Accreditation Council of the Eurasian Centre for Accreditation and Quality Assurance in Education and Healthcare December 10, 2023

#### **REPORT**

OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF EVALUATION OF EDUCATIONAL PROGRAM 7R01113 "ALLERGOLOGY AND IMMUNOLOGY FOR ADULTS, CHILDREN" OF THE CORPORATE FOUNDATION "UNIVERSITY MEDICAL CENTER" FOR COMPLIANCE WITH THE ACCREDITATION STANDARDS OF POSTGRADUATE EDUCATION PROGRAMS (RESIDENCE SPECIALTIES) OF MEDICAL EDUCATIONAL ORGANIZATIONS

external expert evaluation period: November 27-29, 2023

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# LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	on Designation	
SCES	State Compulsory Educational Standard	
MOH RK	Ministry of Health of the Republic of Kazakhstan	
CF "UMC"	Corporate Foundation "University Medical Centre"	
Academic staff	Academic staff	
RDC	Republican Diagnostic Center	
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Education	
	and Healthcare	
EEC	External expert commission	
LSI	Laws and Statutory Instruments	
RW	Research work	
R&D	Research and development	
End-of-course	End-of-course asssessment	
assessment		
JSC	Joint-Stock Company	
NJSC	Non-profit joint stock company	
IEP	Individual educational plan	
WC	Working curriculum	
AMP	Administrative and management personnel	
CED	Catalogue of elective disciplines	
Academic staff	Academic staff	
EP Educational program		
EMC	Educational and methodological council	
NUSM	Nazarbayev University School of Medicine	

# 1. Composition of the External Expert Commission

In accordance with ECAQA Order No. 26 dated November 8, 2023, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external evaluation of the residency educational program in the specialty 7R01113 "Allergology and immunology for adults, children" during the period November 28-30, 2023 in the following composition:

№	Status as part of the EEC	Full name	Academic degree/title, position, place of work/place of study, course, specialty
1	Chairman	Turgunov Yermek Meiramovich	Doctor of Medical Sciences, Professor, Vice-Rector for Scientific and Clinical Work NJSC "Medical University of Karaganda", President of the NJSC "Surgical Association of the Karaganda Region", member of the International Society of Surgeons (International Surgery Society), member of the "Association of Independent Experts of Astana" and the "Union of Independent Experts of KSMU".
2	International expert	Ziganshina Liliya Yevgenevna	Doctor of Medical Sciences, Professor of the Department of Epidemiology of the Russian Medical Academy of Continuing Professional Education, Director of Cochrane Russia. Member of the WHO Committee on the Selection and Use of Essential Medicines. Laureate of the State Prize of the Republic of Tatarstan in the field of science and technology for the work "Development and implementation in healthcare practice of the Republic of Tatarstan of a new technology for the selection and rational use of drugs - the formulary system."
3	International expert	Saatova Guli Mirakhmatovna	Doctor of Medical Sciences, Professor, Head of the Department of Cardio Rheumatology of the Institution "National Centre for Maternal and Child Health" of the Ministry of Health of the Kyrgyz Republic (MHKR), Chief Rheumatologist of the Ministry of Health of the Kyrgyz Republic, Vice-President of the Association of Rheumatologists of Central Asia and Kazakhstan
4	Academic expert	Zhantelieva Lyazzat Asanovna	Doctor of Medical Sciences, Deputy Chairman of the Board for R&D JSC "Scientific Centre of Urology named after B.U.Dzharbusynov"
5	Academic expert	Madyarov Valentin Manarbekovich	Doctor of Medical Sciences, Head of the Department of Surgery with a course of anaesthesiology and resuscitation National Educational Institution "Kazakhstan- Russian Medical University"
6	Academic expert	Idrisov Alisher Saugabaevich	Doctor of Medical Sciences, Associate Professor of the Department of Family Medicine No. 2

			NJSC "Astana Medical University"
7	Academic expert	Menchisheva Yulia	Doctor PhD, Head of the Department of Surgical
		Alexandrovna	Dentistry of NJSC "Kazakh National Medical
			University named after S.D.Asfendiyarov"
8	Academic expert	Ramazanova	Candidate of Medical Sciences,
		Sholpan	Associate Professor of the Department of
		Khamzaevna	Childhood Diseases named after N.A. Barlybaeva
			NJSC "Kazakh National Medical University
			named after S.D. Asfendiyarov"
9	Academic expert	Dolmatova Irina	Doctor of Medical Sciences, acting Professor of
		Anatolyevna	the Department of Ophthalmology of the National
			Educational Institution "Kazakhstan-Russian
10			Medical University"
10	Academic expert	Arinova Saule	Candidate of Medical Sciences, Professor of the
		Pasevnoevna	Department of Surgical Diseases of the NJSC
1.1	A 1 '	IZ '1 D'	"Karaganda Medical University"
11	Academic expert	Karibaeva Dina	Candidate of Medical Sciences, Associate
		Orynbasarovna	Professor of the Department Fundamental Medicine of the Kazakh National
12	A andomia avmont	Ashagaya Caulash	University named after Al-Farabi
12	Academic expert	Apbasova Saulesh Akhatovna	Candidate of Medical Sciences, assistant Department of Pathological Anatomy and Forensic
		Aknatovna	Medicine named after Professor Pruglo Yu.V.
			NJSC "Semey Medical University"
13	Resident expert	Orynbay Aizere	Resident of the second year of study in the
13	Resident expert	Sauletkyzy	specialty "General Surgery" of the NJSC "Astana
		Saulcikyzy	Medical University"
14	Resident expert	Yerkinov Yerbolat	Resident of the first year of study in the specialty
1 1 7	Resident expert	1 CINIIIOV I CIOCIAL	"Angiosurgery, including children's" LLP
			"National Scientific Oncology Centre". Resident
			of the surgical community "Veritas"
		\	NJSC "Astana Medical University"
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The EEC report includes a description of the results and conclusion of an external evaluation of the educational program 7R01113 "Allergology and immunology for adults, children" for compliance with the Accreditation Standards for postgraduate education programs (residency specialties) of medical educational institutions and conclusions (hereinafter referred to as the Accreditation Standards), recommendations of the EEC for further improvement of approaches and conditions for the implementation of the above educational program and recommendations for accreditation for the ECAQA Accreditation Council.

# 2. General part of the final report

2.1 Presentation of the residency educational program in specialty 7R01113 "Allergology and immunology for adults, children"

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Name of organization, legal form of ownership, BIN	Corporate Foundation "University Medical Centre" BIN: 151040018391
Management Body	JSC "Nazarbayev University"
Full name of the first manager	Pya Yuri Vladimirovich
Date of creation	September 20, 2015
Location and contact details	Republic of Kazakhstan, 010000

	"Yesil" district, Astana
	st. Kerey, Zhanibek khandar, 5/1
State license for educational	
activities in residency (date, number)	
Information about branches,	Kyzylorda branch of the Corporate Foundation "University
subsidiaries (if any)	Medical Centre"
Year of commencement of the	2023
accredited educational program (EP)	
Duration of training	3 years
Total number of graduates since the	3 residents
beginning of the EP implementation	
Number of residents in the EP since	9 residents
the beginning of the current	
academic year	
Full-time teachers/part-time workers	The total number of teachers is 4, including full-time teachers
involved in the implementation of	- 1, part-time teachers - 3.
the educational program	
	Sedateness,% - 25%
	Categorization, % - 50%
Website	www.umc.org.kz
Instagram	
Facebook with active pages	

At the corporate foundation "University Medical Centre", training in the specialty of residency 7R01113 "Allergology and immunology for adults, children" was started for the first time in September 2021. The total contingent of the specialty was 9 residents. It should be noted that when entering residency, the corporate foundation "University Medical Centre" sets higher requirements. Persons who have certificates of passing a foreign language test (for example, IELTS at least 6.0, TOEFL at least 560 points) are awarded the highest score on a 100-point grading system. In view of the fact that the clinical bases of the corporate foundation "University Medical centre" are scientific centres, the organization of the educational process is built taking into account the specifics of the work of these medical organizations. Nevertheless, in the implementation of the residency educational program in the specialty 7R01113 "Allergology and Immunology for Adults, Children," there is a complete integration of education, science and practice. This is reflected in the internal regulatory documents of the foundation. A distinctive feature is the special attention paid to the motivation for conducting scientific work and disseminating its results through the publication of articles in journals included in the Web of Science and Scopus database, as well as through presentations at international conferences, especially in non-CIS countries. The implementation of this motivation for publication activity, speaking at conferences and congresses is carried out through the "024" program.

The administrative staff responsible for the implementation of the residency educational program in specialty 7R01113 "Allergology and immunology for adults, children" includes employees of the Department of Education under the leadership of Director Syzdykova Alma Alibekovna.

The academic staff conducting residency training in the specialty 7R01113 "Allergology and immunology, adults, children" consists of three full-time doctors of the Scientific Centre for Maternity and Childhood. All academic staff have completed advanced training courses in pedagogy. The organization pays attention to the constant professional growth of teaching staff and motivates research work.

#### 2.2 Information about previous accreditation

To date, accreditation of the educational program 7R01113 "Allergology and immunology for adults, children" has not been carried out.

# 2.3 Brief description of the results of the analysis of the self-assessment report of the residency educational program in specialty 7R01113 "Allergology and immunology for adults, children"

The self-assessment report of the residency educational program in specialty 7R01113 "Allergology and immunology for adults, children" is presented on 143 pages of main text, 54-page appendices, copies or electronic versions of documents located at <a href="https://drive.google.com/drive/folders/1VnNmI-pZJkoP16pgiHjoggnslA\_kePco">https://drive.google.com/drive/folders/1VnNmI-pZJkoP16pgiHjoggnslA\_kePco</a>.

The report is characterized by completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for self-assessment of the educational program provided to the educational organization by the accreditation centre - ECAQA, as well as internal consistency of information. The report is accompanied by a covering letter signed by the Chairman of the Board, Doctor of Medical Sciences Pya Yuri Vladimirovich, which confirms the reliability of the quantitative information and information included in the self-assessment report.

The report contains a list of 14 members of the internal self-assessment commission, indicating the responsibilities of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational program.

Self-assessment of the educational program 7R01113 "Allergology and immunology for adults, children" was carried out on the basis of order No. 08-n/k dated June 1, 2023 "On approval of the composition of the working group for preparation for specialized accreditation of the corporate foundation "University Medical Centre".

All standards contain the actual practice of the Corporate Foundation "University Medical Centre" in training residents in the specialty 7R01113 "Allergology and immunology for adults, children" taking into account the start of admission of students in 2021, reasoned data, examples of the implementation of the objectives of the educational program, national and international events, methodological support confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is quite complete and updated regarding the number of residents, teachers, administration, information on selection and admission, training results, results of evaluation of knowledge and skills, material and technical base of the university and clinical sites, contractual obligations with partners (universities, associations, database), financial information, plans for development and improvement, etc.

The report is presented to ECAQA in complete form, with data adjusted according to the above recommendations, written in competent language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, tables and figures (diagrams, photographs) contain links in the text and are continuously numbered.

#### 3. Description of external expert evaluation

External expert work as part of the evaluation of the educational program 7R01113 "Allergology and immunology for adults, children" was organized in accordance with the Guidelines for conducting external assessment of educational organizations and educational programs of the ECAQA / Dates of visit to the organization are November 27-29, 2023 Sequence of the visit to within 3 days is presented in detail in Annex 3 to this report.

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

- interviews with management and administrative employees 5 people;
- interviews with residents 46 people of 1st year of study, including 3 residents of the educational program in the specialty 7R01113 "Allergology and Immunology for Adults, Children" and 50 people of 2-3 years of study, including 3 residents studying in the specialty 7R01113 "Allergology and immunology for adults and children";
- studying the website www.umc.org.kz;
- interviewing academic staff in paediatric and therapeutic specialties (16 people);
- survey of teachers and residents 117 and 211, respectively;
- observation of resident training: attending a journal club meeting (11/29/2023, 1st year residents);

- review of resources in the context of implementing accreditation standards: 5 clinical practice/clinical engagement centres, including the Scientific Centre for Maternity and Childhood (Astana, Turan Ave. 32), Republican Diagnostic Centre (Astana, Sygynak St. 2), where training is conducted in 9 educational programs with the participation of 117 full-time teachers/part-time teachers;
- study of educational and methodological documents in the amount of 19 units both before the visit to the organization and during the visit to the departments (the list of documents studied is in **Annex 2**).

The team of the accredited organization ensured the presence of all persons indicated in the visit program and according to the lists of interview sites (Table 1).

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

№	Position	Quantity
1	Meeting with the management of the CF "University Medical Centre"	2
	- Chairman of the Board – Professor Pya Yuri Vladimirovich.	
	- Deputy Chairman of the Board of the Corporate Foundation "University Medical	
	Centre" - Khamzina N.K.	
2	Meeting with the Director of the Department of Education Syzdykova A.A.	1
3	Meeting with managers of additional education	2
	Olkhovik S.V., Shintaeva S.	
4	Meeting with department directors	3
	<ul> <li>Director of the Department of Internal Medicine – Nabiev A.N.</li> </ul>	
	<ul> <li>Director of the Department of Women's Health - Bapaeva G.B.</li> </ul>	
	<ul> <li>Director of the Department of Paediatrics – Ivanova-Razumova T.V.</li> </ul>	
5	Interviews with residents, including three residents of 2-3 years of study in	50
	specialty 7R01113 "Allergology and immunology for adults, children"	
6	Interview with teachers in paediatric and therapeutic specialties of residency,	17
	including two teachers teaching in specialty 7R01113 "Allergology and	
	immunology for adults, children" - Kovzel E.F., Kiykbaev K. Sh., Zhamanbaeva	
	Zh. Zh., Volodchenko S.A	
7	Meeting with representatives of support services (human resources, financial	4
	sector)	
8	Meeting with the teacher conducting training at the simulation centre	1

On the last day of the visit to the organization, a meeting of EEC members was held based on the results of the external evaluation. A final discussion was held on the results of the external evaluation of the educational program, study of documents, results of interviews, talks, and questionnaires. Members of the EEC began drafting the final report of the EEC. Generalizations of the results of the external evaluation are made. The experts individually completed the "Quality Profile and criteria for external evaluation of the educational program 7R01113 "Allergology and immunology for adults, children" for compliance with the ECAQA Accreditation Standards." No comments were made by the EEC members. Recommendations for improving the educational program were discussed and the chairman, MD Turgunov Yermek Meiramovich 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, and each member of the commission was provided with a personal computer with access to all supporting documents. The Commission notes the high level of corporate culture of the Corporate Foundation, the high degree of openness of the team in providing information to members of the EEC.

When conducting a survey of residents, the majority of respondents (73.75%, 59 people out of 80 respondents) believe that it is necessary to accredit an educational organization or educational programs.

According to 81.25% (26) of teachers, the survey conducted by ECAQA is useful for developing recommendations for improving key areas of activity of an accredited educational organization.

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

4. Analysis of compliance with accreditation standards based on the results of an external evaluation of the residency educational program in specialty 7R01113 "Allergology and immunology for adults, children."

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

#### 1.1 Mission statement

When implementing program activities, namely, based on the results of an interview with the Chairman of the Board of the Corporate Foundation "University Medical Centre", the Director of the Department of Education, members of the educational and methodological council, in interviews with residents and teachers, compliance with the criteria of standard 1 was established. All participants in the educational process know the mission educational program, took part in the formation of proposals for formulating the mission, while the mission was brought to the attention of potential residents through the website, social networks, and information letters to medical organizations. The organization's strategic plan for the period 2019-2023 was reviewed (approved by the decision of the Board of Trustees of the corporate foundation "University Medical Centre" dated May 25, 2019), including such areas as "outstanding quality and innovation in the provision of patient-centred and family-oriented medical care", "outstanding quality in the field of medical science, education and practical training of healthcare professionals", "integration of medical care, research and educational activities", "effective corporate governance system", which confirms the implementation of the accreditation standard and demonstrates the goals, objectives and organization prospects. From interviews with residents, it was established that before the start of classes, teachers inform about the mission, work plans of the educational organization, and tell where to get the necessary information about the educational program, teachers, and training bases.

During the visit to the departments of the educational organization, experts noted the strengths of the educational organization in relation to the accredited educational program, including:

- in the corporate foundation "University Medical Centre" there are departments that are directly related to the educational program 7R01113 "Allergology and immunology for adults, children", which can be noted as the best practice in education. Residents are trained at clinical sites equipped with modern diagnostic equipment, accredited by the international commission JCI of the centres of the CF "UMC" (in 2014, the Centre was successfully accredited by the Joint Commission International), where patients from all over Kazakhstan are treated and receive consultations. This conclusion was made because residents have the opportunity to learn modern innovative technologies, which are implemented on the basis of the centres of the CF "UMC", participate in master classes organized by foreign specialists, and work on modern equipment, which is not similar in other medical organizations of the Republic of Kazakhstan.
- motivation of residents to participate in prestigious international conferences with an oral or poster presentation, motivation to publish in co-authorship or as the first author or corresponding author in journals indexed by Web of Science and Scopus, creating comfortable conditions in mastering practical skills, including visiting a simulation centre of the School of Medicine of Nazarbayev University, access to all bibliographic databases of scientific literature and the library, timely conduct of advanced training courses in the specialty and pedagogy among teaching staff who conduct training in residency specialties, motivation of teaching staff for scientific activities, the creation and implementation of scientific projects.

The results of studying the documentation demonstrate that the mission of the organization and the mission of the educational program 7R01113 "Allergology and immunology for adults, children," as well

as the educational process, are built in accordance with the State Compulsory Educational Standard and the current regulations in postgraduate education and healthcare. At the same time, during meetings with teachers and residents, experts identified a number of problems, including the lack of an electronic, automated system for evaluating the educational achievements of a resident physician, the lack of an electronic test database and an implemented system for determining the validity and reliability of test tasks.

The educational organization conducts training for residents in the following clinical bases and departments: JSC "National Scientific Cardiac Surgery Center", JSC "National Center for Neurosurgery", National Scientific Center for Maternity and Childhood, Republican Diagnostic Center, departments of therapeutic and surgical profiles, as well as in the department of radiology and nuclear medicine, where a patient-oriented approach is provided through the integrity, consistency and continuity of the treatment and diagnostic process, informing the patient about all the details of the treatment and diagnostic process, creating comfortable conditions for the patient to stay in the process of providing him with medical care, providing emotional support in regarding the patient, taking into account his needs and preferences. The educational organization pays due attention to the safety and autonomy of patients by improving the system of clinical training of students of the CF "UMC", analyzing and analyzing complex clinical cases of scientific, educational and practical interest, developing proposals for improving the system of medical care, clinical training, scientific research and patient safety. From October 20 to October 23, 2014, the Center successfully passed accreditation by the Joint Commission International in accordance with international standards of quality and patient safety. The Director for Quality Management and Patient Safety of CF "UMC" periodically plans and coordinates the improvement of management systems, issues of improving the quality of services provided, and conducting internal audits.

Experts have established that residents have appropriate working conditions to support their own health, since the educational organization provides instruction, which includes demonstration of safe work practices, as well as working hours, working conditions, health and safety issues in the workplace, and regulation of violence in the workplace, the use of personal protective equipment (wearing overalls), safety signs, electrical safety, actions in case of accidents and other incidents.

Such basic competencies of residents in the accredited specialty 7R01113 "Allergology and immunology for adults, children", such as formulating a clinical diagnosis, interpreting laboratory and instrumental research methods, conducting treatment and rehabilitation of patients, interacting with patients and medical workers, as well as special competencies including the formulation of research questions, critical assessment of professional literature, effective use of international databases in their daily activities, participation in the work of a research team - help educational organizations apply innovative forms of teaching. This allows residents to develop such skills and qualities as the ability to obtain information about the patient, detail complaints, conduct objective research, be capable of critical perception of conflicting ideas, independently and effectively solve problems in the field of professional activity, have a broad outlook and be aware of themselves and their responsibility in modern society, have a scientific understanding of a healthy lifestyle, possess skills and development skills, have a communicative culture, be able to continuously learn throughout life, be ready to effectively and efficiently provide medical care to the population, make decisions based on the principles of evidence-based medicine, be able to apply scientific advances in medicine, apply management principles to the organization and implementation of medical care, have teamwork skills and leadership qualities.

The educational organization encourages residents to strive to participate in research in their chosen specialty through assistance in choosing a topic and direction of research, funding within the 024 program for participation in international conferences in foreign countries and publication of articles in peer-reviewed journals included in the Web of science and Scopus, and also ensures the participation of residents in such academic events as journal club meetings, organizing and conducting events for scientific and information exchange in the form of conferences, seminars, symposia, forums and other forms aimed at exchanging experience.

Experts determined that employees, students, teaching staff, and employers participated in the development of the mission and final results of training at the CF "UMC". Taking into account the opinions of all stakeholders was based on the results of a systematic survey and participation in round

tables.

#### 1.2 Professionalism and professional autonomy

Experts have determined that the formation of professionalism includes the development of practical skills with the achievement of final learning outcomes, such as: patient supervision, communication and collaboration, safety and quality, public health, research, training and development; performance of competencies - patient care, medical knowledge, practice-oriented learning and improvement, communication skills, professionalism, system-based practice, and the resident's ability to demonstrate high standards of ethical behaviour, demonstrate compassion, responsiveness to the needs of patients beyond self-interest, integrity and respect for others, acceptance of personal mistakes and recognition of them. Clinical mentors of residents, demonstrating by their personal example, contribute to the formation of professionalism among residents. The formation of this competence occurs during the period of study through all disciplines of the educational program. This competency is evaluated by direct observation, a 360-degree tool, and feedback from various sources.

The educational organization promotes the professional autonomy of residents by providing them with the opportunity for an additional type of training, the opportunity to participate in the organization of educational activities and the choice of elective component disciplines. Each resident is provided with a "Resident Privilege List".

Experts have established that the educational organization fully exercises autonomy in relation to the selection of residents for an accredited specialty in accordance with the state mandatory standard of residency in medical specialties and the standard professional training program for medical specialties of residency, approved by the order of the Minister of Health and Social Development of the Republic of Kazakhstan dated 4 July 2022 No. KR MOH-63, as well as the internal Rules for organizing the educational process in the residency of the CF "UMC", approved by the decision of the Board of the CF "UMC" dated March 29, 2021 No. 6, the Rules for admission to the residency of the CF "UMC", approved by the decision of the Board CF "UMC" dated March 1, 2018 No. 5.

Also, the organization fully develops the educational program, determines approaches to evaluating residents (Instructions for the development of educational and methodological documentation and a system for evaluating the educational achievements of resident doctors of the corporate foundation "University Medical Centre", Approved by the decision of the Board of the corporate foundation "University Medical Centre" on May 13, 2021 Protocol No. 2 as amended on September 15, 2023 Protocol No. 15). Responsible employees showed the experts a document defining the requirements for teachers of the residency program (clauses 53, 54 of the Rules for Organizations of the Educational Process in Residency of the Corporate Foundation "University Medical Centre"). Every year, employees of the Department of Education carry out advisory work to resident doctors of graduate courses on issues of employment and working out a state educational grant in accordance with the Law on Education (Article 47.) and in accordance with the Rules for sending a specialist to work, reimbursement of expenses incurred from budgetary funds, granting the right independent employment, exemption from the obligation or termination of the obligation to work for citizens of the Republic of Kazakhstan studying on the basis of the state educational order, approved by the order of the acting Minister of Science and Higher Education of the Republic of Kazakhstan dated August 11, 2023 No. 403.

Graduates of the residency program of the CF "UMC" are employed in the clinics of the CF "UMC" and in leading medical clinics, such as JSC "National Centre for Neurosurgery", JSC "National Scientific Cardiac Surgery Centre", MSI on the REM "Hospital of the Medical Centre of the Administration of the President of the Republic of Kazakhstan", LLP "National Scientific Oncology Centre", MSI on the REM "National Scientific Centre of Traumatology and Orthopaedics named after Academician N.D. Batpenov" Ministry of Health of the Republic of Kazakhstan, as well as in regional multidisciplinary hospitals and clinics of the country.

The share of employed persons who completed residency on the basis of the CF "UMC" in all specialties for 2019-2023 years are consistently amounted to 100%.

To verify **standard 1**, a meeting was held with the head of the Department of Education, Syzdykova A.A. During the conversation, the experts asked the following questions: which units took part in developing the mission and goals of the educational program, whose opinions and suggestions

were taken into account and how. During the answers, the director of the organization confirmed that all structural divisions of CF "UMC" took part in the development of the strategy and mission, the discussion also took place at the level of consultative and advisory bodies, including at the educational and methodological council dated May 8, 2019 No. 3. At CF "UMC", the formulation of the mission statement and goals was based on the opinions and suggestions of employees, students, academic staff, based on the results of a systematic survey and participation in round tables. Such events make it possible to identify the existing advantages and problems of all types of activities of the organization and thereby promptly develop action plans to eliminate shortcomings and improve.

The academic freedom of residents is manifested in the freedom to choose the subject of research and form their own conclusions, as well as the disciplines included in the CED, and is described in the Rules for organizing the educational process in the residency of the corporate foundation "University Medical Centre" (Approved by the decision of the Board of the corporate foundation "University Medical Centre" dated March 29, 2021 No. 6).

When conducting a survey of 80 residents (on the resource <a href="https://webanketa.com/">https://webanketa.com/</a>, 22 questions), a number of questions were devoted to the quality of the educational process and educational program. It was found that 78.75% (63 residents) would recommend studying at this educational organization to their acquaintances, friends, and relatives. And 67.5% (54 respondents) believe that educational program leaders and teachers are aware of students' problems related to learning. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", 85% (68 people) of residents answered positively, 2.5% (2) are not sure about this, 6.25% (5 people) could not yet answer this question and 2.5% (2 residents) would like to believe it.

The 32 teachers surveyed (21 survey questions) also answered that 81.25% (26 people) are satisfied with the organization of work and workplace in this educational organization, and 15.63% (5 people) partially agree with this statement. Experts determined that the CF "UMC" has a healthy microclimate, since the manager is quite accessible to both residents and employees, responds promptly to requests and takes into account suggestions received through feedback and "360 surveys." In the questionnaire, 90.63% (29 teachers) are satisfied with the microclimate of the organization, and 9.38% (3 teachers) are partially satisfied. According to 84.38% (27 respondents), in an educational organization, a teacher has the opportunity to realize himself as a professional in his specialty. For your information, a total of 32 people responded (117 in total on staff), with teaching experience of up to 5 years - 21.88% (7 teachers), up to 10 years - 9.38% (3 teachers), over 10 years - 68.75% (22 teachers).

# 1.3 Final learning outcomes

The final results of training in the residency specialty 7R01113 "Allergology and Immunology for Adults, Children" are defined and included in the Educational Program, which was developed by the team of the Clinical Academic Department of Paediatrics and the Department of Internal Medicine of the CF and approved by the Educational and Methodological Council (Minutes No. 5 of 04/27/2023).

Informing stakeholders about the final results of training of residents in the specialty 7R01113 "Allergology and immunology for adults, children" is carried out through systematic surveys, questionnaires and participation in round tables. Experts are convinced that the professional behaviour and communication skills of residents are formed through the formation of competencies in the chosen field of medicine, as well as by choosing elective disciplines that complement and deepen the competencies formed by the disciplines of the compulsory component, ensuring the flexibility of the educational program with a focus on the needs of society and the priorities of the national system healthcare. All of the above is reflected in the syllabuses, educational program and individual curriculum and is reflected in the Rules of organizations of the educational process in the residency of the corporate foundation "University Medical Centre" and the Code of Business Ethics of the corporate foundation "University Medical Centre" (approved by decision of the Board No. 17 of December 26, 2022). Faculty and residents are informed about the code of ethics. You can view the contents of the code of ethics at the link <a href="https://drive.google.com/drive/folders/1tak8k\_vNzwglXzf-stVta16QlgZaT5HP">https://drive.google.com/drive/folders/1tak8k\_vNzwglXzf-stVta16QlgZaT5HP</a>.

When determining the final learning outcomes, employees of the Department of Education took into account previous learning outcomes in undergraduate and internship programs, 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 an accredited educational program.

The surveyed teachers responded that 68.75% (22 people) were completely satisfied with the level of previous training of residents, and 28.13% (9) were partially satisfied.

Experts have established a clear continuity between the final results of previous resident training (prerequisites) and residency training, and subsequent continuing professional development programs. The organization has developed 52 additional education programs, including for specialty 7R01113 "Allergology and immunology for adults, children." Residents are informed about this.

# 1.4 Participation in the formulation of mission and final results

When developing the goals and objectives of the educational program 7R01113 "Allergology and immunology for adults, children", employees of the Department of Education and the Department of Paediatrics and the Department of Internal Medicine, employers, residents took part, which is confirmed by the document - the educational program in the specialty, extracts from the Minutes of the meetings of the Educational and Methodological Council (Minutes No. 5 of 04/27/2023).

At the same time, when talking with residents and experts, they did not receive a clear answer to the question "Do you participate in the formulation of the mission and goals of the organization, educational program?", "What is the personal contribution of residents to improving the educational program?" To these questions, the residents answered that out of all the resident students, two are members of the advisory bodies, on behalf of which all residents can convey their proposals and opinions on the organization of the educational process.

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

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

# 2.1 Framework parameters of the postgraduate medical education program

The model of the educational program in the specialty 7R01113 "Allergology and immunology for adults, children" is determined on the basis of the final results of resident training, therefore it includes the following: patient supervision, communication and collaboration, safety and quality, public health, research, training and development.

Duration of training is 2 years.

The consistency and transparency of training is guaranteed by the timely completion of evaluation sheets for the implementation of practical skills, as well as the completion of a journal with evaluations of current, intermediate and final performance.

To implement the educational program in the specialty 7R01113 "Allergology and Immunology for Adults, Children," the organization's documents contain educational documents, which define the goal, take into account the integration of practical and theoretical components, and independent work. Compliance with State Compulsory Educational Standards and standard requirements has been established, including compliance with the academic load, and the ratio of the volume of disciplines is maintained depending on the duration of study.

The workload in the curriculum for the specialty "Allergology and Immunology for Adults, Children" in accordance with the training period of 2 years includes a cycle of major disciplines presented in the amount of 4020 academic hours or 134 credits, including: compulsory component - 3900 academic hours or 130 credits; optional component - 120 academic hours or 4 credits.

Attending a meeting of the journal club for residents of the 1st year of study, experts received convincing evidence that the training is carried out according to plan, before the start of the lesson, residents answer tests, receive feedback from the teacher, and have the opportunity to improve their skills in various nosologies of allergy and immunology. The organization ensures compliance with ethical aspects in the implementation of the educational program, since experts have studied the Code of Business Ethics of the Corporate Foundation "University Medical Centre" (approved by Board Decision

No. 17 dated December 26, 2022) and during the interview, residents responded that they were informed about the contents of this document.

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

The mentoring system, which is described in the Rules of Organizations of the Educational Process in the Residency of the Corporate Foundation "University Medical Centre," was evaluated. The tasks of the mentor in the specialty 7R01113 "Allergology and immunology for adults, children" are to promote comprehensive active professional development and equal distribution of clinical workload, provide resident doctors with patients, supervise clinical practice and control the performance of manipulations and operations, training through joint rounds, discussion of the plan examination and treatment.

The procedure for informing residents about their rights and responsibilities is reflected in the Job Descriptions of the Resident Physician (Approved by Decision of the Educational and Methodological Council No. 15 of September 15, 2023) and in the Resident Privilege List (Approved by the Director of the Department of Paediatrics on September 1, 2023).

The qualification obtained as a result of mastering the educational program in the specialty "Allergology and immunology for adults, children" corresponds to level 8 of the national qualification framework (**ESG1.2**) and has code 7R01113.

Teachers use such methods of training residents as lectures, seminars, journal club, grand round, work of a resident doctor with a scientific supervisor on RW; discussion of a clinical case, simulation training, student work on preparing and passing the end-of-course assessment.

The list of teaching methods is described in the syllabuses. Through these methods, residents can participate in patient care. Faculty can provide a resident with supervision of approximately 5 case studies per day and 100 per month. For example, residents of the educational program in the specialty 7R01113 "Allergology and immunology for adults, children" upon completion of training can:

- Interpret specific laboratory tests in allergology;
- Provide emergency allergy care for life-threatening conditions;
- Conduct skin, intradermal and provocative, application, prick tests, drip, and scarification tests;
- Conduct allergen-specific immunotherapy.

Experts have found that the principles of academic honesty and anti-plagiarism are fully implemented in educational organizations. This is reflected in the Rules for organizations of the educational process in the residency of the corporate foundation "University Medical Centre" and the Code of Business Ethics of the corporate foundation "University Medical Centre" (approved by decision of the Board No. 17 of December 26, 2022). Academic integrity applies to areas of resident training such as completing independent assignments, taking exams, and writing articles, essays, and projects. Anti-plagiarism is used when residents are engaged in research work. Residents are trained to promptly collect informed consent from patients for any diagnostic and therapeutic procedures. The experts noted that the medical records contain a corresponding document signed by the patient.

Thus, by the end of the training, residents will acquire basic skills and abilities in the specialty "Allergology and Immunology for Adults, Children," which will allow them to work in institutions such as hospitals of multidisciplinary or highly specialized medical organizations, research centres that have an inpatient facility or specialized beds for the profile "Allergology and immunology for adults, children" (ESG 1.2).

The experts did not establish any violations with respect to the principle of equality in postgraduate education and continuous professional development, since the educational organization complies with the Constitution of the Republic of Kazakhstan, the Law on the Languages of the Peoples of the Republic of Kazakhstan and other LSI in the field of education and healthcare. For example, an educational organization employs 117 people, of which 45% are women and 55% are men.

In the organization of education, there is a mechanism for regularly adapting teaching and learning methods to the requirements of modern science and education, as well as to the current needs of practical healthcare. This mechanism includes monitoring the timing of the last completion of advanced training

courses in pedagogy, testing and communication skills of academic staff and timely referral to training in new methods of teaching and evaluating the results of educational achievements of residents. Moreover, the corporate foundation has the Bitrix 24 portal, implemented as a cloud service. Bitrix 24 combines information (news, various groups) and communication (chat/video chat, mail, forums) services, and also has a common disk in which various documents necessary for residency training are stored, an organizer (calendar, planner, etc.) and etc.

This demonstrates compliance with Standard 2 in terms of adapting training to the needs of residents. At the same time, along with the principles of quality and academic integrity, which are described in the Rules of organizations of the educational process in the residency of the corporate foundation "University Medical Centre" and the Code of Business Ethics of the corporate foundation "University Medical Centre" (approved by decision of the Board No. 17 of December 26, 2022), the organization does not have an anti-plagiarism system.

#### 2.2 Scientific method

The educational program includes the scientific foundations and methodology of medical research (discipline "Research", 2 credits, 60 hours), including clinical research and clinical epidemiology. When talking with residents, experts learned that they use scientific evidence in their training and know the basics of evidence-based medicine. For example, when attending a journal club meeting, experts were convinced that residents were taught methods of critical evaluation of literature, articles and scientific data, and the application of scientific developments. This form of training is conducted twice a month.

When surveying residents, it was established that the educational organization has access to students' participation in research work. 62.5% of the 80 respondents noted that they were already engaged in scientific work, 18.75% responded that they had started planning research work, 12.5% had not yet decided on a topic, 2.5% were not engaged.

# 2.3 Structure, content and duration of the residency program

There are documents containing requirements for the structure and content of educational programs, including the Typical curriculum, State Compulsory Educational Standards 2022, according to which the EP in specialty 7R01113 "Allergology and immunology for adults, children" consists of a mandatory component (130 credits) and an optional component (4 credits). Also, 4 credits are allocated for intermediate certification and 2 credits for end-of-course assessment.

Thus, the labour intensity for training a doctor in the specialty "Allergology and immunology for adults and children" is 140 credits (https://epvo.kz/#/register/education\_program/application/46593). The Department of Education is responsible for the selection and implementation of innovations in the educational process.

The content of work programs and the catalogue of elective disciplines reflect the needs of the healthcare system, including issues of paediatric allergy and immunology, as well as the specifics of research and scientific achievements of teachers. For the successful implementation of the educational program in the specialty 7R01113 "Allergology and immunology for adults, children," the organization has resources for organizing the assessment of practical skills of residents - the presence of checklists for recording and assessing manual skills, the presence of a simulation class.

Residency training includes classroom work, independent clinical work under the guidance of a mentor, and the student's own independent work (IWS). The volume of classroom work is 10% of the volume of each discipline, independent clinical work under the guidance of a clinical mentor - 75%, IWS - 15%. The volume of theoretical training is no more than 20% of the volume of the curriculum. Thus, the volume of the classroom is 10%, independent work under the guidance of a mentor - 75% and independent work of the student - 15% of the volume of each discipline.

The organization of education ensures that the structure, content and duration of the educational program are adjusted in the event of any changes in different sciences, demographics, as well as in response to the needs of the health care system. For this purpose, there is a feedback mechanism from stakeholders to identify current and in-demand areas in maxillofacial surgery for inclusion as an elective component in CED.

Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, with which 72.5% of respondents completely agree, 16.25% partially agree, 7.5% completely disagree.

The organization has its own clinical base with 475 beds and 500 outpatient visits. A Joint Steering Committee was also created, which consists of the executive management of AEO "Nazarbayev University", UPMC (strategic partner University of Pittsburgh Medical Centre), and CF "UMC". And to the survey question "Is there enough time for practical training (supervision of patients, etc.)", 90% of residents responded with complete agreement, 5% partially agreed, 2.5% disagreed. At the same time, 73.75% of residents claim that after completing classes the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, works on mistakes).

At the same time, to the question "Do representatives of residents participate in the development of educational programs?", the experts received the following answer: management provides feedback during a 360-degree survey, two residents are members of the advisory bodies of the corporate fund.

The surveyed residents are fully satisfied with the schedule of training sessions (67.5%).

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

Management of the educational process, reflected in the self-assessment report (**Standard 2**) and general approaches to management were confirmed during a visit to the Department of Education and conversations with the head and staff. At the same time, verification of **standard 2** showed that CF "UMC" pays special attention to the issue of compliance with the requirements of international standards of quality and safety of medical care JCI, including through the use of methodologies for continuous quality improvement, advanced training of medical personnel in leading medical organizations in the world, implementation of a patient-oriented system of medical care, including based on the recommendations of partner mentors from Switzerland in the field of hospital services.

The experts got acquainted with the work of the departments, including the work of the department of additional education, technology transfer, the work of all clinical departments, human resources services, the financial sector, the library, the simulation centre, a total of 24 meetings were held and, during cross-interviews, compliance with accreditation standards regarding the relationship was established education and medical care. Residents of the CF "UMC", being part of a team of clinicians, follow all the rules governing the provision of medical care at the organization's clinics. The Rules for the Organization of Postgraduate Education in the Corporate Foundation "University Medical Centre", approved by the decision of the Board of the Corporate Foundation "University Medical Centre" No. 6 dated March 29, 2021, define all the rights and obligations of participants in the educational process, including in the context of providing medical care.

Thus, responsibility for choosing the basis for clinical training and practice of a resident in the specialty 7R01113 "Allergology and immunology for adults, children" is assigned to the Department of Education. Experts analysed information on the availability of accreditation of clinical sites and concluded that all clinical sites of the corporate foundation have passed international JCI accreditation.

Training of residents in specialty 7R01113 "Allergology and immunology for adults, children" is aimed at meeting the needs of practical healthcare. The National Centre for Motherhood and Childhood of the Corporate Foundation provides a lot of opportunities and conditions for qualified training of specialists in the field of allergology and immunology. Thus, during a conversation with the management of the organization, experts received information about the number of residents and the organization of the educational process, and teachers confirmed that the training of residents is carried out directly in the clinical departments - the departments of surgery, paediatric surgery, anaesthesiology and intensive care, internal medicine, women's health, paediatrics, laboratory medicine, pathology and genetics, radiology and nuclear medicine. Residents of this specialty can supervise patients with diseases such as primary immunodeficiency conditions, angioedema, urticarial, and bronchial asthma.

This is facilitated by the mentoring that is carried out in the organization.

When attending a journal club meeting on the topic "Diagnostics of orphan diseases (primary immunodeficiency)" and talking with residents, experts saw that the organization promotes the

development of practical competencies of residents, including on laboratory equipment. At the same time, residents deepen their theoretical knowledge and develop communication skills.

Integration between education and medical care (on-the-job training) is carried out through the direct participation of residents in the diagnosis and treatment of patients - self-examination of patients, under the supervision of a clinical mentor/head of department, independently or under the supervision of teachers performing medical manipulations, operations, management medical documentation, drawing up plans for examination and management of patients, participation in rounds and clinical discussions. Training is conducted in accordance with clinical protocols.

Of the 80 residents surveyed, 70% responded that teachers in the classroom use active and interactive teaching methods quite often, 10% believed that they rarely or sometimes.

Employees of the Department of Education, employees of the Department of Internal Medicine and the Department of Paediatrics took part in the planning, discussion, approval and review of the educational program in the specialty 7R01113 "Allergology and Immunology for Adults and Children".

*Conclusions of the EEC on the criteria.* Complies with 22 standards (including 19 basic, 3 improvement standards): fully - 22.

#### **Standard 3: ASSESSMENT OF TRAINEES**

#### 3.1 Evaluation methods

The study of control and measurement tools (50 tests, 23 situational tasks presented on paper) showed that the organization has implemented an appropriate evaluation policy that allows for a comprehensive evaluation of the educational achievements of residents. During interviews, residents spoke about assessment forms, such as summative and formative assessments, and that they were satisfied with everything. They also receive regular feedback from teachers. The system for appealing assessment results is reflected in the Instructions for the development of educational and methodological documentation and a system for assessing the educational achievements of resident doctors of the corporate foundation "UNIVERSITY MEDICAL CENTER" (Approved by the decision of the Board of the corporate foundation "University Medical Centre" on May 13, 2021. Protocol No. 2 (as amended on September 15, 2023, protocol No. 15)) and during the period of operation of the educational organization, there were no appeals. The evaluation covers not only knowledge and skills, but also professional behaviour and communication skills, which is confirmed by the presence of evaluation sheets for the implementation of practical skills, taking into account the above points.

The criteria for admission to the final certification are complete completion of the training program in accordance with the WC, IEP and portfolio. This is documented in the Rules of Organizations of the Educational Process in the Residency of the Corporate Foundation "University Medical Centre".

Admission for independent examination of residents is the completion of a full course of training in accordance with the requirements of the WC, IEP. The admission of resident doctors to the end-of-course assessment is issued by order of the supervising head of the CF "UMC" according to the list no later than two weeks before the start of the end-of-course assessment and is submitted to the certification commission. In the practice of educational organizations, residents (including other specialties) pass an independent examination in 100% of cases.

In the educational organization there is no unified system for validating and assessing the reliability of resident assessment methods (tests, tasks, cases).

To verify the data of **standard 3**, the experts asked questions to the Director of the Department of Education A.A. Syzdykova, the heads of clinical departments and academic staff regarding evaluation methods during the current and final monitoring of residents' progress and checked the documents and methods for assessing residents.

The organization has EMD, including EP, TC, IEP, CED, syllabuses, which are compiled by academic staff who provide training in the residency specialty 7R01113 "Allergology and immunology for adults, children", by employees of the Department of Education and approved at a meeting of the Educational Methodological Council (minutes No. 15 of September 15, 2023). Head of the Department of

Education Syzdykova A.A. responded that additions and updates to the control and measurement equipment are planned to be made in early 2024.

The results of the resident assessment are documented in a paper journal, as well as using evaluation sheets and stored on the Bitrix 24 portal.

There is a document on appealing the evaluation results - Instructions for the development of educational and methodological documentation and a system for evaluating the educational achievements of resident doctors of the corporate foundation "university medical centre", which was approved in 2021. To date, there have been no resident appeals.

During a visit to the organization and during an interview with employee Asylbekova M.K., Director of the Department of Internal Medicine, the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and staff, and includes documents such as annual operating plans, annual reports , regulations of departments, agreements with teachers and residents, a list of Resident Privileges, and educational and methodological documentation (work program, working curricula, syllabuses, journals), evaluation tools (checklists, statements), awards, certificates and verifications.

A review of the website showed that its pages contain the documents necessary for residents - Rules for admission to residency, Order on approval of academic staff and clinical mentors in the specialty of residency, Rules for organizing the educational process in residency of the corporate foundation "University Medical Centre", syllabuses, working curriculum, schedule, job descriptions of a resident physician, privilege lists for all residency programs, a catalogue of elective disciplines for the 2023-2024 academic year, academic calendar for the 2023-2024 year and there is information on the procedure for selecting residents for internships, which is regularly updated.

During the visit to the organization, management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the evaluation process?" And the answer was received: "Yes, the practice of attracting external examiners to the CF "UMC" is provided for in the event of an end-of-course assessment. To take a comprehensive exam, a Final Certification Commission is formed, which includes a chairman who is not an employee of the CF "UMC", who has an academic degree/academic title, and members of the commission from among the employees of the CF "UMC", with an academic degree of Doctor or Candidate of Sciences/degree Doctor of Philosophy (PhD) or having the highest/first qualification category in the relevant specialty."

#### 3.2 Relationship between evaluation and learning

When conducting interviews with 17 teachers regarding evaluation methods, experts received convincing information that during the seminars academic staff uses a point-rating evaluation system, formative and summative evaluation methods, and the performance of practical skills is evaluated using developed assessment sheets. The results of evaluating current, intermediate and final performance are recorded in journals. Monitoring of final performance is carried out using test tasks and situational tasks (clinical cases). Residents also shared their opinions on the timeliness of providing tests, counselling before exams, the clarity of the entire evaluation procedure and its fairness.

For example, residents said that after assisting and performing manipulations, the clinical mentor gives feedback on the same day and points out ways to advance and improve.

The experts examined the resources for organizing the assessment of knowledge and practical skills, namely, test tasks, situational tasks, practical skills evaluation sheets, and a simulation class.

Experts determined that the choice of methods for evaluating residents is carried out in accordance with directive, external and internal regulations and is based on evaluating the completeness and correctness of practical skills, since the practical part of training is the main one. For example, ongoing evaluation methods such as verbal questioning, direct observation, evaluation of performance on simulation equipment, and evaluation of activity in journal club and clinical education committees facilitate inter-professional learning. And a method such as assessing practical skills at the patient's bedside demonstrates the integration of training and an emphasis on clinical skills. Established evaluation methods ensure that the resident has mastered all sections of the educational program and acquired the necessary practical skills.

Feedback from residents based on the results of their evaluation is collected in the form of a questionnaire and stored in the database of the corporate fund, to which all academic staff and residents have access. In interviews, residents confirmed that they receive feedback after completing their training.

The interviewed representatives of employers also pointed out that the training of graduates corresponds to the modern development of medical practice and science, since the technical equipment of the clinical bases of the corporate foundation for diagnostics and treatment corresponds to international JCI standards, and the variety of components to choose from is due to the presence of current, in-demand areas in practical healthcare in field of allergology and immunology. Employers said that they themselves participate in the assessment of residents, but the educational organization did not provide systematic feedback to them.

At the same time, there are difficulties in the development of control and measurement tools, including the development of test items of the third level of complexity, automation of the evaluation system and determination of validity.

*Conclusions of the EEC on the criteria* comply with 9 standards (including 6 basic, 3 improvement standards): fully - 6, partially - 3.

### Recommendations for improvement:

- 1) To ensure that grades are given according to the developed evaluation system in accordance with the "Instructions for the development of educational and methodological documentation and the system for evaluating the educational achievements of a resident physician" UMC. According to the rules for organizing the educational process in the residency of the CF "UMC" dated March 29, 2021, the grades of the current, intermediate and end-of-course assessment in alphanumeric format (**Standard 3.1.1.**) must be entered in the resident's progress log.
- 2) To review test assignments in accordance with the qualification requirements for residency students. Implement an automated system for determining the validity and reliability of test items (**Standard 3.1.4**).
- 3) To introduce a unified electronic journal for recording the progress of residents and students (Standard 3.2.1).

#### **Standard 4: TRAINEES**

#### 4.1 Admissions policy and selection

The educational organization has a policy for the admission of residents, which is called the Rules for Admission to the Residency of the Corporate Foundation "University Medical Centre" (Approved by decision of the Board of the Corporate Foundation "University Medical Centre" on March 1, 2018 No. 5 Changes and additions were made on June 26, 2019 No. 14, March 5, 2021 No. 5, April 20, 2022 No. 5, April 28, 2023 No. 7).

Approaches to the admission of residents are based on the requirements of the country and internal regulations, namely, Order of the Minister 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 higher and postgraduate educational programs education", Orders of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. KR MOH-270/2020 "On approval of the rules for placing state orders, admission to training and training of medical personnel in residency" and dated March 15, 2023 "On amendments to some orders of the Ministry of Health of the Republic of Kazakhstan" and in accordance with the Rules for admission to the residency program of the CF "UMC", approved by the decision of the Board of the CF "UMC" dated March 1, 2018 No. 5.

Transparency of the selection procedure and equal access to residency programs is achieved through the media and the provision of information on the website of the CF "UMC" (www.umc.org, kz, section "Science and Education - Residency"), which is confirmed in paragraph 2 of the document "Rules for admission to the residency program of the CF "UMC", approved by decision of the Board of the CF "UMC" dated March 1, 2018 No. 5.

The document takes into account the requirements for residency applicants in terms of their previous achievements in undergraduate and internship courses (for example, academic performance, foreign language proficiency).

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

Approaches to the admission and transfer of residents from other educational organizations are reflected in paragraph 5 of the document Rules for organizations of the educational process in the residency of the corporate foundation "University Medical Centre".

The appeal procedure based on the results of admission to residency is prescribed in paragraph 6 of the Rules for admission to residency of the corporate foundation "University Medical Centre". To date, there has been no precedent for appeal.

Representatives of students were not included in the process of developing a policy for admission and selection of residents, and therefore it was recommended by the EEC to involve professional associations in the process of developing a policy for admission to residency.

A review of the admission and selection policy and the number of residents is carried out annually, and the Department of Education is responsible for this.

Thus, experts validated the data according to **standard 4.** In general, all criteria are met, at the same time, some shortcomings were identified, namely the lack of involvement of professional associations of residents in the process of developing residency admission policies. The experts familiarized themselves with the documentation for the admission of residents, including the Rules for admission to the residency program of the corporate foundation "University Medical Centre". Many documents are well-written, but there are comments regarding approaches to admitting residents with disabilities, which may be due to the lack of this contingent of applicants.

#### 4.2 Number of residents

For the period 2019-2023 274 residents were admitted to all educational programs, including 9 residents to the program in specialty 7R01113 "Allergology and immunology for adults, children." The total graduation rate of residents on the dates of commencement of admission to residency in all specialties was 683 people. The Ministry of Health of the Republic of Kazakhstan annually holds a meeting of the working group of the medical and economic council on medical education and science, where the volume of the state order for personnel training is discussed.

#### 4.3 Support and counselling for residents

The practice of academic advising, personal support for residents and the development of not only professional skills were evaluated by experts through interviews and questionnaires of residents. When conducting interviews with residents and graduates, the following information was obtained: for the entire period of residency training, each student is assigned a curator who provides the functions of an academic mentor, participates in the formation and implementation of an individual curriculum, in the selection of disciplines and teachers based on work with the catalogue of disciplines and working curriculum, supervises the clinical, educational and research activities of the student and mastery of practical skills. The curator also provides advisory assistance in resolving future career issues, determining the direction of research, choosing a supervisor, and determining the basis for industrial practice. Clinical mentors conduct educational work with the resident doctors assigned to them on issues of improving their academic performance, discipline and class attendance, and attracting them to participate in the public life of CF "UMC".

The educational organization has a resident development program, which includes a Journal Club, Program 024 to finance publication activities and presentations at international conferences, congresses and symposiums.

For the purpose of social support for resident doctors, CF "UMC" allocates appropriate resources. To do this, the resident doctor must write an application addressed to the head of the organization. If the head of the resident doctor approves the application with a request for financial assistance, a meeting of the budget or tariff commission of the CF "UMC" is held, at which the possibility of allocating the necessary funds is considered.

Financial support for residents is provided through the issuance of a scholarship in the amount of 100,036 (one hundred thousand thirty-six) tenge. Psychological support for residents is provided through counselling by psychologists in the psychosocial support sector with 6 staff positions. There is a room for psycho-emotional relief, where art therapy, music therapy and yoga classes are carried out.

Every year, employees of the Department of Education provide advisory work to graduate resident doctors on issues of employment and working out a state educational grant. The employment rate of graduates of all residency programs in 2022 was 100%.

#### 4.4 Representation of residents

The educational organization has the following advisory and consultative body - the Educational and Methodological Council, in which residents participate - Tobyl A.S., resident doctor 3 years of study in the specialty "Paediatric Surgery", Mukhamedzhan G.B. "Obstetrics and gynaecology for adults and children". Also, the participation of students in decision-making about processes in the centres of the CF "UMC" is ensured through regular meetings of journal clubs, Grand rounds, topics for discussion at which are provided by the students themselves based on issues of interest to them in the department, in the centres of the CF "UMC", score 360 degrees.

When surveying residents, experts found that the opinions of resident doctors are taken into account to improve the educational process, which is reflected in the EMC protocol No. 6 dated July 20, 2018.

# 4.5 Working conditions

Residents receive a monthly scholarship in accordance with the Decree of the Government of the Republic of Kazakhstan dated October 10, 2022 No. 799 "On amendments to the Decree of the Government of the Republic of Kazakhstan dated February 7, 2008 No. 116 "On approval of the Rules for the appointment, payment and amount of state scholarships for students studying in educational organizations" In total, the educational organization has 4 clinical bases for training residents and at each site various events are held in which residents participate. For example, rounds in the department, morning medical conferences, provision of assistance in departments, night/day shifts as part of the duty team, consultations and conversations with patients and/or their relatives, meeting of doctors to review clinical cases; consultations, reviews of incidents in accordance with international standards JCI, participation in organizing and conducting events for scientific and information exchange in the form of conferences, seminars, symposia, forums and other forms aimed at exchanging experience, scientific and practical information, strengthening mutually beneficial ties, participating in joint scientific and research projects, and also participation with reports in the journal club.

As a rule, residents supervise 5 patients per day, and 100 people per month. Residents make thematic reports as part of a journal club on methods of diagnosis and treatment of various diseases of the maxillofacial region. They participate in health education work.

Elements of distance learning for residents were introduced into the educational organization, the format and content of educational programs were developed depending on the needs of practical healthcare, the academic staffs of the CF "UMC" was trained in the use of distance technologies, and access to Moodle was provided outside of the workplace.

*Conclusions of the EEC on the criteria.* Compliant out of 20 standards (including 14 basic, 6 improvement standards): fully - 18, partially - 2, do not comply - 0

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

- 1) To involve professional associations in the process of developing residency admissions policies (**Standard 4.1.4**).
- 2) To consider the possibility of creating an informal association of students to solve problem situations (**Standard 4.3.4**).

#### **Standard 5: TRAINERS**

#### 5.1 Recruitment and selection policy

There are 117 employees in total, in the specialty 7R01113 "Allergology and Immunology for Adults, Children" - 4, of which 1 are full-time teachers, 3 part-time teachers. The requirements for

teachers of the residency program take into account the availability of a specialist certificate, degree, category, and work experience.

The degree of academic staff conducting training in the specialty of residency 7R01113 "Allergology and immunology for adults, children" is 25%, the highest category is 1 person (25%), the first -0 (0%), the second -0 (0%).

The experts familiarized themselves with the job descriptions of doctors conducting residency training and the regulations on the Department of Education (Annex No. 7 to the minutes of the Board of the Corporate Foundation "University Medical Centre" August 01, 2023 No. 11 Approved by the decision of the Board of the Corporate Foundation "University Medical Centre" 01" August 2023 No. 11).

Experts are familiar with the personnel policy and policy regarding mentors in the Rules for organizing the educational process in the residency of the corporate foundation "University Medical Centre". The ratio of teachers and residents is 1:3.

The motivation system for teachers and clinical mentors includes the following - timely delivery of CDP courses at the expense of the CF "UMC", motivation for publication activity and presentations with research results at international conferences and congresses within the framework of the 024 program.

In order to motivate teachers and clinical mentors, a gala event was held in March 2020 to reward UMC employees based on the results of educational and scientific activities for 2019.

The principles of ethics and academic integrity of teachers are reflected in the document "Coordination of Work for the Implementation of the Residency Program" document, which spells out the responsibilities of the Department of Education, the director of the residency program by specialty, the clinical mentor and the teacher of the residency program.

When talking with teachers, they confirmed their awareness of the policy of recruitment, admission and motivation of teachers and clinical mentors, which includes academic experience and qualifications of a practicing specialist in the relevant fields of medicine, criteria for scientific, educational, pedagogical and clinical achievements; balance between teaching, research and clinical care; and also considers faculty-to-resident ratios sufficient for effective teaching and learning and monitoring of residents' academic and professional achievements.

In order to verify the data of standard 5, external experts obtained the opinion of teachers on personnel policy, which includes the presence of an academic degree, academic title, work as a full-time teacher or carrying out part-time activities, practical experience, scientific and teaching work experience. The conversation with teachers included such questions as knowledge of the mission and goals of the educational program, knowledge of modern teaching methods, the availability of feedback and evaluation of major disciplines and the educational program and allowed experts to learn about approaches to attracting staff from clinical sites for teaching, recruitment strategies and tactics residents, information security of the educational program, and also identify problems in the management and development of human resources.

When surveying teachers, it was found that the majority of 81.25% (26 people) were completely satisfied with the organization of work and workplace in this educational organization, but 15.63% (5 people) were partially satisfied. In this educational organization, teachers have the opportunity to engage in scientific work and publish research results - 87.5% (28 respondents) completely agree, 12.5% (4) partially agree. Satisfied with wages - 40.63% (13 people), dissatisfied with 21.88% (7). They note the possibility of career growth - 81.25% (26 people) completely agree, 18.75% (6 people) - partially agree.

#### **5.2 Faculty Commitment and Development**

In order to verify the data of **standard 5**, during a meeting with the head of the personnel department and during interviews with teachers, experts received an opinion on approaches to developing the pedagogical competence of teachers, motivation for working with residents, mentoring, which includes advanced training every 5 years in the specialty and pedagogy based on the annual Personnel Qualifications and Competencies Development Plan, which is developed by the Human Resource Management Department. Various forms and methods of CDP program for academic staff are used: mentoring programs, courses, seminars, workshops, conferences, trainings, mentoring, distance learning,

internships, etc. Professional development of personnel also includes internal rotation of employees, delegation of authority, mentoring and other tools development of competencies on the job.

A unique opportunity to develop the potential of the academic staff of the CF "UMC" is provided by budget program 024 "Targeted contribution to Nazarbayev University" by the subprogram "Technology Transfer". Every year, through funding within the framework of this program, more than 50 employees improve their skills in the best foreign centres, and mentoring programs and master classes are organized with the involvement of international experts. At the same time, academic staff has the opportunity to improve their qualifications both in their clinical specialty and in developing competence in the field of research activities and methodology of medical education.

Experts determined that faculty and residents have adequate time for teaching, mentoring, and learning. The work schedule of teachers is established in accordance with the Rules of organizations of the educational process in the residency of the corporate foundation "University Medical Centre". Opening hours are from 8:00 to 16:00. Teachers conduct seminars lasting 7.5 hours per week. Clinical reviews, clinical rounds are happened weekly. There is weekly duty.

Experts received answers about the teacher training program, educational program, and completed training for 2023. These events are financed by the educational organization. The expert checked teachers' certificates on such topics as "Methodology and educational technologies in residency" (41 hours. Order No. 105-kb dated 10/09/22).

Experts have found that teachers initiate research topics for residents stimulate the need for additional training and independent work with literature and medical documentation. CF "UMC" implements academic mobility programs for teachers and invitation of mentors in accordance with the goals and needs of students and employees. In order to motivate teachers, clinical mentors, and resident doctors of the CF "UMC", ceremonial events are held to reward UMC students and employees based on the results of educational and scientific activities.

In an educational organization, there is an opportunity for career growth and development of teacher competencies - 81.25% (26 people) of the surveyed teachers responded that they completely agreed with this statement, and 18.75% (6) partially agreed with this. Studied in professional development programs - 43.75% (14 people) less than 1 year ago, 34.48% (11 people) more than 3 years ago, 15.63% (5) more than 5 years ago and 3 13% (1 person) answered "I don't remember when it was."

The organization implements social support programs for teachers - 40.63% (13) answered that "yes, such programs exist," 6.25% (2) of respondents answered that there are no such programs, and 34.38% (11 people) respondents do not know about this.

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

Recommendations for improvement identified during the external visit:

1) To optimize the ratio of teaching and clinical workload of teachers and clinical mentors.

# Standard 6: EDUCATIONAL RESOURCES

# 6.1 Logistics and equipment

Residents are trained on the basis of the National Scientific Centre for Maternity and Childhood, the Republican Diagnostic Centre, the National Cardiac Surgery Centre, the National Centre for Neurosurgery, including residents of an accredited educational program in the specialty "Allergology for Adults, Pediatric" on the basis of 8 clinical and academic departments. There are 475 beds in total. There are 3 training rooms, a large conference room with a capacity of more than 200 people, a second conference room for 50 people and a small conference room for 20 people, resident rooms in each department, a library with 34 seats, a computer class with 14 seats.

The experts visited the library, which provides residents and staff with access to the Thomson Reuters (Web of Science), Springer Link, OXFORD JORNALS Medline, and Scopus databases. Total literature on the accredited specialty is 1736 pieces.

Before starting the corresponding discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he must acquire and develop during his training. The structure of the syllabuses did not correspond to the approved form.

Residents noted that from the beginning of training the topics of scientific directions were not determined. Despite the discrepancy in data regarding the timing of approval of research topics for residents, all residents noted motivation in choosing a scientific direction and interest in publishing articles and presenting research results at international conferences.

The material and technical equipment of the corporate foundation complies with JCI international standards.

During a conversation with representatives of the financial sector, it was found out that the application for the 2024 calendar year included funds for the purchase of the necessary equipment for the simulation centre to improve training conditions.

Updating of the material and technical base, including the library background, is carried out every 5 years. So, over 5 years, the update affected the following: the fleet of computer equipment was updated, a computer class was created, a local computer system Bitrix 24 was created, and uninterrupted operation of the Internet was ensured.

#### **6.2 Clinical sites**

A review of the resources showed that they correspond to the goals and objectives of educational activities; for example, the clinical bases of the JSC "National Scientific Cardiac Surgery Centre", the JSC "National Centre for Neurosurgery", the National Scientific Centre for Maternity and Childhood, and the Republican Diagnostic Centre were visited.

During a visit to the clinical base - the National Scientific Centre for Maternity and Childhood, "Republican Diagnostic Centre", experts examined the resources, their compliance with training programs, accessibility for teachers and residents, how modern this equipment is and meets the needs of students and practical healthcare.

In order to validate the implementation of the self-assessment report data and obtain evidence of the quality of the programs, interviews were conducted with residents. The experts asked questions about satisfaction with training, sufficient time for supervising patients, working with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents in need, participation in "Journal Clubs," and the availability of international databases of professional literature. In general, residents are satisfied with the training, assessment methods, and purposefully entered this organization, because they believe that the educational organization has good resources, image and international connections, at the same time, residents would like more independence in managing patients and conducting international events.

There is a simulation centre with an area of 62.0 m2 on the basis of the Scientific Centre for Maternity and Childhood, equipped with equipment, including: resuscitation, obstetric, neonatological and paediatric equipment.

Residents of the educational program in the specialty 7R01113 "Allergology and immunology for adults, children" can practice practical skills: performing cardiopulmonary resuscitation, performing tracheostomy, providing emergency care to patients with anaphylactic shock.

Residents showed their commitment to the organization of education, were active in answering questions from external experts, demonstrated their judgment in organizing training, evaluating their skills, advisory support, the opportunity to participate in research work, and financing, demonstrated proficiency in English when answering questions from a foreign expert MD, Professor L.E. Ziganshina, at a meeting of the journal club. Experts examined residents' documents (portfolios, resident evaluation results, checklists, residents' survey results).

#### 6.3 Information Technology

Experts evaluated the access of residents and teachers to the necessary web resources, including the corporate foundation website, the Moodle distance learning website, a database of educational information resources that can be accessed from the internal network of the CF "

UMC", the Paragraph information system, an electronic library with a full access to full-text databases SCIENCE DIRECT and SCOPUS (Elsevier), Web of Knowledge (THOMSON REUTERS),

SPRINGER (SpringerLink) on the basis of Agreement No. 107 dated June 19, 2017 between JSC "National Centre for Scientific and Technical Information", Almaty and UMC, as well as OVID CENTRAL, PUBMED, MEDLINE, EMBASE, BMJ Updates, ClinicalKey (Elsevier), COCHRANE LIBRARY through personal registration.

CF "UMC" has concluded international agreements for access to international databases:

- 1) access to the electronic full-text resource of one of the world's leading interactive databases of journals, book series, books, reference materials and interactive archive collections "SpringerLink, Nature Publishing Group" is open. Archive depth is 1997;
- 2) access to scientific electronic full-text resources of the Clarivate Analytics (WoS) database is open, which includes 23,000 scientific journals, 23,000,000 patents, 110,000 materials from scientific conferences over the past 100 years;
- 3) an agreement concluded with Elsevier provides full access to full-text resources of SciVerseScienceDirect, including 2500 journals, 11000 online books, SciVerseScienceDirect, SciVerseScopus, Reaxys, Emabse, EngineeringVillage, as well as innovative systems for analysis, assessment and decision-making in scientific research activities SciVal, etc.
- 4) EBSCO: Medline Complete and DynaMed Plus, Database contains authoritative medical information on medicine, nursing, dentistry, veterinary medicine, public health, preclinical sciences and more;
  - 5) Wiley Online Library;
- 6) BMJ: BMJ Journals, Best Practice, BMJ eLearning includes 22 leading specialized medical journals on clinical, evidence-based and sanitary medicine.

Students have access to electronic media. Residents confirmed that they can use PubMed, Scopus, and Springer, including when preparing for classes.

Information and communication technologies are represented by the following: local computer system Bitrix 24, personal information manager Microsoft Outlook, there is a video broadcast system in conference rooms, a subscription to the professional ZOOM platform. In order to create conditions for timely receipt of information by resident doctors, the following were created: a) a page on the social network Facebook, thanks to which resident doctors have the opportunity to follow news on residency programs and learn important events that occur at UMC; b) a single email in which all work curricula and plans are loaded, the schedule of training sessions, the duty schedule, the vacation schedule, etc. important information. Each resident physician has login access; c) a WhatsApp group, which includes all group leaders, which allows you to quickly transmit/receive the necessary information; d) groups on the Bitrix24 Internet for resident doctors. Access to patient data and the healthcare information system is provided through Bitnix HIS (Hospital Information System). The resident supervises 5 patients per day, including completing the necessary documentation under the supervision of a faculty member. There is access to INFINITT, Laboratory.lnk, AIS "Polyclinic", EDIP (electronic database of inpatients), Registers of the assigned population and Register of pregnant women, Oncoreregister, portals "Bureau of Hospitalization" and other information systems. For faster communication between workers within centers, most employees have portable communication devices (Dect).

#### **6.4 Clinical teams**

In order to develop the experience of working in a team among residents, the educational organization conducts such activities as direct work together with clinical workers of the centres of the CF "UMC" in all areas of their activities, discussion of tactics of management, treatment of patients in the department and participation in pathomorphological, clinical and scientific and practical conferences, in various educational events, such as "Journal Club", "Educational and Clinical Commission".

Experts attended a journal club meeting, where the results of teamwork of residents in therapeutic specialties were presented. Inter-professional interaction is carried out through participation in the form of speech and discussion in the journal clubs twice a month and the clinical educational commission. Residents can conduct health education activities among patients and educational activities among interns.

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 90% of 80 respondents completely agree with this, 5% partially agree, 2.5% found it difficult to answer.

#### 6.5 Medical scientific research and achievements.

The educational organization carries out research work in such areas as: "Women's health", "Laboratory medicine, pathology and genetics", "Paediatrics".

Over the past 5 years, progress has been made in the number of publications in peer-reviewed journals in the Web of science database; also in 2022, a grant was received from Pfizer for the educational project "Removing the burden of migraine in Kazakhstan", in 2023 year, two projects of the CF "UMC" were financed by the Ministry of Education and Science of the Republic of Kazakhstan. Residents of all years of study are involved in carrying out scientific work (or fragments). They perform such types of work as collecting material, interpreting data, and statistical processing.

In the departments, resident doctors manage patients under the guidance of a clinical mentor/head of the department, participate in operations, perform various manipulations according to the Privileges List, and practice their skills on simulation equipment.

During the implementation of research, each resident doctor is assigned a scientific supervisor from among the teachers of the CF "UMC", whose area of scientific and clinical activity corresponds to the chosen topic of the resident doctor. The topic, the head of the RW of the resident doctor, is approved by the EMC of the CF "UMC". An agreement is signed between the resident doctor and the supervisor, which regulates the legal relationship between the resident physician and the scientific supervisor within the framework of mutual cooperation, and defines the fundamental conditions for joint activities. The head of the RW of the resident doctor provides systematic consultation on the problems of work, providing assistance in developing a theoretical and methodological basis for the study; consultations on literature selection, information search, data collection, etc. Based on the results of the study, the resident doctor presents the results of the work.

In July 2018, at the EMC meeting, the results of 23 research papers of residency graduates were heard in the form of a presentation. In 2019, there were results for 48 projects. 105 research papers were accepted for 2020-2023, including 39 research papers for 2023.

In 2022, 42 articles were published in foreign journals, 38.1% of them in Q1 journals.

Since 2022, CF "UMC", by decision of the Research Council, Nazarbayev University, has been included in the list of organizations eligible to submit documents for grant funding under the CRP program. 4 applications were submitted for the CRP competition together with teaching staff and NU researchers.

On the basis of the CF "UMC", 12 projects were implemented in 2022 alone, but there were no major projects in allergology.

The educational program includes a discipline where residents study research methods in medicine (Scientific work, 2 credits, and 60 hours). If residents carry out scientific and practical research, they are provided with access to instrumental and laboratory equipment.

During the period from September 1 to December 30, 2022, on the basis of the CF "UMC", an educational program was conducted on the topic "Professional Development Program (PDP) in the field of scientific research" for 22 employees of the CF "UMC". The program was aimed at obtaining theoretical knowledge, developing skills acquired during the training process, and developing the professional competencies of specialists in conducting scientific research. the program was led by professors from the School of Nazarbayev University (NUSM): Antonio Sarria-Santamera - Associate Professor of the Department of Medicine of Nazarbayev University; Alessandro Salustri – Professor of the Department of Medicine, NUSM; Byron Crape - Assistant Professor, Department of Medicine, NUSM; Philippe la Fleur - Assistant Professor of the Department of Medicine of NUSM.

Within the framework of this program, doctors conduct research projects, but do not conduct research projects in allergology.

The minutes of the in-person meeting of the Board of the CF "UMC" No. 20 dated September 07, 2021 approved the key performance indicators (KPIs) of clinical academic departments for 2021-2023,

which include indicators of educational and scientific activities. In accordance with the KPI, the degree of involvement in educational and scientific activities is assessed.

An interview with 4 teachers showed that there are both successes and problems in the management of education, depending on the specific base (admission of residents to equipment, a sufficient number of case patients, time to maintain medical records, independent work). Due to the fact that the main clinical base of practice for residents is the National Centre for Maternity and Childhood, the population of patients supervised by residents is limited by age (mainly children) and nosology (planned hospitalization).

### 6.6 Educational expertise

Expertise in education includes the following areas - evaluation by the Educational and Methodological Council, the use of a mechanism for expert evaluation of educational programs, and the work of the quality management system service.

Employees of the Department of Education and the Educational and Methodological Council conduct annual monitoring of the quality of educational programs, the results of which are included in the minutes of meetings.

As part of the residency program review, an annual 360 survey is conducted (https://umckaz.qualtrics.com/Q/MyProjectsSection?). The survey includes resident doctors of the 1st, 2nd and 3rd years of study of all specialties.

The examination is carried out in the form of an analysis of the needs for specialists, an analysis of resident training methods, and its results allow us to draw conclusions about the quality of innovative changes in postgraduate education. For example, the results of assessing the effectiveness of teaching methods and educational activities made it possible to include a Journal Club and an educational and clinical commission (Grand round) in training in all residency specialties on an ongoing basis.

Resources for clinical training are updated annually and, based on the results of conversations with representatives of the financial sector, it was noted that in 2024 the simulation centre will be equipped with the necessary equipment for all residency programs.

# **6.7** Training in other institutions

The academic policy for resident training includes the possibility of training at alternative organizations if existing clinical sites do not cover all topics of the educational program. The preparation of scientific publications is carried out under the guidance of a teacher and does not require additional training bases. However, residents can participate in academic mobility within the country.

There is a document on the transfer and offset of learning results between educational organizations: paragraph 5 of the Rules for organizations of the educational process in the residency of the corporate foundation "University Medical Centre".

6 agreements and 19 memorandums were concluded with organizations, universities, associations, including JSC "National Scientific Cardiac Surgery Centre", JSC "Scientific Centre of Neurosurgery", MSI on the REM "City Multidisciplinary Hospital No. 2" of the Akimat of Astana, MSI on the REM "City Centre for Phthisiopulmonology" of the Akimat of Astana, MSI on the REM "City Centre for Phthisiopulmonology" of the Akimat of Astana, MSI on the REM "City Centre for Phthisiopulmonology" of the Akimat of Astana. Memoranda have been concluded with foreign clinics in Ghana, Turkey, Israel, Italy, Slovenia, Lithuania, and Korea. During 2019-2023, at the expense of the UMC CF, 26 resident doctors were sent to international conferences, forums, and congresses, 8 of them foreign. For example, in the specialty of an accredited educational program, international cooperation is carried out with Italy.

Teachers of educational organizations actively participate in republican and international events. Thus, 30 teachers took part in the mentoring program "Implementation of international standards in the management and implementation of residency programs." Such participation made it possible to apply the information received in the educational process. For example, in the specialty of the educational program 7R01113 "Allergology and immunology for adults, children," scientific and practical events such as conferences and master classes are held. There was scientific and practical conference with international participation "Interdisciplinary issues of allergology and immunology."

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

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

# 7.1 Monitoring and evaluation mechanisms

Monitoring of the educational program includes questioning of residents, teachers, residency graduates, and employers, which ensures transparency of the process and results. An annual analysis of the educational program will allow the educational organization to make adjustments and improve the content. Subsequently, the residency program was approved at a meeting of the Educational and Methodological Council (Minutes No. 5 of 04/27/2023). Regular evaluation of the quality of the educational program is carried out by the Department of Science and Education by monitoring and evaluating the educational program at all levels, using a competency-based approach and includes a system of evaluation forms "360 degree analysis".

An evaluation of the process of implementing the educational program in view of the first set of residents in the specialty 7R01113 "Allergology and Immunology for Adults, Children" was carried out in 2023 after mastering the disciplines of the educational program by analysing the final learning results. For example, a survey of 39 residents of 1, 2 and 3 years of training in other specialties as part of the "360 degree survey" using a 10-point scale demonstrated the following: the maximum average value (8.77) among resident doctors is understanding the purpose and objectives of the training program and what is required of a resident physician; The vast majority of respondents noted the possibility of mastering the necessary practical skills in the departments of the clinic (8.10) and the provision of the program with the number and necessary profiles of patients in the departments of the clinic (8.08); 8.00 points allocated by resident physicians to provide sufficient practice to improve clinical knowledge and practical skills; an average score of 7.88 was noted on the question of sufficient responsibility for making decisions and managing patients in accordance with the level of training; Resident doctors rated the opportunity to participate in scientific events and research at UMC as 7.96 points.

The objectives of the survey were: 1. to identify the degree of understanding of the main directions of the residency program of the CF "UMC" by students; 2. evaluation of opinions regarding the effectiveness of educational activities; 3. evaluation of the level of satisfaction of resident doctors. The main criteria for evaluating a residency program were rated by respondents as a whole with a rating of 8.1 points out of 10

A survey of 117 faculty members conducted in 2023 showed that participating academic staff accurately and clearly understands the purpose and objectives of the residency program. However, 28.6% of them find enough time and desire to effectively train residents. The survey results show that only 57.2% of residents are independent, 42.8% need supervision when communicating with patients and consulting.

Evaluation of approaches to the admission of residents is carried out through feedback, surveys and questionnaires. All results of the surveys and the analysis carried out on it are presented to the EMC, based on the results of which corrective actions are proposed by council members.

The selection and compliance of teachers and teaching methods is also carried out through feedback from residents. For example, the results of a survey of 39 residents in 2023 showed that, assessing the level of effectiveness and informativeness of the educational activities of the residency program, 79.5% of respondents responded positively to the Journal Club and 72.2% for seminars, 55.9% of respondents responded positively to the effectiveness of using formative and summative assessment in improving their clinical knowledge. Also, 59.5% of respondents note the effectiveness of using Practical Skills in improving skills and abilities. Assessing the level of interest of the teacher in training resident doctors, 60.5% of respondents responded positively, 10.5% responded negatively. As a result, only 59.5% of respondents expressed their satisfaction with the residency program. However, 73.7% of respondents rated the level of support and direction from residency staff as positive.

The evaluation of the sufficiency and quality of educational resources is carried out by the Department of Education. In the process of assessing the quality of residency educational programs, it was established that, along with the achievements (strengthening the program through the inclusion of

Scientific work in a mandatory component, as well as through invited foreign teachers, internships with the possibility of participation of resident doctors at international and republican conferences, seminars), there is a number of problems and shortcomings, including the need to compensate for the absence of case studies by concluding contracts with third-party organizations, the lack of simulation equipment for practicing practical skills in the field of maxillofacial surgery, the lack of an automated electronic system for recording current, intermediate and final progress.

#### 7.2 Feedback from teachers and residents

Educational organizations regularly collect feedback from teachers, residents, and employers.

To survey teachers, a questionnaire was developed that included 15 questions, rated on a ten-point scale and including three levels: (1) General evaluation criteria; (2) The level of effectiveness and information content of new educational activities; (3) Providing residents with various resources for training. The results of a survey of teachers conducted in 2023 showed that the average rating for three levels of questions was distributed as follows: (1) General evaluation criteria - 7; (2) Level of effectiveness and information content of new educational activities – 6.3; (3) Provision of residents with various resources for training – 7.7. The analysis showed that the teaching staff who participated in the survey accurately and clearly understand the purpose and objectives of the residency program. However, 28.6% of them find enough time and desire to effectively train residents. The survey results show that only 57.2% of residents are independent, 42.8% need supervision when communicating with patients and consulting.

The survey of residents is conducted once a year and is devoted to such topics as: the number and type of patients in the departments, responsibility for making decisions in the management of patients, the level of support and assistance from doctors, the level of effectiveness and informativeness of the educational activities of the residency program, access to modern literature and library, computer programs and simulation equipment, satisfaction with the residency program, level of support and referrals from residency department staff.

#### 7.3 Resident and Graduate Outcomes

The results of residents and graduates are indicators of the quality of educational programs.

Thus, the results of an independent evaluation of residents in 2022 showed that among all examinees, 87.5% of residents received an "excellent" rating, 12.5% received a "good" rating. The highest rate is for residents in the specialty "Neonatology", "Anaesthesiology and Reanimatology", and the lowest rate is for residents in the specialty "Oncology and paediatric haematology".

An analysis of the end-of-course assessment results for three years revealed the following: the share of residency graduates who passed the end-of-course assessment procedure and received "good" grades from the total number of graduates in 2020 was 62.52%, in 2021-60%, in 2022-87.5%, 2023-74.19%, and "excellent" in 2020-70.81%, 2021-65%, 2022-87.5%, 2023-64.41%.

Faculty evaluated the level of clinical training of residents in 2022 and 2023, noting positive dynamics in 2023 and better assessment results compared to previous years. Experts noted the following successes in the clinical training of residents: a direct correlation between the provision of residents with thematic patients, involvement in the treatment process and, as a consequence, knowledge of the features of diagnosis and treatment of nosological forms within the specialty being studied and successful assessments of the final certification; motivation of residents for scientific activities. At the same time, experts also identified shortcomings in the clinical training of residents, which include the lack of automation and transfer of many forms of assessment and accounting from paper to electronic.

Since the entire process of training and monitoring of residents is concentrated in the Department of Education, the results of assessing the clinical practice of residents and graduates are immediately sent to responsible persons. Responsible for residency programs is director Syzdykova A.A. To improve the educational process, the following has been undertaken in the last 2-3 years: updating the equipment of the simulation class, in accordance with changes in the State Compulsory Educational Standards of WC, IEP, syllabuses, introducing training activities such as "Journal Club" and "Educational and Clinical Commission".

#### 7.4 Stakeholder engagement

Educational organizations have approaches to involving teachers and residents in evaluating the educational program and monitoring its implementation. The members of the EMC include heads of departments, key persons in residency from among the teaching staff, and, depending on the agenda, other interested persons may be invited. In this way, we can provide maximum access to the results of the evaluation of residency programs of the CF "UMC" to all interested parties.

Thus, two residents are included in the advisory body "Educational and Methodological Council" and participate in the discussion of all issues of the educational process. The results of the evaluation of the educational program are announced at a meeting of the Educational and Methodological Council.

### 7.5 Procedure for approval of educational programs

The educational organization has established a system for documenting the educational process, including approval of the educational program, which includes the following: planning, approval at a meeting of the Educational Methodological Council, implementation, analysis of results and implementation of changes.

The interested parties involved in the approval of the educational program are employees, students, and employers.

A system for monitoring the quality and compliance of clinical sites, material and technical equipment and educational resources has been developed and implemented, which includes the following: the creation and operation in each centre of the CF "UMC" of an internal quality assurance system quality management and patient safety departments (QM&SD) under the leadership of the deputy Director for Quality Management and Patient Safety, whose responsibilities include planning and coordination, improvement of the management system, issues of improving the quality of services provided, including the educational process, and conducting internal audits.

**Conclusions of the EEC on the criteria.** Compliant out of 10 standards (including 7 basic, 3 improvement standards): fully - 9, partially - 1, do not comply - 0

Recommendations for improvement identified during the external visit:

1) To improve monitoring of the educational program with the involvement of stakeholders (**Standard 7.1.1.**)

# **Standard 8: GOVERNANCE AND ADMINISTRATION Proof of compliance:**

#### 8.1 Governance

Residency training is carried out in accordance with the requirements of such regulatory rules regarding the admission of residents as the Rules for organizations of the educational process in the residency of the corporate foundation "University Medical Centre" (Approved by the decision of the Board of the corporate foundation "University Medical Centre" dated March 29, 2021 No. 6) and Rules for admission to the residency program of the corporate foundation "University Medical Centre" (Approved by the decision of the Board of the corporate foundation "University Medical Centre" on March 1, 2018 No. 5 Changes and additions were made on June 26, 2019 No. 14, March 05, 2021 No. 5, April 20, 2022 of the year No. 5, April 28, 2023 No. 7).

The evaluation of knowledge and skills is carried out on the basis of the Rules for organizing the educational process in the residency of the CF "UMC", approved by the Board of the CF "UMC" dated 03/29/2021 No. 6. To implement the educational program, the educational organization has an organizational structure in which the educational sector is represented by clinical and academic departments and the Department of Education. A certificate of completion of residency is issued to residents who have completed the residency educational program in their chosen specialty and have successfully passed state certification, and contains information about the period of study, the name of the specialty of study and the awarded academic degree in the relevant specialty, indicating the code.

#### 8.2 Academic leadership

The responsibilities and duties of the management and employees for postgraduate medical education are determined, which are assigned to the Board of the CF "UMC" (http://umc.org.kz/about/praylenie/), the Chairman of which is Doctor of Medical Sciences, Pya Yuri

Vladimirovich. Residency issues are supervised by the Deputy Chairman of the Board of the CF "UMC" N.K. Khamzina and enshrined in Order No. 04-n/k dated 02/07/2023 "On the distribution of duties, areas of authority and responsibility between members of the Board and other officials of the corporate foundation "University Medical Centre". Clinical and academic departments and the Department of Education are responsible for organizing residency programs. The Department of Education is managed by Director Syzdykova A.A.

Transparency of management and decision-making in the educational process is ensured by discussing educational and methodological documentation, organizing the educational process for the residency program at meetings of the EMC and, after receiving their positive conclusion, it is approved by the supervising head of the CF "UMC". The official website of the CF "UMC" provides information on educational residency programs: information for applicants, class schedule, academic calendar, catalogue of elective disciplines, syllabuses, etc., which ensures accessibility and transparency of the educational process.

The educational organization evaluates the leadership of the educational process and employees in relation to achieving the mission of the residency program, the expected final results of training by conducting feedback with residents and teachers through questionnaires, audits on the issues of assessing the quality of the organization of the educational process.

To the survey question "Do the heads of the organization listen to your opinion regarding issues related to the educational process, research work, clinical work," 84.38% of teachers answered that systematically, 9.38% answered "sometimes", 0% "quite rarely", 0% "never".

# 8.3 Training budget and resource allocation

The department responsible for planning and distribution of finances at CF "UMC", including residency programs, is the financial and economic department under the leadership of the Managing Director for Finance in accordance with Order No. 48-n/k dated May 24, 2018. Under the supervision of the Managing Director for Finance There are the following structures responsible for budget management, including residency programs: financial and economic department, accounting and finance department. The range of duties, responsibilities and powers are reflected in the job descriptions of employees of the corporate fund, approved by Order of the head of the organization No. 22-n/u dated 02.12.2019. Financial matters in CF "UMC" are handled by the financial and economic department under the leadership of the managing director for finance in in accordance with Order No. 48-n/k dated May 24, 2018. A financial plan is drawn up annually, including a target budget for training. The financial plan is in line with the strategic plan for the period 2019-2023..

The most funds are spent on the purchase of simulation equipment, working equipment - equipment for surgical interventions, subscriptions to access international medical information resources. During a meeting with financial sector employees, experts found out that budget planning is carried out for the calendar year, taking into account the wishes and needs of all clinical departments and the Department of Education.

#### 8.4 Administration and management

There is an appropriate administrative (10 people) and academic (206 people) staff, including management.

Experts have established that the quality management system includes regular internal and external audits, including those supporting the residency program of processes. The quality and safety management department (QMS&SD) is responsible for the implementation and monitoring of the QMS. Teachers are aware of the QMS, which is confirmed during their interviews. An evaluation of the administration and management of the educational process in general and the residency educational program in the specialty 7R01113 "Allergology and Immunology for Adults, Children" is carried out by identifying priority areas for improvement and carrying out quality improvement activities, identifying high-risk areas, and submitting them for discussion to the Board of the CF "UMC" proposals on issues requiring management decisions of CF "UMC".

#### 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 areas of training for personnel with higher and postgraduate education, Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569), in the organization of education at the beginning of the 2023-2024 academic year. Each year, training is provided in 9 specialties. All educational programs are provided with relevant educational and methodological documents and teachers.

*Conclusions of the EEC on the criteria.* Complies with 11 standards (including 8 basic, 3 improvement standards): 11 completely.

#### **Standard 9: CONTINUOUS RENEWAL**

The procedure for updating the organizational structure is carried out as necessary. In connection with the changes in the State Compulsory Educational Standards, curricula and syllabuses for resident doctors have been revised, and internal regulatory documents are being revised to bring them into line with the new established requirements.

The educational organization annually allocates resources for continuous improvement. Evaluation and monitoring of the implementation of the educational program of the CF "UMC" residency allowed us to identify such an area for improvement as the further development of teaching potential in the field of educational technologies. For example, in 2023, 43 residency teachers have certificates of completion of advanced training courses in educational technologies.

To purposefully improve the educational process, sociological research is carried out, including "Analysis 360°", and literature on postgraduate medical education is also studied. In the process of this analysis, approaches to teaching in residency were revised, and such teaching methods as "Journal Club" and "Educational and Clinical Commission" were introduced.

Conclusions of the EEC on the criteria. Complies with 2 standards (including 1 basic, 1 improvement standard): completely - 2.

**CONCLUSION:** when conducting an external evaluation of the educational program, it was found that out of 114 standards, 107 accreditation standards demonstrate compliance, 7 improvement standards are partially met. No non-compliance with standards has been identified.

# 5. Recommendations for improving the educational program 7R01113 "Allergology and immunology for adults, children":

- 1. To ensure that grades are given according to the developed evaluation system in accordance with the "Instructions for the development of educational and methodological documentation and the system for evaluating the educational achievements of a resident physician" UMC. According to the rules for organizing the educational process in the residency of the CF "UMC" 03/29/21, the grades of the current, intermediate and end-of-course assessment in alphanumeric format (3.1.1.) must be entered in the resident progress log (3.1.1.).
- 2. To review test assignments according to the qualification requirements of residency students. To implement an automated system for determining the validity and reliability of test items (3.1.4).
- 3. To introduce a unified electronic journal for recording the progress of residents and students (3.2.1).
- 4. To involve professional associations in the development of residency admissions policies (4.1.4).
- 5. To optimize the ratio of teaching and clinical workload of teachers and clinical mentors (5.2.1.).
- 6. To improve monitoring of the educational program with the involvement of stakeholders (7.1.1.)

# 6. Recommendation to the ECAQA Accreditation Council

Members of the EEC established the compliance of the residency educational program in specialty 7R01113 "Allergology and Immunology for Adults, Children" of the Corporate Foundation "University Medical Centre" with the Accreditation Standards and came to a unanimous opinion to recommend that the ECAQA Accreditation Council accredit this program for a period of 3 years.

	Full name	Signature
Chairperson of EEC	Turgunov Yermek Meiramovich	A.
Foreign Expert	Ziganshina Liliya Yevgenevna	S.E. muncee
Foreign Expert	Saatova Guli Mirakhmatovna	Rec-
Academic Expert	Zhantelieva Lyazzat Asanovna	6
Academic Expert	Madyarov Valentin Manarbekovich	
Academic Expert	Idrisov Alisher Saugabaevich	Monned
Academic Expert	Ramazanova Sholpan Khamzaevna	anal
Academic Expert	Dolmatova Irina Anatolyevna	Inelas"
Academic Expert	Arinova Saule Pasevnoevna	45
Academic Expert	Karibaeva Dina Orynbasarovna	Lagridado
Academic Expert	Apbasova Saulesh Akhatovna	Smile 1
Academic Expert	Menchisheva Yulia Alexandrovna	Mark
Resident Expert	Yerkinov Yerbolat	Off
Resident Expert	Orynbay Aizere Sauletkyzy	

 $\label{eq:Annex 1.} Annex \ 1.$  Quality profile and criteria for external evaluation of an educational program

(summarization)

		<b>10</b>			Grade	
Standard	Criteria for evaluation	Number of standards	BS*/SI	Totally coincides	Partially comply	Does not comply
1.	MISSION AND OUTCOMES	14	9/5	14		
2.	EDUCATIONAL PROGRAMME	22	19/3	22		
3.	ASSESSMENT OF TRAINEES	9	6/3	6	3	
4.	TRAINEES	20	14/6	18	2	
5.	TRAINERS	8	7/1	7	1	
6.	EDUCATIONAL RESOURCES	18	11/7	18		
7.	PROGRAMME EVALUATION	10	7/3	9	1	
8.	GOVERNANCE AND	11	8/3	11		
	ADMINISTRATION					
9.	CONTINIOUS RENEWAL	2	1/1	2		
				107	7	
		114	82/32		114	

# List of documents studied by members of the EEC as part of an external evaluation of the residency educational program

№	Names of documents	Quantity
1.	Syllabuses,	2
2.	Working curriculum	1
3.	Schedule	1
4.	Job descriptions of a resident doctor	1
5.	Resident Privilege Lists	2
6.	Rules for organizing the educational process in the residency of the	1
	corporate foundation "University Medical Centre"	
7.	Instructions for the development of educational and methodological	1
	documentation and a system for evaluating the educational achievements	
	of resident doctors of the Corporate Foundation "University Medical	
	Centre"	
8.	Educational program for all residency specialties	1
9.	The procedure for selecting and sending resident doctors of the corporate	1
	foundation "University Medical Centre" for internship	
10.	Regulations on the Educational and Methodological Council of the	1
	Corporate Foundation "University Medical Centre"	
11.	Rules for admission to the residency program of the corporate foundation	1
	"University Medical Centre"	
12.	Order on approval of academic staff and clinical mentors in the residency	1
	specialty of the corporate foundation "University Medical Centre"	
13.	Regulations on the Department of Education	1
14.	Agreements on the provision of paid services for conducting educational	6
	events under the "Residency" program of the corporate foundation	
	"University Medical Centre" with various medical organizations (centres,	
	clinics)	