sheet was introduced during its defence. Students and representatives of practical healthcare have the opportunity to participate in the implementation of new assessment methods during a direct discussion of the latter's approval at the level of the Council of the Sr and PD, which includes residents and employers (<https://cloud.mail.ru/public/QYWp/8xmZPQpqqz>).

End-of-course assessment and midterm certification of residents at NJSC "MUK" is carried out in accordance with the academic calendar, WC and syllabi. The WC provides a list of disciplines and the form of end-of-course assessment during the academic period.

The criteria for admission to the end-of-course assessment are positive grades in the final exams of modules/disciplines in the specialty. This is documented in the residency regulations, Academic Policy. Students who have completed the educational process in accordance with the requirements of the working curriculum and the EP, completed a research project, and scored at least 70 points in self-assessment conducted by the National Centre for Independent Examination (hereinafter referred to as NCIE) are admitted to the final certification.

Validation and assessment of the reliability of resident assessment methods (tests, tasks, cases) is carried out as follows: the teacher's assessment of the student's academic achievements at NJSC "MUK" is carried out according to the distribution curve of the grades given by him in accordance with the normal distribution (Bell Curve) in accordance with the approved criteria for assessing learning outcomes based on the general principles of the League of Academic Integrity (<https://adaldyq.kz/documents>).

The educational organization has a practice of involving external examiners in assessing residents, which is documented in the order on final certification, and is also available in the minutes No. 14 of 09.11.2023 of the meeting of the Council of the SR&PD. This ensures the independence and objectivity of the assessment results.

Thus, to verify the data of **standard 3**, the experts asked questions to the dean of the SR&PD Tashkenbaeva V.B. checked the documents and methods for assessing residents.

The organization has CIS (tests, clinical tasks) in the amount of tests - 480, tasks - 16, which are compiled by the academic staff and approved at the meeting of the SR&PD. CIS EP in the form of test tasks for the second year of students after completing the module / disciplines and clinical tasks for the 1st year of study.

CIS are developed by the academic staff of the department and approved at department meetings.

The appeal is carried out in accordance with the "Policy for the admission of students to the NJSC "MUK". To consider applications from persons who disagree with the results of the entrance examinations, an appeal committee is created, the composition of which is approved by the order of the chairman of the admissions committee. An application for appeal is submitted to the chairman of the appeal committee by a person entering residency. Applications are accepted until 13:00 the next day after the announcement of the results of the entrance examinations and are considered by the appeal committee within one day from the date of submission of the application. The appeal committee works with each person individually. If a person fails to appear at a meeting of the appeal committee, his application for appeal will not be considered. While considering an application by the appeal committee, the person who filed the appeal provides an identity document. Decisions of the appeal committee are made by a majority vote of the total number of members of the committee. In the event of a tie, the vote of the chairman of the committee is decisive. The work of the appeal committee is formalized in a protocol signed by the chairman and all members of the committee.

The results of the appeal are posted on the University website (<https://qmu.edu.kz/ru/contents/view/1296>).

To date, there have been no appeals from residents.

During the visit to the organization and interview with the employee Ibraeva L.K., Associate Professor, the commission was convinced that there is a documentation system that is transparent and accessible to all faculty and staff, and includes such documents as annual operational plans, annual reports, departmental regulations, contracts with faculty and residents, regulations on clinical mentors, and educational and methodological documentation (work program, work curricula, syllabuses, journals), assessment tools (checklists, statements), certificates and credentials. A review of the website showed that its pages contain the documents necessary for residents - the residency regulations, Academic Policy, Code of Ethics and there is information on the organization of the educational process in the residency, which is regularly updated.

During the visit to the organization, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" And the answer was received that they are involved, for the period of final certification, according to the order. The participation of representatives of practical healthcare at all stages of the assessment, heads of departments, attending physicians, mid-level medical personnel, as well as patients during the 360° assessment of residents, ensures the objectivity and fairness of the assessment. Thus, for the final certification in the 2023-2024 academic year, by order dated 21.12.23 No. 4 "On approval of the composition of the Certification commission for the 2023-2024 academic year" representatives of practical healthcare were included in the certification commission.

Transparency and accessibility of assessment procedures are ensured by free access to the University's Academic Policy, which covers the Rules of the academic performance assessment rating system, as well as syllabi of disciplines/modules, exam schedules, control and measuring tools (list of final assessment questions, specification of test tasks, examples of tasks) of all stakeholders - teachers, students, office registrars through the AIS "Platon", the student portal of NJSC "MUK".

3.2 Relationship between assessment and learning

The adequacy of the teacher's assessment of the student's academic achievements at NJSC "MUK" is carried out according to the distribution curve of the grades given by him in accordance with the normal distribution (Bell Curve) in accordance with the approved criteria for assessing learning outcomes based on the general principles of the League of Academic Integrity (<https://adaldyq.kz/documents>).

The main principles of assessing the knowledge and skills of residents in NJSC "MUK" are as follows:

- the relationship between the results, teaching methods and assessment
- compliance of the content of the exam materials with the EP, syllabus;
- the assessment must be objective, valid and reliable;
- use of various methods, in various situations and standardized approaches to assessment;

- timely informing of students and active involvement of residents, representatives of practical healthcare in the assessment;
- providing feedback to the student;
- assessment must be effective, useful, appropriate for the resident and improvement of the EP.

To achieve the final learning outcomes, relationships are established between competence, teaching methods and assessment. A competency-based approach, practice-oriented, allows for the focus of training and assessment on achieving specific results and makes it possible to assess the acquired competencies, and also helps students better understand what is expected of them, and employers - what this or that qualification means.

The reliability of assessing residents' knowledge in all forms of control over residency students is ensured by 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" (<https://cloud.mail.ru/public/QYWp/8xmZPQpqqz>).

While interviewing 35 teachers regarding assessment methods, experts received convincing information that the assessment methods for residents in the specialty "Infectious diseases of adults, children" are being developed and discussed with external stakeholders. Assessing the quality of teaching methods and control and measuring tools (CMT) is one of the functions of the QACS. The QACS reviews applications from students/faculty on the implementation of the EP, monitors the results of employer and student satisfaction, monitors the quality of midterm and final assessments, monitors the results of external assessments and the implementation of recommendations. The QACS also reviews cases of violation of academic integrity.

Residents also shared their opinions on the timeliness of providing tests, conducting consultations before exams, the clarity of the entire assessment procedure and its fairness. For example, residents said that, according to the schedule, consultations are held before the midterm assessment, and training test assignments are analysed.

The experts examined the resources for organizing the assessment of knowledge and practical skills, namely, conducting end-of-course assessment, and clinical examination. A clinical examination is conducted at the patient's bedside. Mastering practical skills: collecting complaints, disease history, epidemiological history, objective status, and justification of diagnosis, assignment of laboratory and instrumental studies, treatment is assessed according to assessment sheets, where the assessment criteria are prescribed.

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 current assessment methods as analysis of clinical cases contribute to inter-professional training. And such a method as a mini-clinical exam demonstrates the integration of training and an emphasis on clinical skills. The established assessment methods guarantee that the resident has mastered all sections of the educational programme and acquired the necessary practical skills.

In NJSC "MUK", the registration of the entire history of residents' academic achievements is handled by the DAA (office registrar department), the departments for accounting of the contingent of students, DI and ID. The office registrar unit constantly monitors the results of the end-of-course assessment and midterm assessment of students and analyses them in accordance with the assessment table, reflecting the actual percentage distribution of absolute grades above the passing level.

After summing up the final grades at the department, the faculty announces the results to the residents with a discussion of what was done well, proposals and further activities to improve the resident's skills and abilities.

In the interview, the residents confirmed that they receive feedback after completing their training.

The 17 employers surveyed also indicated that graduates' training is in line with the modern development of medical practice and science, since practical skills are acquired on a clinical basis, together with clinical mentors they participate in consultations, clinical reviews, pathological-anatomical conferences, study the latest diagnostic and treatment data, study regulatory documents, conduct statistical processing of case histories, the results are published in journals, in conference materials in the form of abstracts, speeches at medical seminars, scientific and practical conferences. Employers said that they themselves participate in the assessment of residents, since they are included in the end-of-course assessment of residents. Employers noted that they receive annual feedback on satisfaction with the quality of the EP. Employers believe that they would like to see the strongest skills in residency graduates such as practical skills, communication skills and knowledge of regulatory documents.

There were no difficulties in developing control and measuring tools.

Conclusions of the EEC on the criteria correspond to 9 standards (including 6 basic, 3 improvement standards): fully - 9, partially - 0, does not correspond - 0.

Recommendations for improvement: none

Standard 4: RESIDENTS

4.1 Admission policy and selection

At NJSC “MUK”, students are admitted to residency based on the Academic Policy of NJSC “MUK”, section "Admission rules, student progress, certification", which is revised annually (<https://www.qmu.edu.kz/media/qmudoc/AcademPolitika.pdf>).

Persons who have mastered higher education programs and internships are admitted to residency. Persons entering NJSC “MUK” for educational programmes in residency are admitted based on their applications on a competitive basis based on the results of the entrance exam. During the period of entrance examinations to residency, examination and appeal commissions are created for specialties (<https://qmu.edu.kz/ru/contents/list/1610>)

The department's Academic staff conducts career guidance work among bachelor's students, interns, practical health care specialists and the medical community on the benefits of admission to residency educational programs. Every year, career guidance meetings with interns are organized jointly with the School of Medicine. A Job Fair is regularly held so that students can plan their future professional activities (<https://fb.watch/pUixrbBNLP/?mibextid=Nif5oz>).

In NJSC “MUK”, the procedure for admitting citizens to residency is established by the order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 “On approval of the standard rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education” (<https://adilet.zan.kz/rus/docs/V1800017650>), by 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>).

The policy for admission and transfer of residents from other national or foreign universities is regulated by the order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 "On approval of the standard rules for admission to study in educational organizations implementing educational programs of higher and postgraduate education" (<https://adilet.zan.kz/rus/docs/V1800017650>), 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>), AP NJSC "MUK" (<https://www.qmu.edu.kz/media/qmudoc/AcademPolitika.pdf>).

The transfer of residents from one university to another is carried out based on available educational grants or their redistribution by the authorized health authority. Residency students'

transfer applications are reviewed by the university rector during the summer vacation period within five working days before the start of the next academic period. During the transfer process, the academic difference in the courses of the curricula completed in previous academic periods is determined. The academic difference is identified by the university based on the list of courses studied, their syllabi, and volume in academic hours, as reflected in a certificate issued to individuals who did not complete their education.

For the transfer of a resident student from a foreign educational institution, a document on completed academic programs (academic certificate, transcript) and a document confirming the completion of the previous education level must be submitted. This document must undergo the nostrification procedure in Kazakhstan, in accordance with the order of the Minister of Education and Science of the Republic of Kazakhstan No. 8 dated January 10, 2008 (registered in the State Register of Regulatory Legal Acts under No. 5135).

The academic difference in the curriculum that is not resolved within the established timeframe is subsequently recorded as academic debt.

The procedure for appeals regarding residency admission outcomes is outlined in the "Admission Policy of NJSC MUK". There were no appeal cases during the reporting period.

Students, particularly residents, are involved in developing the residency admission and selection policy. The review of the admission and selection policy, as well as the number of residents, is conducted annually and is overseen by the Residency and Professional Development School Council (20% of its members are students), the Board, and the Board of Directors, as stipulated in the Admission Policy.

The residency admission policy is periodically reviewed in accordance with regulatory documents of the authorized body, internal decisions of NJSC MUK, and social and professional considerations. For instance, in 2022, additional criteria were introduced into the residency admission rules, including work experience in healthcare and research activities related to the program. These updates were approved by the Chair of the Board and Rector on May 12, 2022. In 2023, the residency entrance exam program included comprehensive testing with questions on biomedical and clinical sciences relevant to the specialty.

Thus, the experts validated the data for **Standard 4**. Overall, all criteria are met.

4.2 Number of residents

Over the duration of the "Therapy" residency program, the number of residents admitted through funding from the local executive body (LEB) of the Karaganda region has increased due to the demand for therapists in the region's medical institutions. The funds for training therapy residents have been allocated by the LEB of the Karaganda region. Specifically, one resident was admitted in the 2022–2023 academic year, and three were admitted in the 2023–2024 academic year.

Table: Number of Admitted Residents to the "Therapy" Program

	2022-2023	2023-2024
Number of applicants	1	5
Number of interview invitees	1	5
Number of interviews completed	1	5
Number of residents admitted	1 (LEB)	3(LEB)

The resident admitted in the 2022–2023 academic year withdrew voluntarily. Two out of the three residents admitted in the 2023–2024 academic year also withdrew voluntarily. Currently, a first-year therapy resident has taken an academic leave to care for her child.

Based on the current Law of the Republic of Kazakhstan dated July 27, 2007, No. 319-III "On Education" (<https://adilet.zan.kz/rus/docs/Z070000319>), the Order of the Ministry of Health of the Republic of Kazakhstan dated December 15, 2020, No. RK MOH-270/2020, the Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018, No. 600, and the Admission Policy of NJSC MUK, admissions to residency programs are carried out through the

allocation of educational grants funded by the republican or local budget, as well as through tuition paid by individuals. For the 2023–2024 academic year, the tuition fee for citizens of Kazakhstan in the residency program was set at 1,500,000 KZT per academic year (Resolution of the NJSC MUK Board of Directors dated June 8, 2023, No. 49). (<https://muk.qmu.kz/ru/obrazovatelnye-programmy/rezidentura/terapiya/>)

In 2020, NJSC MUK developed the "Regulation on Inclusive Education at NJSC MUK" (Protocol No. 26 dated December 9, 2020), in accordance with the Constitution of the Republic of Kazakhstan, the Order of the Minister of Education and Science of the Republic of Kazakhstan No. 600, the NJSC MUK Charter, and internal regulatory documents (<https://www.qmu.edu.kz/media/qmudoc/PPOrganizacii.pdf>).

The "Regulation on Inclusive Education at NJSC MUK" ensures that students with disabilities have access to quality education in an inclusive learning environment alongside students without disabilities. There are currently no residents with disabilities enrolled in the "Therapy" residency program. Resources to support the education of individuals with special needs are defined and approved in the Inclusive Education Plan, which was adopted at the Senate meeting in December 2020. As part of this plan, a working group discusses new development positions for NJSC MUK with members of the university's Board.

Marker signs have been installed in the university's reading room to designate spaces for individuals with special educational needs. In line with its inclusivity policy, the university has equipped the new building with ramps for mobility aids and reconstructed the entrance of the main academic building to allow wheelchair access. Additionally, elevators in the new academic building, commissioned in 2016, are now operational and connected to the main building via a heated passage. This setup ensures accessibility to all classrooms for individuals with mobility limitations.

Special residency programs for individuals with special educational needs are not being developed. The university operates under the principle that inclusivity is about integration, not segregation, ensuring that students with special educational needs are included in standard educational programs. To support this, a provision has been added to the university's AP, granting students the right to an individualized approach in the organization of their learning process. Flexible class schedules and individualized final assessment arrangements are available upon request for students with special needs. These matters are handled by the schools within NJSC MUK, in coordination with the respective departments and the DAA.

4.3 Support and consulting of residents

The university has a system of academic counseling for students, based on monitoring their academic progress. Support and counseling are provided directly by faculty members and mentors from the department responsible for the residents' training. Schools provide guidance on all aspects of the educational process, including mandatory and elective course selection.

The website of the University presents the rules for the entire life cycle of students: schedule, working curricula, instructions, academic rating of students, academic policy, LSI, etc.

NJSC "MUK" has created a Career Development Centre, where one of the areas of work is psychological support for students within the framework of professional activities.

The staff of the Career Development Centre and the Deans of the Schools provides consultations and support on professional orientation and career planning, including recommendations on employment issues both in the workplace and at events, in particular, job fairs.

Students have the opportunity to travel at the university's expense to other cities and countries to participate in Olympiads, competitions, forums, scientific and practical conferences and to visit various exhibitions.

Students are given the opportunity to seek advice from the student service centre at the DAA, the youth department, the career development centre, and schools. The career development centre has a specialist with a background in psychology to support students. Academic, individual support and consultations at NJSC "MUK" are structured taking into account the needs of students.

Some categories of students are provided with preferential accommodation in the dormitories of NJSC "MUK". The entrance to the academic buildings is provided with ramps.

On issues of academic support at the university, professors and teachers can usually provide time for consultations; there are schedules of work of advisers with students to explain the features of educational programs, to improve practical skills it is possible to enrol in the Centre for Simulation and Educational Technologies, where you can also receive consultations from tutors upon request. Issues on the organization of classes and the staffing of groups are decided directly by the employees of the supervising dean's office.

Students are fully provided with educational and methodological materials in both paper and electronic form. It is possible to study in comfortable reading rooms. Video lectures by teachers are available on digital platforms, enriching the educational experience of students. The Physical Health Centre and the University Student Clinic are jointly responsible for managing physical and mental health. Additional sections have been organized to promote and maintain a healthy lifestyle. In addition, the physical development program initially involves dividing students by physical capabilities into the main, preparatory, special medical group and exercise therapy group. Sports equipment is available for students living in dormitories.

Financial support and incentives are provided to students: rector's scholarships, benefits for dormitory fees, provision of meals for orphans and children left without parental care, funding for student organizations, funding for student participation in Olympiads, scientific conferences, social events, academic mobility and internships.

The University provides students with the opportunity to receive a scholarship from the Chairman of the Board-Rector. Every year, the scholarship of the Chairman of the Board - Rector is awarded to full-time students who do not receive a scholarship, starting from the 2nd year of study, who successfully master educational programs (provided that the GPA is not lower than 3.0 for the entire period of study and who have no disciplinary sanctions for the entire period of study), who are engaged in research work, innovative, entrepreneurial, sports, cultural, creative and social activities. The scholarship of the Chairman of the Board - Rector of NJSC "MUK" is not a state one.

The University actively promotes the concept of inclusiveness and accessibility of education, aimed at creating equal opportunities and a favourable environment for all members of the educational community. There are benefits for preferential accommodation in the dormitories of NJSC "MUK" in accordance with the Regulation on the activities of dormitories provided to the following categories of persons: persons with disabilities, disabled persons and disabled people from childhood, disabled children, orphans and children left without parental care, persons whose one or both parents are disabled, young people left without parental care until adulthood, persons equated in benefits and guarantees to participants and disabled people of the Great Patriotic War, rural youth enrolled in educational programs that determine the socio-economic development of the village, as well as fellow countrymen, etc. For students experiencing difficulties with financial issues, there is an opportunity to pay in instalments upon personal application. The agreement on educational services specifies the possibility of paying for tuition in two parts. Vulnerable groups of the population receive a discount on educational services.

The digital environment is actively developing at the university. For example, all students get access to buildings using a branded bank card. Each student receives personal accounts for all digital applications necessary for successful learning. In particular, academic success is recorded in the AIS Platonus program. Other popular services for full digital well-being are also used. It is also worth noting the Student Service Center, which provides students with the opportunity to conveniently and remotely receive certificates of study, apply for admission to classes after missing them for valid and invalid reasons, and other administrative procedures. This department helps to ensure prompt service to students, improving the availability and convenience of obtaining the necessary documents. Students have the opportunity to receive complete information about available resources, news and events at the university through official pages on social networks.

4.4 Representation of residents

The following consultative and advisory bodies operate in the educational organization: the Council of the SR and PD, the Academic Council, the Committee for Quality Assurance of the EP, in the work of which residents participate. Residents have a real opportunity to participate in the organization of the curriculum of the specialty during the direct discussion of the EP, at the level of developing the Individual Work Plan (<https://cloud.mail.ru/public/7pfm/B3eGcbbkH>) and choosing elective disciplines. Representatives of residents are included in the members of the Council of the SR and PD and the Senate.

Resident doctors 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. Mechanisms for rewarding residents for their community service include: when selecting residents for academic mobility programs in universities in neighboring and far abroad countries, preference is given to residents who have scientific achievements and participate in the community activities of the university, city, or country.

4.5 Working conditions

According to the Decree of the Government of the Republic of Kazakhstan No. 799 of 10.10.2022 "Rules for the appointment, payment and amount of state scholarships" (<https://adilet.zan.kz/rus/docs/P080000116>), the Regulation on the procedure for assigning scholarships established by the President of the Republic of Kazakhstan, residents studying on the basis of an educational grant are paid state scholarships.

Based on the order of the Ministry of Health of the Republic of Kazakhstan dated 21.12.2020 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 positions of health workers" (<https://adilet.zan.kz/rus/docs/V2000021856>), residency students have the opportunity to additionally work 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 9.5% of such residents (2).

The educational organization has three clinical bases for resident training, each hosting various events in which residents participate. For instance, pathological and anatomical conferences, city seminars for primary healthcare physicians, scientific conferences, and clinical case reviews. On average, residents manage 6–10 patients daily and 30–40 patients monthly. They prepare thematic reports on infectious diseases of current concern during the epidemiological season (e.g., measles, ARVI, influenza, meningococcal infections, intestinal infections, viral hepatitis) to maintain awareness among physicians. Residents also participate in health education initiatives, including developing informational leaflets on the prevention of key therapeutic diseases in Kazakh and Russian for the general population.

NJSC "MUK" concludes an Agreement on joint activities with clinical bases (F NJSC "MUK" 8-20/1) in accordance with the Order of the Ministry of Health of the Republic of Kazakhstan dated December 21, 2020 No RK MOH-304/2020 "On approval of the provisions on the clinical base, clinic of the organization of education in the field of health care, university hospital, residency base, integrated academic medical centre and the requirements imposed on them" (<https://adilet.zan.kz/rus/docs/V2000021848>), according to which, in order to form an effective management system by increasing transparency in the exchange of information and decisions taken, distribution of powers and responsibilities, ensuring responsibility, the management of the residency base provides stakeholders with access to information on the current procedures of the organization, determines the levels of access of personnel, including resident doctors, to confidential information.

Residents' participation in the provision of medical services does not dominate over educational services and is not excessive. The administration of clinical bases can offer additional work to residents in cases of production need in the amount of no more than 0.5 of the rate; part-time work is possible only with the consent of the resident.

While providing diagnostic and therapeutic measures carried out at clinical bases, residents work under the guidance of a clinical mentor. The main role of the mentor is to teach residents practical activities and achieve the competencies necessary for independent medical practice. Residents, under the supervision of mentors, provide inpatient care to patients, conduct outpatient and polyclinic appointments, conduct preventive measures, informational and explanatory work, participate in laboratory and instrumental research, and are on duty at the clinical bases of NJSC "MUK" at least four times a month.

When visiting the clinical base, experts found that residents have appropriate working conditions to support their own health, since NJSC "MUK" has created favourable working conditions for high-quality education. The Clinic assumes an unconditional obligation to ensure healthy and safe conditions when carrying out any type of work on the basis of the Clinic, in connection with which, all types of liability for causing harm to the life and / or health of students, employees of the Parties and third parties when carrying out any type of activity on the territory of the Clinic, are assigned entirely to the Clinic", "Provision of scientific and pedagogical workers and students of the organization of higher and (or) postgraduate medical education with personal protective equipment necessary for work in specialized departments of the university hospital."

Clinical bases 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 training and sign a familiarization sheet on safety precautions.

Residents due to illness, lasting from 6 to 12 months, based on the conclusion of the medical advisory commission at the hospital or outpatient and polyclinic organization (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 the child 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 (a 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 program, from the same year (and academic period) from which he/she applied for this leave.

There have been no cases of therapeutic residents at NJSC "MUK" requiring individual training programs. Nevertheless, if such a need arises, sufficient tools and resources are available to ensure a full training program and maintain the required quality of education. One potential component of such training could be the expertise gained during the COVID-19 pandemic in organizing an effective distance learning process.

Since 2020, due to the onset of the COVID-19 coronavirus pandemic and the introduction of quarantine and restrictive measures in the Republic of Kazakhstan, adjustments were made to the organization of the educational process at NJSC "MUK". Effective distance learning programs "Zoom", "Teams", "Webex" have been introduced into the educational process. While analysing the topics of classes, the teaching staff has done a lot of work to transform traditional forms of teaching into an electronic learning format: the virtual board "Padlet", work in online rooms, Google survey and other innovative technologies.

This is enshrined in the document - Academic Policy <https://muk.qmu.kz/ru/obuchayushchimsya/gid-po-obucheniyu/akademicheskaya-politika/organizatsiya-uchebnogo-protssesa/>

Conclusions of the EEC on the criteria. Comply with 20 standards (including 14 basic, 6 improvement standards): fully - 20, partially - 0, does not comply - 0.

Recommendations for improvement: no

Standard 5: TEACHERS

5.1 Recruitment and selection policy

The NJSC "MUK" has developed, approved and implemented [the university's personnel policy, rules for the admission of employees upon employment, the Rules for competitive replacement of vacant positions](#), to maintain the optimal level of the numerical and qualitative composition of employees, their professional and social development to ensure high quality of the educational process and training in residency of competitive specialists taking into account the needs of the labour market. The above-mentioned regulatory documents are regulated by the Labour Code of the Republic of Kazakhstan (<https://adilet.zan.kz/rus/docs/K1500000414>), the Law of the Republic of Kazakhstan "On Education"

(https://online.zakon.kz/Document/?doc_id=30118747&doc_id2=30118747#activate_doc=2&pos=66;-98&pos2=2381;-98) 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" (<https://adilet.zan.kz/rus/docs/V090005750>). The regulatory documents establishing the guarantee of labour rights and freedoms of employees, the creation of favourable working conditions for them are the collective and labour agreements.

According to the Regulations on Residency, training is carried out under the guidance of the Academic staff and a clinical mentor. Classes in the residency are conducted by persons with an academic degree of Doctor of Science or Candidate of Sciences, an academic degree of Doctor of Science PhD, as well as doctors with a certificate and at least 5 years of experience who correspond to the profile of the discipline taught. The clinical mentor is appointed by order of the Chairman of the Board - Rector from among qualified specialists in practical health care working at the residency bases, who have a certificate and at least 5 years of experience in the relevant specialty.

The University implements its personnel policy in such a way that the profile of the teaching staff strictly corresponds to the range and balance of teaching skills, which is achieved by constant monitoring and regulation of the ratio of teaching staff teaching basic and clinical disciplines based on the needs for the effective implementation of educational programs, as well as based on the total volume of teaching load based on the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 606: "On approval of the average ratio of the number of students to teachers for calculating the total number of Academic staff of higher and (or) postgraduate education organizations, with the exception of military, special educational institutions, educational organizations in the field of culture" (<https://adilet.zan.k/rus/docs/V2000020928>).

The personnel policy, the development plan for mentors and teachers are regulated by laws and orders of the Ministry of Health and the Ministry of Education of the Republic of Kazakhstan. Due to their periodic changes and additions, as well as based on changing needs in postgraduate education, the DHRM makes changes and additions to the regulatory documents of the university.

To adapt the policy of recruitment and development of Faculty and clinical mentors in residency, a regular assessment of needs in the field of healthcare is carried out, through a periodic analysis of the degree of satisfaction of employers and students, as well as actively cooperating with representatives of the medical community, employers and graduates.

Academic staff are actively involved by the Ministry of Health of the Republic of Kazakhstan as experts in the development of clinical protocols and independent examinations.

The university's recruitment practices are improved by training graduates in residency, master's and doctoral programs for the further human resources of the departments.

The distribution of the Academic staff by discipline categories directly corresponds to the number of allocated academic hours and rates for the specialty approved for each discipline. The number of teaching staff is calculated based on the average ratio of students and teachers (the average number of students per teacher) of 3:1, respectively. When forming working curricula and calculating hours, labour intensity is taken into account and a balance is achieved in the ratio of teachers and residents.

The Academic staff and clinical mentors of the "Therapy" educational program meet the required qualifications for their positions and possess the competencies outlined in the Residency Regulations. These qualifications ensure the achievement of the mission and goals of the educational program.

Indicators of the effectiveness of Academic staff and clinical mentors include the acquisition of medical skills and competencies by students in their specialty as specified in the Model Curriculum, Educational Program, syllabi, and successful completion of independent examinations.

The head of the "Therapy" educational program is R.Zh. Toyynbekova, Candidate of Medical Sciences, Associate Professor, Physician-Therapist of the Highest Category, and Specialist in Functional Diagnostics.

Since the establishment of the "Therapy" educational program at NJSC "MUK", four residents have been enrolled (three have withdrawn, and one is currently studying). At present, the educational process is supported by five faculty members: three professors on full-time contracts, one associate professor, and one assistant professor, as detailed in Appendix 5.

The overall profile of the academic staff involved in implementing the "Therapy" program throughout its existence is presented in [Table 5](#). This table reflects the academic qualifications of the faculty, core staff, part-time AS, total staff, and the proportion of women during the reporting period.

Faculty members implementing the program are certified specialists with the highest qualifications in their respective fields and have over 20 years of professional experience. They actively engage in clinical practice at clinical bases and university clinics while conducting scientific research with notable publication activity. Details on the core faculty members are provided in Appendix 5 B.

Clinical mentors guiding the clinical activities of residents are certified specialists with the highest or first qualification categories and at least five years of clinical experience. These mentors head specialized departments. The clinical mentors overseeing residents' clinical activities include:

- 1.S.V. Vitt - Deputy Director for Therapy at "City Center for Primary Health Care" LLP, a physician-therapist of the highest qualification category.
- 2.S.S. Asanova - Head of the Therapeutic Department at the "Regional Medical Center" State Enterprise, Karaganda Region.

Experts have reviewed the job descriptions of employees and the regulations on clinical mentors.

They have also familiarized themselves with NJSC "MUK's" staffing policy dated January 11, 2021, the regulations on mentors, [rules for hiring employees](#), and rules for [competitive selection for vacant positions](#). The faculty-to-resident ratio is 1:5.

The university's staffing policy ensures the recognition of all types of activities by full-time Academic staff through incentive measures. The motivation system for faculty and clinical mentors includes bonuses, awards, and monetary rewards. For professional achievements, employees receive certificates of honor, letters of appreciation, medals, and other awards. Information on performance evaluations and recognition of achievements across all activities is presented at Senate meetings and published on the university's website.

According to the Regulation on Remuneration of NJSC "MUK" (approved by the Chairman of the Board - Rector of NJSC "MUK" dated 08/16/2021), additional payments are made to the authors' team for publishing an article with an impact factor of more than 1, in international peer-reviewed scientific publications (indexed in the Web of Knowledge, Scopus). Remuneration for scientific work is carried out in accordance with the Regulation on temporary research teams created in NJSC "MUK" to implement scientific and technical programs. Distribution of wages among participants of temporary research teams is carried out in accordance with the labour participation of each employee. All university employees also have social support - sports infrastructure, preferential services in the Dental Clinic, an active trade union.

If the indicators are successfully met, the Academic staff is stimulated annually in the form of bonuses.

Additional payment for teaching classes in English to the Academic staff with an IELTS certificate (5.5 points and above) or TOEFL (525 points and above) is in the amount of 100% of the basic salary (including external part-time workers (master's students, doctoral students)).

The principles of ethics and academic integrity of teachers are reflected in the document - the Code of Academic Integrity and the Code of Business Ethics. During a conversation with the teachers, they confirmed their awareness of this issue, the documents reflect the rules and responsibilities, ethical standards, values and principles, they are all familiar.

In order to verify the data of standard 5, external experts received the opinion of teachers on the personnel policy, which includes corporate values and competence of employees, the personnel policy carried out at the university is designed to strengthen the confidence of employees in the demand for their work, a fair assessment of activities to ensure the long-term economic potential of the university, the preservation and increase of its intellectual capital. The conversation with Associate Professor Devdariani H.G. included such questions as how you attract employees of clinical sites for teaching and allowed the experts to learn about the approaches to attracting employees of clinical sites for teaching (there are 8 such teachers in total), about the strategy and tactics of recruiting residents, information support of the educational program, and also to identify problems in the management and development of human resources, since most part-time workers do not know the teaching methods, but instruction on teaching methods is carried out, and part-time workers attend classes of experienced teachers, internal departmental control is carried out by full-time employees.

When 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. Satisfied with the work of the HR service (personnel) - 80% completely agree, 20% partially. Satisfied with the salary - 56% completely agree, 28% partially, more no than yes - 4%.

5.2 Commitments and development of teachers

In NJSC "MUK" for the Academic staff of the residency EP, ample opportunities for professional and personal improvement are provided: internships, seminars, an internal system of advanced training, courses in the state, English language, cooperation with foreign universities and recognized experts from near and far abroad in the specialized specialty within the framework of academic mobility programs, information and communication technologies are highly developed.

The approach to planning advanced training for academic staff and clinical mentors is differentiated, taking into account the needs, revision and changes in state mandatory standards, teaching methods and the emergence of new technologies, the needs of practical healthcare.

The university conducts advanced training courses in specialties and pedagogical qualifications. For clinical mentors, courses are held on educational technologies in teaching clinical disciplines in the amount of 60 hours. Upon completion of advanced training, relevant supporting documents are issued, which are submitted to the department, the HR department, and also uploaded to the AIS "Platon".

Full-time employees of the department, including clinical mentors, systematically undergo advanced training according to the development plan of the educational program.

In December 2023, the university held an advanced course for trainers to improve the pedagogical qualifications of employees of a medical educational organization on the module "Effective Teacher" in the amount of 180 hours / 6 credits, within the framework of which teachers were able to improve their teaching skills. Also, from December 11 to 15, 2023, a course on "Educational Technologies in Teaching Clinical Disciplines" was held. (<https://cloud.mail.ru/public/QYWp/8xmZPQpqqz>).

Faculty members have full opportunities for continuous professional development both within the university/country and abroad, in accordance with the department's and university's plans. For language development, Academic staff members take courses in English and Kazakh languages.

An important factor is the involvement of teachers from universities of the Republic of Kazakhstan, near and far abroad in the educational process of NJSC "MUK" under the academic mobility program. All teaching staff and clinical mentors of this EP have undergone advanced training in their main specialty and in pedagogical competence over the past 5 years (<https://cloud.mail.ru/public/QYWp/8xmZPQpqz>).

In 2023, the university implemented an Individual teacher work plan (ITWP) on the "Platon" AIS platform. The plan includes activities such as educational, methodological, scientific, and public work. The "ITWP Regulation" provides an incentive system based on the completion of plan items by year-end. Criteria for scientific, educational, pedagogical, and clinical achievements are outlined in the ITWP, which is discussed during department meetings and approved by the department head, specifying the volume and timelines for the educational, extracurricular, methodological, public, scientific, and other activities of faculty members, in alignment with the department's and university's overall goals and objectives.

The results of the work of the faculty and department are reflected in the rating assessment of the department's activities, which makes it possible to identify the strengths and weaknesses in the work of each teacher according to the ITWP, and departments as a whole. The analysis of the fulfilment of the performance indicators of the faculty of the departments is carried out by the head of the department and discussed at a meeting of the department, considered at a meeting of the Senate of the SR and PD and a meeting of the University Senate. According to the rules for certification of the faculty and research staff of the NJSC "MUK", certification is carried out in order to determine the compliance of the university's teachers and research staff with the qualification requirements imposed on the faculty and research staff of the NJSC "MUK", at least once every three years. According to the rules for the attestation of AS and research staff at NJSC "MUK", attestation is conducted to determine whether university instructors and researchers meet the qualification requirements for AS and research staff of NJSC "MUK." This process takes place at least once every three years.

The research and innovation activities of the Department of Therapy are related to the training of residents, participation in RW (Research and Innovation Activities (<https://cloud.mail.ru/public/QYWp/8xmZPQpqz>), development of clinical protocols of the Ministry of Health of the Republic of Kazakhstan in the specialty "Therapy", independent examinations.

To verify Standard 5 data, during a meeting with the Head of the HR Department and interviews with instructors, experts obtained opinions on approaches to developing teaching competencies among faculty members, their motivation to work with residents, and their mentoring roles. This includes additional training on educational technologies, opportunities to participate in research and technical programs, joint publications with AS and residents, and participation in scientific and practical conferences.

Experts found that instructors and residents have sufficient time for teaching, mentoring, and learning. The AS work schedule, provided by the program leader, indicates the following hours: for a full-time position (1.0 FTE), the working hours are from 8:00 AM to 3:42 PM. Instructors conduct daily seminars lasting 3 hours. Time allocated for clinical case reviews and ward rounds is from 8:00 AM to 5:00 PM, with on-call duties four times per month.

The salary fund for instructors consists of a base salary, which is a fixed component of their pay, and additional payments and allowances, which form the variable component. Base salaries are established based on the staffing schedule by decision of the NJSC "MUK" management board. Funding for mentors is carried out in accordance with the remuneration regulations of NJSC "MUK" (Protocol No. 25 dated 17.11.2023).

Experts noted that instructors initiate RW topics for residents, encouraging the need for additional training and independent work with literature and medical documentation within the IMIS. From discussions with residents, it was learned that infectious disease residents actively use platforms such as PubMed and UpToDate for both scientific and clinical purposes.

In the educational organization, there is an opportunity for career growth and development of teacher competencies - 84% of the surveyed teachers answered, and 16% partially agree with this.

Studied in professional development programs - 84% during the current year, 16% more than 3 years ago.

The organization implements social support programs for teachers - 64% answered that "yes, such programs exist", 4% "I have already used this", 4% of respondents answered that they doubt, and 28% of respondents do not know about it.

Conclusions of the EEC on the criteria. Compliant with 8 standards (including 7 basic, 1 Standard of improvement): fully - 8, partially - 0, do not comply.

Recommendations for improvement: none.

Standard 6: EDUCATIONAL RESOURCES

6.1 Material and technical support and equipment

The Karaganda Medical University possesses a sufficient material and technical base, enabling the creation of all necessary conditions for training qualified specialists and achieving final outcomes and competencies in the "Therapy" specialty. The total area of the university's main academic buildings is 29,160.6 sq. m., while the dormitories cover 30,162.9 sq. m. On the territory of the University Clinic, which occupies an area of 2,122 sq. m., there are primary and auxiliary units, as well as training rooms. Lecture halls and classrooms are equipped with multimedia support, internet access, and modern computers.

At clinical bases, residents undergo initial safety training, which is documented in the Occupational Safety Journal of the respective departments. Subsequently, every 6 months, residents undergo refresher safety training. The clinical mentor is responsible for conducting the training and ensuring residents comply with workplace safety rules. Additionally, department heads oversee the provision of safe working conditions and occupational safety at workplaces.

All clinical bases are equipped to provide first aid to residents, adhere to anti-epidemic measures, and create conditions for IWR.

The library plays a key role in providing residents with informational resources. Experts visited the library, which offers residents and staff access to educational and methodological literature.

The library's total area is 1,526 sq. m., with 941.6 sq. m. allocated for book storage. The reading rooms can accommodate 443 seats. The library includes an acquisition and bibliography department, a service department for scientific and educational literature (comprising a scientific literature subscription section, two educational literature subscription sections, a reading room, a periodicals hall, an electronic resources hall, and an interactive room). The library's computer facilities include 113 computers, of which 88 are thin clients (TC). Twenty-one personal computers (PCs) are located in library departments, 4 PCs and 63 TCs are in the electronic resources hall, and 25 TCs are in the interactive room. All computers are connected to the Internet. Wi-Fi coverage is available throughout the library. The electronic resources hall is equipped with two scanners, and the interactive room features a short-throw projector. For students, there is a Researcher's Room equipped with 15 computers connected to the Internet, allowing access to all university information resources. User services in the electronic halls are available Monday to Friday from 9:00 AM to 8:00 PM and on Saturdays from 9:00 AM to 6:00 PM. The university library has 2 information kiosks that allow users to electronically order necessary literature via the electronic catalog based on the "WEB-IRBIS" module.

As of January 1, 2024, the university library's total collection comprises 455,599 items across 43,703 titles, meeting the requirements for literature availability.

The formation of the document collection is carried out as follows:

- Educational publications are acquired based on department requests in alignment with the university's curricula and programs.
- Scientific publications and other document types are procured to satisfy the needs of readers, including students and faculty.

In recent years, the university has subscribed to electronic libraries such as "Student Consultant", "Doctor Consultant", "Lan", "Epigraph", "Aknurpress", "RMEB", which offer over 10,000 electronic educational, methodological, and supplementary publications across various disciplines in Kazakh, Russian, and English. Students and faculty also have access to international databases, including ClinicalKey, Osmosis, Wiley Online Library, STATdx, Complete Anatomy, and others. The library ensures timely and unrestricted access to library resources for all reader categories through the electronic resources hall, the interactive room, and remote access options.

Access to library resources is facilitated via an electronic catalog, bibliographic, and full-text databases, which are integrated into the university's information and analytical system. To enhance the range of information resources and improve the efficiency of information and reference-bibliographic services, the library has developed its own full-text databases. Access to these databases is available through the electronic catalog on the university's website and portals, subject to user authorization (via personal identification number and password). The electronic catalog of the university library comprises 83,740 records.

To boost the university's scientific activity ranking and publication output, as well as to promote its scientific works online, the "NJSC MUK Repository" was established in 2018. This repository is included in the global Open DOAR catalog of open access repositories and indexed by Google Scholar. As of 2024, the repository contains 624 scientific publications and works.

As part of the national subscription, the library provides access to the following platforms:

1) Wiley Online Library (<https://onlinelibrary.wiley.com/>) A multidisciplinary publisher offering full-text scientific resources across all fields of modern science and knowledge. Scientific content is divided into major thematic collections of journals, books, and encyclopedias in areas such as natural, technical, social, and humanities sciences. Access is provided through a national subscription.

2) Web of Science (Clarivate) (<http://csi.webofknowledge.com/CSI/exit.do?Func=Exit&SID=D5Nylp9iOfDZWQbh9TF>) A multidisciplinary electronic scientific research platform that includes interdisciplinary and specialized databases. Access is provided through a national subscription.

3) Scopus Elsevier (<https://www.scopus.com/search/form.uri?display=basic>) A citation abstract database that includes approximately 38,000 global journals and calculates citation indices for journals and authors. Access is provided through a national subscription.

4) ScienceDirect (<https://www.sciencedirect.com/>) An information platform by Elsevier, offering access to 13 million publications from 2,500 scientific journals and 33,000 books. Articles are grouped into four main sections: physical and engineering sciences, life sciences, medical sciences, and social and humanities sciences. Access is provided through a national subscription.

5) ClinicalKey Elsevier (<https://www.clinicalkey.com/>) An online resource for medicine and healthcare by Elsevier, offering access to more than 1,000 Elsevier books, over 600 journals, clinical guidelines with an updatable library of standards, a drug database, a video library with over 17,000 videos and 3.6 million illustrations, and a presentation tool for exporting illustrations to PPT slides. Access is available via registration in the electronic library through the university's IP addresses.

6) Complete Anatomy Elsevier (<https://3d4medical.com/download>) A virtual anatomical atlas. Access is provided via an activation code.

7) Osmosis (<https://www.osmosis.org/login>) A learning platform designed to help students study more effectively and retain information visually. It offers videos, quizzes, flashcards, notes, and other resources covering a wide range of medical topics, from physiology to pathology, pharmacology, and clinical practice. Access is provided via login and password.

8) STATdx (<https://app.statdx.com/>) A diagnostic resource for radiologists, used in daily practice and scientific research in radiology. STATdx includes information on all radiological specialties, with over 4,300 diagnoses, 200,000 high-quality images, 300 anatomical modules, 1,400

differential diagnoses, 20,000 real patient case studies, and step-by-step procedural guidelines. Access is provided via registration ID and password.

9) Lecturio – A next-generation precision medical learning platform featuring content from professors at leading universities worldwide. Access is provided via license codes.

10) Medical University Electronic Library "Student Consultant" (<http://www.studmedlib.ru/>) This resource includes 2,601 electronic educational and supplementary publications across various disciplines, 167 publications in Kazakh, and 367 medical periodicals. Access is provided via an activation code.

11) Electronic Medical Library "Consultant Doctor" (<http://www.rosmedlib.ru/>) This electronic library offers access to various reference books, national guidelines for practicing physicians, clinical recommendations, and monographs. "Consultant Doctor" includes 2,429 publications and 1,313 training modules. Access is provided via an activation code.

12) Electronic Library System "Lan" (<https://e.lanbook.com/>) This system includes 1,396 educational publications on medicine, including materials for postgraduate education. Access is granted upon registration in the ELS via the university's IP addresses. Remote access is available upon attachment to the University.

13) Electronic Library "Epigraph" (<https://res.epigraph.kz/search/>) This collection features 1,000 titles of textbooks and educational aids in medicine and related sciences for higher education institutions in the Republic of Kazakhstan. Textbooks and manuals are available in three languages: Kazakh, Russian, and English. The books contain colorful illustrations of the studied material. Access is provided upon registration in the electronic library via the university's IP addresses. Remote access is available using the University's promo code.

14) Epigraph Multimedia Textbook Portal (<https://mbook.kz/ru/index/>) Provides access to 50 multimedia textbooks in Kazakh, Russian, and English. Access is granted upon registration in the electronic library via the university's IP addresses. Remote access is available using the University's promo code.

15) Digital Library "Aknurpress" (<https://aknurpress.kz/login>) Contains over 1,000 titles of textbooks and educational aids for higher education institutions in the Republic of Kazakhstan, aligning with academic disciplines. Textbooks and aids are available in Kazakh, Russian, and English. Access is provided upon registration in the electronic library via the university's IP addresses. Remote access is available using the University's promo code.

16) Republican Interuniversity Electronic Library (RMEb) (<http://rmebrk.kz/>) Contains 76,417 titles of documents, including textbooks, teaching aids, abstracts, dissertations, monographs, journals, and video materials on general education disciplines and medicine. Access is granted upon registration using the University's corporate email.

Users are informed through notifications sent to their corporate Outlook email and postings on the MUK website, the MUK Portal, the Student Portal, the University's Instagram page, and the Telegram messenger (<https://t.me/muklibrary/>). The MUK website features a "Library" section in Kazakh, English, and Russian. Additionally, the library maintains feedback channels with readers via the Student Portal and the Telegram bot @MUKLibrarybot, where students can ask questions, view event calendars, access documents, instructions, and videos on using electronic resources, and more.

The University provides extensive opportunities for residents to utilize the Center for Simulation and Educational Technologies (CSET). The center enables the simulation of various clinical scenarios that closely resemble real-world medical practice. It is equipped with simulation devices and demonstration tools to develop practical skills in specialty areas and emergency care in internist practice. Key equipment includes:

A virtual ultrasound simulator with the LiveScan SONOSIM sensor for training in ultrasound diagnostics for adults and children of various ages; Mannequins for practicing rectal examination skills for various rectal pathologies, nasogastric tube placement, and gastric lavage; A SimMan patient simulator with software for practicing intensive care skills in various clinical situations; Phantoms for catheterization of peripheral and central veins (Nasco, LF01012U) in adults and children; Equipment

for oro- and nasotracheal intubation in adults, children, and infants (AirSim Standard); Mannequins for BLS, ACLS (BT-CPEA), and PALS training, including a neonatal and 5-year-old child mannequin for pediatric cardiopulmonary resuscitation; NENASIM (Epona) infant simulator for realistic multidisciplinary group or individual simulation training in infant patient care; Mannequins for lung and heart auscultation skills, equipped with an electrocardiograph and defibrillator; A 3B Scientific cricothyrotomy trainer for practicing airway management techniques; A life-size ambulance model by GC "CARUS" for simulating emergency medical care; The OPUS MINI universal platform for interactive training in various medical procedures, including ultrasound-guided central venous catheterization.

Residents regularly practice their skills at the CSET by pre-scheduling and registering for sessions. Group supervisors evaluate the outcomes of independent training sessions at the center, ensuring oversight of the conducted activities.

The satisfaction of students and faculty with the material and technical resources supporting the educational process is analyzed annually through surveys.

Heads of departments, program directors, and discipline coordinators review material and technical resources yearly to identify gaps and update the inventory of core and supplementary literature and essential training equipment. Based on this analysis, requests are compiled and submitted to the library for subsequent acquisition. Updates to the material and technical base are reflected in syllabi for modules and disciplines.

As new literature is acquired, a Teaching and Learning Resource Map for program disciplines is developed to track the availability of literature.

The library develops and updates user guides for the university's subscribed electronic resources annually. The Library section on the MUK website, available in Kazakh, English, and Russian, includes a "Links to Information Resources" page featuring links to user guides for electronic resources. Additionally, these guides are available on the Student Portal in the "Library" section.

6.2 Clinical bases

NJSC "MUK" operates 3 of its own clinics (University Clinic, Occupational Health Clinic, and Dental Clinic) and collaborates with medical organizations in Karaganda, Karaganda Region, and Astana. The joint activities of these medical institutions with the medical university are regulated by cooperation agreements updated annually by the Clinical Work Department.

The agreements with the university's clinical bases are prepared considering the educational programs' needs, including patient profiles, the level of medical care provided, the availability of facilities for organizing the educational process, student safety, and the medical organization's accreditation certificate, which confirms the compliance of the clinical base's activities with the healthcare accreditation standards of the Republic of Kazakhstan.

The clinical bases used to implement the educational process of the residency specialty "Therapy" are the medical institutions of city and regional significance: Regional Clinical Hospital (renamed "Regional Multidisciplinary Hospital" as of 01.02.23), University Clinic of NJSC "MUK", Occupational Health Clinic of NJSC "MUK", City Center for Primary Health Care LLP, Regional Medical Center of Karaganda Region. The university ensures that these clinical bases are fully equipped to support the educational process (Appendix 7B). A total of 36 educational rooms are available at the clinical bases, providing 100% of the required space for teaching.

The clinical bases involved in the "Therapy" residency program feature: 24/7 multidisciplinary inpatient departments and day-care facilities. Laboratories for clinical biochemistry, immunology, and bacteriology. Centers/offices for functional, ultrasound, and radiological diagnostics, as well as endoscopy, all equipped with modern technology. These facilities create the necessary conditions for effective resident training.

The clinical training of residents is supervised by clinical mentors, including one department head and physicians with over 15 years of professional experience in their specialty.

Residents gain extensive practical skills under the guidance of clinical mentors while working in departments during the day and through mandatory night shifts (4 night shifts per month). Residents document all their achievements in portfolios (evaluation sheets), which are certified by clinical mentors and supervisors.

The clinical bases of the "Therapy" residency program provide an adequate number of patients with therapeutic diseases. Residents work within the IMIS.

The university offers extensive opportunities for residents to utilize the Center for Simulation and Educational Technologies (CSET). The center allows the simulation of various clinical scenarios that closely resemble real-world medical practice. Residents practice their clinical skills at CSET during their independent study hours, following prior booking and registration of their training time. As part of the educational process, practical seminars on emergency care, titled "Emergency Conditions Territory", are also conducted in the CSET.

The residency training program for therapy residents includes a course on "Intensive Care in the Inpatient Setting", and the curriculum incorporates sections dedicated to emergency care.

Residents demonstrated a strong commitment to the educational process, actively responding to questions from external experts. They shared their perspectives on the organization of training, the assessment of their skills, the availability of consultative support, opportunities to engage in research activities, and funding. The experts reviewed residents' documentation, including portfolios, assessment results (checklists), and survey outcomes.

6.3 Information technology

To meet the needs of residents and teachers in educational, scientific and information requests, the University provides access to the necessary web resources and electronic media (<https://cloud.mail.ru/public/QYWp/8xmZPQpqqz>).

The official website of the University is a publicly available source of information on all areas of the University's activities for all interested parties. Access to other information resources of the University for University employees, teachers, and students is carried out through authorization under their account to ensure security when performing actions. All university employees have authorized access to the corporate portal <https://portal.kgmu.kz>. Teachers and all other participants in the educational process have access to the AIS Platonus. Students use the information provided in the AIS Platonus, as well as the resources of the student corporate portal <https://kgmukz.sharepoint.com/>.

Information resources on educational and scientific activities for teachers, researchers and students are provided by the library in accordance with the instructions provided on the official website of the university on the page Library - Social networks are also operational sources of information for students and university employees; the university has official accounts: <https://www.instagram.com/officialkmu/>, <https://www.facebook.com/Officialkmu/>, <https://vk.com/officialkmu>.

Since January 2022, an electronic library card based on the Wallet software has been introduced for all library users. In order to improve the rating of scientific activity and publication activity of the University by promoting its scientific works on the Internet, in 2018 the "Repository of NJSC "MUK" <http://repoz.kgmu.kz/>, was created, which is included in the global catalogue of open access repositories "Open DOAR" and in the Google Scholar search engine. In 2023, the number of publications and scientific papers posted in the "Repository of NJSC "MUK" are 624 scientific papers.

Residents confirmed that they can use these web resources and electronic media, including in preparation for classes.

In order to effectively use information and communication technologies in the educational process in the specialty "Infectious diseases of adults, children", the Microsoft Teams platform was used during the PS during the pandemic, and Webex has been used since 2022. We work remotely with residents who carry out visiting residency in the regions according to the needs of practical healthcare. The LMS Moodle platform is used to conduct the IWR with specific assignments,

assessment criteria and assignment submission schedule, when conducting theoretical classes in a hybrid format with residents of the visiting residency in the 2nd year.

In connection with the transition to distance education and the need to develop telecommunications for the high-quality implementation of the educational process, the University purchased Cisco Webex Desk Pro - a system that uses artificial intelligence to collaborate with advanced features such as Webex Assistant and facial recognition for video conferencing

Since January 2022, an electronic library card based on the Wallet software has been introduced for all library users. The electronic resources room of the NJSC "MUK" library provides access to the Internet, an electronic catalogue and an electronic library, electronic textbooks, and databases. The official website is managed by the university's public relations service, which administers the site.

Thus, information about library services and resources is presented on the website in the "Library" section (<https://www.qmu.edu.kz/ru/contents/list/1452>), information on the provision of educational services for students of additional education is in the "Professional Development" section (<https://qmu.edu.kz/ru/education>).

For the effective use of new information technologies and access to patient data and health information systems within the framework of both the educational and treatment process, residents of the specialty "Infectious diseases of adults and children" use an Integrated medical information system (IMIS) for patient management, entering medical and diary records, generating sheets of doctor's orders, making diagnoses, issuing epicrisis and prescribing laboratory and instrumental research methods, for attaching outpatient appointment reports.

Fast and efficient transfer of information in all areas of the educational trajectory is provided by the information platforms of corporate mail Outlook, Student Portal, SharePoint.

The educational program uses such technologies as, consultations on the IWRT for students are conducted remotely on the Webex electronic platform, where all MUK teachers are users and have the opportunity to hold meetings, consultations, lectures with students in real time, share content; for posting training courses. For the purpose of conducting the IWR, the LMS Moodle platform is used with specific assignments, assessment criteria and assignment submission schedule.

The library of the NJSC "MUK" provides access, including remote access, to the following educational and scientific information resources.

1) Wiley Online Library <https://onlinelibrary.wiley.com/>
2) Web of Science (Clarivate) <http://csi.webofknowledge.com/CSI/exit.do?Func=Exit&SID=D5Nylp9iOfDZWQbh9TF> - A multidisciplinary electronic research platform including interdisciplinary and specialized databases. Access is provided via a national subscription.

3) Scopus Elsevier <https://www.scopus.com/search/form.uri?display=basic> - A citation abstract database. Access is provided via a national subscription.

4) Science Direct <https://www.sciencedirect.com/> - Access is provided via a national subscription.

5) ClinicalKey Elsevier <https://www.clinicalkey.com/> - An online resource for medicine and healthcare from Elsevier, accessible with registration through the university's IP addresses.

6) Complete Anatomy Elsevier <https://3d4medical.com/download> - A virtual anatomical atlas. Access is provided through an activation code.

7) Osmosis <https://www.osmosis.org/login> - An educational platform that helps students learn better and remember more information visually. Access is provided through login credentials.

8) STATdx <https://app.statdx.com> - A diagnostic resource for radiologists, used in daily practice and for scientific research in radiology.

9) Cochrane Library <https://www.cochranelibrary.com/> - A database of evidence-based medicine, consisting of clinical protocols, trials, and research.

During the unfavourable epidemiological situation of the COVID19 pandemic, new communication and information platforms for distance learning were mastered: Microsoft Teams, Webex Cisco, Zoom, Moodle. Distance learning was carried out during the pandemic (during the

quarantine period), the Microsoft Teams platform was used, since 2022 - Webex for the effective use of information and communication technologies in the educational process in residency specialties during the PS. Residents who carry out visiting residency in the regions work remotely according to the needs of practical healthcare. For the purpose of conducting the IWR, the LMS Moodle platform is used. with specific assignments, assessment criteria and assignment submission schedule.

Students from the category of persons for whom DET may be applied and who have expressed a desire to study using DET submit an application in any form addressed to the Chairman of the Board-Rector for permission to study using DET, on the basis of which an order is issued. The University provides the student with an individual curriculum and a schedule for mastering the EP, developed on the basis of the working curriculum.

While implementing educational programs or parts thereof using DET, the University:

- creates conditions for the functioning of the educational Internet portal of the information and educational environment, ensuring that students master educational programs or parts thereof in full, regardless of the location of the students;
- determines the procedure for providing educational and methodological support for the educational process, including in the form of individual consultations provided remotely using information and telecommunication technologies;
- determines the ratio of the volume of classes conducted through direct interaction between the teacher and the student, and classes using DET;
- provides students with access to the information system, which contains all educational, reference and methodological material, the testing system, electronic resources and sources;
- makes management decisions when circumstances arise that do not depend on the actions of participants in the educational process.

While teaching individuals with special educational needs using DET, the reception and transmission of information is carried out in forms accessible to them.

The structural unit responsible for organizing the educational process according to DET is the school implementing the relevant EP.

The preparation of digital educational resources is carried out by their developers in accordance with the educational programme and includes: digital educational materials, electronic educational platforms.

At the same time, the ethics documented in the code of business ethics (<https://cloud.mail.ru/public/QYWp/8xmZPQpqqz>) is observed.

6.4 Clinical teams

Residents specializing in "Therapy" closely collaborate in teams with residents and physicians from therapeutic, surgical, obstetric-gynecological specialties, as well as with doctors specializing in laboratory and radiological diagnostics and other fields.

Patient management under the supervision of clinical mentors at clinical sites involves residents participating in team-based work alongside specialists from related fields, such as "General Surgery", "Obstetrics and Gynecology", "Anesthesiology and Reanimatology", and others. This collaboration includes joint discussions of patient management plans, incorporating recommendations from consulting physicians.

Residents in the "Therapy" specialty provide consultative and methodological assistance to 4th-year students and interns in the "General Medicine" specialty. This includes guiding them during patient management and clinical internships. Residents support students and interns by providing essential information on adhering to infection control protocols, epidemiological safety measures, proper hand hygiene, gathering information for research, studying patient history in the Integrative Medical Information System (IMIS), and preparing academic case histories. During clinical case conferences at clinical sites, residents actively participate as supervised specialists. They present reports on critically ill patients, consider consultant conclusions, adjust patient examination and treatment plans, and document conference outcomes in IMIS. In their clinical practice, residents

develop skills in supervising nursing and junior medical staff working with them in hospital departments and outpatient clinics.

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 96% of teachers completely agree with this, 4% partially agree.

6.5 Medical scientific research and achievements

The educational program includes a mandatory component for mastering research skills. The integration of scientific principles and medical research methodology into the curriculum is based on the Law of the Republic of Kazakhstan "On Science" and the "Development Program of NJSC 'Karaganda Medical University' for 2024–2028" (<https://adilet.zan.kz/rus/docs/P2300001105>).

As part of this initiative, a program is being developed and implemented to support and promote university researchers by engaging students, interns, residents, and young scientists under 35 years old in scientific research programs and projects. Research project topics are selected by residents during their first year of study with the guidance of the program supervisor, curator, and clinical mentor. The topics are subsequently approved at a department meeting. Data on the participation of residents in the "Therapy" educational program in scientific research is presented in Table 4. Analysis of this data indicates a high level of effectiveness in conducting research projects.

Table 4. Participation of Residents in the "Therapy" Educational Program in Research

Year	Number of Residents	Participation in Research Programs/Grants	Articles/Abstracts Published in Journals	Participation in International Conferences/Presentations	Participation in Republican Conferences	Participation in University Conferences
2022-2023	1		1	1		

As part of their research work, residents conduct literature analysis using electronic resources during independent work (IWR). AS and clinical mentors provide consultative support, enhancing residents' research and statistical processing skills. This approach helps residents develop competencies in research methodology. Participation in Journal Clubs further refines their ability to critically evaluate medical information for practical application. Access to clinical bases at the department allows residents to work with patient records while collecting clinical material. The robust material and technical resources of NJSC "MUK" (library collections, electronic resources, access to a shared laboratory, etc.) support residents in conducting research and developing skills applicable to further education in PhD programs.

The results of residents' research work on independent topics include the publication of articles in collections and peer-reviewed journals.

Information about the university's research activities and available infrastructure for conducting scientific research is presented on the university's website: <https://muk.qmu.kz/ru/nauka/>.

The university's research activities during the reporting period were carried out in accordance with the Development Program of the Research University for 2019–2023. The target indicators of this program were approved by the Government of the Republic of Kazakhstan on June 27, 2019, Resolution No. 453 (Section 6.5.2, Development Program of the Research University for 2019–2023). Subsequently, on December 11, 2023, the Government approved a new Development Program of NJSC "Karaganda Medical University" for 2024–2028 through Resolution No. 1105 (<https://adilet.zan.kz/rus/docs/P2300001105>).

The university's priority research areas include: Preventive environments as the foundation of public health; Personalized approaches to managing significant diseases; Comprehensive studies aimed

at developing and implementing pharmaceutical products based on domestic plant materials; Medical and social problems of aging and the elderly; Research in medical education; The research infrastructure of NJSC "MUK" is represented by the Research Center, which operates as an academic, scientific, and practical base. Its structure includes the following; A shared-use research laboratory; A sanitary-hygienic research laboratory; A vivarium.

The laboratories are equipped with modern equipment, facilitating in-house research, equipment-sharing, and collaborative scientific research with domestic scientists, foreign research organizations, and universities. The key units for organizing research at NJSC "MUK" are its departments, which host academic and research laboratories, create temporary research teams, and manage faculties for training scientific personnel within master's and PhD programs. NJSC "MUK" continuously enhances the material and technical resources of its research divisions, conducts accreditation of its scientific departments, and trains laboratory staff in modern research methods.

NJSC "MUK" implements a targeted policy to involve young researchers and students in scientific research. Doctoral students, master's students, residents, and undergraduate students are actively engaged in temporary research teams. The department, together with clinical bases, provides opportunities and necessary guidance for conducting research, offering in-depth study, analysis, and subsequent practical implementation of modern diagnostic and therapeutic methods. During the first year of study, residents are assigned research topics, which are reflected in their individual plans and approved at departmental meetings. The program leader, faculty, and clinical mentors provide consultative support in conducting research, preparing theses, and publishing scientific articles. They also motivate residents to participate in scientific congresses and student conferences with presentations. During the 2022–2023 academic year, a resident from the "Therapy" program published a thesis titled "Daily Blood Pressure Profile in Patients with Knee Osteoarthritis" in the proceedings of the All-Russian Therapeutic Congress with International Participation "Botkin Readings".

Residents of the "Therapy" specialty have the opportunity to conduct research work during extracurricular activities as part of their independent work. One of the competencies of residency graduates is achieving research skills through conducting research work, with the results evaluated in their portfolio during interim assessments and upon completion of training. Consequently, residents, under the guidance of the faculty, publish the results of their research and clinical case reviews in conference proceedings and indexed scientific journals. This process helps them acquire and expand their skills in conducting research and producing scientific outputs.

At the department, research work with residents is carried out by allowing students to select topics under the supervision of faculty and clinical mentors, focusing on the most pressing issues. During the COVID-19 pandemic, research efforts were directed toward this topic. Currently, work is focused on socially significant and relevant diseases such as COPD, bronchial asthma, and RA.

Residents in their first and second years of study are involved in conducting research or its components. Their tasks include processing medical histories, completing patient charts, writing literature reviews, and studying materials from foreign specialists. All information about their research activities is included in the resident's portfolio, structured in accordance with the Residency Regulation of NJSC "MUK" (<https://cloud.mail.ru/public/QYWp/8xmZPQpQz>). If residents conduct scientific and practical research, they are provided with access to instrumental and laboratory equipment.

Interviews with five faculty members, including 3 full-time staff, revealed no issues in educational management. Free access for residents to equipment, a sufficient number of thematic patients, time for maintaining medical records, and independent work with clinical mentors create all the conditions necessary for mastering practical skills and fulfilling the residency program.

6.6 Expertise in the field of education

The evaluation of educational programs (EPs) at NJSC "MUK" is conducted during the stages of development, approval, and updating of the EPs. The policy and procedures for the evaluation of EPs are regulated by the Regulation on EP Management of NJSC "MUK". Residency programs are developed by the program leader in accordance with the National Qualifications Framework, professional standards, Dublin Descriptors, and the European Qualifications Framework. The

Academic Committee of the Senate of NJSC "MUK" conducts the evaluation of the EP Concept. The EPs undergo internal evaluation by the Quality Assurance Commission under SR and PD. The commission's composition is approved at a school meeting and includes faculty members, representatives from practical healthcare (employers), and residents. Residency programs are approved by the Board of Directors. The EPs are included in the Unified Higher Education System Registry after approval by external reviewers.

The development of EPs and monitoring of educational activities involve all stakeholders, including students and employers.

To stimulate scientific activity among faculty, incentive allowances are provided for publishing scientific papers in journals with an impact factor above 1 and in international peer-reviewed journals indexed in Web of Science or Scopus.

Additional payments are granted for psycho-emotional and physical workloads for employees of clinical departments at NJSC "MUK" in accordance with Appendix 3, proportional to their employment rate, upon the recommendation of the clinic's chief physician. Faculty members conducting classes in English are eligible for a 100% bonus to the Basic salary if they hold an IELTS certificate (5.5 or higher) or a TOEFL certificate (525 points or higher). This incentive also applies to external part-time staff (master's and doctoral students).

Employees are recognized for their professional achievements with honorary certificates, letters of gratitude, medals, and awards. Information about the assessment of work and recognition of achievements in all activities is presented at Senate meetings and published on the university's website. The implemented HR policy ensures a balance between academic and professional qualifications among faculty members, which supports the quality of the educational process.

In 2019, the Karaganda Medical University Clinic was opened, comprising a therapeutic block (30 beds), surgical, anesthesiology and resuscitation, admission-diagnostic, consultation-diagnostic, and pathomorphological units, with a total hospital capacity of 100 beds.

As of 2023, the resources for clinical training are sufficient, including the clinical base of the Regional Clinical Hospital and the Consultation-Diagnostic Center of the NJSC "MUK" Clinic.

6.7 Training in other institutions

The development plan for the "Therapy" educational program includes inbound and outbound academic mobility of residents to partner universities and visiting professors, implemented according to the academic mobility plan. The goal of academic mobility programs is to establish competitive educational and research programs. Residents and faculty members of NJSC "MUK" are eligible to participate in academic mobility programs in compliance with the current legislation and regulatory legal acts of the Republic of Kazakhstan. Academic mobility is conducted within the framework of memorandums, agreements, or contracts of cooperation concluded by the educational organization with Kazakhstani and foreign organizations of education and science, based on personal invitations from educational and scientific organizations, as well as at the participants' initiative. The implementation of academic mobility and its informational support at NJSC "MUK" is carried out by the Department of International Cooperation in collaboration with schools. Partner universities and their educational programs must be accredited according to the educational standards of the respective country and included in the Register of Accredited Educational Organizations and Programs. The nomination of candidates for participation in the academic mobility program to partner universities is carried out according to the Academic Mobility Plan, which is prepared for the calendar year based on applications from program leaders.

Academic mobility includes: Studying a discipline chosen by the resident during the period specified in the educational organization's schedule or in the Individual Educational Plan (IEP); Delivering lectures and seminars; Training during internships as part of credit mobility programs for faculty and staff of educational organizations under international grant programs; Conducting joint research.

Participants in academic mobility programs are selected through an open competitive process based on the principles of equal opportunities, existing achievements, abilities, and community involvement. Funding for academic mobility of residents and faculty members to universities or scientific centers in neighboring and far-abroad countries is provided by the Ministry of Healthcare of the Republic of Kazakhstan.

In accordance with the unified regulatory framework for residency training in the Republic of Kazakhstan, the transfer process at NJSC "MUK" is regulated by the university's Academic Policy. The university has a coordinator for academic mobility programs. To ensure academic mobility of students and recognition of educational programs, the comparison and transfer of completed courses (with credits and grades) are carried out when changing educational trajectories, institutions, or countries of study, based on ECTS (European Credit Transfer and Accumulation System). An academic credit within the ECTS framework measures the workload of a course, including classroom sessions and independent study.

As part of academic mobility, memorandums of cooperation in healthcare, medical education, and science have been signed with 24 medical universities in Kazakhstan and 83 universities in neighboring and distant foreign countries. In 2016, as part of the strategic partnership development, a memorandum of cooperation was signed with Lund University, Sweden. More than 1,000 students and staff of the university have participated in international academic mobility programs. NJSC "MUK" is included in the "Avicenna" Directory of Medical Schools by the World Health Organization and the World Federation for Medical Education. NJSC "MUK" is a member of the Association for Medical Education in Europe (AMEE), the Association for the Study of Medical Education (ASME), the Organization for PhD Education in Biomedicine and Health Sciences in the European System (ORPHEUS), the European University Association (EUA), the University Mobility in Asia and the Pacific (UMAP), the International Association for Educational Development (IADE), the Association of Higher Education Institutions of the Republic of Kazakhstan, and the Asian Medical Education Association (AMEA). As part of the development of strategic partnership, a memorandum of cooperation with Lund University, Sweden, was signed in 2016. More than 1,000 students and staff 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, at the initiative of the university, the Central Asian International Conference on Medical Education has been held since 2012, 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 programs and projects of scientific research in the field of healthcare, international multicenter studies SMART, METALL, UTIAP. The staff of the department are working to establish relationships, actively interact with republican professional associations on issues of organizing academic mobility of the teaching staff, and residents of the department actively interact with republican professional associations, take part in scientific and practical conferences, master classes.

Conclusions of the EEC on the criteria. Comply with 18 standards (including 11 basic, 7 improvement standards): fully - 18, partially - 0, do not comply - 0

Recommendations for improvement: none.

Standard 7: EDUCATIONAL PROGRAMME EVALUATION

7.1 Monitoring and evaluation mechanisms

All stages and levels of quality assurance of the educational programme are regulated by the current legislation and regulations: the Law on Education of the Republic of Kazakhstan, Order of the Ministry of Health of the Republic of Kazakhstan No. 63 dated 04.07.2022 "On approval of state mandatory standards for levels of education in the field of health care", Order of the Ministry of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152 "On approval of the Rules for organizing the educational process using credit technology of training in organizations of higher and (or) postgraduate education", the Charter of NJSC "MUK", the Academic Policy of NJSC

"MUK", the Policy for the admission of students to NJSC "MUK".

The monitoring system is a continuous multi-level process that covers the assessment of all aspects of the organization, implementation and assessment of the EP: development, approval of the EP, organization and implementation of the educational process, achievement of the final LO, analysis of the results of external and internal audit of the EP and the educational process at the University, analysis of feedback from all participants in the educational process and stakeholders.

The monitoring mechanism for EP is carried out within the framework of internal university control during audits and includes several stages: planning, data collection, analysis/conclusions, necessary improvements, and subsequent monitoring of changes. According to the Academic Policy of NJSC "MUK", all university structures involved in the implementation and quality management of EP participate in the monitoring (internal audit) process. Each stage and level in the EP quality assurance system is regulated by relevant normative and regulatory documents. Responsibility for managing EP lies with school councils. The quality of EP is ensured by the participants in its implementation: the Dean of the School, the EP Manager, module coordinators, discipline coordinators, department heads, and faculty members. Since the 2020-2021 academic year, a Quality Assurance Committee for Schools (QACS) under the SR and PD has been established, with its primary function being to monitor the implementation of EP and evaluate the satisfaction of all stakeholders.

Quality assessment at the institutional level is ensured by the Department of Strategic Development and Quality Management, which also coordinates the processes of preparation for the external assessment of the quality of the educational program. Monthly meetings of the department and school discuss the methodological support of the educational program, the implementation of the curriculum, the results of quality control of the educational process, and the analysis of students' academic achievements. Monitoring of the educational programme at the university level is carried out through discussion of the context of the programme at the School Councils, whose members are the faculty of the departments, employers and students. Their opinions, comments and suggestions on the organization of the educational process (class schedule, etc.), the CED, the library fund, the results of control and other issues directly related to the educational process are taken into account and aimed at improving the educational program. The necessary measures are discussed and recommended during the annual reports of the Vice-Rector for Academic Affairs at a meeting of the University Senate. One of the forms of monitoring the quality of the EP is midterm and end-of-course assessment.

An external quality evaluation procedure includes an independent assessment of the knowledge of university graduates are carried out in the form of a comprehensive exam with the involvement of external examiners. The results of the independent examination of the NCIE, discussed annually at a meeting of the department, the Council of the SR and PD, determine the need to improve the EP. One of the mechanisms for continuous monitoring and improvement of the EP is a systematic survey of the academic staff (<https://cloud.mail.ru/public/Wzpp/Px1owdHiw>), students and employers. Residents are surveyed after completing each discipline. The results obtained are discussed at meetings of the department, Schools, meetings of the AC, the University Senate. Based on the results of this data, the strategy of the EP is adjusted.

External mechanisms include: annual independent assessment of graduates' knowledge and skills, rating of educational programmes of higher education institutions based on the assessment of the activities of higher education institutions by the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken", institutional and specialized accreditation accompanied by post-accreditation monitoring and other external inspections by authorized bodies.

Supporting documents for this information in general are the annual Reports of the Chairmen of the FSA, the National Chamber of Entrepreneurs "Atameken" together with the Ministry of Science and Higher Education has been conducting an independent assessment of educational programmes of Kazakhstani universities for the sixth year.

The residency program is approved at SR and PD meetings. Regular quality assessments of the educational program are conducted by the Quality Assurance Committee for Schools (QACS) through academic staff, student, and employer surveys.

When evaluating the program, the goals and objectives of training, as well as the final learning outcomes (through resident assessments and independent examinations), are taken into account. The implementation process of the educational program is assessed through feedback from residents and faculty, as well as the achievements of graduates. The selection and adequacy of faculty and teaching methods are also evaluated based on resident feedback.

Following the requirements of accreditation standards, NJSC MUK conducts systematic monitoring of educational programs, considering the institution's mission, required final learning outcomes, program content, knowledge and skills assessment, and educational resources. Monitoring and evaluation encompass all aspects of program organization, implementation, and assessment. The methods used to assess residents' knowledge and skills are outlined in the syllabi of program disciplines, which include: *Ongoing assessment*: oral questioning, written assignments, solving clinical cases, tests, 360° evaluations, assessment of medical documentation management, evaluation of night/day shift performance (evaluation sheets), and assessment of practical skills acquisition in the workplace.

Final assessment: comprehensive exams, including clinical and written exams/tests. The adequacy and quality of educational resources are evaluated by the Quality Assurance Committee for Schools (QACS) through analysis of program reviews conducted by its members, as well as feedback analysis from employers, graduates, and students. This feedback helps identify necessary improvements to enhance the quality of educational resources.

7.2 Feedback from teachers and residents

The involvement of stakeholders in evaluating the quality of educational programs is implemented through the assessment of student satisfaction with the program, employer satisfaction with the quality of graduate training, annual data collection and analysis of employment rates, and career growth analysis. The evaluation of educational programs with the participation of multiple stakeholders is stipulated by the Academic Policy of NJSC "MUK" and the developed program forms and procedures for their review and approval, which necessarily include an evaluation by experts from practical healthcare. Responsibility for managing educational programs lies with the school councils, which consist of 60% teaching staff, 20% employers, and 20% students. The Quality Assurance Committee includes teaching staff from the Schools of Residency and Professional Development (SR and PD), student representatives, and employers. Employers' and students' recommendations are considered during the development of the elective course catalog. Employers also participate in reviewing final assessment materials and conducting final certification.

Students are also involved in the formation of educational programs, with their opinions and feedback on the educational process being considered. An important mechanism for program evaluation is obtaining student feedback through surveys conducted after each discipline. Based on these results, program strategies are adjusted. Annually, the Department of Strategic Development and Quality Management conducts surveys of employers and students. Questionnaires for students are coordinated with the schools and include questions regarding their satisfaction with the quality of the educational process, resource availability, relationships with staff from various departments, the quality of the educational process in the departments, and support and information provided. Questionnaires for employers assess their satisfaction with the level of graduate training, the demand for graduates in the labor market, and provide recommendations for improving resident training. The results of these surveys are discussed at the meetings of SR and PD, and program adjustments are made based on stakeholder feedback.

7.3 Results of residents and graduates

The performance outcomes of residents and graduates serve as indicators of the quality of educational programs. At the departmental level, resident satisfaction with the educational process is systematically evaluated. After completing each discipline, residents fill out questionnaires to share their opinions on the quality of training, highlighting the strengths and weaknesses of the learning process. The results are analyzed during departmental meetings to improve the organization and

content of the educational program.

Monitoring of residency program graduates has not been conducted since there were no graduates from the "Therapy" educational program.

Over the past 2–3 years, the following measures have been implemented to enhance the educational process: the establishment of a Quality Assurance Commission for educational programs.

7.4 Involvement of stakeholders

The educational institution has established approaches to involve faculty and residents in evaluating the educational program and monitoring its implementation. The results of the program evaluation are presented at the meetings of the Quality Assurance Commission, the school council, and the Senate.

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, etc.

7.5 Procedure for approving educational programs

The educational program "7R01126 – Therapy" has been developed in accordance with the license for conducting educational activities within the framework of educational program groups based on the classifier of training directions. Upon the recommendation of School Councils, the Senate reviews the list of educational programs considering market demands and available material and human resources, which is subsequently submitted for approval by the Board of Trustees and ratified by the Board of Directors.

Faculty members, external specialists, clinical mentors, employers, and residents are involved in the development and review of the program. The program undergoes both internal and external reviews. Inclusion of the program in the Unified Higher Education Platform registry involves a stage of external independent expertise.

Monitoring of educational resources to support the implementation of the program and disciplines is conducted during the development and updating of syllabi and working curricula. The availability of necessary equipment, literature, and resources from the CSET is analyzed. Departmental work plans specify the department's infrastructure, including the availability of training rooms, offices, technical teaching aids, and equipment. Resident training is conducted at clinical bases of medical organizations based on agreements (Order of the Ministry of Health of the Republic of Kazakhstan No. RK MOH-304/2020 dated December 21, 2020, "On Approval of Provisions on Clinical Bases, Clinics of Educational Organizations in the Field of Healthcare, University Hospitals, Residency Bases, Integrated Academic Medical Centers, and Requirements for Them"). When preparing agreements between clinical bases and MUK, the characteristics of the base, department profiles, bed capacity, and accreditation certificates ensuring compliance with healthcare accreditation standards in the Republic of Kazakhstan are considered. The monitoring of educational resources for compliance and quality of clinical training within the program is carried out by the department, the DAA, SR and PD, and through internal audits.

Conclusions of the EEC on the criteria. Comply with 10 standards (including 7 basic, 3 improvement standards): fully - 10, partially - 0, do not comply - 0

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, such as acceptance of applications by the Admissions Committee within the timeframes established by the "Model Rules for Admission to Education in Educational Organizations Implementing Educational Programs 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.](#), as well as the availability of license No. KZ32LAA00016018 dated May 6, 2019 in the direction of 7R091 "Healthcare (Medicine)". The educational programme is managed in accordance with the Law of the Republic of Kazakhstan "On Education", Order of the Minister of Education and Science of the Republic of Kazakhstan No. 595 "On approval of the Model rules for the activities of educational organizations of the corresponding types", Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 600 "On approval of the Model rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education", Order of the Minister of Health of the Republic of Kazakhstan 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 programs in the field of health care and specialists in the field of health care", State Educational Standards, and is also established by the internal regulatory document Academic [Policy of NJSC "MUK"](#), Regulation on the management of the educational program, Regulation on residency.

The implementation of educational programs of the residency is carried out in accordance with license No. KZ32LAA00016018 dated 06.05.2019 in the direction 7R091 "Healthcare (medicine)".

The organizational structure supporting the educational program includes the Department of Academic Affairs (DAA), SR and PD, departments, the library, the university clinic, and others.

Upon completing postgraduate training programs and receiving a positive IA result, graduates are awarded a state-issued "Certificate of Residency Completion" conferring the qualification of a physician. Individuals who have completed the 7R01126 "Therapy" educational program and successfully passed state certification are awarded the qualification of General Practitioner.

8.2 Academic Leadership

In accordance with the "Regulations on Educational Program Management at NJSC MUK" (decision dated September 9, 2020, Protocol No. 14), the quality of educational programs (EP) is ensured by the participants involved in their implementation: the Dean of the SR and PD, the EP Manager, the Head of the Department, and faculty members. The Head of the Department and the EP Manager are directly responsible for organizing and ensuring the effectiveness of ongoing academic performance monitoring and interim assessments in the disciplines. They provide consultations and conduct examinations in the academic disciplines as per the EP academic calendar, syllabus, and exam schedule. Quality assurance at the EP level is overseen by the QACS.

The management of the educational process is carried out in accordance with the organizational structure of NJSC MUK (approved by the Board of Directors, Protocol No. 40 dated October 30, 2022). Residency training and clinical processes are under the supervision of the Vice Rector for Research and Clinical Work, Prof. Turgunova E.M. The Vice Rector operates in accordance with [a job description approved by the Management Board decision on October 28, 2022](#), and oversees the university's clinical activities, including university clinics, the clinical training of postgraduate specialists, the development of clinical research, and the university's research activities, taking into account scientific and social priorities and the needs of fundamental science and practical healthcare.

Direct management of residency programs is carried out by the SR and PD, which is an educational, scientific, methodological, administrative, and educational subdivision of NJSC MUK. The SR and PD is responsible for implementing higher professional education programs.

The SR and PD is tasked with making decisions regarding: The development and implementation of EP, the introduction of new residency EP by specialty, the development and formation of working curricula in accordance with SCES requirements, residency EP, and CED recommendations, the recruitment of residents and the selection of faculty members for departments involved in residency training. The SR and PD also monitors residents, supports connections with the healthcare sector and residency graduates, and interacts with other NJSC MUK structural units involved in the implementation and support of residency programs (DAA, CSS, DEF, etc.)

The university has developed and implemented principles and approaches for periodic leadership evaluations through annual meetings of the Chair of the Board - Rector with the city's medical

community, faculty, administrative staff, and students. During these meetings, the Rector presents an annual report on the university's activities. This report is published on the university's website.

The periodic evaluation of the university's leadership activities is conducted during meetings of collegial and advisory bodies through internal audits, the work of external and internal commissions, and self-assessments. Heads of administrative divisions, vice-rectors, and deans present reports at Senate meetings and School Council sessions.

The university has established principles and approaches for the periodic evaluation of faculty performance, as outlined in the Academic Policy of NJSC MUK (AP NJSC MUK OE AP/1, Version No. 1) and the university's HR Policy (<https://www.qmu.kz/ru/contents/view/379>; <https://www.qmu.kz/media/qmudoc/AcademPolitika.pdf>; <https://www.qmu.kz/media/qmudoc/KadrPolit.pdf>). Annual monitoring of faculty performance is carried out at all levels, starting from the department level, and is noted in the Personal Growth Plans for faculty at NJSC MUK, during department meetings, School Council sessions, and Senate meetings.

University divisions, including departments and schools, analyze their performance based on the achievement of KPIs specific to their respective units. These KPIs include indicators related to teaching, learning, and research activities for the reporting period (academic or calendar year). Issues related to educational programs (EP) are brought to the School Council and Senate for discussion. The compliance of residency faculty with the goals and objectives of the EP is analyzed based on annual reports, individual work plans, and faculty certifications conducted every five years (Standard 5: "Academic staff").

Residents can participate in the evaluation of academic leadership (e.g., dean, department head, faculty) by expressing their opinions and suggestions at the end of a course or specific discipline. Additionally, surveys may be conducted to gather feedback and take residents' comments and suggestions into account. Feedback may address various aspects, including the organization of the educational process (e.g., class schedules), the selection of elective courses, the library collection, and other issues directly related to the learning process.

In response to the survey question "Do the organization's leaders listen to your opinion regarding issues related to the educational process, research, and clinical work?", 72% of teachers responded that they do so systematically, 24% responded "sometimes" and 4% "no answer"

8.3 Budget for training and resource allocation

The resource provision for the educational program 7R01126 "Therapy", including the targeted training budget, is managed by the Department of Economics and Finance, which oversees the activities of the State Procurement Department and the Department of Economics and Finance. <https://cloud.mail.ru/public/QYWp/8xmZPQpqz>.

The university implements separate financial accounting for each educational program. The needs of the SR and PD are reviewed at the Management Board meeting, where each expenditure item and cost is thoroughly discussed. These expenses are planned based on requests submitted by the Dean of SR and PD. The process of planning and distributing finances for residency programs is outlined in the "Regulation on the Management of Educational Programs at NJSC MUK". <https://cloud.mail.ru/public/QYWp/8xmZPQpqz>.

The university's annual budget formation process includes defining the income and expenditure base. The income portion of the university's budget is generated from the following sources:

- Core educational activities (educational grants and income from fee-based educational services);
- Other activities (conducting research projects, publishing and printing services, medical services, dormitory accommodation services, etc.).

The targeted budget allocated by the primary service customer, the Ministry of Health of the Republic of Kazakhstan (MoH RK), is based on the actual student enrollment data. However, the regulatory documents governing the university's planning and spending processes are not always precise and do not clearly distinguish expenditure norms per student and their financial support.

Targeted funding is provided through: The budget program (006 "Training of specialists with higher and postgraduate education and providing social support to students"); Government educational grants; The university's own funds or local executive bodies (LEBs).

The cost of each educational program is calculated to fully cover all expenses, including salaries, taxes, internship expenses, academic mobility, visiting professors, educational process support (equipping the Center for Simulation and Educational Technologies, expanding the library collection), and the maintenance of educational buildings.

An annual financial report is submitted, demonstrating, among other things, the allocation of educational resources in line with program needs and covering all types of expenses for the implementation and development of the residency program.

8.4 Administration and Management

NJSC "MUK" has an appropriate administrative and teaching staff, with academic leaders holding leadership and management positions in structural divisions responsible for making decisions on academic matters. The university employs 95 administrative staff and 987 teaching staff, including management, totaling 1,082 employees. To ensure effective management of the educational process, employees of the Academic Affairs Department underwent professional development in 2023.

The university's management structure ensures the effective implementation of educational programs, efficient management, and timely provision of necessary educational resources.

Staff recruitment is based on an analysis of the educational program's needs, following which a competition is announced to fill vacant positions in accordance with the [Rules for Competitive Recruitment for Vacant Positions at NJSC "MUK"](#). The requirements for teaching staff when applying for vacant positions are defined by job descriptions and the [Charter of NJSC "MUK"](#).

The operational management of educational programs is carried out by deans, program directors, module coordinators, department heads, and faculty members. Operational management functions include the development, implementation, and execution of educational programs, curriculum design, provision of material, technical, educational, methodological, and informational support for the educational process, career guidance, and student engagement.

The primary structural unit responsible for managing, implementing, and coordinating the work of other departments involved in delivering educational programs is the school.

Experts have determined that the Quality Assurance Policy for the educational process has been developed within the Quality Management System of NJSC "MUK" (ISO 9001:2015). The Quality Assurance Policy is reviewed in the event of changes in regulatory legal acts, the university's strategic goals, or stakeholder requirements.

The administration and management of the educational process as a whole, and the residency program in the specialty "Therapy", are assessed through systematic monitoring, data analysis, feedback evaluation from residents, and participation of internal and external experts.

8.5 Requirements and regulations

The educational organization 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 training areas for personnel with higher and postgraduate education) all educational programmes 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 improvement standards): fully - 11, partially - 0, do not comply - 0

Standard 9: CONTINUOUS RENEWAL

To ensure the continuous improvement of the educational process in line with global educational management practices and considering the needs of practical healthcare in the Republic of

Kazakhstan, NJSC MUK regularly conducts monitoring and evaluation of education quality, updates the resident training process, and implements changes and improvements to the educational program.

In 2022, with the introduction of the new State Compulsory Education Standard (SCES) No. 63 dated July 4, 2022, the development of the educational program involved a review and analysis of the residents' final learning outcomes and competencies, taking into account modern trends in diagnostics and treatment of therapeutic conditions. The proportion of practical classes was increased from 10% to 20% (in accordance with the SCES). At the beginning of each academic year, syllabi are reviewed and updated to introduce new teaching and assessment methods, improve access to literature, and revise the thematic plan. These updates consider the latest clinical protocols, international guidelines, healthcare needs, and labor market demands in the field of infectious diseases.

Academic performance monitoring, quality control of knowledge, results of interim assessments, and outcomes of the independent examination by the National Center for Independent Examination (NCIE) are conducted and discussed at the meetings of the School of Residency and Postgraduate Education (SR and PD). An important mechanism for evaluating the resident learning process is gathering feedback from residents through surveys.

The monitoring and revision planning process of the educational program is aimed at improving the program and the quality of resident training. The process of planning revisions (changes and updates) of the educational program is carried out based on the release of new SCES standards, regulatory documents in residency education, strategic partnerships, and other factors.

Changes and updates to the educational program are made considering the feedback from stakeholders (employers and residents), who are regularly surveyed. In cases where a full revision of the educational program is required (due to new regulatory documents in residency education, strategic partnerships, etc.), the program director and SR and PD organize working meetings with those responsible for specialties to explain the new provisions and assign tasks for revision. The specialist in charge forms a working group that includes experienced teaching staff, residents, and representatives of practical healthcare. The procedure for developing, approving, and updating the educational program is outlined in the [Regulation on Educational Program Management](#).

The processes of updating and improving the educational program, clinical competencies, assessment methods for residents, and teaching methods are based on prospective studies and current literature data on the educational process.

Thus, the continuous improvement of the educational process in the residency program in the specialty "Therapy" contributes to the modernization of the educational program and the graduation of well-trained specialists in demand across various regions of the Republic of Kazakhstan.

Conclusions of the EEC on the criteria. Comply out of 2 standards (including 1 basic, 1 Standard of improvement): fully - 2, partially - 0, do not comply - 0.

CONCLUSION: during the external evaluation of the educational programme, it was found that out of 114 standards (including basic standards - 82 and improvement standards - 32), full compliance is demonstrated by 114 standards for accreditation, including 82 basic standards and 32 improvement standards. No non-compliance with standards was found.

Considering that this is the initial accreditation of the educational program in the specialty "Therapy" and the admission of residents is planned for 2024, in accordance with the requirements of the Law on Education of the Republic of Kazakhstan, the educational institution has initiated the specialized (program) accreditation process without a cohort of residents. Therefore, the task of the External Evaluation Committee (EEC) was to assess the university's readiness to admit residents, to study the existing principles and approaches in resident training, and to evaluate the mechanisms for quality assurance and management of the residency educational program based on other educational programs. Nevertheless, the EEC thoroughly examined the organization of training in the specialty

"Therapy", including documentation, faculty, educational resources, and other critical aspects related to compliance with accreditation standards.

The EEC concluded that, alongside achievements in resident training—including the expected effectiveness of the accredited educational program in "Therapy"—there are no remarks.

ECAQA

Профиль качества и критерии внешней оценки образовательной программы (обобщение)

Стандарт	Критерии оценки	Количество стандартов	БС*/СУ	Оценка		
				Полностью соответствует	Частично соответствует	Не соответствует
1.	МИССИЯ И КОНЕЧНЫЕ РЕЗУЛЬТАТЫ	14	9/5			
2.	ОБРАЗОВАТЕЛЬНАЯ ПРОГРАММА	22	19/3			
3.	ОЦЕНКА РЕЗИДЕНТОВ	9	6/3			
4.	РЕЗИДЕНТЫ	20	14/6			
5.	АКАДЕМИЧЕСКИЙ ШТАТ/ПРЕПОДАВАТЕЛИ	8	7/1			
6.	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ	18	11/7			
7.	ОЦЕНКА ОБРАЗОВАТЕЛЬНОЙ ПРОГРАММЫ	10	7/3			
8.	УПРАВЛЕНИЕ И АДМИНИСТРИРОВАНИЕ	11	8/3			
9.	НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ	2	1/1			
		114	82/32	114		

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

№	Наименования документов/дата утверждения	Количество
1.	Стратегическая программа развития НАО «МУК»	1
2.	Академическая политика НАО «МУК»	1
3.	Кадровая политика НАО «МУК»	1
4.	Нормы времени для расчета объема учебной работы на 2023-2024 учебный год	1
5.	Политика приема обучающихся в НАО «МУК»	1
6.	Правила приема сотрудников при трудоустройстве в НАО «МУК»	1
7.	Правила рейтинговой системы оценки успеваемости обучающихся	1
8.	Силлабусы	12
9.	Список публикации штатных ППС по специальности «Терапия»	1
10.	Повышение профессиональной и педагогической квалификации штатных преподавателей по специальности: «Терапия»	7
11.	Повышение педагогической квалификации клинических наставников по специальности «Терапия»	5
12.	Укомплектованность научной и учебной литературы НАО «МУК»	1