To Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Health Care 15.06.2023

REPORT OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF EVALUATION OF EDUCATIONAL PROGRAMME <u>7R01123</u> "ADULT <u>AND PEDIATRIC PULMONOLOGY"</u> AT KARAGANDA MEDICAL UNIVERSITY NJSC FOR COMPLIANCE WITH THE STANDARDS OF ACCREDITATION OF POSTGRADUATE EDUCATION PROGRAMMES (RESIDENCY SPECIALTY) OF MEDICAL EDUCATIONAL INSTITUTIONS

External expert evaluation period: 24-26 May 2023

Karaganda, 2023

CONTENT

	List of designations and abbreviations	2
1.	Members of the external expert committee	4
2.	General part of the final report	5
2.1	Presentation of the educational programme for the specialty - 7R01123	5
	"Pulmonology adult, paediatric"	
2.2	Data on previous accreditation	7
2.3	Conclusion on the results of reviewing the report on self-assessment of the	7
	educational programme 7R01123 "Adult and Pediatric Pulmonology" for	
	compliance with the Standards for Accreditation of Postgraduate Education	
	Programmes (Residency Specialty) of Medical Education Organisations and	
	decisions	
3.	Description of the external expert evaluation and conclusion	8
4.	Analysis for compliance with accreditation standards based on the results of	10
	external evaluation of the educational programme 7R01123 "Adult and pediatric	
	pulmonology"	
5.	Recommendations for the improvement of educational programme 7R01123	35
	"Adult and pediatric pulmonology"	
6.	Recommendation to the Accreditation Council	36
7.	Appendix 1. Quality profile and criteria of external evaluation and educational	37
	programme of residency in specialty of educational programme 7R01123 "Adult	
	and Pediatric Pulmonology ".	
8.	Appendix 2. List of documents studied within the framework of external expert	38
	evaluation	

Abbreviation	IST OF DESIGNATIONS AND ABBREVIATIONS Designation
AC	Academic Committee
AP	Academic Policies
EEC	External Expert Committee
HEI	Higher Education Institution
SCES	State Comprehensive Education Standard
DAA	Department of Academic Affairs
DET	Distance Education Technologies
DIID	Department of Informatisation and Infrastructure Development
HRMD	Human Resources Management Department
UHEMS	Unified Higher Education Management System
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in
Lengn	Higher Education and Health Care
FAC	Final Attestation Commission
FA	Final Attestation
IEP	Individual Education Plan
IHIS	Integrated Healthcare Information System
CED	Catalogue of Elective Disciplines
MH	Ministry of Health
MES	Ministry of Education and Science (now Ministry of Science and
WILD	Higher Education)
KMU NJSC	Karaganda Medical University Non-Profit Joint Stock Company
NCIE	National Centre for Independent Examinations
OCCH	Oblast Children's Clinical Hospital
ОСН	Oblast Clinical Hospital
EP	Education Program
APS	Assessment of Practical Skills
TRA	Tolerance Rating Assessment
OSCE	Objective Structured Clinical Examination
PS	Principal Subject
PHC	Primary Health Care
HETP	Higher-Education Teaching Personnel
RK	Республика Казахстан/ Republic of Kazakhstan
WC	Working Curriculum
SSS	Student Support Services
IWR	Independent Work of Residents
IWRT	Independent work of residents with teachers
EPMS	Employee Performance Management System
MC	Model curriculum
KOHD	Karaganda Oblast Health Department
TM	Teaching Materials
ACM REB	Academic Methodological Association of the Republican
	Education Board
CSET	Centre for Simulation and Educational Technology

LIST OF DESIGNATIONS AND ABBREVIATIONS

1. Members of the external expert committee

In accordance with the ECAQA order No. 15 of 11.05.2023, an External Expert Commission (hereinafter referred to as EEC) was formed to conduct an external evaluation of the educational programme of the residency in the specialty 7R01123 "Adult and pediatric pulmonology" in the period of 24-26 May 2023 in the following membership:

No	Status as a member of the EEC	Full name	Academic degree/title, position, place of work/place of study, course, speciality		
1	Chairman	Khatimya Ilyasovna Kudabaeva	Associate Professor, Candidate of Medical Sciences, Professor of the Department of Internal Diseases №1 Marat Ospanov Western Kazakhstan Medical University NJSC (non-public joint stock company)		
2	Foreign expert	Sergey Aleksandrovich Ryzhkin	Doctor of Medical Sciences, Head of the Department of Radiotherapy and Radiology named after Academician A.S. Pavlov, Head of the Department of Additional Professional Education of the Russian Medical Academy of Continuous Professional Development (Moscow), Scientific Secretary of the Department of Medical and Biological Sciences of the Academy of Sciences of the Republic of Tatarstan, accredited expert of the Federal Service for Supervision of Education and Science (Rosobrnadzor).		
3	Academic expert	Shushanik Gevorkovna Afrikyan	PhD in Pharmacy/Candidate of Pharmaceutical Sciences, Associate Professor of the Department of Pharmacy, Head of the Computer Based Examinations Organisation Department, Yerevan State Medical University after M. Geratsi, Republic of Armenia.		
4	Academic expert	Saltanat Nurgozhayevna Urazova	Doctor of Medical Sciences, Head of the Department of Family Medicine No. 3. Astana Medical University NJSC		
5	Academic expert	Darya Muratovna Shabdarbaeva	Doctor of Medical Sciences, Professor,pathologist of the highest category, medical examiner of the highest category, head of the department of pathological anatomy and forensic medicine named after Professor Y.V. Pruglo, Semey Medical University NJSC		
6	Academic expert	Raygul Mukhanbetovna Ramazanova	Doctor of Medical Sciences, Professor of the Department of Internal Medicine Kazakh National Medical University named after S.D. Asfendiyarov NJSC		
7	Academic expert	Akmaral Kanashevna Zhumalina	Doctor of Medical Sciences, Professor, Head of the department of paediatric		

			1
			diseases with neonatology
			West Kazakhstan State Medical University
			named after Marat Ospanov NJSC
	Academic expert	Raihan Esenzhanovna	Candidate of Medical Sciences, Head of the
8		Tuleutayeva	Department of Pharmacology and Evidence-
			based Medicine of Medical University
			NJSC
9	Academic expert	Zaure Alpanovna	PhD in Medical Sciences, Dean of the
		Baigozhina	School of Nursing
			Astana Medical University NJSC, Member
			of the Association for Medical Education in
			Europe (AMEE).
10	Academic expert	Sholpan Khamzaevna	Candidate of Medical Sciences, Acting
		Ramazanova	Associate Professor at the Department of
			Clinical Disciplines, Al-Farabi Kazakh
			National University.
11	Academic expert	Bibikhan Abdaliyevna	Candidate of Medical Sciences, Assistant of
	1	Yeralieva	the Department of Clinical Pharmacology
			Kazakh National Medical University named
			after S.D. Asfendiyarov NJSC
12	Academic expert	Gulnara	doctor - urologist of the highest qualification
	1	Akhmetkazyevna	category, assistant of the Urology
		Isposunova	Department
			Kazakh National Medical University named
			after S.D.Asfendiyarov NJSC
13	Academic expert	Asem Kalelovna	PhD, Associate Professor, Department of
		Dosanova	Paediatric Surgery
			Astana Medical University NJSC
	Academic expert	Asel Baidauletovna	Candidate of Medical Sciences,
14	1	Doshakanova	Head of the Postgraduate Education
			Department of the Kazakh Order "Badge of
			Honour" Research Institute of Eye Diseases
			LLP
15	Employers'	Bayan Lashinovna	Deputy Director for Strategic Development
	Representative	Daniyarova	of the Regional Clinical Hospital,
			Karaganda Oblast Health Department
16	Expert -	Aknur Daurenkyzy	Doctoral student of the first year of study in
	representative of	Orazbay	the Biology speciality E.A. Buketov
	doctoral students		Karaganda University NJSC
17	Residents'	Aydana Kurak	Resident of the first year of training on
	representative	· · · · · · · · · · · · · · · · · · ·	speciality "Adult and Pediatric
	1		Endocrinology" of the Medical University
			of Astana NJSC
			01 Astalia NJSC

The ECAQA observer - Makpal Aldibekovna Umarova, Head of Accreditation and Monitoring Department.

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

The report of the EEC contains the evaluation of the educational programme **7R01123** "Adult and Pediatric Pulmonology" for compliance with the Standards for Accreditation of Postgraduate

Education Programmes (Residency Specialty) of Medical Education Organisations and Conclusions (hereinafter - Accreditation Standards), recommendations of the EEC on further improvement of approaches and conditions for implementation of the above educational programme and recommendations for the ECAQA Accreditation Council.

2. General part of the final report

2.1 Presentation of the educational programme for the specialty - 7R01123 " Adult and Pediatric Pulmonology"

I culatific I unifoliology			
Name of organisation, legal form of	Karaganda Medical University Non-profit Joint Stock		
ownership, BIN	Company, BIN 190140033600		
Corporate body	Ministry of Health of the Republic of Kazakhstan		
Full name of the first manager	Anar Akylbekovna Turmukhambetova		
Creation date	20.01.1950		
Location and contact details	Republic of Kazakhstan, Karaganda, Gogol str. 40,		
	tel. 8-7212-50-06-31		
State licence for educational	No.14020603 dated 14.04.2015		
activities in residency (date, number)	KZ32LAA00016018 dated 06.05.2019		
The year of implementation of the	2018		
accredited educational programme			
(EP) started			
Duration of training	2 years		
Total number of graduates since the	24 (for the period of 2018 – 2022)		
beginning of the implementation of			
the EP			
Number of residents at the EP from	12 (8 residents of the 2nd year of training,		
the beginning of the current	4 residents of the 1st year of training)		
academic year			
Full-time teachers/joint teachers	Total number of teachers - 6, including full-time employees -		
involved in the implementation of	5, part-time employees - 1.		
the programme, including % of			
academic degree holders rate	Categorisation, %		
Website	www.qmu.edu.kz		
Instagram	@officialkmu		
Facebook with active pages			

KMU NJSC is the leading medical university of Kazakhstan in training qualified personnel for the health care system, has a high reputation in the field of providing educational, scientific and treatment and diagnostic services, has a high national rating among medical universities of Kazakhstan.

Since 2019, KMU NJSC has received the status of a research university (resolution of the Ministry of Health of the Republic of Kazakhstan dated 27.06.2019 No. 453). In the field of medical education, science and practice, partners of the University are medical universities and research centres of Kazakhstan, Russia, Belarus, Georgia, Tajikistan, Uzbekistan, as well as France (University of Poitiers), Italy (University of Milan), Japan (Shimane University), Great Britain (University of London St. George) and others. The University actively participates in the implementation of international projects of the Erasmus+ programme.

Programme 7R01123 "Adult and Pediatric Pulmonology" was developed and implemented in KMU NJSC in 2015 in accordance with the National Qualifications Framework, professional standards approved in accordance with the Labour Code of the Republic of Kazakhstan and State Comprehensive Education Standard.

In 2015 Karaganda State Medical University in accordance with the licence No. 14020603 dated 14.04.2015 for the EP "Pulmonology, including pediatric" carried out the first intake of residents. 3 residents were admitted under the state order and according to the results of entrance examinations.

Since 2019 the educational activity is implemented in accordance with the licence in the direction "7R091 Health Care", KZ32LAA00016018 dated 6.05.2019. The duration of training is 2 years. Year of the first graduation - 2017.

During the last 5 years, the contingent of residents was 41: in 2018-2019 academic year - 3 residents (state order), in 2019-2020 academic year - 7 (state order), in 2020-2021 academic year - 15 (8 state order, 6 local executive boards, 1 at the expense of medical organisation), in 2021-2022 academic year - 11 (6 state order, 5 at the expense of medical organisations, in 2022-2023 academic year - 5 (state order). The total output was 24 residents. The reflection of effective implementation of the EP in this specialty is 100% successful passing of the independent examination by the residents of the final course for 2018-2019, 2019-2020, 2020-2021, 2021-2022 academic years: according to the results of the independent examination, the average score of the final certification was 93.5% (83.3% - "excellent", 16.7% - "good"). Graduates of the residency programme "Adult and Pediatric Pulmonology " are in demand, the employment rate is 100% in the specialty. 2 of them work in the Hospital Medical Centre of the Presidential Administration (Astana), 1 in the Regional Clinical Hospital (Karaganda city, 1 at the Department of Internal Medicine of KMU NJSC.

In the current academic year there are 12 residents, of which 4 are 1st year residents and 8 are 2nd year residents. The ranking of the interim (summer) assessment performance for the 2020-2021 and 2021-2022 academic years showed an average score of 94.4% and 88.1% for the 1st year of training and 92.5% and 90.2% for the 2nd year of training, respectively, reflecting the continuation of stable qualitative and relative performance scores.

The head of the EP is Professor L.K. Ibrayeva, the chairman of the EP committee on the speciality "Pulmonology (adult)" at the Educational and Methodological Association of the Republican Educational and Methodological Council in the direction of "Health", the developer and reviewer of clinical protocols of diagnosis and treatment, professional standard and standard of pulmonology service of the Republic of Kazakhstan, an expert in the field of medical education.

Provision of human resources, including HETP, clinical tutors and support staff involved in the implementation of the programme "Adult and pediatric pulmonology" is 100%. The implementation of the EP "Adult and pediatric pulmonology" is carried out by 6 HETP and 8 clinical tutors, who are certified specialists, with the highest and first category in the field of taught disciplines with 17 years of work experience and more and carry out clinical activities at the clinical bases of the University and University clinics. The share of full-time teachers is 83.3%, part-time teachers - 16.7% (1 teacher at 0.25 rate). The academic degree holder's rate of the HETP is 100%. Categorisation of HETP and clinical tutors is 100%.

2.2 Information on previous accreditation

In 2018, the EP "Adult and Pediatric Pulmonology" was accredited by Independent Agency for Accreditation and Rating (IAAR) (registration number: AB No: 1784, accreditation certificate validity period: 14.06.2018-13.06.2023).

2.3 Conclusion on the results of reviewing the report on self-assessment of the educational programme of the residency in the specialty "Adult and Pediatric Pulmonology" for compliance with the Standards of accreditation of postgraduate education programmes (specialty of residency) of medical educational institutions and conclusions

The self-evaluation report of the residency educational programme in the specialty of Adult and Pediatric Pulmonology is presented in 112 pages of main text, appendices - 55 pages, copies or electronic versions - 477 documents located at the link

https://drive.google.com/drive/folders/1pdCvvFIzipqSvbyN9b9UVEg5NIvvJdId?usp=sharing

The report is characterised by completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for the self-assessment of the educational programme provided to the educational organisation by the accreditation centre - ECAQA, as well as internal unity of information. The report is accompanied by a cover letter signed by the Chairman of the Board-Rector A.A. Turmukhambetova, which confirms the reliability of quantitative information and data included in the self-assessment report.

The report includes a list of 9 members of the internal self-assessment commission with the indication of responsibility of each employee, information about the representative of the organisation responsible for the self-assessment of the educational programme - M.A. Ernazarova, chief specialist of the department of strategic development and quality management.

Self-evaluation of the educational programme "Adult and Pediatric Pulmonology" was carried out under the order of the University Rector No. 274 dated 16.09.2022 "On approval of the composition of the working group for the self-evaluation of educational programmes".

Accreditation expert S.N. Urazova reviewed the report. The review highlights the strengths and areas for improvement, as well as recommendations for additions and changes, which in the process of feedback with the HEI representative were taken into account and appropriate changes and additions were made to the self-assessment report.

In all standards the real practice of the university on training residents in the specialty "Adult and paediatric pulmonology", taking into account the beginning of admission of students in 2015, reasoned data, examples of implementation of educational programme objectives, national and international events, methodological support, confirming compliance with the requirements of accreditation standards are given. The description in the self-assessment report is sufficiently complete and updated on the number of residents, teachers, administration, information on selection and admission, training results, results of knowledge and skills assessment, material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, bases), financial information, plans for development and improvement, etc.

The report is submitted to ECAQA in a completed form, with data corrected according to the above recommendations, written in a competent language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, tables are referenced in the text and are numbered cross-numbered.

The quality of the self-assessment report served as a basis for the transition to the next stage of the accreditation procedure - external assessment. The experts planned validation of the report data, comparison of information from the report with the information that will be obtained during the visit to the educational organisation, i.e. verification of quantitative and qualitative indicators.

3. Description of the external expert evaluation

The external expert work within the framework of the evaluation of the educational programme "Adult and Pediatric Pulmonology" was organised in accordance with the Guidelines for the external evaluation of educational organisations and educational programmes of ECAQA and according to the programme approved on 11.05.23 by the Director General of ECAQA S. Sarsenbaeva and agreed with the Chairman of the Board-Rector A. Turmukhambetova.

Dates of the visit to the organisation: 24-26 May 20223.

The external evaluation focuses on validation of the self-assessment report data and verification of indicators indicating the degree of compliance with the criteria of accreditation standards.

The sequence of the 3-day visit is presented in detail in the Visit Programme (hereinafter referred to as the programme), which is in the documentation of the accreditation centre. The Programme is the proof of implementation of all planned activities within the framework of the external expert evaluation.

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

results:

- interview with management and administrative staff 7 persons;
- interviews with residents 84 people;
- exploring the website https://www.qmu.edu.kz/ru;
- interviewing 40 staff, 35 faculty and preceptors;
- faculty and resident questionnaires 32 and 63, respectively;
- observation of resident training: attendance of interdisciplinary practical training with the application of active, innovative technologies for residents in the specialties "Adult and Pediatric Pulmonology", "Adult and Pediatric Gastroenterology", "Adult Haematology" on the topic "Interdisciplinary patient: diagnosis and treatment of bleeding" (intellectual quest game). 18 residents participated (8 of them were residents-pulmonologists) The class was conducted by teachers: Doctor of medical sciences, Professor L.K. Ibrayeva, Candidate of medical sciences, Professor E.M. Laryushina, Doctor of medical sciences, Professor L.G. Turgunova. Venue: training room of the Department of Internal Medicine on the basis of the Regional Clinical Hospital of the Karaganda Oblast Health Department at the address: 41/43 Yerubaev str;
- review of resources in the context of meeting the accreditation standards: 3 practice/clinical engagement bases were visited, including Regional Clinical Hospital PSE of the Karaganda Oblast Health Department, where training on 6 educational programmes is conducted with the participation of 6 full-time teachers /12 part-time clinical mentors. In addition, Haematology Centre LLP (17 S. Seyfullin St.), Regional Children's Clinical Hospital of the Karaganda Oblast Health Department (8 Yerzhanov St.) were visited;

Study of educational and methodological documents placed in 44 annexes (88 items) both before the visit to the organisation and during the visit to the subdivisions (the list of studied documents is given in Appendix 2).

The staff of the accredited organisation ensured the presence of all persons specified in the visit programme and according to the lists of interview and interview sites (Table 1).

No.	Position	Number
1	Chairman of the Board - Rector of Karaganda Medical University NJSC	1
2	Vice-rector for academic work	1
3	Vice-rector for scientific and clinical work	1
4	Head of Career Development Department	1
5	Deans of Schools	6
6	Director of the Institute of Life Sciences	1
7	Heads of Educational Programmes	10
8	Members of the Academic Senate Committee	22
9	Director of the Department of Human Resource Management	1
10	Chief Specialist of the Department of Human Resource Management	1
11	Chief Specialist of the Centre for Simulation and Educational Technologies	1
12	Director - Chief Accountant of the Department of Economics and Finance	1
13	Deputy Director of the Department of Economics and Finance	1
14	Residents	84
15	Teaching staff	35
16	Graduates (residency)	39
17	Employers (residency)	23

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

On the last day of the visit to the organisation there was a meeting of the EEC members on the results of the external evaluation. Final discussion of the results of the external evaluation of the educational programme, study of documents, results of interviews, interviews, questionnaires was held. The EEC members started designing the final report of the EEC. The results of the external evaluation were summarised. The experts individually filled in the "Profile of quality and criteria of external evaluation of the educational programme "Adult and Pediatric Pulmonology" for compliance with the ECAQA Accreditation Standards. The EEC members made no remarks. Recommendations for the improvement of the educational programme were discussed and the chairperson H.I. Kudabaeva held the final open voting on the recommendations for the ECAQA Accreditation Council.

Comfortable conditions were created for the EEC work, access to all necessary information and material resources was organised. The Commission notes the high level of corporate culture of the University, a high degree of openness of the staff in providing information to the members of the EEC. In general, it can be noted that in KMU NJSC there are favourable conditions for the implementation of the educational process, the creative potential of teaching staff and adequate training of medical specialists, according to the requirements of modern society.

During the questionnaire survey of residents - 88.9% assessed the work of the External Expert Commission on Accreditation as positive, 9.5% - as satisfactory. The majority of respondents (85.7%) believe that it is necessary to carry out accreditation of the educational organisation or educational programmes.

According to 90.63% of teachers, the questionnaire survey conducted by ECAQA is useful for the development of recommendations on improvement of key areas of activity of the accredited educational organisation. 40.6% of the HETP noted that they were personally involved in the activities on preparation for the accreditation of EP as a member of the internal self-assessment commission, 9.4% were engaged in technical support before the ECAQA EEC meeting, 31.3% wrote sections of the self-assessment report, 50% - collected information for annexes to the self-assessment report. 6.3% of the HETP noted that they were not involved in the preparation of the university for accreditation and 3.1% found it difficult to answer. To the questionnaire "Would you personally like to become an expert on ECAQA accreditation and quality assurance of education and health care" -28,1% expressed a desire, 18,8% were not interested in this question, 18,75% had already participated in the work of accreditation commissions of this accreditation centre and 34,4% of HETP had difficulties in answering it.

75% of the HETP believe that the work of the EEC on accreditation can fully cover all the issues related to the quality of implementation, as the visit of the commission is preceded by the stage of programme self-assessment and report writing. 53,1% of the HETP connect this with the fact that the commission examines all the main processes of programme implementation. 40,6 % believe that it depends on the fact that the programme of the commission's visit includes interviews and interviews with stakeholders that allow drawing conclusions about the quality of education, 37,5 % of respondents believe that the programme of the commission's visit is rich and covers all key aspects of education and 15,6 % of teachers are sure that everything depends only on the professionalism and competence of accreditation experts.

Among the activities of the EEC on accreditation, the most important and allowing to obtain evidence of compliance with accreditation standards, the HETP noted: interview with the management - 3.1%; interview with the head of the EP - 3.1%; interviews with students - 15.6%; interviews with employers' representatives - 6.3%; visits to internship sites - 9.4%; reviewing the self-assessment report of the programme - 3.1%; attendance of practical classes - 3.1%. 56.3% note that a single activity cannot solve, but only all of the above listed in the complex.

At the end of the visit programme, the Chairperson of the EEC announced recommendations on the results of external evaluation within the framework of specialised accreditation for the management and staff of the educational organisation.

4. Analysis for compliance with the accreditation standards according to the results of external evaluation of the educational programme of the residency in the specialty 7R01123 "Adult and pediatric pulmonology "

Standard 1: MISSION AND FINAL RESULTS Evidence of compliance:

1.1 Mission statement

The mission of the EP "Adult and pediatric pulmonology" is aimed at training a highly qualified doctor-pulmonologist, capable of meeting the needs of society in providing medical care to patients, to apply and develop advanced innovative technologies in medicine, science and practice throughout life, to improve the health of the population. The mission of the EP is developed in accordance with the institutional (general university) mission: "development of society, improvement of health and quality of life of the population of Kazakhstan by achieving excellence in science, education and practice", which is approved on 22.10.2019 by the decision of the Senate of KMU NJSC, Minutes No.1 (https://qmu.edu.kz/ru/contents/view/260).

The EP is aimed at implementation of six fundamental profile competences of residents of EP "Adult and pediatric pulmonology", which ensures training of a professional pulmonologist with versatile competences. The competences of the residency graduate are presented on the website and are available for all stakeholders (https://qmu.edu.kz/ru/contents/view/314).

During the implementation of the programme activities, namely, according to the results of interviews with the first head of the organisation, vice-rectors for academic and scientific and clinical work, deans of schools, members of the Academic Committee of the Senate, as well as in interviews with residents, teachers and employers, compliance with the criteria of standard 1 was established. All participants of the educational process know the mission of the educational programme, took part in the formation of proposals for the formulation of the mission, with the mission communicated to potential residents through the website, social networks, newsletters to medical organisations. The strategic plan of the organisation for the period of 5 years, including such directions as leadership in research, excellence in education and student life, assistance to the health care system in promotion and preservation of health, which confirms the implementation of the accreditation standard and demonstrates the goals, objectives and prospects of the organisation, has been studied. At present, the university has acquired the status of a research university, which allows uniting the trinity for training qualified personnel - education, science and practice. It was found from interviews with residents that before the start of classes, teachers inform about the mission, work plans of the educational organisation, tell where to get necessary information about the educational programme, teachers, training bases.

In the process of visiting the university departments, the experts noted the strengths of the university in relation to the accredited educational programme, especially in clinical training of residents, acquisition and practice of clinical skills. Thus, under the accredited programme there is a large number of clinical bases providing primary and specialised care to both adult and child population with pulmonological diseases. At these bases residents have the opportunity to work in close cooperation with doctors of related specialities, in the intensive care unit, in the functional diagnostics and radiation diagnostics rooms, which are equipped with the most modern technology (spirography, bodyplethysmography, CT, MRI scan, ultrasound of pleural cavities, etc.). An important fact is the possibility of employment of resident doctors in these clinics on 0.5 rate, and later graduates remain to work at these bases on a permanent basis, which contributes to continuity and reflects the high training of personnel.

KMU NJSC has departments directly related to the educational programme "Adult and Pediatric Pulmonology", which can be noted as the best practice in education, namely the Department of Academic Work, the Centre for Simulation and Educational Technologies. This conclusion was made as the experts were shown the distance learning platform "Platonus" and the own development of

KMU NJSC "Session", integrated with the Antiplagiarism anti-plagiarism system, it was shown how they are used in training and evaluation of residents. This structure allows for objective assessment of resident knowledge and is in line with the Academic Integrity Policy. In addition, visiting the Centre allows residents to practice the necessary skills in the specialty not only according to the schedule of classes, but also allows residents to come to study individually according to their needs as part of their independent work by appointment in a specially designed form.

The results of the documentation study demonstrate that the mission of the organisation, as well as the mission of the educational programme "Adult and pediatric pulmonology" and the educational process are built in accordance with the State Educational Standards and current normative-legal acts (NLA) in postgraduate education and healthcare.

1.2 Professionalism and professional autonomy

To verify Standard 1, a meeting was held with the Chairman of the Board of KMU NJSC Rector A.A. Turmukhambetova, Vice-Rectors for scientific and clinical work E.M. Turgunov, for academic work K.K. Toleubekov. During the conversation, experts asked the following questions: - How the HEI policy has changed with the change of the status of the research institute, - Whether the opportunities of the organisation to implement its tasks have expanded, - What image activities are carried out to improve the status of the HEI, - How the communication with employers and graduates is maintained. During the answers, the representatives of the administration noted that certainly with the acquisition of the new status of the HEI the funding for research work has increased, the number of teaching staff participating in research projects has increased, as well as the interest of residents in conducting research, and the most active of them are included in the projects. The HEI maintains close relations with employers and graduates, they work on a regular basis to attract students to the HEI, periodic questionnaires and meetings are held to discuss pressing issues. To improve the image and prestige of the HEI cooperates with many medical universities and research centres of Kazakhstan, Russia, Belarus, Georgia, Tajikistan, Uzbekistan, as well as France (University of Poitiers), Italy (University of Milan), Japan (Shimane University), Great Britain (University of London St. George) and others. This interview provided evidence that the mission of the residency programme and the mission of the university are fully consistent with each other.

During the survey of 63 residents (on the resource <u>https://webanketa.com/</u>), out of 22 questions, a number of them were devoted to the quality of the educational process and educational programme. It was found that 81% of residents will recommend to their acquaintances, friends, relatives to study in this educational organisation. And 82.5% of respondents believe that the heads of the educational programme and teachers are aware of the problems of students related to training. To the question "Do you think the university allows you to acquire the necessary knowledge and skills in your chosen speciality?", 96.8% of residents answered positively, 1.6% could not answer this question yet and 1.6% would like to believe so.

Interviewed 32 teachers (21 questions of the questionnaire) answered that 93.8% are satisfied with the organisation of work and workplace in this HEI, and 6.3% partially agree with this statement. The experts determined that there is a healthy microclimate in the HEI, as the manager is quite accessible to both residents and staff, responds promptly to requests, there is a rector's blog, where one can write and get a quick response. Moreover, the rector and management regularly hold meetings with students and faculty, where it is possible to ask questions directly. There are fixed hours of reception, corporate mail, all phones and schedule are indicated. 87.5% of teachers are satisfied with the microclimate of the organisation, and 12.5% are partially satisfied. In the opinion of 90.6% in the university a teacher has an opportunity to realise himself as a professional in his speciality. For information, a total of 32 respondents (total of 522 in the staff), with teaching experience up to 5 years - 6.3%, up to 10 years - 12.5%, more than 10 years - 81.3%.

1.3 Training outcomes

The EP "Adult and pediatric pulmonology" within the framework of the State Educational Standards and Qualification Characteristics takes into account the outcomes of the resident. The

objectives, training outcomes of the EP implemented by the HEI are presented in the register of the UHEMS of the MES RK (<u>http://esuvo.platonus.kz/#/user/rep/submissions/application/45627</u>) and are available for all interested parties.

Professionalism of residents is achieved due to the structure of the EP, forming the whole set of competences necessary for the practice of pulmonologists. Thus, the final learning outcomes of the residency programme are formulated in the EP and are available for review on the corporate website of KMU NJSC in the section "Resident", "Employer".

The experts have established a clear continuity between the outcomes of residents' previous training (prerequisites) and residency training, and subsequent continuing professional development programmes. Sixty additional education programmes have been developed, including for the specialty "Adult and pediatric pulmonology". Residents are informed about it.

1.4 Participation in the formulation of mission and outcomes

When talking to residents and employers, experts received a clear answer to the question "Do you participate in the formulation of the mission and goals of the organisation, educational programme?", "What is the personal contribution of residents to the improvement of the educational programme?" Residents of the speciality "Adult and pediatric pulmonology" answered to these questions that they are members of collegial bodies, where they have the opportunity to express their opinion and put forward any ideas. Employers of the specialty also noted their active participation when discussing the mission and educational programme, CED. Many of the representatives of practical healthcare are also clinical mentors of the residents, closely cooperate and interact with the staff of the department, take part in the discussion of the development of educational programmes, made their proposals on this issue and participated in the discussion of the mission of the specialty. The experts obtained information through interviews and visits to clinical bases.

79.37% of the surveyed residents noted that programme managers and HETP involve students in the work of advisory bodies (Methodological Council, Academic Council, Educational Programmes Committee). However, 4.76% of respondents answered that they are not involved in the work of advisory bodies, and 11.1% do not know anything about it, 4.76% are in doubt. Thus, the majority of residents are involved in the formulation of the mission and end results.

EEC conclusions on the criteria. Compliant out of 17 standards (including 10 basic, 7 improvement standards) fully - 17.

Standard 1: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 2: EDUCATION PROGRAMME Evidence of compliance:

2.1 Framework for a postgraduate medical education programme

To implement the education programme for the specialty "Adult and pediatric pulmonology", the documents of the organisation have teaching materials, where the purpose is defined, the integration of practical and theoretical components, independent work is taken into account. Compliance with the State Educational Standards and standard requirements has been established.

Having attended the interdisciplinary practical training in the form of an intellectual quest game for residents in three specialties, including the specialty "Adult and pediatric pulmonology" on the topic "Interdisciplinary patient: diagnosis and treatment of bleeding" (duration 3 hours), the experts received convincing data that the training is carried out according to the plan. Before the beginning of the class, residents answer tests, receive feedback from the instructor, have the opportunity to improve skills in interdisciplinary interaction, differential diagnosis, diagnosis and emergency care. The University ensures compliance with ethical aspects in the implementation of the educational programme. The experts studied the code of ethics (Minutes No. 4 of the meeting of the Board of Directors dated 24.08.2019) and during the interview the residents answered that they are informed

about the content of this document.

The analysis of education activity has shown that the scientific basis and all achievements of science on the advising disciplines are taken into account, additions to the bibliography of teaching materials and syllabuses are made, and teachers apply them in classes.

The system of mentoring, which is described in the document "Regulations on Residency" (approved by the Decision of the Board of KMU NJSC 23.08.2022, Minutes No. 18) has been evaluated.

In total, there are 8 clinical tutors in the accredited speciality, whose tasks are to provide clinical training of students, to ensure continuity between medical education and practical training "at the patient's bedside" in the conditions of real practice, which contributes to the improvement of professional competencies, communication skills and will prepare a specialist for independent work. When studying specialised disciplines at the clinical base, the resident is assigned to a department and manages a certain number of patients. When managing patients, the resident fills out medical documentation in the programme of the integrated medical information system, uses the capabilities and resources of the clinical base.

The procedure of informing residents about their rights and obligations is reflected in the module/discipline syllabuses, posted on the student portal of KMU NJSC for independent study by residents, as well as the head of the EP, the teacher informs residents about the EP, their rights and obligations, including the discipline policy, obligations on ethics.

This demonstrates compliance with Standard 2 in terms of adapting teaching to the needs of residents. The principles of quality and academic integrity are described in the document "Code of Academic Integrity", included in the content of the "Academic Policy of KMU NJSC (approved by the Decision of the Board of KMU NJSC on 27.08.2021, Minutes No. 1, with amendments and additions from 14.07.2022, Minutes No. 9).

2.2 Scientific method

The educational programme includes scientific bases and methodology of medical research, which are considered during the main disciplines: "Respiratory diseases of the respiratory organs at the outpatient stage" (topic: Non-medicamentary methods of treatment in pulmonology and health education, 6 hours); "General principles of bronchodilator and antibacterial therapy" (topic: General principles of antibacterial therapy, 5 hours), "Pharmacotherapy in pulmonology" (topics: Target therapy of severe bronchial asthma; Antifibrotic therapy, 3 hours each), "Respiratory diseases of the respiratory system in hospital" (topics: Inflammatory diseases of the lungs and pleura; Bronchobstructive diseases of the respiratory system and the most common complications, 3 hours each), including clinical research and clinical epidemiology (6 hours). In addition, a 4-credit Research Project elective has been developed and is taught in all areas of research methodology, literature searches and skills, clinical epidemiology, and biostatistics.

When talking with residents, the experts learnt that they use scientific evidence in teaching and know the basics of evidence-based medicine. Teachers said that they teach residents how to evaluate critically literature, articles and scientific data, and how to apply scientific developments. This form of training is organised in the form of a "journal club", which is held 1-2 times a month.

During the questionnaire survey of residents it was found that the university has access to the participation of students in research work. 92.1% of residents fully agree with the statement that KMU NJSC has access to participation in research work, 6.4% - partially agree with this statement, 1.6% - disagree. To the questionnaire "Are you currently engaged in research work?" - were answered "yes" - 74.6%, "no" - 11.1%; "I plan to start" - 11.1%; "in search of a research topic" - 1.6%; "do not want to do research" - 1.6%.

41.3% of the questioned residents noted that they personally published one scientific printed work (articles, theses, review), more than one - 39.7%: none - 3.2%; plan to publish in the near future - 11.1%; no answer 3.2%; I just entered the training programme - 1.6%.

2.3 Structure, content and duration of the residency programme

There are documents containing requirements to the structure and content of educational programmes, including the "Regulations on the management of the educational programme", approved by the decision of the Board of 09.09.2020, Minutes No. 14. Responsibility for the selection and implementation of innovations in the educational process is borne by the head of the programme and the teaching staff implementing this programme.

The content of the working programmes and the catalogue of elective disciplines reflects the needs of the health care system, including elective components: "Peculiarities of management of pregnant women with bronchopulmonary pathology", "Sepsis in infectious diseases of the bronchopulmonary system", "High-resolution computed tomography in disseminated lung diseases", "Differential diagnosis of pulmonary hypertension", "Differential Diagnostics and Emergency Care in Thoracic Surgery", "Issues of Intensive Respiratory Therapy in Pulmonology", "Congenital and Hereditary Lung Diseases in Children", "Congenital Malformations Due to Combined Disorder of Lung Development", as well as the specifics of research and scientific achievements of teachers. For the successful implementation of the educational programme in the specialty "Pulmonology adult, paediatric", the organisation has resources for the assessment of residents' practical skills (clinical bases to provide access to patients, the Centre for Simulation and Educational Technologies).

No difficulties in planning, development and approval of educational programmes were identified during interviews and visits to the department and other structures. Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes. 90.4% of the surveyed residents fully agree that teachers provided them with methodological and didactic materials, additional literature to prepare for classes, 9.5% partially agree.

The University has its own clinical base for 30 therapeutic beds and a pulmonologist's office for outpatient reception of patients, as well as concluded agreements with medical organisations "Regional Clinical Hospital", "Children's Clinical Hospital of Karaganda, "Regional Centre of Phthisiopulmonology", Hospital of the Medical Centre of the Presidential Administration of Astana), where residents are assigned to the department/cabinet of a pulmonologist and manage a certain number of patients while studying profile disciplines.

To the question of the survey "Is there enough time for practical training (patient supervision, etc.)", 90.5% of residents answered with full agreement, 4.8% partially agreed, 4.8% did not answer. According to the results of the questionnaire, 92.1% responded that after the completion of classes the instructor constantly gives them feedback (listening to your opinion, conducting mini questionnaires, working on mistakes), 7.94% believe that sometimes.

95.2% of residents were fully satisfied with the content of the education programme (list of disciplines): partially - 3.2%; 1.6% were in doubt. At the same time, to the question "Are residents' representatives involved in the development of educational programmes?", the experts received the following answer: "Yes, constantly" 79.4%, "No, they are not involved" 4.8%; "I don't know anything about it" 11.1%. Resident representatives are part of collegiate bodies such as the EPC, Residency School Council, and Senate, where they have the opportunity to discuss the EP. In addition, resident representatives are present at department meetings when the EP is being approved and discussed. And also residents mainly made proposals on the topics of speciality electives.

92.1 per cent of the surveyed residents are fully satisfied with the schedule of training sessions.

2.4 Organisation of training and the links between postgraduate medical education and health care delivery

The management of the educational process reflected in the self-assessment report (Standard 2) and general approaches to management were confirmed by visiting the School of Residency and Additional Education, the Department of Academic Work and talking to the head and staff. At the same time, verification of standard 2 showed that the clinical bases visited by the experts, which provide training for pulmonology residents, provide an opportunity to master the tactics of management of patients with various diseases of pulmonological profile, peculiarities of their course under the guidance of the HETP, clinical mentors. Residents perform direct management of patients

with filling out medical records, drawing up examination and treatment plans, night duty. In the process of training at clinical bases residents have the opportunity to be present during various diagnostic and therapeutic manipulations and procedures, in particular, many residents of the second year responded that they were trained to perform bronchoscopy, independently conduct spirography, bodyplethysmography, read CT and MRI results.

The experts got acquainted with the work of departments, including the work of the pulmonology department "Regional Clinical Hospital", the office of a pulmonologist in the polyclinic, where they were able to talk to residents-pulmonologists, a total of offline meetings were held, directly in the clinic and a general interview, during the cross-interview it was found that there is a constant connection of residents-graduates with their supervisors, the relationship of supervisors and clinical mentors with stakeholders is monitored. This is facilitated by the mentoring that takes place in the organisation.

When talking to the residents, the experts saw that the organisation promotes the development of practical competencies of the residents, which was verified during the visit to the clinical base and simulation centre. The residents are satisfied with the conditions at the clinical bases, where they have opportunities for comprehensive training in their speciality with on-call, rotation through cycles and work with allied specialists.

When attending a practical training session for residents in the specialities "Adult and paediatric pulmonology" at the Department of Internal Medicine and talking to residents A.V. Samoilova, A.N. Nikitina, A.V. Krylov, experts saw that the university promotes the development of practical competences of residents (nebuliser inhalation, vibromassage, picflowmetry, spirography, bodiplasmography, bronchoscopy training), including on simulation equipment. At the same time, residents deepen their theoretical knowledge, develop communication skills.

Training of residents in the speciality "Adult and paediatric pulmonology" is aimed at meeting the needs of practical health care, as the recent pandemic revealed a shortage of pulmonologists.

When talking to the management of the organisation, the experts received information that the university pays great attention to the practical orientation of the training of residents, there is a close relationship with representatives of clinical bases, where residents work in the staff on 0.5 rate, on duty 2 times a month. *The faculty confirmed that resident training was provided directly in the clinical departments and pulmonologist's offices of multidisciplinary medical organisations.* These are pulmonology department and pulmonologist's office in the Regional Clinical Hospital, pulmonology beds in the pediatric department and polyclinic in the Regional Clinical Children's Hospital, respiratory department and polyclinic in the Children's Hospital of Karaganda, pulmonology beds in the therapeutic department in the Clinic of the Medical University of KMU NJSC, pulmonologist's offices in the Clinic of Professional Health Care of KMU NJSC, Karaganda branch of "Olymp Medical Group" (Allergy Centre of Devera), Regional Centre of Phthisiopulmonology Municipal state enterprise on the right of economic management).

In these clinical bases residents have the opportunity to carry out practical activities in close cooperation with doctors of related therapeutic and surgical specialities, participate in multidisciplinary consiliums, carry out continuity in the management of patients at the inpatient level (ICU (Intensive Care Unit)- pulmonology department - other departments of therapeutic and surgical profile), inpatient - outpatient clinic, have well-equipped auxiliary departments (endoscopic, morphological, radiation, functional and surgical). Clinical bases of the university create favourable conditions for creating an educational environment for training residents.

Residents of the speciality "Adult and pediatric pulmonology" can supervise patients with such diseases as pneumonias of various etiologies, COPD, bronchial asthma, bronchiectasis, interstitial lung diseases, lung abscess, bronchiolitis, congenital and hereditary respiratory diseases and other pulmonological diseases.

Residents-pulmonologists of the 1st and 2nd year of training are employed as "resident doctors"

in medical institutions of Karaganda and Temirtau cities (University Clinic of KMU NJSC, Regional Centre of Phthisiopulmonology, Polyclinic No.1 of Karaganda, Polyclinic No.5 of Karaganda, Hippocrates LLP). This is facilitated by mentoring, which is carried out in the organisation.

Of the questioned residents, 95.2% noted satisfaction with the activities of mentors, supervisors and academic supervisors, 6.35% were partially satisfied, 1.6% were partially dissatisfied, 4.8% of respondents did not answer this question.

Of all respondents, 92.6 per cent said that teachers regularly use active and interactive teaching methods in their classes, 4.8 per cent expressed the opinion that such teaching methods are used only sometimes, "rarely" 1.6 per cent, "don't know what it is" - 1.59 per cent.

EEC conclusions on the criteria. Compliant out of 30 standards (including 22 basic, 8 improvement standards): fully compliant - 30.

Standard 2: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 3: RESIDENT'S EVALUATION Evidence of compliance:

3.1 Evaluation methods

Examination of the test instruments (100 test tasks, 25 clinical tasks) showed that the organisation has implemented an appropriate assessment policy that allows for a versatile assessment of residents' learning achievements. When interviewed, residents described the forms of assessment such as checklists, portfolio evaluation sheets and that they are satisfied with everything. As well as receiving regular feedback from the faculty. A learner who disagrees with the final grade has the right to appeal no later than the next working day after the grades for the exam in Platon AIS. The system of appealing the evaluation results is reflected in the document "Academic Policy", approved by the decision of the Senate on 27.08.2021, Minutes No. 1 (Section 5-8 "Conducting interim certification") and for the period of training residents in the specialty " Adult and pediatric pulmonology " since 2015 there have been no precedents of appealing.

Thus, to verify the data of **Standard 3**, the experts asked questions to the Dean of the School of Residency and Further Education and checked the documents and methodologies for resident assessment.

During the visit to the organisation and during the interview with the Dean of the School of Residency and Additional Education, V.B. Tashkenbaeva. the expert commission verified that there is a documentation system, which is transparent and accessible to all faculty and staff, and includes such documents as annual operational plans, regulations of subdivisions, agreements with residents and educational and methodological documentation (EPs, working curricula, syllabuses, electronic journals in Platon AIS), evaluation tools (evaluation sheets, checklists, statements), certificates, certificates and attestations. The review of the website showed that its pages contain the documents necessary for residents (EP passport, working curricula, syllabuses, catalogue of elective disciplines, examples of control and measurement tools) and there is information on the student portal, which is updated on a regular basis.

3.2 The links between evaluation and training

The results of resident evaluation are documented as follows. Differentiated evaluation methods are used to assess various training outcomes, so theoretical knowledge is mainly assessed by testing and practical skills by means of evaluation sheets for each section of practical work, examinations at the end of each cycle are conducted in a written format, according to the principles of Academic Integrity with the use of an anti-plagiarism system. Current control of residents is carried out on a daily basis - in the form of feedback by the teacher and clinical mentor, diary checks and checklists. Evaluation sheets are used to assess different types of resident's activities. Control of independent work and evaluation of its results are organised as a unity of two forms: self-monitoring and self-

assessment; control and evaluation by teachers, etc. (Academic policy of KMU NJSC, protocol No. 1 of the Senate from 27.08.2021). The Platon AIS programme provides a personal account of the student, where his/her data, Individual Education Plan, history of educational achievements are placed. When the resident mastering the practical skills provided for in the programme, the teacher, clinical mentor, makes a mark in the portfolio about their achievement.

In interviews with teachers it was noted that the reliability and validity of assessment methods are made by discussing the examination material at the departmental meeting together with external stakeholders, undergoing expert evaluation by external reviewers. The examination material is uploaded to Platon AIS or Session AIS one week before the final control. To ensure transparency and objectivity of the final control the Registrar's office forms a pool of proctors. At the same time, the experts did not receive an answer as to how the tests are validated, there are attempts to count manually through Exell programme, which is not quite an effective method. The experts recommend that in order to determine the best validity and reliability of the assessment methods, a computer programme should be implemented.

From the conversation with the lecturers of the Department of Internal Medicine the experts received information that the following system of evaluation of residents in the process of training is used: formative (current control), summative (interim certification and final control), independent examination (final certification of the National Centre for Independent Examinations). Residents also shared their opinion about the timeliness of providing tests, counselling before exams, clarity of the whole assessment procedure and its fairness. For example, residents said that they record all their achievements in personal portfolios, which will also be useful for their future career development, as they collect all their speeches, articles, certificates, and interesting clinical cases.

During the visit to the organisation, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" The answer was that it is a prerequisite for interim and final certification, which ensures impartial assessment.

The experts examined the resources for organising the assessment of knowledge and practical skills, namely, syllabuses, testing tools, evaluation sheets.

The interviewed representatives of employers also pointed out the compliance of graduates' training with the modern development of medical practice and science, as they have excellent clinical skills, are able to work independently, and are constantly improving in their practical activities. Employers said that they themselves participate in the evaluation of residents, as they are included in the Attestation Commission. In order to identify the degree of employers' satisfaction with the quality of graduates' training and to receive recommendations from them on the development of students' competences, the Department of Strategic Development and Quality Management annually conducts a centralised survey of employers using the Google Forms platform. Employers are fully satisfied with the quality of training of residents in the speciality "Adult and pediatric pulmonology".

EEC conclusions on the criteria compliance out of 11 standards (including 7 basic, 4 improvement standards): fully - 9, partially - 2.

Standard 3: fulfilled

Recommendations for improvement identified during the external visit:

1) Develop and implement a programme to determine the validity and reliability of resident assessment methods (3.1.4, 3.1.6).

Standard 4: RESIDENTS <u>Evidence of compliance</u>: 4.1 Admission and selection policy In KMU NJSC admission of students to the residency is carried out based on the section "Rules of admission, progress of students, certification" of the Academic Policy of KMU NJSC, which is revised annually. Persons who have mastered the EP of higher education and internship are admitted to the residency programme. Admission of persons to the EP in residency is carried out on their applications on a competitive basis based on the results of the entrance exam. For the period of conducting entrance examinations to the residency programme an examination and appeal commission for specialities is created.

About the policy on admission of residents told the dean of the school of residency and additional education V.B. Tashkenbaeva. Approaches to the admission of residents are built on the requirements of the country and internal regulations, namely, in accordance with the Model Rules for training in educational institutions implementing the EP of higher and postgraduate education (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 600 of 31 October 2018) and the Rules of placing a state order, admission to training and training of medical personnel in residency (Order of the Ministry of Health of the Republic of Kazakhstan No. KP ДCM-270/2020 of 15 December 2020).

The KMU NJSC regularly reviews the rules of admission to residency: in the 2019-2020 academic year (approved by the decision of the Senate of KMU NJSC on 22.10.2019, Minutes No. 1), in the 2021-2022 academic year (approved by the decision of the Senate on 21.05.2021, Minutes No. 10) and in the 2022-2023 academic year (approved by the decision of the Board of Directors on 27.05.2022, Minutes No. 37) (https://www.qmu.edu.kz/media/qmudoc/OPResRus.pdf).

Thus, the experts have validated the data according to Standard 4. In general, all criteria are met. The experts familiarised themselves with the documentation on admission of residents, including the "Academic Policy", orders on admission to the residency.

Regarding the practice of academic counselling, personal support of residents and development of not only professional skills, the experts interviewed clinical preceptors. The KMU NJSC has a resident development programme that includes residents in advisory bodies such as the EPC, AC (Academic Council), Council of Young Scientists, Residency and Professional Development School Council, and Senate. So the resident-pulmonologist of the 1st year of training A.V. Krylov with positive personal characteristics, excellent academic performance is a member of the Council of the School of Residency and Professional Development.

4.2 Number of residents

The number of accepted residents is regulated by the state order of the Ministry of Health of the Republic of Kazakhstan, orders of the Ministry of Information and Public Development for the training of medical personnel and the possibilities of their clinical training, the maximum permissible load on teaching staff, clinical tutors, material and technical resources of the university and clinical bases.

During the period 2018-2022, 42 residents were admitted to the educational programme on the specialty "Adult and Pediatric Pulmonology". 24 residents successfully completed their training.

According to the data of the self-assessment report, documents presented on the google disc, as well as at the interview with the faculty, the analysis of the number of accepted residents at the EP "Adult and pediatric pulmonology" in dynamics for the last 5 years is presented and it was revealed that since 2019 years there was an increase in the number of accepted residents under the state order up to 7-8, and in the last 2 years the number of accepted residents under the state order is stably maintained not less than 5. Currently, there are 12 residents (8 in 2 years of training, 4 in 1 year of training) studying in the speciality "Adult and pediatric pulmonology".

For all years, 100% of residents in the speciality "Adult and Pediatric Pulmonology" successfully passed the independent examination from the first time. At the same time, 83.3% of residents received "excellent" and 16.7% "good" in the final examination, the average score of the final certification was 93.5%.

4.3 Supporting and counselling residents

In the course of interviews with residents, the EEC experts found that the HEI provides various services for the organisation of counselling, psychological, social, medical support of students to protect the interests of residents, assisting them in educational, scientific, extracurricular activities. The EEC experts confirmed that experienced teachers, as well as mentors of the clinical base are involved in the counselling. Before the beginning of each cycle, the instructor of the group informs its residents about the schedule of its work, the time when residents can apply for counselling in this discipline. The staff of the School of Residency and Professional Development together with the staff of the Department provides information support to all trainees.

Residents can submit their proposals, address their questions directly to the rector through the virtual reception centre, which functions on the official website of the university. Residents can send their proposals to deans, vice-rectors and other heads of structural units via corporate e-mail. KMU NJSC has a student service centre providing services to students on a "one-stop-shop" principle, the work of which the experts could make sure of on the first day when visiting this unit. During the interview with representatives of the administration, the dean stated that the university provides support to residents, if necessary for social, financial and personal needs, allocates appropriate resources for social and personal support. For example, the university has developed the "Regulations on travelling of KMU NJSC's students, which regulates issues related to the financial provision of their trips to internships, conferences, forums, cultural and mass events held outside the university.

The School of Residency and Professional Development holds meetings and gatherings with residents, where various issues related to training, student support services, etc. are also discussed. The experts were informed that there is a Career Development Centre under the Youth Department, which facilitates the employment of graduates.

In addition, during the visit to the clinical site, the department was informed that when cases of various disagreements with colleagues arise, the situation is resolved by discussing the problems personally with the head of the EP, the lecturer, while maintaining confidentiality. In case of professional crisis, the resident has the opportunity to contact the staff psychologist of the clinic of the medical university KMU NJSC, Youth Health Centre.

4.4 Resident representation

During the conversation with the representatives it was found out that KMU NJSC's residents participate in the meetings of collegial bodies, where they are official members and express their opinion and suggestions for improvement. For example, the resident-pulmonologist of the 1st year of training A.V. Krylov is a member of the Council of the School of Residency and Professional Development (Order No. 3 of the Dean of the School of Residency and Professional Development of 08.09.2022).

An example of the fact that the residents' suggestions were taken into account is the possibility for pulmonologists to visit the Hospital of the Medical Centre of the Presidential Administration in Astana to acquire highly specialised professional competencies (diffusion capacity of the lungs, transbronchial lung biopsy). Also, taking into account the residents' opinion, such disciplines as "Highresolution computed tomography in disseminated lung diseases", "Differential diagnosis of pulmonary hypertension", "Issues of intensive respiratory therapy in pulmonology" were introduced in the catalogue of elective disciplines.

The EEC experts also confirmed that the Academic Policy of KMU NJSC of 27.08.2021 regulates the issues of participation of students of all levels in the issues of quality of the educational process. The department collects feedback from residents at the stage of mastering the taught discipline (at the end of the study of the discipline), as well as on issues related to the learning/working conditions, problematic situations. According to the analysis of the questionnaires, taking into account the suggestions made, appropriate adjustments are made.

4.5 Working conditions

Residents' participation in the provision of medical services does not dominate over educational services and is not excessive, which was confirmed when talking to residents and faculty during the

visit to the clinical base. It was also confirmed that the students of the residency programme have an opportunity to work in their free time on 0.5 rate. Thus, residents-pulmonologists of the 1st and 2nd year of training are employed as "resident physicians" in medical institutions of Karaganda and Temirtau cities (N.N. Mutalkhanov in "Polyclinic No. 2 of Temirtau", A.V. Krylov in "Polyclinic No 1 of Karaganda", A.V. Yerketanov in "Polyclinic № 1. Karaganda", J.A. Erketayeva in "Polyclinic No5 of Karaganda", A.V. Samoilova in LLP MF Hippocrates, M.K. Aubakirova in New Polyclinic LLP, E.D. Karimova in the University Clinic of KMU NJSC, O.S. Klassen in the Regional Centre of Phthisiopulmonology.

In accordance with the current agreements with clinical bases "The Clinic undertakes to provide admission of trainees to patients and to all structural units of the Clinic in accordance with the needs of the educational process, except for cases when admission of trainees to the therapeutic process is not allowed by the current legislation and/or patient requirements". When providing diagnostic and therapeutic activities carried out at the clinical bases, residents work under the supervision of a clinical mentor, are on duty at the clinical bases at least four times a month.

Representatives of clinical bases confirmed that before starting work residents are instructed and sign a safety acknowledgement sheet. The start and end of a resident's daily work is regulated depending on the mode of operation of the clinical base and the individual work schedule of the trainee. All clinical bases have conditions for residents to rest in their free time, to take hot meals, to work with literature, which was confirmed during the rounds of clinical bases.

EEC conclusions on the criteria. Compliant out of 30 standards (including 18 basic, 12 improvement standards): fully compliant - 30.

Standard 4: fulfilled Recommendations for improvement identified during the external visit: none

Standard 5: TEACHERS

Evidence of compliance:

5.1 Recruitment and selection policy

The staff involved in the training of residents in the speciality "Adult and pediatric pulmonology" 6, including 5 full-time teachers, 1 part-time teacher, 8 clinical tutors.

The experts got acquainted with the Personnel Policy of KMU NJSC (approved by the decision of the Management Board on 11.01.2021, Minutes No.1), the Regulation on Residency (approved by the decision of the Management Board on 23.08.2022, Minutes No.18), which defines the mentoring system, as well as with the "Job descriptions of the clinical mentor" (approved by the decision of the Management Board on 27.07.2022, Minutes No.7), according to which the activity of the clinical mentor is regulated.

In order to verify the data of Standard 5, external experts obtained the opinion of teachers about the personnel policy, which includes knowledge and observance of corporate values (conscientious performance of work by each employee, expressed in the efficiency and effectiveness of their labour; creation by the university of an atmosphere in which each employee has the opportunity to offer new ideas, ready-made solutions that will strengthen and reinforce interest in the activities of the university; mutual assistance, respect for each other, for interested parties, and respect for the university's activities).

The conversation with the head of the EP "Adult and pediatric pulmonology", Professor of the Department of Internal Medicine, L.K. Ibrayeva included such questions as how the selection of the HETP and clinical tutors for the implementation of the EP is carried out, taking into account what criteria, and allowed the experts to learn about approaches to the involvement of clinical base staff for teaching (there are 8 such teachers in total), methodology and periodicity (certificates of training of the HETP and clinical tutors were presented) of improving the teaching qualifications of the HETP and clinical tutors at the university (at least once every 5 years), strategy and tactics of resident

recruitment, information support of the education programme.

During the questioning of teachers it was found that the majority (93.8%) are fully satisfied with the organisation of work and workplace in the university, but 6.3% are partially satisfied. In this educational organisation teachers have the opportunity to do scientific work and publish the results of research and development - 90.6% fully agree, 9.4% partially agree. They are satisfied with the work of HR (personnel) service - 87,5% fully agree, 9,4% partially agree. Satisfied with the salary - 53.1% strongly agree, 12.5% disagree, 25% - more "Yes" than "No", 9.4% - more "No" than "Yes".

5.2 Commitment and development of teachers

In order to verify the data of Standard 5, during the meeting with the head of the human resources department and during interviews with teachers, the experts received information about approaches to the development of teaching competence of teachers, motivation to work with residents, implementation of mentoring, which includes participation of teachers and clinical mentors in the practical training of residents, formation of their skills of independent work with patients, responsibility for the further development of the resident, becoming a specialist according to the requirements of the medical community, market and training outcomes.

The experts received responses about the faculty development programme, which is held annually and 4 faculty members and clinical mentors involved in the implementation of the Adult and Pediatric Pulmonology programme were trained for the academic year 2022-2023. These activities are funded by the University. The expert has checked the certificates of the tutors on such topics as "Educational Technology in Teaching Clinical Disciplines" (60h/2 credits, 12-19.12.2022), "ORPHEUS Supervision Workshop" (8h, 11.11.2022), "SKLAD-2022. Inclusive Professional Education: Modern View and Approaches" (72h, 9-20.12.2022).

The experts found that teachers initiate R&D topics for residents, stimulate the need for additional training and independent work with literature, medical documentation.

In HEI there is an opportunity for career growth and development of teacher's competences - 9.63% of questioned teachers fully agree with this statement, and 9.38% partially agree. 87.5% of the questioned were trained at professional development courses, 9.38% - more than 5 years ago, 3.13% - do not remember when it was.

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

At the same time, 95.24% of the surveyed residents are satisfied with the activities of mentors, supervisors and scientific supervisors, 4.8% are partially satisfied with them.

EEC conclusions on the criteria. Compliant out of 7 standards (including 5 basic, 2 improvement standards): fully compliant - 7.

Standard 5: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 6: EDUCATIONAL RESOURCES

Evidence of compliance:

6.1 Material and technical support and equipment

During the visit and interviews, the experts were convinced that KMU NJSC has sufficient infrastructure necessary for the successful implementation of the programme "Adult and pediatric pulmonology" with the use of material and technical base, information resources and technologies, resources for clinical training. All clinical bases have training rooms, which are equipped to conduct classes, they have the necessary furniture, technical means of education, including personal computers and multimedia projectors.

The experts were convinced during the visit to the clinical bases that the residents have access and opportunity to work on computers, laptops, projectors, internet access. In addition, residents use

the resources of the clinical base, IT facilities, internet, equipment, laboratories in their training and practice, as the experts were convinced during the visit to the clinical base.

The questionnaire survey of teachers showed that 93.8% of respondents fully agree that the university has enough equipment and resources for training residents in accredited programmes, 6.3% - partially agree. 87.5% are fully satisfied with the organisation of the educational process, 12.5% are partially satisfied.

93.8% of teachers are fully satisfied with the organisation of work and workplace in the HEI, 6.3% - partially satisfied.

6.2 Clinical bases

The review of resources showed that they meet the goals and objectives of educational activities, for example, the therapeutic building of the Regional Clinical Hospital with a bed capacity of 200 beds was visited. The university staff provides collegial and ethical relations with the nursing staff, management of the clinical base to achieve the final results of residents. Sufficient number of subject patients, state-of-the-art equipment and demonstrates accessibility to trainees is provided, and staff members, who serve as both educators and preceptors, provide quality training in an ethical and deontological manner. Before starting the respective discipline of the education programme, the resident receives a syllabus from the instructor and knows what skills he/she should acquire and develop during the training period.

During visits to the clinical sites, the experts examined the resources, their relevance to the training programmes, accessibility for faculty and residents, how up-to-date the equipment is and how it meets the needs of trainees and practical healthcare. The assessors obtained evidence of fulfilment of standard 6, as well as validation of the self-assessment report information.

In order to validate the implementation of the self-assessment report data and to obtain evidence on the quality of the programmes, an interview was conducted with *12 residents in the specialty of Adult and Pediatric Pulmonology*. The experts asked questions about satisfaction with training, sufficiency of time to supervise patients, work in DamuMed with medical documentation, satisfaction with teaching methods and qualification of teachers, social and moral support for residents in need, participation in "Journal Clubs", accessibility to the resource of international databases of professional literature. In general, residents are satisfied with the teaching methods, evaluation methods, and purposefully entered this organisation, as they believe that the educational organisation has good resources, image and international relations, at the same time residents would like more autonomy in patient management, holding international events.

Residents showed their commitment to the education organisation, were active in answering questions from external experts, demonstrated their judgement on the organisation of training, assessment of their skills, advisory support, opportunities to participate in R&D, funding.

The experts studied residents' documents (portfolios, results of residents' assessment-checklists, results of residents' questionnaires).

The results of the residents' questionnaire showed that 87.3% of respondents are satisfied with the organisation of recreation and catering conditions for students (recreation rooms) on the territory during breaks between classes, 9.52% - partially satisfied.

6.3 Information technology

Residents-pulmonologists can use all the resources of the university. Thus, when visiting the library, the experts were convinced that in addition to available literature, there is an opportunity to use electronic resources, including the possibility of ordering literature through the electronic catalogue on the basis of the module "Web-Irbis". Library fund on speciality " Adult and pediatric pulmonology" makes 2994 editions, from them the total number of textbooks - 1705, including on Kazakh language makes 741 copies, Russian - 753, English - 211, scientific literature - 1269 copies (on Kazakh language - 310, on Russian language - 910, on English language - 49), periodicals - 4, electronic editions - 16.

Over the last 3 years, there is a tendency to decrease the purchase of educational literature in

printed format, due to the increase in subscription to educational electronic resources. Residents and teachers have access to international databases "Cochrane Library", "EBSCO", "BMJ Best Practice", "BMJ Learning", "CBS eBooks". Access to library resources is provided through an electronic catalogue, bibliographic and full-text databases integrated into the University's information and analytical system. This information was obtained by the experts during a visit to the library on the first day and the capabilities of the unit were demonstrated during the interview. As part of the national subscription, the library provides access to the platforms: Web of Science (Clarivate), Scopus Elsevier, Science Direct.

The university uses electronic resources: corporate mail Outlook, Student Portal, SharePoint. In order to effectively use information and communication technologies within the educational process of the programme " Adult and pediatric pulmonology", Microsoft Teams platform, Webex were used during practical classes during the pandemic period.

For the purpose of independent work of residents the Moodle platform is used, which was demonstrated during the visit to the department.

In addition, residents under the supervision of clinical mentors have access to information systems of clinical bases, with the help of which they carry out diagnosis and treatment of patients, keep diary records (Integrated Medical Information System).

90.48% of residents responded that they fully agree with the provision of students with methodological and didactic materials, additional literature to prepare for classes. 87.3% of residents note that they are fully satisfied with the system of independent learning of students, 12.7% - partially satisfied.

6.4 Clinical teams

During the interviews and visits to the clinical base, the experts were convinced that the experience of working in a team is gained by the pulmonology residents in the process of training under the guidance of a clinical mentor, who instils the skills of proper communication with the patient and his relatives. Residents seek advice from more experienced residents in the department and work closely with other medical specialists, nursing and medical staff. First-year residents are assigned to senior residents improving team relationships, as also final-year residents develop effective management skills.

Interdisciplinary master classes, Olympiads involving several departments are held, in which residents take an active part, and also have the opportunity to make presentations and learn. While attending the practical training, the experts attended an interdisciplinary workshop - game-quest, which was attended by residents of several specialities, who were introduced to teamwork, solving joint tasks. In addition, residents have the opportunity to interact with physicians of related specialities in their daily work.

Clinical mentors at the interview informed that residents take an active part in conducting consiliums at clinical bases, make reports on difficult patients, and execute medical records of the consilium in IMIS. At morning conferences, residents make presentations on night duty, during which they justify their actions during duty in relation to patients, a discussion of complex patients is held. While carrying out therapeutic work, residents acquire skills in supervising nursing staff who work with them in the department and outpatient clinic.

To the question "Is there enough time for practical training (patient supervision, clinical rounds, clinical discussions) 90.48% of residents answered - completely agree, 9.5% - partially agree.

87.3% of residents believe that the organisation of clinical (practical) training is excellent, 11.1% - good, 1.6% - satisfactory.

Trainees have sufficient number of patients to supervise or assist in operations - 90.5% of residents strongly agree, 4.8% partially agree, 4.8% did not answer this question.

6.5 Medical research and development

Interviews with faculty members showed that residents have free access to equipment, a sufficient number of case patients, time to keep medical records, and independent work at all clinical

sites.

Research by internal medicine faculty members underpins academic work in residents. During the conversation with the residents it was found out that they take an active part in the implementation of scientific work of the department and clinical bases.

Head of EP "Adult and pediatric pulmonology" Professor L.K. Ibrayeva participates in the implementation of scientific and technical programme "COVID-19: Scientific and technological substantiation of the system of response to the spread of new respiratory infections, including coronavirus infection" (01.07.2021- 31.12.2023). Also L.K. Ibrayeva is the head of the scientific project under the grant funding of the URN AR0925992 "Detection of the negative impact of a complex of non-ionising radiations on the human body (by the example of medical personnel)" (implementation years 2021-2023).

Residents-pulmonologists also participated in these projects with their supervisor. Thus, residents N.M. Saghadi, A.S. Zhanabaeva, A.S. Dauzova, D.F. Artykova, F.N. Nurmetova, B.M. Karabekova, E.A. Mustafa, R.K. Tursynbekova, O.A. Bekenova, S.K. Tusenova, J.D. Nurushev, S.D. Alimkhanova, O.A. Bekenova, S.K. Tusenova, J.D. Nurushev, S.S. Alimkhanova worked in the project on COVID-19, and residents M.K. Aubakirova, A.V. Samoylova, O.S. Klassen participated in the preparation of the application on "Pathogenetic significance of structural and functional imbalance of the vascular system in the pulmo-cardio-renal continuum" for participation in the competition for grant funding for 2023-2025. If the applications are approved by the National Scientific Council, the mentioned residents will be part of the temporary research team.

For 2018-2023 years, residents of EP "Adult and pediatric pulmonology" made 30 publications, including 2 articles in Scopus (A.M. Zharylgapova, O.A. Evmenova, F.M. Turdaly, J.T. Ibrahim), 3 publications - in journals approved by the Committee for Quality Assurance in the field of education and science of the Ministry of Science and Education of the Republic of Kazakhstan, 11 publications in RSCI, 14 works in the collections of scientific and practical conferences.

Many residents are prizewinners of Olympiads, present papers at conferences. All data are confirmed by certificates, diplomas, copies of publications, which are collected in the residents' portfolios presented to the experts. Interest in scientific research and work experience according to the residents caused some of them the desire to continue research work in doctoral studies, 2 residents reported that they are preparing to enter doctoral studies in the current year, which confirms the high commitment and skills of residents-pulmonologists to participate in research work.

74.6% of residents confirmed that they are currently engaged in research work under the guidance of their teacher or mentor, 11.1% - are not engaged in research work, 11.1% have started planning the implementation of research work, 1.6% - are searching for the topic of research work, 1.6% of residents do not want to engage in research work. However, 41.3 per cent have published printed works (articles, theses, reviews) during their studies at the university, 39.7 per cent have more than one publication, 3.2 per cent have none, and 11.1 per cent plan to publish in the near future. 6.6 Expertise in education

The procedure of educational expertise on the quality of planning, implementation and evaluation of EP is a systematic process and is carried out by the following structures: DAA (approval of EP), Dean's Office of Internship and Residency (implementation of EP), Educational Programme Committee (EPC) (planning, development and evaluation of EP), Teaching and Learning Department (TLD) (monitoring of EP), Quality Management System Department. The EPC includes teachers, representatives of professional associations, employers, representatives of students.

Expertise is conducted in the form of analysing the needs for specialists, analysing resident training methods, and the results allow drawing conclusions about the quality of innovative changes in postgraduate education. For example, when attending an interactive session in the form of a quest game, the experts were convinced of high knowledge of residents, their desire to improve their skills, their commitment to their profession. The confirmation of the quality of EP is the feedback from

residents, employers and graduates, who in interviews gave a positive assessment of training in the residency in the speciality "Adult and pediatric pulmonology". All graduates of the residency are successfully employed and have positive characteristics as specialists.

In order to motivate teachers to conduct research in the field of medical education, the availability of publications in this field is an indicator of the department's activity in the rating, which is also taken into account in the differential payment, as reported in interviews by both representatives of the administration and faculty members.

Head of the EP on the speciality "Adult and pediatric pulmonology" Professor L.K. Ibrayeva is the coordinator of the International Project "Erasmus+ Building Educational and Research Capacities in Nutrition and Dietetics in Central Asia (BERNICA) - "Building Educational and Research Capacities in Nutrition and Dietetics in Central Asia", initiated within the framework of Erasmus+ projects "Enhancing Higher Education Capacity (EHC)" (2023-2026). The results of research in the field of education allow improving and introducing innovative methods in teaching, which allows improving the quality of training of residents.

Expertise is conducted in the form of analysing the needs in specialists, analysing the methods of teaching residents, and the results allow drawing conclusions about the quality of innovative changes in postgraduate education. According to the results of the questionnaire, 95.24% of respondents are fully satisfied with the organisation of teaching, 4.76% are partially satisfied with it.

6.7 Training in other institutions

In the interview representatives of administration and teachers reported that in the framework of academic mobility concluded memoranda of cooperation in the field of health care, medical education and science with 24 medical universities of Kazakhstan, with 83 universities of near and far abroad.

Professor L.K. Ibrayeva reported the following information: residents of EP " Adult and pediatric pulmonology" O.B. Zhandarbekov, V.R. Nikkel, A.V. Chernetsky studied at the Medical University of Astana (April 2019). For the academic year 2023-2024 academic mobility is planned for the residents of the 2nd year of training in the State Institution "Minsk Scientific and Practical Centre of Surgery, Transplantology and Haematology" to master the competencies of interventional pulmonology.

Within the framework of the Visiting Foreign Professor programme, professors from foreign partner universities are invited to teach residents (face-to-face, remotely). In April 2023, a full-time course of lectures by Professor L.T. Akhvlediani (Shota Rustavelli Batumi State University, Batumi International University) was held. Shota Rustavelli Batumi State University, International University of Batumi), devoted to types of immunity (antiviral, antimicrobial, anthelminthic), issues of inflammation and phagocytosis, hypersensitivity and laboratory diagnostics. In May 2023, online training of pulmonology residents by Professor I.S. Azizov (Research Institute of Antimicrobial Chemotherapy, Smolensk) on antibiotic resistance is scheduled for May 2023.

Moreover, under an agreement with the Hospital of the Presidential Administration of the Republic of Kazakhstan, resident pulmonologists are travelling for training in the discipline of "Orphan diseases" and for acquiring practical skills within the framework of this topic - to determine the diffusion capacity of the lungs and transbronchial lung biopsy.

EEC conclusions on the criteria. Compliant out of 21 standards (including 10 basic, 11 improvement standards): fully compliant - 21

Standard 6: fulfilled Recommendations for improvement identified during the external visit: none

Standard 7: EVALUATION OF THE EDUCATIONAL PROGRAMME <u>Evidence of compliance</u>: 7.1 Monitoring and evaluation mechanisms

The experts found that the monitoring mechanism of the EP includes several stages: planning, data collection, analyses/conclusions, necessary improvements followed by monitoring of changes. The Dean of the School of Residency reported that the solution of the issues on the EP management is entrusted to the School Boards, the quality of the EP is ensured by the participants of its implementation: the Dean of the School, the Head of the EP, module coordinators, those responsible for the discipline, heads of departments, lecturers.

Since 2020-2021 academic year, the Commission for the quality assurance of the EP has been established, the main function of which is to monitor the implementation of the EP and assess the satisfaction of all stakeholders. And intra-departmental monitoring is carried out by the department staff according to the Department Plan.

In conversation with the teachers of the Department of Internal Medicine, the experts received information that in 2022 the educational programme "Adult and pediatric Pulmonology" was updated in connection with the update of the State Educational Standards, Model curriculum. When revising the EP, it was evaluated and compared with foreign practices in a similar speciality ("Respiratory Medicine" - European countries, Canada, America, etc.). In this regard, the following disciplines were introduced into the EP: General principles of bronchodilator and antibacterial therapy in adults; Pharmacotherapy in adult pulmonology; Pharmacotherapy in pediatric pulmonology; Sleep breathing disorders; Pulmonary rehabilitation of adults; Rehabilitation of children with bronchopulmonary diseases; Respiratory support at the outpatient stage; Intensive pediatric pulmonology.

The success of the residency programme in pulmonology is evidenced by 100% employment in the specialty, most of the graduates work as pulmonologists in Astana, Karaganda and Karaganda region, other cities of the Republic of Kazakhstan. For example, the graduate A.S. Zhanabaeva works as a trainee assistant of the Department of Internal Medicine of KMU NJSC, N.M. Sagadi and A.M. Zharylgapova in the Hospital of the Medical Centre of the Office of the President of the Republic of Kazakhstan (Astana).

7.2 Faculty and resident feedback

Teachers and residents have the opportunity to participate in the evaluation and subsequent improvement of the EP on a regular basis through different feedback channels, organisation of focus groups, constant monitoring of appeals to the blog of the Chairman of the Board - Rector, his deputies, deans. Confirmation of the effectiveness of the education received is also based on the results of feedback - annual questionnaire, students to assess the level of satisfaction with educational programmes. As a result of analysing the questionnaire, changes and additions are made to the EP.

The department conducts a questionnaire survey of residents in order to analyse satisfaction with the quality of training, identify weaknesses and strengths, reasons for dissatisfaction with the learning process. The results of the residents' questionnaire are discussed at the departmental meeting, with subsequent decision-making on the organisation and content of the teaching programme in order to improve it. The results of residents' questionnaires are discussed at the departmental meeting, with subsequent decision-making on the organisation and content of the educational programme in order to improve it. Thus, the analysis of the results of the residents' questionnaire for the academic year 2021-2022 showed high satisfaction (95%) with the quality and clinical environment of training, organisation and equipment of the educational process resources for all disciplines of the specialty "Adult and pediatric pulmonology".

Employers are annually surveyed on their satisfaction with the degree of training of graduates. The results of the questionnaire survey of employers in 2022 showed a high percentage of satisfaction with the quality of training of pulmonology residents, especially employers highly appreciated the level of achievement of such competences as patient supervision, communication and collaboration, training and development, safety and quality of medical care. All recommendations were of a positive nature, there were no comments and suggestions on the speciality "Adult and pediatric pulmonology".

The use of feedback from stakeholders has a systematic character when making changes to the educational programme: the list and content of disciplines in terms of competence formation,

improvement of teaching methods, the system of final control and evaluation of students' knowledge. **7.3 Outcomes of residents and graduates**

In 2022, 36 employers were surveyed (response rate 89%). Assessment of the quality of graduates' training by employers was 4.6 points out of 5, including the EP "Adult and pediatric pulmonology" - 5 out of 5.

100% of employers noted that graduates have a sufficient level of knowledge and skills for qualitative and effective fulfilment of their duties. Assessment of satisfaction with the quality of training of graduates was 91%, for EP "Adult and pediatric pulmonology" - 100%, no employer did not assess the quality of training as low.

The reflection of the effective implementation of the EP in this speciality is the 100% successful passing of the independent examination by the residents of the final year for 2018-2019, 2019-2020, 2020-2021, 2021-2022 academic years: according to the results of the independent examination, the average score of the final certification was 93.5% (83.3% - "excellent", 16.7% - "good")

Graduates of "Adult and pediatric pulmonology" J.T. Ibrahim, A.A. Kaden have letters of thanks from the Akim of Karaganda region, Karaganda region Health Department. Resident J.A. Erketayeva was awarded in the nomination "Yzdik zhas medicine kyzmetkeri" within the framework of the Republican competition "Zhyl uzdigi - 2022", organised for the Day of Medical Worker by the Society of Medical Workers of Kazakhstan (2022). Received letters of thanks on the high quality of training of residents and their contribution to the fight against COVID-19 (2021) from the management of the Regional Clinical Hospital (residents D.F. Artykova, A.S. Dauzova, A.S. Zhanabaeva, F.N. Nurmetova, N.M. Sagadi) (<u>https://www.instagram.com/p/CVNUuL9N_JO/?utm_medium=share_sheet</u>), from the Akzhol party (resident S.S. Alimkhanova), from the management of the Regional Centre of Phthisiopulmonology (resident O.S. Klassen), University Clinic of KMU NJSC.

7.4 Stakeholder engagement

All stakeholders (HETP, residents, employers) are involved in the programme evaluation process through representation in relevant structures. The results of the evaluation are heard at the meetings of the Clinical Council, Schools, Transdisciplinary Board and Board of Studies, published in the university newspaper and on the university website.

Interviews with employers were conducted offline and included such questions as: knowledge of the mission of the university, participation in the development of the mission and proposals to the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through mentoring, providing the department and residents with the necessary resources for practical training and formation of clinical thinking, about the problems of interaction with departments and universities in general, 100% employment of graduates of the residency, etc. Stakeholders' satisfaction with basic knowledge and skills of residents was noted, participation in training of residents through mentoring, providing residents with necessary resources for practical training and formation of clinical thinking, as well as about 100% employment of graduates of the residency, etc. was noted. In general, employers noted the high level of knowledge and practical skills of the graduates of the residency in the speciality "Adult and pediatric pulmonology".

7.5 Approval procedure for education programmes

During the interviews and visits to all structures, the experts were convinced that KMU NJSC has developed mechanisms for the approval of educational programmes, providing for the evaluation of programmes at the stages of planning, implementation, analysis of results and implementation of changes, which allows monitoring the process of implementation of the educational programme and the progress of residents, and ensures the identification and timely resolution of emerging problems.

The expert review is conducted in accordance with the "Regulations on the management of the educational programme" of KMU NJSC.

The EP undergoes the procedures of coordination with representatives of practical healthcare in the specialty, examination by the Commission for Quality Assurance of the School of Residency, is

discussed at the Council of the School of Residency and approved at the meeting of the Board of the KMU NJSC and undergoes external expertise for inclusion in the register of educational programmes of the UHEMS.

EEC conclusions on the criteria. Compliant out of 15 standards (including 10 basic, 5 improvement standards): fully compliant - 15

Standard 7: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 8: MANAGEMENT AND ADMINISTRATION Evidence of compliance:

8.1 Management

The guarantee of the implementation of the EP specialty "Adult and pediatric pulmonology" is its strict compliance with the requirements of regulatory rules regarding the admission of residents (selection criteria and number), training process, assessment of knowledge and skills, established learning outcomes, programme management, which are regulated in the Republic of Kazakhstan by regulatory legal acts of the Ministry of Health of the Republic of Kazakhstan and the Ministry of Education and Science of the Republic of Kazakhstan.

The students who have mastered the programme on specialty "Adult and pediatric pulmonology" and successfully passed the state attestation are issued a document of the state sample on awarding the qualification of an adult and pediatric pulmonologist. Under the order of the Ministry of Education and Science of the Republic of Kazakhstan of 28 January 2015 No. 39 "On Approval of types and forms of state educational documents and Rules for their issuance", in accordance with subparagraph 6-3) of Article 5 of the Law of the Republic of Kazakhstan "On Education" of 27 July 2007, a certificate of completion of residency is issued, as well as after passing the final attestation of NCIE issued a certificate of a specialist without category on the specialty.

All activities on the implementation of the EP are carried out under the direct control of academic departments, members of the Educational Programme Committee, Dean's Office, independent experts.

Transparency of the EP management is carried out through the discussion of educational and methodical documentation on the residency programme at the meetings of departments/modules, EP Quality Assurance Committee, Academic Council and after receiving their positive opinion is approved by the Vice-Rector for Academic Affairs. Syllabuses, test tasks are placed in Platonus AIS.

In order to quickly communicate useful information to residents and teachers, there is an electronic moving news line in the centre of the University campus, the information for which is updated daily. There is a rector's blog on the website and a bi-monthly meeting of the rector with the students.

Management system processes in KMU NJSC are automated by means of information systems: Platon - assessment of students' educational achievements; Session - own development, on the platform of which the students' attestation is carried out; Student Service Centre - university development, with the help of which students can submit and receive certificates and other documents, including state services (certificates of education, duplicates of diplomas, etc.); Documentolog internal and external correspondence.

According to the questionnaire conducted by experts, 96.88% of teachers fully agree that ethics and subordination in relations between colleagues, teachers and management are observed in KMU NJSC, the remaining 3.13% completely disagree. 90.63% of respondents are fully satisfied with the organisation of work and workplace, 9.38% are partially satisfied with it.

8.2 Academic leadership

The EP is managed in accordance with the organisational structure of KMU NJSC (approved by

the Board of Directors, Minutes No. 40 of 30.10.2022). The governing body is the Board of Directors, the executive body is the Management Board. Issues of residency training and clinical process of the HEI are supervised by the Vice-Rector for Scientific and Clinical Work. Direct management of residency programmes and coordination of residents' activities is carried out by the residency school.

The main educational, scientific and clinical divisions that provide training for residents are the departments. Currently, 5 departments participate in the implementation of 23 disciplines of the educational programme "Adult and pediatric pulmonology" (15 disciplines in the 1st year of training, 8 disciplines in the 2nd year of training (7 compulsory disciplines and 1 - optional)). The head of the educational programme on the specialty "Adult and pediatric pulmonology" is Professor L.K. Ibrayeva, in the interview with whom the direct information on the accredited programme was obtained with the provision of the necessary documentation, as well as on the basis of the documents posted on google-disk for the expert commission.

University units, including departments and schools, analyse the implemented activities for the reporting period (academic, calendar year) and form reports on the work done. Issues on the EP are submitted for discussion to the School Council and Senate.

The Vice-Rector for Academic Affairs at the Senate meeting presents a report on the work and achievement of key indicators, analysis of the results of interim and final certification, as well as analysis of the results of independent examination, which are also an indicator of the effective performance of academic management. The Management Board presents a report on the achievement of key development indicators and on the work done during the reporting period at the meeting of the Board of Directors. The Chairman of the Board-Rector holds annual meetings with the community, where he presents an annual report on the university's activities and the achievement of target development indicators. Residents can be involved in the process of evaluation of academic leadership (dean, head of department, teachers) by expressing their opinions and wishes at the end of the course of study or mastering a particular discipline or by questionnaires to identify opinions and take into account comments, suggestions. Comments and suggestions of students on the organisation of the educational process (class schedule, etc.), on the list of elective disciplines, on the library fund and other issues related directly to the learning process may be taken into account.

84.4% of the teachers believe that the management of KMU NJSC listens to the opinion of teachers regarding issues on educational process, research and development, clinical work, 12.5% - believe that sometimes, 3.13% - did not answer.

8.3 Training budget and resource allocation

Data on the budget were obtained in an interview with the Deputy Director of the Department of Economics and Finance M.K. Mukhanova, who reported that the budget of the University is formed from two sources: the republican budget (state order for training of university and postgraduate education, advanced training of medical workers, development of scientific research, transfers) and the provision of paid educational services. The University manages the budget of the EP "Adult and pediatric pulmonology" on the principles of transparency, accountability, objectivity and legality. The university fulfils all obligations to pay the labour of employees and scholarships of residents, to create the necessary conditions at the bases, to purchase the necessary equipment, consumables, and other resources.

In the interview, the Vice-Rector for Scientific and Clinical Activities informed the experts that the innovative activities of teachers and residents (publications, participation in scientific and practical conferences, intellectual property, methodological recommendations, etc.) are financed within the framework of ongoing scientific (science and technology programmes, Grants) and international educational projects (ERASMUS+) according to the calendar plan. Professor E.M. Turgunov (Vice-Rector for Clinical and Scientific Work) noted that with the transition of the university to the status of Research University, funding for research purposes increases, including reimbursement of payments for publications of employees, residents, trips to scientific conferences, academic mobility.

Remuneration, differentiated payment is paid based on the results of achievement of key

indicators of subdivisions. Employees are provided with a social package: discounts on professional development training, retraining, master's programmes and children of employees, as well as discounts on medical care and recreation areas.

8.4 Administration and management

The University makes annual changes and additions to the organisational structure. The staff schedule of departments/modules providing educational programmes of residency is approved annually taking into account changes in the number of residents. According to article 52 of the Law of RK "On Education" from 27.07.2007 No. 319-III the total number of teaching staff is formed on the basis of the average ratio of residents and teachers - 3:1.

Calculation of teaching load is made according to "Model rules of activity of higher education organisations and state standard of education and in residency" and is 650 hours per year. The total number of scientific-pedagogical staff in the speciality "Adult and pediatric pulmonology" - 6 (5 full-time, 1 part-time), staffing 100%.

KMU NJSC is the first medical university of RK, which successfully passed in 2005 the certification of quality management system (QMS) for compliance of educational, scientific and clinical activities with the requirements of the International Standard ISO 9001 series by the certification body NQA - UK (Great Britain), NQA - Russia. In 2015 he was certified by the certification body SGS (Switzerland).

In 2016, the university passed accreditation in the field of health care for compliance with the standards of accreditation of medical organisations providing inpatient care with the assignment of the first category.

The system of internal evaluation, monitoring of teacher's work and achievement of intermediate and final results of educational programmes is carried out through attestation of teachers in all types of activities.

Methods of obtaining information from consumers - interviews, questionnaires, study of complaints and recommendations. Internal assessment of the quality of education is realised in the processes of internal audit, self-assessment (accreditation), implementation of key performance indicators (KPI), which leads to continuous improvement and self-improvement.

8.5 Requirements and regulations

The Regulation on Residency is developed in accordance with the Law of the Republic of Kazakhstan "On Education", the Concept of Medical Education Development and determines the procedure for training medical personnel in residency in the organisations of medical education and science of the Republic of Kazakhstan, regardless of the form of ownership, having a license for this type of educational activity and clinical bases.

The University determines and approves the educational programme on the specialty "Adult and Pediatric Pulmonology", the State Comprehensive Education Standard of the MH RK No. 647 dated 20.07.2022. Approval of the programme is carried out in close cooperation with all interested parties. The structure and content of the SCES correspond to the State Standard on speciality "Adult and Pediatric Pulmonology", the programmes of disciplines are developed at the proper scientific and methodical level. The sequence of study of the disciplines of the residency is built using the system of pre- and post-requisites.

The HETP of the EP "Adult and Pediatric Pulmonology" together with the National Scientific Centre for Health Development of the Ministry of Health of the Republic of Kazakhstan actively participates in the development and implementation of clinical protocols for the diagnosis and treatment of pulmonological diseases, professional standard for the specialty.

EEC conclusions on the criteria. Compliant out of 15 standards (including 8 basic, 7 improvement standards): fully compliant - 15

Standard 8: fulfilled

Standard 9: CONTINUOUS IMPROVEMENT Evidence of compliance:

During the interviews with the administration, dean of the residency school, programme manager, the issues of updating and making changes in the EP, mechanisms and in what situations these steps are taken.

Changes and updates in the EP are carried out taking into account the wishes of stakeholders (employers and residents), who are regularly questioned. In cases when a complete revision of the EP is necessary (in case of new regulatory documents in the field of residency, strategic partnership, etc.), the head of the EP and the residency school organise working meetings with the responsible specialities, explain the new provisions and give a task for revision.

In 2019, the EP "Adult and Pediatric Pulmonology" is completely revised and updated. As a result, the profiling competences and training outcomes required to achieve a certain level in the training process have been revised, resident outcomes and competences have been revised and analysed taking into account the current trends in the development of diagnostics and treatment in pulmonology.

The lecturers confirmed that annual updating of the syllabuses is based on the achievements of science and practice, which is ensured by participation of lecturers at congresses, conferences, webinars, as well as implementation of new international clinical protocols and recommendations for diagnosis and treatment of pulmonological diseases.

The head of the educational programme L.K. Ibrayeva reported that the department took into account the environment of postgraduate training, modified the final results and adapted according to the modern views of theory and practice, carried out adjustments according to the requirements of the new regulations, new methods of evaluation of residents, forms of examinations were developed, teaching methods changed, the process of monitoring and evaluation of the EP changed, stakeholders are widely involved.

Thus, continuous improvement of the education process in the residency programme in the specialty "Adult and pediatric pulmonology" helps to modernise the EP and to produce well-trained specialists in demand in different regions of the Republic of Kazakhstan, which was confirmed in interviews by employers.

EEC conclusions on the criteria. Compliant out of 1 standard (including 1 basic): fully compliant - 1 *Standard 9: fulfilled*

Recommendations for improvement identified during the external visit: none

CONCLUSION: While conducting an external evaluation of the educational program "Adult and pediatric Pulmonology", it was found that out of **147 standards** (including basic standards (BS) -91 and improvement standards (IS)– 56), 145 accreditation standards demonstrate full compliance, including 89 basic standards and 56 improvement standards. 2 basic standards have been partially implemented. Non-compliance with the standards has not been established. The implementation of improvement standards testifies to the compliance of the educational organization with international best practices in such areas as education, science, practice.

5. Recommendations on education programme development:

1. To develop and implement the programme for determining the validity and reliability of the resident evaluation methods (BS 3.1.4; 3.1.5)

6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу **7R01123** «Пульмонология взрослая, детская» НАО «Медицинский университет Караганды», соответствующую Стандартам аккредитации образовательных программ резидентуры медицинских организации образования на период 5 лет.

Председатель Внешней экспертной комиссии КУДАБАЕВА ХАТИМЯ ИЛЬЯСОВНА

Зарубежный эксперт РЫЖКИН СЕРГЕЙ АЛЕКСАНДРОВИЧ

Зарубежный эксперт АФРИКЯН ШУШАНИК ГЕВОРКОВНА

Национальный академический эксперт УРАЗОВА САЛТАНАТ НУРГОЖАЕВНА

Национальный академический эксперт ШАБДАРБАЕВА ДАРИЯ МУРАТОВНА

Национальный академический эксперт РАМАЗАНОВА РАЙГУЛЬ МУХАНБЕТОВНА

Национальный академический эксперт ЖУМАЛИНА АКМАРАЛ КАНАШЕВНА

Национальный академический эксперт ТУЛЕУТАЕВА РАЙХАН ЕСЕНЖАНОВНА

Национальный академический эксперт БАЙГОЖИНА ЗАУРЕ АЛПАНОВНА

Национальный академический эксперт РАМАЗАНОВА ШОЛПАН ХАМЗАЕВНА

Национальный академический эксперт ЕРАЛИЕВА БИБИХАН АБДАЛИЕВНА

Национальный академический эксперт ИСПОСУНОВА ГУЛЬНАРА АХМЕТКАЗЫЕВНА

Национальный академический эксперт ДОШАКАНОВА АСЕЛЬ БАЙДАУЛЕТОВНА

Национальный академический эксперт ДОСАНОВА АСЕМ КАЛЕЛОВНА

Эксперт- представитель практического здравоохранения ДАНИЯРОВА БАЯН ЛАШИНОВНА

Эксперт – представитель докторантов ОРАЗБАЙ АҚНҰР ДӘУРЕНҚЫЗЫ

Эксперт – представитель резидентов ҚҰРАҚ АЙДАНА ЖАНАЙДАРОВНА

luu 07 11

sno

Appendix 1.

				Ev	aluatio	n
Standard	Evaluation criteria	The number of standards	BS*/IS	Completely compliant		
1.	MISSION AND OUTCOMES	17	10/7	10/7		
2.	EDUCATIONAL PROGRAMME	30	22/8	22/8		
3.	RESIDENT EVALUATION	11	7/4	5/4	2/0	
4.	RESIDENTS	30	18/12	18/2		
5.	ACADEMIC STAFF/FACULTY	7	5/2	5/2		
6.	EDUCATIONAL RESOURCES	21	10/11	10/11		
7.	EDUCATIONAL PROGRAMME	15	10/5	10/5		
	EVALUATION					
8.	MANAGEMENT AND	15	8/7	8/7		
	ADMINISTRATION					
9.	CONTINUOUS IMPROVEMENT	1	1/0	1/0		
		147	91/56	89/56	2/0	
				145	2	

Quality profile and criteria for external evaluation of the educational programme (summary)

Appendix 2

List of documents studied by the EEC members within the framework of external evaluation of the residency educational programme

No.	Name of documents	Quantity
1.	- "Gastroenterology, including Pediatric Gastroenterology" residency EP	2
	was discussed by the Academic Committee (Minutes No. 4 dated June 07,	
	2019), approved by the Academic Council (Minutes No. 7 dated June 18,	
	2019), approved at the meeting of the Academic Council and by the	
	Chairperson of the Board-the President of the KMU NJSC (June 27, 2019,	
	Minutes No. 10)	
	- "Adult and Pediatric Gastroenterology" EP (with updates, 2022),	
	approved at the meeting of CQASRPD (Minutes No. 3 dated July 05,	
	2022), discussed at the meeting of the Board of SRPD (Minutes No. 11	
	dated July 07, 2022) and approved by the decision of the Board of the KMU	
	NJSC (Minutes No. 16, dated July 13, 22)	
2.	- Working curriculum for 2021-2023 academic years of the residency	2
	7R09104 "Adult and Pediatric Gastroenterology" residency specialty (No.	
	101/3545 dated August 12, 2021)	
	- Working curriculum for 2022-2024 academic years of the 7R09104	
	"Adult and Pediatric Gastroenterology" residency specialty" (No 101/3027	
	dated June 15, 2022)	
3.	Catalog of Elective Disciplines for the 7R01104 "Adult and Pediatric	1
	Gastroenterology" educational program, 2022, reviewed and approved at	
	the meeting of the Council of the School of Residency and Professional	
	Development, Minutes No. 4, dated November 10, 2022	
4.	- Syllabus on the "Gastroenterology" module discussed and reviewed at the	2
	meeting of the Department of Pediatrics and Neonatology, Minutes No. 10,	_
	dated May 27, 2022, Oncology and Radiation Diagnostics, Minutes No. 1	
	dated August 26, 2022, Internal Diseases, Minutes No. 1, dated May 31, 22,	
	approved by EP Head on May 31, 2022	
	- Syllabus on the "Adult Hepatology" discipline, discussed and reviewed at	
	the meeting of the Department of Internal Diseases, Minutes No. 10A,	
	dated June 29, 2022, approved by EP Head on April 29, 2022	
5.	The list of clinical skills taught by the Department of Internal Diseases in	1
	the Central Medical Center for the 1st-year students of the educational	-
	program in 7R09104 "Adult and Pediatric Gastroenterology" discipline in	
	the 2022-2023 academic year, approved by EP Head, Head of the	
	Department of Internal Diseases, Laryushina Ye.M., September 05, 2022	
6.	Agreement on joint activities with KMU NJSC:	2
0.	- Oblast Children's Clinical Hospital State Municipal Enterprise of the DH	_
	KR (No. 347 dated September 01, 2022)	
	- Oblast Children's Clinical Hospital State Municipal Enterprise of the DH	
	KR (agreement No. 353 dated September 01, 2022)	
7.	Methodological recommendations with the use of active, innovative	1
/.	teaching methods on the topic: "Interdisciplinary Patient: Diagnosis and	1
	Treatment of Bleeding" (intellectual quest game) for residents in 3	
	specialties: Adult and Pediatric Gastroenterology ("Adult Hepatology"	
	discipline, Hepatology module), Adult Hematology ("Consultative	
	Hematology" discipline, Outpatient Hematology module), Adult and	

	Pediatric Pulmonology (Intensive Therapy in Pulmonology discipline,	
8.	Adult Pulmonology in Hospital module) Portfolio of the 2nd year resident of "Adult and Pediatric Gastroenterology" specialty of Kadyrova Angelina Zhumabekovna. - 1st degree diploma in the competition of poster reports of the Congress of Hepatologists/Gastroenterologists of Kazakhstan. June 27, 2022 Kadyrova A.Zh. et al. - 1st degree diploma in the competition of poster reports of the IV International conference "Gastroenterology-2023", 3-4.03.23, Ivacheva	3
9.	 S.Ya., Kadyrova A.Zh., Chunkeneeva A.S. et al. Individual work plan of resident, Igenbekov A.T. for 1 year of study, group 8-001, for 2022-2023 academic year, approved at the meeting of the Department of Internal Diseases, Minutes No. 2 dated September 05, 2022 Extract from the minutes of the meeting of the Department of Internal Diseases, Minutes No. 2 dated September 05, 2022 On the discussion and approval of the individual plan of the resident (IPR) in the specialties of the residency 	2
10.	- The report of the resident, Zholomanova G.K. for the 2021-2022 academic year, discussed and approved at the meeting of the Department of Internal Diseases, Minutes No. 10A, dated June 29, 2022	
11.	Individual work plan of the teacher: Head of the Department of Internal Diseases, Professor Ye.M. Laryushina for 2022-2023, approved at the meeting of the Department of Internal Diseases, Minutes No. 2 dated September 05, 2022	1
12.	Materials on academic mobility of HETP: - The program of classes on the "Strategic planning and quality assurance in a medical university" discipline by the Head of the Department of Internal Diseases, Can.M.Sc., Laryushina Yelena Mikhailovna for teachers of the Tajik State Medical University in the period from December 19 to 21, 2022 - Invitation letter from the President of the Tajik State Medical University, Dr.M.Sc., Gulzoda M.K. to participate in the academic mobility of the HETP of Professors Turgunova L.G. and Laryushina Ye.M., dated December 14, 2022	2
13.	Acts of introduction of innovative teaching methods into the educational process: - the name of the offer: "Quest-Game", approved by the Provost for Academic Affairs of the KMU NJSC Riklefs V.P., January 23, 2023 - the name of the sentence: "Multidisciplinary Consultation", approved by the Provost for Academic Affairs of the KMU NJSC, Riklefs V.P., October 13, 2022 - the name of the offer: "The School of a Young Internist", approved by the Provost for Academic Affairs of the KMU NJSC, Riklefs V.P., February 10, 2022 - the name of the offer: "Training based on the Prevention of Medical Errors (TAME)", approved by the Provost for Academic Affairs of the KMU NJSC, Riklefs V.P., October 13, 2022	4
14.	Acts of implementation of RW results in the educational process: - the name of the offer: "Algorithm of Preventive Counseling: Individual in- Depth Preventive Counseling", approved by the Provost for Academic Affairs of the KMU NJSC, Riklefs V.P., September 29, 2022	3

	 the name of the offer: "Individual Risk Cards for the Development of Cardiovascular Diseases", approved by the Provost for Academic Affairs of the KMU NJSC, Riklefs V.P., May 04, 2022 the name of the offer: "Preventive Model of Management of Risk Factors of Cardiovascular Diseases in the Primary Consultation of Patients", approved by the Provost for Academic Affairs of KMU NJSC, April 28, 	
15	2023 Overtigeneire englysist	2
15.	Questionnaire analysis: - Evaluations of residents' satisfaction with the quality of the educational process, considered at the meeting of the Commission for Quality Assurance at the School of Residency and Professional Development, Minutes No. 3, dated April 06, 2023, signed by the Chairperson, Zhusupova A.M.	3
	- Satisfaction of employers of graduates of the 2021-2022 academic year, considered at the meeting of the Commission on Quality Assurance at the School of Residency and Professional Development, Minutes No. 2, dated February 02, 2023, signed by the Chairperson, Zhusupova A.M.	
	- Analysis of the survey of residents of the KMU NJSC in "Adult and Pediatric Gastroenterology" specialty for the 2021-2022 academic year, conducted upon completion of training in each discipline; discussed at the	
	meeting of the Department of Internal Diseases, Minutes No. 10A, dated June 29, 2022	
16.	Materials of the final control:	8
	 Specification of test assignments of the 2nd stage of final control for 2nd-year residents of 7R01104 "Adult and Pediatric Gastroenterology", approved at the meeting of the Department of Internal Diseases, Minutes No. 2, dated September 05, 2022 Clinical task for the final control in the form of a written assignment on the Session platform for "Gastroenterology" module for 1st-year residents of 7R01104 - Adult and Pediatric Gastroenterology module; the materials of the final control were approved at the meeting of the Department of Internal Diseases, Minutes No. 2, dated September 05, 2022 Clinical task for the final control in the form of a written task on the Session platform on "Nutritionology" discipline for 1st-year residents of 7R01104 - Adult and Pediatric Gastroenterology; materials of the final control were approved at the meeting of the Department of Internal Diseases, Minutes No. 2, dated September 05, 2022 Clinical task for the final control in the form of a written task on the Session platform on "Nutritionology" discipline for 1st-year residents of 7R01104 - Adult and Pediatric Gastroenterology; materials of the final control were approved at the meeting of the Department of Internal Diseases, Minutes No. 2, dated September 05, 2022 Clinical task for the final control in the form of a written assignment on the Session platform for "Gastroenterology" module ("Ultrasound Diagnostics" discipline) for residents of the 1st year of study specialty 7R01104 – Gastroenterology adult, children Review (external) of test tasks for final control in "Adult Hepatology" discipline for residents of 7R01104 "Adult and Pediatric Gastroenterology" for 2022-2023 academic year from the Head of the Hepatological Center of the OCH SME, Chief part-time hepatologist of the Karaganda region, gastroenterologist of the highest category, Lozinskaya I.A., August 31, 	
	2022 - Review (internal) of the materials of the final control on "Hepatology" module for 2nd-year residents in 7R01104 "Adult and Pediatric Gastroenterology", Professor of the Department of Internal Diseases of the	

	KMU NJSC, Can. M. Sc., Alina A.R.	
	- Extract from the minutes of the meeting of the Department of Internal	
	Diseases, Minutes No. 2 dated September 05, 2022. On the discussion of	
	the forms and materials of the final control of residents in the specialties of	
	the residency.	
	- Extract from the minutes of the meeting of the Council of the School of	
	Residency and Professional Development, Protocol No. 2 dated September 08, 2022	
	- Review of clinical tasks for the final control of "Gastroenterology"	
	module for residents of "Adult and Pediatric Gastroenterology" specialty	
	for 2022-2023 academic year, Head of the Gastroenterology Department of	
	the OCH SME of Karaganda, Chief part-time gastroenterologist of the DH	
	of KO, Kabdulina N.V., September 02, 2022	
17.	"Peer Review methodology in ensuring the quality of higher medical	1
	education". Methodological recommendations/ KMU, Karaganda, 2022, 77	
	pages. Riklefs V.P., Laryushina Ye.M., Kaliyeva Sh.S., Turgunova L.G.,	
	Muldayeva G.M., Sheryazdanova D.N., Approved at the meeting of the	
	Senate of the KMU NJSC dated December 29, 2022, Minutes No. 5	
18	The work plan of the Journal Club of the Department of Internal Diseases	1
	for 2022-2023 academic year, reviewed and approved at the meeting of the	
	Department of Internal Diseases, Minutes No. 2, dated September 05, 2022	
19	The program of the School of the young internist of the Department of	1
	Internal Diseases for 2022-2023 academic year, reviewed and approved at	
	the meeting of the Department of Internal Diseases, Minutes No. 2, dated	
	September 05, 2022	