

Accreditation Council of the
Eurasian Center for Accreditation
and Quality Assurance in
Higher Education and Health Care
May 26, 2023

**REPORT
OF THE EXTERNAL EXPERT COMMITTEE
FOLLOWING THE EVALUATION
OF 7R01106 - PEDIATRIC SURGERY
EDUCATIONAL PROGRAM
OF KARAGANDA MEDICAL UNIVERSITY
NON-COMMERCIAL JOINT-STOCK COMPANY
FOR COMPLIANCE WITH ACCREDITATION STANDARDS FOR
POSTGRADUATE EDUCATION PROGRAMS
(RESIDENCY SPECIALTY) OF MEDICAL EDUCATIONAL
ORGANIZATIONS**

period of external expert evaluation: May 24-26, 2023

Karaganda, 2023

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LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Designation
EEC	External Expert Committee
ECAQA	Eurasian Centre For Accreditation and Quality Assurance in Higher Education and Health Care
NJSC	Non-Commercial Joint Stock Company
Dr.M.Sc.	Doctor of Medical Sciences
PhD	Doctor of Philosophy
Can.M.Sc.	Candidate of Medical Sciences
EP	Educational Program
IQAA	Independent Quality Assurance Agency for Education
SCES	State Compulsory Educational Standard
UHEMS	Unified Higher Education Management System
MES RK	Ministry of Education and Science of the Republic of Kazakhstan
HEI	Higher Education Institution
KMU NJSC	Karaganda Medical University Non-Commercial Joint-Stock Company
HETP	Higher-Education Teaching Personnel
ESG	European Standards and Guidelines
TC	Thin Client
PC	Personal Computer
PRP	Personalized Resident Plan
IEP	Individual Education Plan
CED	Catalogue of Elective Disciplines
FN	Full Name
MH	Ministry of Health Care
WC	Working Curriculum
AC	Academic Committee
AP	Academic Policies
NCIE	National Centre for Independent Examinations
OSCE	Objective Structured Clinical Examination
DAA	Department of Academic Affairs
FAC	Final Attestation Commission
FA	Final Attestation
PS	Principal Subject
MPI	Medical Preventive Institution
PBL	Problem-Based Learning
RBL	Research Based Learning
AGREE	Appraisal of Guidelines for Research and Evaluation
L&R	Laws and Regulations
WOS	Web of Science
RW	Research Work
BS	Basic Standard
IS	Improvement Standard
TRA	Tolerance Rating Assessment
FCE	Final Control Evaluation
AIS	Automated Information System
SOP	Standard Of Operational Procedure
EPC	Educational Programs Committee

TM	Teaching Materials
SRPE	School of Residency and Professional Education
IHIS	Integrated Healthcare Information System
SME	State Municipal Enterprise
CSET	Centre for Simulation and Educational Technologies
TB	Transdisciplinary Board
BS	Board of Studies
CID	Curriculum & Instruction Department

ECAQA

1. Composition of the External Expert Committee

In accordance with ECAQA Order No. 15 dated May 11, 2023, an External Expert Committee (hereinafter - EEC) has been formed to conduct an external evaluation of 7R01106 - "Pediatric Surgery" residency educational program in the period of May 24-26, 2023 with the following composition:

No.	Status as part of the EEC	Full name	Academic degree/title, function, place of work/place of study, course, specialty
1	Chairperson	Kudabayeva Khatimya Ilyasovna	Associate Professor, Can.M.Sc., Professor of the Department of Internal Medicine No.1 of Marat Ospanov West Kazakhstan Medical University, NJSC
2	Foreign expert	Ryzhkin Sergey Alexandrovich	Dr. M.Sc., Head of the Department of Radiotherapy and Radiology named after Academician A.S. Pavlov, Head of the Department of Further 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	Foreign expert	Afrikyan Shushanik Gevorgovna	PhD in Pharmacy/Candidate of Pharmaceutical Sciences, Associate Professor of the Department of Pharmacy, Head of Computerized Examination Organization Department of Yerevan State Medical University named after M. Geratsi, Republic of Armenia
4	Academic expert	Urazova Saltanat Nurgozhayevna	Dr.M.Sc., Head of the Department of Family Medicine No. 3 of Astana Medical University, NJSC
5	Academic expert	Shabdarbayeva Dariya Muratovna	Dr. M.Sc., Professor, Head of the Department of Pathological Anatomy and Forensic Medicine named after Prof. Yu.V. Pruglo of Semey Medical University, NJSC
6	Academic expert	Ramazanova Raigul Mukhanbetovna	Dr.M.Sc., Professor of the Department of Internal Medicine, S.D. Asfendiyarov Kazakh National Medical University, NJSC
7	Academic expert	Zhumalina Akmaral Kanashevna	Dr.M.Sc., Professor, Head of the Department of Pediatric Diseases with Neonatology of Marat Ospanov West Kazakhstan State Medical University, NJSC
8	Academic expert	Tuleutayeva Raikhan Yesenzhanovna	Can.M.Sc., Head of the Department of Pharmacology and Evidence-Based Medicine, Semey Medical University, NJSC
9	Academic expert	Baigozhina Zaure Alpanovna	Can.M.Sc., Dean of the School of Nursing, Astana Medical University, NJSC
10	Academic expert	Ramazanov Sholpan	Can.M.Sc., Acting Associate Professor of

		Khamzayevna	the Department of Clinical Disciplines, Al-Farabi Kazakh National University
11	Academic expert	Yeralieva Bibikhan Abdaliyevna	Can.M.Sc., Assistant of the Department of Clinical Pharmacology of S.D. Asfendiyarov Kazakh National Medical University, NJSC
12	Academic expert	Isposunova Gulnara Akhmetkazyevna	Urologist of the highest qualification category, Assistant of the Department of Urology, S.D. Asfendiyarov Kazakh National Medical University, NJSC
13	Academic expert	Doshakanova Assel Baidauletovna	Can.M.Sc., Head of the Postgraduate Education Department of Kazakh Order of the “Badge of Honor” Eye Diseases Research Institute, LLP
14	Academic expert	Dosanova Asem Kalelovna	PhD, Associate Professor, Department of Pediatric Surgery, Astana Medical University, NJSC
15	Employers' representative	Daniyarova Bayan Lashinovna	Deputy Director for Strategic Development, Regional Clinical Hospital, Department of Health Care of Karaganda region
16	Representative of doctoral students	Orazbay Aknur Daurenkyzy	First-year doctoral student in Biology specialty of Ye.A. Buketov Karaganda University, NJSC
17	Residents' representative	Kurak Aidana	First-year resident in Adult and Pediatric Endocrinology specialty at Astana Medical University NJSC

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

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

The EEC report contains the evaluation of 7R01106 “Pediatric Surgery” educational program for compliance with the Standards for Accreditation of Postgraduate Education Programs (Residency Specialty) of Medical Education Organizations and Conclusions (hereinafter - Accreditation Standards), EEC recommendations for further improvement of approaches and conditions for implementation of the above educational program and the recommendations for the ECAQA Accreditation Council.

2. General Part of the Final Report

2.1 Presentation of 7R01106 “Pediatric Surgery” Educational Program

Name of organization, legal ownership form, BIN	“Karaganda Medical University” Non-Commercial Joint-Stock Company, BIN 190140033600
Management authority	Ministry of Health Care of the Republic of Kazakhstan

Full name of the first executive	Turmukhambetova Anar Akylbekovna
Date of establishment	January 20, 1950
Location and contact details	40 Gogol str., Karaganda city, 100008, Karaganda region, Republic of Kazakhstan, phone 8-7212-50-06-31
State license for educational activity in residency (date, number)	KZ32LAA00016018 dated May 06, 2019
Year of the accredited educational program (EP) implementation	2016
Length of schooling	3 years
Total number of graduates since EP implementation	1
Number of residents at the EP from the beginning of the current academic year	9
Full-time teachers/ part-time teachers involved in the implementation of the EP, including % of academic degree holders rate	Total number of teachers - 7, including full-time - 1, part-time - 6 Academic degree holders rate, % - 29% Categorization, % - 100%
Web-site Instagram Facebook with active pages	@officialkmu

The 7R01106 “Pediatric Surgery” residency educational program (EP) has been offered since 2011-2012 academic year, and this educational program was subjected to specialized accreditation in 2016. EP accreditation was conducted by IQAA; SA 0094/5, EP accreditation validity period: from September 26, 2016 to September 26, 2021. The Head of 7R01106 “Pediatric Surgery” EP is Dr.M.Sc. Professor Askarov M.S.

In the current academic year, 9 residents are studying on 7R01106 “Pediatric Surgery” EP: 6 residents in the third year of training, 3 in the second year of the study. 1 graduate of the residency program in the "Pediatric Surgery" specialty has been employed, which is 100% for the reporting period.

Study on 7R01106 “Pediatric Surgery” residency EP is carried out by Dr.M.Sc., Professor Askarov M.S. (Cold Surgery, Pediatric Urology, Surgical Infection of the Skin, Subcutaneous Fat, Bone and Joint System, Surgical Infection of the Thoracic and Abdominal Cavity, Outpatient and Polyclinic Surgery, Emergency Surgery, Endoscopic Surgery, Traumatology, Thoracic Surgery, Neonatal Surgery, Diagnosis and Surgical Treatment of Congenital Malformations of the Genitourinary System, Modern Treatment Aspects in Pediatric Combustiology), and in the related disciplines, the Associated Professor Bismildin Kh.B. (“Pediatric Surgery” in general surgery, pediatrics, neonatology).

According to SCES 2022 (Order No. 63 dated July 04, 2022) <https://adilet.zan.kz/rus/docs/V2200028716> the resident is on duty 4 times a month (day, night duty), participates in diagnostic and therapeutic activities, which is reflected in the evaluation sheets of each resident's portfolio. The portfolios of each resident in the 7R01106 “Pediatric Surgery” specialty sufficiently reflect the amount of work done for the 2022 - 2023 academic year. Moreover, each resident

Since the beginning of 2022 - 2023 academic year according to the personalized work plan three third-year residents: Kabidenova Yedige, Omarova Alexandra and Kabbasova Olzhas - have undergone field residency within the framework of academic mobility in Pavlodar Regional Pediatric Hospital in the period from September 05, 2022 - February 16, 2023. Order No. 182po dated September 05, 2022 <https://disk.yandex.ru/i/tJQiTLOCxTR1Cw> .

From September 28 to October 5, 2022, the second-year resident Iskakova Aizhan Serikovna completed the “Improvement of Pediatric Rehabilitation Service” seminar program in the amount of 2 credits/60 hours. https://disk.yandex.ru/i/t6KM_7XPYvJjlw.

The second-year resident Rustamkhanova D. within the framework of the research conference dedicated to the 90th anniversary of the Institute of Pediatrics and Children's Surgery, Almaty, October 6-7, 2022 made a report: “Balalarda termiyalyk zharaqattardan keingi kuyiktik zhara aimagyn ashyk turde zhurgizu adisinin ornyn”. <https://disk.yandex.ru/i/51NF16k6AyHDQQ>; third-year resident Kulzhanov Turabek Yergeshevich also took part in the conference with the report “Introduction of right posterior thoracotomy for esophageal atresia”. https://disk.yandex.ru/d/dVTR7ymaT_Zatw.

The residents Tikhonova Yu.I., Iskakova A.S., have conducted sanitary-educational work on the topic "Child Injuries" in 2022 with patients' parents of OCCH polyclinic patients. (<https://disk.yandex.ru/d/Ga5nHDFs0ktcvg>).

2.2 Information on Previous Accreditation

The previous accreditation of Karaganda Medical University NJSC for 7R01106 (6R113300) “Pediatric Surgery” specialty was conducted by the Independent Quality Assurance Agency in Education (IQAA). The Certificate of International Accreditation SA No. 0094/5 dated September 26, 2016 with reissuance on October 09, 2020 valid for a period of time

The Pediatric Surgery educational program was included in the register of the Unified Higher Education Management System (hereinafter - UHEMS) of the Ministry of Education and Science of the Republic of Kazakhstan. http://esuvo.platonus.kz/#/register/education_program/application/24235.

2.3 Opinion Following the Self-Evaluation Report Reviewing of 7R01106 “Pediatric Surgery” Educational Program for Compliance with Accreditation Standards for Postgraduate Education Programs (Residency Specialty) of Medical Educational Organizations and Conclusions

The self-evaluation report of the residency educational program in the 7R01106 “Pediatric Surgery” specialty (hereinafter referred to as the Report) is presented on 119 pages of the main text, appendices on 31 pages, copies or electronic versions of 2 documents located at the following link <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ>

The Report is characterized by completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for conducting self-evaluation of the educational program provided to the educational organization by the accreditation center - ECAQA, as well as internal unity of information. The Report is accompanied by a cover letter signed by the President, Turmukhambetova A.A., which confirms the reliability of quantitative information and data included in the self-evaluation Report.

The Report has a list of 13 members of the internal self-evaluation committee with the indication of responsibility of each employee, information about the representative of the organization responsible for the self-evaluation of the educational program - Askarov Meirambek, Dr.M.Sc., Professor, Head of 7R01106 “Pediatric Surgery” educational program.

Self-evaluation of 7R01106 “Pediatric Surgery” educational program was carried out on the basis of the order of the University President No. 274 dated September 16, 2022 “Approval of the Working Group for the Self-Evaluation of Educational Programs”.

The Report was reviewed by the Accreditation Expert: PhD Dosanova Asem Kalelovna, and the reviews noted 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-evaluation Report.

In all standards the real practice of the University on resident preparation specialized in 7R01106 "Pediatric Surgery" with regard to the beginning of students' enrollment in 2019, reasoned data, examples of implementation of educational program objectives, national and international events, methodological support, confirming compliance with the requirements of the accreditation standards

are given in all standards. The description in the self-evaluation Report is sufficiently complete and up-to-date in terms of the number of residents, teachers, administration, information on selection and admission, academic achievement, knowledge and skills evaluation results, material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, and 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 literate language, the wording for each standard is clear and understandable and described in accordance with the standards criterion, tables are referenced in the text and numbered cross-numbered.

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

3. Description of the External Expert Evaluation and Conclusion

External expert work within the framework of evaluation of 7R01106 “Pediatric Surgery” educational program was organized in accordance with the Guidelines for external evaluation of educational organizations and educational programs of ECAQA and according to the program approved on May 11, 2023 by the ECAQA General Director, Sarsenbayeva S.S. and agreed with the President of Karaganda Medical University NJSC, Turmukhambetova A.A. The dates of the visit to the organization: May 24 - 26, 2023.

The external evaluation is aimed at validation of the self-evaluation Report data and verification of indicators indicating the degree of compliance with the criteria of accreditation standards.

The sequence of the visit within 3 days is presented in detail in the Visit Agenda (hereinafter referred to as the Agenda), which is available in the documentation of the accreditation center. The Agenda provides evidence of implementation of all planned activities in the external peer review process.

In order to obtain objective information, the following methods and their results were used by EEC members:

- interview with management and administrative staff - 7 people;
- interviews with residents - 84 people;
- review of the website <https://www.qmu.edu.kz/ru>;
- interviewing 40 staff members, 35 faculty members and tutors;
- questionnaire survey of teachers and residents - 32 and 56, respectively;
- observation of resident training: attendance of 2 practical classes: on “Cardiac Conduction Disorder” topic of “Intensive Therapy in Cardiology” discipline, the class was conducted by Dr. Aisanov Bauyrzhan, Can.M.Sc., Associate Professor of Emergency Medicine Department of Anesthesiology and Resuscitation, with the residents of 10-001 group of “Pediatric and Adult Anesthesiology and Resuscitation” specialty on the basis of the clinic of KMU NJSC and on the “Premedication in Cardiac Surgery in Cardiac Surgery Patients” topic of “Anesthesia and Intensive Care in Cardiac Surgery, Perfusiology” discipline for 8-003, 8-005 groups (total number of 5 people) on “Pediatric and Adult Anesthesiology and Resuscitation”, the lesson was conducted by the Associate Professor of the Department of Emergency Medicine, Anesthesiology and Resuscitation, Mugazov Miras Mugazovich, on the basis of “Regional Clinical Hospital” State Municipal Enterprise clinic;
- review of resources in the context of meeting accreditation standards: 2 practice/clinical educational bases were visited, including the clinic of Karaganda Medical University NJSC at the following address: 3, Ardak St. and 10A, Nazarbayev Ave. in Karaganda, where training on 3 accredited educational programs is conducted with the participation of 12 full-time/ part-time faculty members;

- study of training and methodological documents in the amount of 73 items both before and during the visit to the organization (the list of studied documents is in **Appendix 2**).

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

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

No.	Function	Quantity
1	Chairperson of the Board – President of Karaganda Medical University NJSC	1
2	Vice-President for Academic Affairs	1
3	Vice-President for Scientific and Clinical Work	1
4	Head of Career Development	1
5	Deans of Schools	6
6	Director of the Institute of Life Sciences	1
7	Heads of Educational Programs	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 Resources Management	1
11	Chief Specialist of the Center 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	Higher-Education Teaching Personnel	35
16	Graduates (residency)	39
17	Employers (residency)	23

The sequence of the visit during May 24-26, 2023 is detailed in the Visit Agenda, which is on file with the accreditation center and attached to this Report.

On the first day of the visit - on May 24, 2023, a meeting was held with members of the Board of KMU NJSC with Toleubekov K.K., Turgunov Ye.M. Toleubekov K.K., the Vice-President for Academic Affairs, and the Vice-President for Scientific and Clinical Work were introduced to the EEC members and given information about the purpose of the visit. The Vice-Presidents voiced the strategy of postgraduate education development, including residency programs, which indicate a clear vision of the University and interest in improving the residency programs taking into account the needs of practical health care. The experts asked questions about the academic load of faculty members, clinical tutors. This interview provided evidence that the mission of the residency program and the mission of the University are fully consistent with each other.

The issues of internal quality assurance policy in higher and postgraduate education, planning, monitoring of implementation, provision of resources, evaluation of educational programs, work with departments; issues of clinical resources for resident training, scientific directions of the University, motivation systems and participation in RW of teachers of residency departments were discussed. EEC members met with employees of the departments responsible for enrollment and employment of graduates with the Head of Career Development Department, Tokzhumanova G.M., Dean of the School of Residency, Tashkenbayeva V.B., Dean of Nursing Education, Yestemesova K.A., Director of the Institute of Life Sciences, Klyuyev D.A., the questions about the formation of the state order for specialties, selection and enrollment procedures, paid training, career guidance, feedback with University entrants and applicants, work with departments, monitoring the employment of graduates, satisfaction with the quality of graduate training were discussed.

The interviews with the Heads of educational programs allowed to specify the information about the distribution of working time of the HETP, the possibility of realization of creative potential, the

equipment of the material and technical base of the departments that provide training on accredited educational programs of residency, as well as to evaluate the mechanisms of involvement of residents in the research process and their motivation, for the implementation of leadership in science at all levels of training.

The interviews with members of the Academic Senate Committee, the School's Quality Assurance Committee by level of education (master's, PhD, residency) allowed the experts to find out how the Internal Quality Assurance Policy functions in postgraduate education in the context of ESG. The issues of monitoring of educational programs by all stakeholders were discussed. However, there was no information on the mechanisms for evaluating the validity and reliability of resident evaluation methods.

The following objectives of the Dean's Office are also analyzed: formation of the state order for specialties, admission of residents, provision of resources, and evaluation of residency educational programs. It is established that the Dean's Office closely cooperates with departments teaching residents. The resources of the residency program are provided by cooperation with 52 foreign partners. Within the framework of academic mobility of HETP and students, work is being carried out to develop partnerships with foreign HEIs, thus, during the reporting period the HETP conducting training on accredited programs visited the Russian Federation, South Korea, Lithuania.

Meetings with employees of the Department of Human Resources Management and the Center for Simulation and Educational Technologies; with employees of the Department of Economics and Finance made it possible to clarify the situation about the average age of HETP (52 years), the academic degree holders rate of department staff, the percentage of HETP who speak foreign languages, as well as methods of encouraging HETP for scientific activities, the availability of publications at the expense of KMU NJSC rating magazines.

University library was visited. The total area of the library is 1526 sq. m., the book storage area is 941.6 sq. m. The number of seats in the reading rooms is 443 seats. The libraries include: the department of acquisition and bibliography and the department of maintenance of scientific and educational literature (consists of a subscription of scientific literature, two subscriptions of educational literature, a reading room and a hall of periodicals, a hall of electronic resources, and an interactive hall). The library's computer fleet consists of 113 computers, including 88 thin clients (TC), 21 personal computers (PCs), and the entire computer fleet is connected to the Internet. The Wi-Fi zone is distributed throughout the library. There are 2 scanners installed for users in the electronic resources hall. The interactive hall is equipped with a short-focus projector. For students, there is a Researcher's Hall equipped with 15 computers connected to the Internet, which allows them to have access to all information resources of the University. Service of users in electronic halls is carried out from Monday to Friday from 09-00 to 20-00, on Saturday from 09.00 to 18-00. For the implementation of the educational process in "Adult and Pediatric Endocrinology" specialty, the book supply of basic and additional literature is 100%. Of these, the total number of textbooks, including in the Kazakh language, is 1,314 copies, scientific literature – 785 copies, periodicals – 4, electronic publications – 7.

Sports hall of the University and the Student Service Center were visited. In the Student Service Center of KMU NJSC, a student can obtain all the necessary documents signed with an electronic digital signature through a personal account on the portal cos.qmu.edu.kz, by pre-ordering the necessary service. The result of the service is sent to the student's e-mail.

In order to evaluate compliance with Standard 6, during the visit to the Department of Academic Affairs the experts were shown the Platonus distance learning platform and the Session in-house development of the KMU NJSC that is integrated with the Antiplagiarism anti-plagiarism system, as well as how they are used in the training and evaluation of residents.

The Center for Simulation and Educational Technology was visited in the afternoon. The CSET area is 1300 sq.m., and it has 42 classrooms. The Center is equipped with more than 400 types of simulation equipment, including 57 high-tech simulators. Visiting the Center is possible within the framework of independent work of the resident by appointment in a specially designed form. There is an extensive amount of simulation equipment available for surgical specialties intended to practice

basic practical skills, however, there is limited simulation equipment available for residents to practice their skills.

Thus, the EEC was able to validate the data of the self-evaluation Report of the educational program according to standards 1, 3,7,8,9 and partially 2, 5 and 6 during the first day of the visit by the expert.

On the second day of the visit on May 25, 2023, in order to evaluate the resources ensuring effective implementation of the educational program, the experts visited the clinical bases of the departments. So experts Shabdarbayev D.M., Isposunova G.A., Dosanova A.K. visited 2 bases of practice/clinical training, including the clinic of KMU NJSC at the following address: Ardak, building 3, where training is conducted on 3 accredited educational programs: “Pediatric and Adult Anesthesiology and Resuscitation”, “Pediatric Surgery”, “Adult and Pediatric Urology and Andrology”; and the “Regional Clinical Hospital” SME at the address: 10A Nazarbayev Ave., Karaganda, where 2 educational programs are taught: Pediatric and Adult Anesthesiology and Resuscitation” and “Adult and Pediatric Urology and Andrology”. At the clinical bases meetings with the Heads of residency educational programs on 7R01106 “Pediatric Surgery” specialty, Askarov M.S., 7R01102 “Adult and Pediatric Anesthesiology and Resuscitation”, Vasilyev D.V. and 7R01128 “Adult and Pediatric Urology and Andrology”, Asamidanov E.M. were held.

According to the Personalized Resident Plan (PRP), residents receive an educational-methodical complex of the discipline with the specified learning outcomes of the educational program. Revision of the thematic plan, with the inclusion of current topics, development of the catalog of elective disciplines is carried out annually. It was noted that the CED for 7R01106 "Pediatric Surgery" specialty might contain duplication of topics, therefore, it was recommended to develop electives in collaboration with related principal subjects or core disciplines, which will allow expanding the possibilities of the educational process.

The material and technical support of departments and clinical bases, classrooms, work and recreation places of residents were surveyed. It was established that the clinic is equipped with modern therapeutic and diagnostic equipment and has its own simulation equipment for practicing practical skills of endovideosurgery. The residents have free access to the provision of diagnostic and treatment activities, including formally the full name of residents is indicated in the operative plan (Fig.1). Access to the KMIS and DAMU electronic systems is self-administered, provided the resident physician be employed, or using the login/password of a clinical tutor. Personal computers have been allocated in the resident's room for residents to access the KMIS and DAMU.

According to the PRP, the resident physician participates in day/night duty, which is reflected in their portfolio along with the total number of mastered skills, assistantships, independently performed manipulations and surgeries.

There is a designated room for residents' meals and recreation. There is a checkroom for trainees on the first floor of the MPI.

The reviewers examined documentation for the 7R01106 - Pediatric Surgery educational program at the link under <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ>, that confirmed compliance with accreditation standards, **including documentation of 2 faculty members and 7 resident tutors and as requested by EEC members.**

The experts attended the practical training of the 2nd year pediatric surgical residents (group 9-001), Endoscopic Surgery module, topic #9: “Varicocele. The technique of performing laparoscopy”. The class was held on the basis of KMU NJSC clinic, the teacher - Professor of the Department of Surgical Diseases, Askarov M.S. The theoretical part is discussed in RBL format: a critical evaluation of a clinical protocol for the diagnosis and treatment of varicocele based on the AGREE II algorithm. In the training room of the department, there is a simulation training laparoscopic rack, where the residents use silicone breadboard models to practice the skills of working with manipulators, applying clips, isolating vessels, suturing. The environment is as close to real life as possible.

№	Ф.И.О ПАЦИЕНТА	Название операции	Бригада Хирургов
1.	Кудайбергенов А	Тонзиллотомия	1/1 Есипов, Д.К
2.	Горошкин 1974	ФЕЗУ	1/2 Есипов
3.	Яригина 1993	ПРПН	1/3 Есипов
4.	Ахматов 1954	Земорродотомия	2/1 Аскаров/Аманжол (р.)
5.	Зрицов 1967	Земорсечение пластика	3/1 Бадыров/Самиев (р.)
6.	Мелтауов 1960	БЧУР АГПН	3/2 Аскаров/Аманжол (р.)
7.	Самиев 1970	Кистэктомия	3/3 Зубков
8.	Базарбаева 1962	ВЛХЗ	1/1 Аманжол/Аманжол (р.)
9.	Самиев 1966	ВЛХЗ	2/1 Бадыров
10.	Надильба 1951	Земорсечение пластика	2/2 Аманжол/Аманжол (р.)
11.	Зрижин 1949	Земорродотомия	3/1 Аскаров/Аманжол (р.)
12.	Вашев 1980	Операция Бергмана	2/2 Самиев
13.	Матин 1961	БЧУР АГПН	2/3 Аскаров/Аманжол (р.)
14.	Касенов 1965	Лапароскопическая	1/4 Аскаров/Аманжол (р.)
15.	Бамандин 1981	Пластика ПМС	3/1 Аманжол/Аманжол
16.	Белевцев 21.01	Орхидопексия справа	4/1 Аскаров/Аманжол (р.)
17.	Домов 21.01	РПЗ	4/2 Аскаров/Аманжол (р.)
18.	Замаров 15.1	Маршара	4/3 Аскаров/Аманжол (р.)
19.	Ернек Б.А.	Устранение гипертонии	4/4 Аскаров/Аманжол (р.)

Figure 1 - Operative plan

In the afternoon, there were interviews with students, faculty, alumni, and employers of the residency educational programs.

In general, all residents noted the sufficiency of library and electronic resources, the availability of communication with HEI staff and representatives of practical health care, the conduct of research projects and the possibility of visiting residency in the framework of the educational program in the relevant medical institutions. The residents demonstrated their commitment to the organization of education, were active in answering questions from external experts, and showed their judgment on the organization of training, evaluation of their

skills, advisory support. In conversation with students almost all residents noted satisfaction with the management of the educational process, material and technical conditions. Among the participants of this interview were representatives of trainees who are members of the Residency School Council, confirming the participation of stakeholders - students in the creation and revision of residency educational programs. From the possible improvements in the educational process, the students themselves note the limited academic mobility and show a desire to exchange experience and knowledge not only within the Republic of Kazakhstan, but also in the countries near and far abroad.

The interviews with faculty members took place in a trusting conversation. Almost all employees of the University show satisfaction with working environment and their pay. Over the last year, there has been an increase in labor remuneration due to the inclusion of the therapeutic rate in the basic rate of a lecturer. Taking into account the categorization of HETP also has a motivational impact, as the contribution to educational, scientific and educational activities is differentially evaluated.

The HETP of the KMU NJSC implements 15 scientific and technical projects, the introduction of the position of Research Assistant, Associate Research Professor and Research Professor allows to shift the emphasis on research work by limiting the teaching load from 650 hours to 200 hours per year. The system of incentives for HETP at KMU NJSC also includes bonuses for the publication of articles in rating journals included in the Scopus and Web of Science databases. The experts found that faculty members initiate RW topics for residents, stimulate the need for additional training and independent work with literature and medical documentation.

One of the important tools of accreditation review is conducting interviews with employers - representatives of practical health care who are not affiliated with KMU NJSC. In the course of interviews, it was found out that in general the employers are satisfied with the competencies of graduates. The interviews with employers for all KMU NJSC residency programs applied for accreditation 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 of KMU NJSC, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through tutoring, providing the department and residents with the necessary resources for practical training and formation of clinical thinking, about the problems of mutual cooperation, and the problems of the development of clinical skills. The employers have expressed interest in developing communication skills in residency graduates.

Thus, the EEC was able to validate the data from the self-evaluation Report of the educational program on standards 2, 3,4,5,6,7,8,9 during the second day of the experts' visit.

On the **last day of the visit** to the organization, a meeting of the EEC members on the results of the external evaluation was held. The final discussion of the results of external evaluation of the educational program, study of documents, results of interviews, interviews, and questionnaires was held. The EEC members started designing the final report of the EEC. The results of the external evaluation were summarized. The experts individually filled in the "Profile of quality and criteria of external evaluation of the 7R01106 "Pediatric Surgery" educational program for compliance with the ECAQA Accreditation Standards". No objections were made by EEC members. Recommendations for the improvement of the educational program were discussed and the Chairperson, Kudabayeva Kh.I. conducted the final open voting on recommendations for the ECAQA Accreditation Council on the period of accreditation for 5 years.

Comfortable conditions were created for the work of EEC; access to all necessary information and material resources was arranged. The Committee notes a high level of corporate culture of the University, a high degree of openness of the staff in providing information to the EEC members. In general, it can be noted that in Karaganda Medical University NJSC favorable environment has been created for the implementation of educational process, creative potential of HETP and adequate training of medical professionals, according to the requirements of modern society.

During the questionnaire survey of residents, 88.89% of residents evaluated the work of the External Expert Committee on Accreditation as positive, 9.52% evaluated the work of the External Expert Committee on Accreditation as satisfactory. The majority of respondents (85.71%) believe that accreditation of educational organization or educational programs should be conducted.

According to 90.63% of faculty members, the questionnaire survey conducted by ECAQA is useful for developing recommendations to improve key areas of the University's activities and educational program. 40.63% of the HETP noted that they were personally involved in the preparation events for the EP accreditation as a member of the internal self-evaluation committee, 9.38% were engaged in technical support before the ECAQA EEC meeting, 31.25% wrote sections of the self-evaluation Report, 50% were involved in collecting information for appendices to the self-evaluation Report. 6.25% of HETP noted that they were not involved in the preparation of the HEI for accreditation and 3.13% found it difficult to answer. On the question "Would you personally like to become an expert on accreditation of ECAQA and quality assurance of education and health care" - 28.13% expressed a desire, 18.75% were not interested in this matter, 18.75% have already participated in the work of accreditation committees of this accreditation center and 34.38% of HETP had difficulties with the answer.

75% of HETP believe that the work of the EEC on accreditation can fully cover all issues related to the quality of implementation, as the visit of the committee is preceded by the stage of program self-evaluation and Report writing. 53.13% of the HETP connect this with the fact that the committee examines all the main processes of program implementation. 40.63% believe that it depends on the fact that the Agenda of the committee visit included interviews and surveys with stakeholders that allowed drawing conclusions about the quality of education, 37.5% of respondents believe that the Agenda of the committee visit is rich and covers all key aspects of education and 15.63% 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 the Standards of Accreditation, HETP noted: interview with the management - 3.13%; interview with the Head of EP - 3.13%; interviews with students - 15.63%; interviews with employers' representatives - 6.25%; visits to internship sites - 9.38%; reviewing the program self-evaluation Report - 3.13%; attendance of practical classes - 3.13%. The 56.25% note that a single activity cannot solve, but only all of the above listed in the complex.

At the end of the visit Agenda the Chairperson of the EEC announced recommendations on the findings of the external evaluation within the framework of specialized accreditation for the management and staff of the educational organization.

Conclusion of the external evaluation:

The members of the EEC carefully studied and evaluated the main indicators of the accredited educational program. Analyzed the information obtained by the expert during the study of the self-evaluation Report, during the preparation of a written review with recommendations for improvement, the implementation of the activities of the **visit Agenda of the KMU NJSC from May 24 to 26, 2023**. All obtained information was compared with the data of the self-evaluation Report, validation of information on each criterion of the accreditation standards and verification of indicators of the appendix to the self-evaluation Report was carried out, which allowed to make sure that the information provided by the University and supporting documents for compliance with the ECAQA Accreditation Standards are reliable.

Prior to visiting the organization by reviewing the report appendices provided by the postgraduate department and accessing the 65 appendices on google drive at <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ>, the experts reviewed 73 appendices with documents and visually inspected the documents, as well as during the external expert evaluation the EEC members examined the main documents (mission, strategic plan up to 2025, discipline TPs, syllabuses, control instruments, checklists, residents' portfolios, personalized resident plans of different years of training, publications of teachers, rules of enrollment in the residency, personnel policy, internal quality assurance system program, educational resources were reviewed directly at the clinical bases of the departments (lecture rooms, office equipment available for residents to work with literature, patient documentation, educational and methodological literature), resources on residency on the website of KMU NJSC , which allowed to identify the compliance of the activities of the educational organization with the basic standards of accreditation.

Accredited educational program, 7R01106 “Pediatric Surgery” is developed on the basis of the current SCES in 2016, updated every year. The length of schooling is 3 years. At the present time there are 9 residents enrolled in 2020-2021, 2021-2022. All educational, methodological, personnel and resource bases are available and have been evaluated by experts for compliance with accreditation standards. Through interviews with faculty members and interviews with residents in various specialties, it was possible to determine their direct involvement in the development, evaluation of educational programs, decision-making on a number of key issues in the selection of clinical sites, elective topics, participation in appeals committees for admission and evaluation of residents, development of the content of individual resident plans and selection of tutors. The residents of the 7R01106 “Pediatric Surgery” specialty take an active part in the work of collegial bodies of the HEI.

Recommendations on improvement of activity in the field of implementation of 7R01106 “Pediatric Surgery” residency educational program for compliance with the Accreditation Standards, developed by EEC according to the results of expert evaluation, were presented at the meeting with the management on May 26, 2023.

The Agenda of the 3-day visit (May 24-26, 2023) of the external expert evaluation of the EEC has been fully accomplished. The University staff ensured the participation of all persons specified in the Agenda.

Thus, the external evaluation and the visit of the EEC members allowed verifying and validating the data of the self-evaluation Report of the residency program in full in accordance with the Regulations on the External Expert Committee, Guidelines for the external evaluation of the ECAQA medical education institution.

Comfortable environment was created for the work of the EEC; access to all necessary information and material resources of the accredited educational program was arranged. The experts note the high level of corporate culture and discipline of the staff responsible for postgraduate education at KMU NJSC , the high degree of openness of the staff in providing information to the members of the EEC.

4. Analysis for compliance with accreditation standards following the external evaluation of 7R01106 “Pediatric Surgery” educational program

Standard 1: MISSION AND FINAL RESULTS

Proof of compliance:

1.1 Mission Statement

The mission of the educational program (hereinafter the EP) on 7R01106 “Pediatric Surgery” specialty is “Training of highly qualified professionals able to meet the needs of society in providing medical care to pediatric surgical patients, to apply and develop advanced innovative technologies in medicine, science and practice, to use the achievements of information and communication technologies, to improve public health. The professionals must be prepared to adapt to the changing state and global health care environment, continue lifelong learning, and contribute to society”. The University is the largest medical HEI in the country, training professionals at all levels of higher and postgraduate education, in all areas of health care. The University's activities are based on the integration of academic, scientific and clinical activities to provide high-quality and modern medical care to the population and the training of professional personnel.

During the implementation of the program activities, namely, according to the results of the interview with the first Head of the organization, members of the Senate Academic Committee, the Committee on Quality Assurance of the Residency School and members of the External Expert Committee, compliance with the criteria of **standard 1** was established in interviews with residents and teachers. All participants of the educational process know the mission of the educational program, took part in the formation of proposals for the formulation of the mission, while the mission was brought to the attention of potential residents through the website, social networks, informational letters to medical organizations. The program of development of the Karaganda Medical University Non-Commercial Joint-Stock Company for the period of 5 years from 2019 to 2023, the strategic plan of the organization for 3 years, including such areas as the integration of education and science in order to form competitive professionals, which confirms the implementation of the accreditation standard and demonstrates the goals, objectives and prospects of the organization, has been reviewed. From interviews with residents, it was found that before the start of classes, the teachers inform about the mission, work plans of the educational organization, tell where to get the necessary information about the educational program, teachers, training facilities.

During the visit to the Department of Surgical Diseases of the KMU NJSC, experts noted the strengths of the educational organization in relation to the accredited educational program, 7R01106 “Pediatric Surgery”, including: clearly formulated and achievable end results of training, the competence of employees involved in the formation and implementation of the EP, the interest of stakeholders in the development of the EP; autonomy in the patient - doctor relationship, independent management of patients under the supervision of tutors, participation in surgical interventions; scientific potential of both HETP and students.

The KMU NJSC has departments that are directly related to the 7R01106 “Pediatric Surgery” educational program: the Student Service Center, the Department of Academic Affairs, the Center for Simulation and Educational Technologies, the Department of Surgical Diseases, the library, which can be marked as the best practice in education, but it is the Center of Simulation and Educational Technologies that can be identified as a potential the leading link in the training of highly professional personnel. This conclusion is made because the Center for Simulation and Educational Technologies has a staff of competent employees, tutors, a huge fleet of simulation equipment, as well as standardized patients for practicing clinical cases and, in the prospect, communication skills.

The results of studying the documentation demonstrate that the mission of the organization and the mission of the 7R01106 “Pediatric Surgery” educational program, and the educational process is built in accordance with the SCES and current laws and regulations (L&R) in postgraduate education and health care.

1.2 Competence and Professional Autonomy

Visiting the clinical base, attending open classes, meetings with teachers and residents made it possible to see that, adhering to a patient-centered approach in the clinical process, while maintaining the need for assistance; each resident has an individual level of such quality as competence. The

development of competence is formed on the basis of direct training at the workplace, where residents face clinical situations of intensive care and anesthesiological practice of various levels of complexity, adopting the experience of senior colleagues, and thereby building their own model of behavior.

To verify the **standard 1**, a meeting was held with the Chairperson of the Board - the President of the Karaganda Medical University NJSC . During the conversation, the experts asked the following questions: “How does the “Karaganda Medical University” NJSC achieve leadership in science? and “How is scientific activity stimulated in the HETP environment?”. While answering, the President of the “Karaganda Medical University” NJSC confirmed that scientific activity is one of the priority areas of the development of the KMU NJSC . For this purpose, the corresponding material and technical base is being developed: the “Institute of Life Sciences” is established and successfully operates, which has a research laboratory of collective use, a vivarium.

In 2022 the staff of KMU NJSC initiated and actively participates in 12 scientific researches financed by the Ministry of Education and Science of the Republic of Kazakhstan, in 2 projects of program-targeted financing of the Ministry of Health Care of the Republic of Kazakhstan, as well as having 52 strategic foreign partners KMU NJSC participates in a multicenter randomized double-blinded clinical trial and is the owner of two international grants. Each KMU NJSC employee who is a member of a research team can expect financial support through grant funding. And publications of research results in rating journals included in the SCOPUS&WOS database are encouraged based on the results of KPI achievement at the end of the reporting period.

When conducting a questionnaire survey of 56 residents (on the resource <https://webanketa.com/>), out of 22 questions, a number of questions focused on the quality of the educational process and educational program. It was found that 80.95% of residents would recommend to their acquaintances, friends, relatives to study in this educational organization. And 82.54% of the respondents believe that the educational program heads and faculty members are aware of the students' learning related problems. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", 96.83% of residents answered positively, 1.59% could not answer this question yet and 1.59% would like to believe so.

Interviewed 32 teachers (21 questions of the questionnaire) answered that 93.75% are satisfied with the organization of work and workplace in this educational organization. The experts determined that the organization has a healthy environment, as the Head is quite accessible to both residents and staff, responds promptly to requests and appeals through the “President's Blog” on the website <https://www.qmu.edu.kz/ru/hall/ask>. In the questionnaire, 87.5% of teachers are satisfied with the microclimate of the organization and 12.5% are partially satisfied. In the opinion of 93.75% in the organization of education, the teacher has the opportunity to be realized as a professional in his/her specialty. For the record, a total of 32 people responded (522 total in the state), with 6.25% having teaching experience under 5 years, 12.5% under 10 years, and 81.25% over 10 years.

1.3 Final Learning Outcomes

The final learning outcomes of the 7R01106 “Pediatric Surgery” residency educational program are formulated in accordance with the current SCES: there are 6 principal competencies (PC): 1 - Clinical skills; 2 - Communication; 3 - Competence; 4 - Laws and regulations; 5 - Research; 6 - Personal and professional development.

The objectives, learning outcomes of the educational program implemented by the HEI are presented in the register of UHEMS of the MES RK http://esuvo.platonus.kz/#/register/education_program/application/24235.

During the visit to the clinical sites, the syllabuses for the disciplines taught in 7R01106 “Pediatric Surgery” specialty were studied; for each discipline, learning outcomes and a list of practical skills to be possessed by the resident at the end of the discipline were developed. During interviews with students on the availability of direct interaction with patients, the opportunity to develop communication skills, satisfaction with the competence of HETP and tutors, resources for the realization of scientific potential - all respondents answered in the affirmative. In interviews with

KMU NJSC graduates, it was noted that there is a need to strengthen resident training in the area of regulatory and legal relations.

The experts have established a clear continuity between the final results of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 60 additional education programs posted on the website <https://www.qmu.edu.kz/ru/contents/view/1349>, including for the “Pediatric Surgery” specialty. The residents are informed about this.

1.4 Involvement in the Formulation of the Mission and Final Results

During the conversation with residents and employers, the experts received a clear answer to the question “Do you participate in the formulation of the mission and goals of the organization, the educational program?”, “What is the personal contribution of residents to the improvement of the educational program?”. To these questions, the residents of the 7R01106 “Pediatric Surgery” specialty noted that they are members of collegial bodies where they have the opportunity to express their opinions and put forward any ideas. Employers of this specialty also noted their active participation in the discussion of the mission and educational program. The Head of the Department of Pediatric Surgery of the Karaganda region remarked that he actively participated in the discussion of the mission of 7R01106 “Pediatric Surgery” EP, made their suggestions in the development of the educational program and the final results.

The 79.37% of the surveyed residents noted that program heads and HETP involve students in the work of advisory bodies (methodological council, academic council, EPC). The answer “do not involve” was shown by 4.76% and do not know anything about it – 11.11%, doubt with the answer of 4.76%.

EEC conclusions on the criteria. Comply with 17 standards (including 10 basic, 7 improvement standards): fully compliant - 17

Standard 1: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 2: EDUCATIONAL PROGRAM

Proof of compliance:

2.1 Framework Parameters of the Postgraduate Medical Education Program

The educational process in the KMU NJSC is organized in accordance with the “Rules of the organization of the educational process on credit education technology” (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152). The “Adult and Pediatric Anesthesiology and Resuscitation” EP has been developed taking into account the modular education technology and the transition to ECTS credits. (<https://qmu.edu.kz/ru/contents/view/314>).

For the implementation of the educational program in 7R01106 “Pediatric Surgery” specialty in the documents of the organization there are TM, where the goal is defined, the integration of practical and theoretical components, independent work is taken into account. Compliance with the SCES and standard requirements has been established. Attending a practical lesson on “Varicocele. The Technique of Performing Laparoscopy” of the “Endoscopic Surgery” module (duration 1.5 hours), attended by residents of group 9-001, the experts received convincing evidence that the training is carried out according to plan. Before the start of the lesson, residents answered tests, then received feedback from the teacher, had the opportunity to improve the skill of laparoscopic varicocelectomy on the simulation equipment of the clinical base.

The University ensures compliance with ethical aspects in the implementation of the educational program. The experts have studied the Code of Business Ethics (Appendix 8 to the decision of the Board of Directors dated August 24, 2019, Resolution No. 4 <https://disk.yandex.ru/i/3OCEjXaXUU53mw>) and during the interview, residents replied that they were informed about the contents of this document.

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

The system of tutoring, which is described in the Academic Policy of the KMU NJSC (approved by the decision of the Senate on August 27, 2021, Resolution No. 1), has been evaluated. The residents of the accredited educational program have 5 tutors, whose tasks are mentoring and advisory support in the development of practical skills by residents within the framework of independent work of a resident with a tutor (70% of the academic load).

The procedure for informing residents about their rights and obligations is reflected in the “Academic Policy”. https://drive.google.com/drive/folders/1fN2AjXp2PidFazaKDdXGPT-BM835CmLw?usp=share_link.

This indicates compliance with Standard 2 in terms of adapting training to the needs of residents. At the same time, along with the principles of quality and academic integrity, which are described in “Academic Policy” document of KMU NJSC in order to ensure the principles of academic integrity in accordance with paragraph 37 of Appendix 5 of the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 30, 2018 3 595 “On Approval of Standard Rules for the Activities of Educational Organizations of Appropriate Types” conducts verification of degree work, master's theses, articles, monographs, guidelines, textbooks, etc. for plagiarism elements and to determine the level of originality using the StrikePlagiarism electronic software.

2.2 Scientific Method

At KMU NJSC, scientific research is a compulsory component of training and implies the integration of educational, practical and research processes, with the result in the form of publications of scientific papers, presentations at conferences of various levels. All students of the residency are actively involved by the staff of clinical departments and the Department of Science in the acquisition, analysis and statistical processing of the material.

The Head of the EP in the 7R01106 “Pediatric Surgery” specialty was trained in new educational technologies based on research - Research based learning (RBL). At the same time, RBL methods are used in the development of practical classes: such as critical appraisal of a clinical protocol for a given nosology AGREE II <https://disk.yandex.ru/i/jZQ3UfPUHHgonw>; search for clinical trial results in SCOPUS, Web of Science, PubMed, Elsevier, Cohhrane library databases etc.; KMU NJSC provides corporate access to databases.

Knowledge of evidence-based medicine is mandatory during residency training in the 7R01106 “Pediatric Surgery” specialty. The EP stipulates, within the framework of the implementation of the IWR, active participation in the research activities of the University, which is proved by the presented scientific publications, which are reflected on <https://drive.google.com/drive/folders/1wN7PUm5XG6nAdhdjz4Ykk6noGDkXfHBQ>. In talking with residents, the experts learned that they use scientific evidence in teaching and know the fundamentals of evidence-based medicine. The faculty told that they teach residents the methods of critical appraisal of the literature, articles and scientific data, and the application of scientific developments.

During the questionnaire survey of residents it was found that, the University has access to the participation of students in research work. The 92.06% of residents strongly agree with the statement that there is access to participation in research and development work at KMU NJSC, 6.35% - partially agree with this statement, 1.59% - disagree with this statement. To the questionnaire, “Are you currently engaged in research work?” - 74.6% of respondents answered “yes”, 11.11% - “no”, 11.11% - “plan to start”, 1.59% - “in search of RW topic”, “do not want to do RW” - 1.59%. The 41.27% of the questioned residents noted that they personally published one scientific printed work (articles, theses, review), more than one - 39.68%; none - 3.17%; plan to publish in the near future - 11.11%; no answer - 3.17%; I just entered the educational program - 1.59%.

2.3 Structure, Content and Duration of the Residency Program

The content, scope and sequence of courses of the 7R01106 “Pediatric Surgery” program strictly comply with the SCES 2022. The basis for achieving the objectives of training in the specialty is the acquisition by residents of the necessary knowledge and key competencies, principal subjects (PS) of the main component and elective component.

Training in the 7R01106 “Pediatric Surgery” residency is full-time and the length of schooling is 3 years. The residents of the 2nd and 3rd year for the period of the Report are trained according to SCES 2020.

There are documents containing requirements for the structure and content of educational programs, including the standard program for 7R01106 “Pediatric Surgery” specialty of 2022. Responsibility for the selection and implementation of innovations in the educational process is the responsibility of the department and teachers of principal subjects. Despite the comprehensiveness of the subject matter of the disciplines, there are some points that need to be supplemented. At the time of the visit to the Department of Surgical Diseases, the catalog of elective disciplines for 7R01106 “Pediatric Surgery” specialty was supplemented with the following disciplines: “Acute Surgical Diseases of the Abdominal Cavity in Children”, “Diagnosis and Surgical Treatment of Congenital Malformations of the Genitourinary System”. However, when reviewing the calendar and thematic plan, the duplication of topics of principal subjects and elective disciplines is noted. Therefore, it is necessary to include elective disciplines taking into account horizontal integration with related disciplines and/or vertical integration with core disciplines.

The teachers provide the residents with methodical and didactic materials, additional literature to prepare for classes. The 90.4% of residents fully agree that teachers provided them with methodical and didactic materials, additional literature to prepare for classes, and 9.5% of residents are partially agree.

The HEI has 3 own clinical bases (the 7R01106 “Pediatric Surgery” program is implemented on the basis of the University Clinic of KМУ NJSC with the area of 2122 sq.m., for 100 beds and 120 outpatient visits), as well as concluded 57 agreements with medical organizations of Karaganda region. For the successful implementation of the educational program in 7R01106 “Pediatric Surgery” specialty, there are sufficient resources to organize the evaluation of practical skills of residents (powerful clinical bases, simulation center). *The 90.48% of residents indicated they were completely satisfied that there were enough patients available to supervise or assist in surgeries; while 4.76% were partially satisfied; and 4.76% did not respond. The 95.24% of residents are fully satisfied with the content of the educational program (list of disciplines): partially - 3.17%; doubted with the answer - 1.59%.*

At the same time, to the question “Do residents' representatives participate in the development of educational programs?” the experts received the following answer: “Yes, constantly” - 79.37%, “No, they are not involved” - 4.76%; “I don't know anything about it” - 11.11%. The surveyed residents are fully satisfied with the schedule of academic sessions (92.06%), “partially” - 79%.

2.4 Learning Organization and the Relationship between Postgraduate Medical Education and Health Care Delivery

The management of the educational process reflected in the self-evaluation Report (**standard 2**) and general approaches to management were confirmed during the visit to the Center for Postgraduate Education and discussions with the Head and employees. At the same time, verification of **standard 2** showed that the training of pediatric surgical resident physicians uses all necessary documentation for the implementation of the 7R01106 “Pediatric Surgery” residency educational program. The experts were acquainted with the work of clinical base subdivisions, visited libraries, a total of 11 meetings were held and during the cross interview it was established that the implementation of the educational program complies with requirements.

During the conversation with the residents, the experts saw that the organization promotes the development of practical competencies of the residents. At the same time the residents enhance their theoretical knowledge, develop communication skills

When attending the practical training of residents of 9-001 group on the module: “Endoscopic Surgery”, topic “Varicocele. Technique of Performing Laparoscopy” and in conversation with the residents, the experts saw that the organization promotes the development of practical competencies of the residents, including on simulation equipment. At the same time, the residents deepen their theoretical knowledge and develop communication skills.

The preparation of residents in 7R01106 “Pediatric Surgery” specialty is aimed at meeting the needs of practical health care, as KMU NJSC on the basis of MIPD contracts train specialists for Karaganda city, Karaganda and Pavlodar regions. Therefore, this organization is a profile in the field of pediatric surgery, and provides a lot of opportunities and conditions for qualified training of professionals. Thus, during the conversation with the management of KMU NJSC experts received information about the availability of agreements with clinical bases, where the training of pediatric surgeons is carried out, the possibility of traveling residency, and teachers confirmed that the training of residents is carried out directly in the departments of pediatric surgery, traumatology and orthopedics, pediatric urology. The residents of this specialty can supervise patients with such diseases as acute surgical pathology of abdominal cavity organs, purulent-inflammatory diseases of soft tissues, hernias, developmental anomalies of external genital organs, developmental anomalies of the urinary system, congenital malformations of the musculoskeletal system, traumas, including neurotrauma. This is facilitated by tutoring, which is carried out at the KMU NJSC on clinical bases: the University Clinic of the KMU NJSC and the Regional Pediatric Clinical Hospital. In talking with residents, the experts saw that the organization promotes the development of residents' practical competencies. At the same time, the residents deepen their theoretical knowledge and develop communication skills.

The 95.24% of the surveyed residents indicate satisfaction with the activities of tutors, mentors and scientific advisors, 6.35% of the respondents are partially satisfied, 1.59% of the respondents are partially dissatisfied, 4.76% of the respondents did not answer this question.

EEC conclusions on the criteria. Comply with 30 standards (including 22 basic, 8 improvement standards): fully compliant - 29, partially compliant - 1, not compliant - 0

Standard 2: fulfilled

Recommendations for improvement identified during the external visit:

1) Develop elective disciplines taking into account vertical and horizontal integration of disciplines (2.3.4, improvement standard)

Standard 3: EVALUATION OF RESIDENTS

Proof of compliance:

3.1 Evaluation Methods

The applied system of evaluation of knowledge, skills and abilities of students in KMU NJSC corresponds to the accepted practice at the national level, and it is defined in the standardized operational procedure (SOP) “Development and Approval of the System of Evaluation of Educational Achievements”. According to the Academic Policy of KMU NJSC in the syllabuses for each discipline are specified types of final control and calculation of the final grade for the discipline / module.

The type of control, teaching method and evaluation methods are taken into account when filling in the electronic record of departmental HETP in “Platonus” AIS and determine the peculiarity and singularity of the electronic SOP record “Keeping an Electronic Record”.

Base facility staff, patients (360-degree evaluation) is involved to validate resident evaluation. Scientific work is peer-reviewed and evaluated when residents speak at conferences and publish articles. Review of controls is done at several levels - intra-departmental review by a member of the department, intra-university review by a member of the University staff, or external review when staff

from external organizations, associations, or employers act as reviewers. Reviews are minuted at departmental or EPC meetings.

The study of control and evaluation instruments (tests, situational tasks, control questions) has shown that KMU NJSC has implemented an appropriate evaluation policy, which allows for a versatile evaluation of residents' educational achievements. When interviewed, the residents talked about forms of evaluation, such as the use of evaluation sheets to evaluate practical skills and that they were satisfied with everything. And they also get regular feedback from faculty members. The appeal system for evaluation results is reflected in the Academic Policies document and there have been no precedents of appeal in the department during the period of operation of the educational organization.

Thus, in order to verify the data of **standard 3**, the experts asked the heads questions about where the rules of current, interim and final attestation are prescribed, and checked the documents and methodologies for resident evaluation. There is a database of test assignments in the amount of 250-400 per discipline for third-year residents, residents of the 1st and 2nd years have 10-20 clinical assignments for each discipline for the “Session” platform, which are compiled by the developers of the EP and approved at the meeting of the AC. Control and evaluation instruments have been reviewed by internal and external experts. The Head of the Education Department replied that additions and updates to the CEI are planned to be carried out annually.

During the visit to the clinical base and during the interview with the Head of the EP, Dr.M.S. Askarov, the commission verified that there is a documentation system that is transparent and accessible to all faculty and staff, and includes such documents as annual plans, annual reports, unit regulations, contracts with faculty and residents, in full teaching and methodological documentation (EP, working curricula, syllabuses, journals), evaluation instruments (checklists, sheets), certifications, certificates and credentials. A review of the website showed that the pages of the website contain the TMs required for residents and have information that is regularly updated.

The conducted questionnaire survey showed that 9.65% of residents were fully satisfied with the methods of knowledge and skills evaluation, while 6.35% were partially satisfied. The 92.6% of respondents answered that teachers regularly apply active and interactive teaching methods in their classes, 4.76% expressed the opinion that such teaching methods are applied only sometimes, “rarely” - 1.59%, “don't know what it is” - 1.59%.

According to the results of the survey, the 92.06% of respondents said that after the end of the class the instructor constantly gives them feedback (listening to your opinion, conducting mini questionnaires, working on mistakes), 7.94% of respondents believe that sometimes.

3.2 The Relationship between Evaluation and Learning

During the visit to KMU NJSC, the EEC members confirmed that the resident evaluation methods are comparable to learning and teaching methods and cover the evaluation of all student competencies, both during practical sessions and during examinations.

Resident evaluation results are documented as follows: evaluation sheets are filled out, a grade is given, and it is entered in the record. In each discipline, anesthesiology and resuscitation residents solve advanced clinical problems on the Session platform, which was developed by HEI staff and awarded with a patent. However, this program does not provide for evaluating the validity and reliability of evaluation methods.

The department evaluates the reliability and validity of evaluation methods by reviewing the evaluation sheets on an ongoing basis, analyzing and validating the tests. However, there is no program to determine the validity and reliability of resident evaluation methods.

When conducting interviews with teachers regarding evaluation methods, the experts received convincing information that there is an unbiased evaluation of theoretical knowledge through oral questioning and testing, practical skills using checklists, solving clinical problems on the “Session” platform. The residents also shared their opinions on the timeliness of test delivery, pre-test counseling, clarity of the entire evaluation procedure and its fairness.

During the visit, the management was asked, “Are external examiners engaged to improve the fairness, quality and transparency of the evaluation process?”. And the answer was received that

during the Final State Attestation of residents, leading professionals from practical healthcare are involved as chairpersons and members of the SAC. The experts inspected the resources for organizing the evaluation of knowledge and practical skills, namely, the simulation center with evaluation sheets for each practical skill. However, simulation equipment is only available for anesthesiology and resuscitation residents to practice and test their practical knowledge of emergency conditions. No simulation equipment is available for resuscitation pathology.

The interviewed representatives of employers also pointed out that the training of KMU NJSC graduates corresponds to the modern development of medical practice and science, as the residents are trained in a clinic with all powerful human resources and the necessary complete equipment to provide qualified and high-tech assistance to patients. The employers said they themselves are involved in resident evaluation because they are included on the exam boards. The HEI systematically conducts feedback with employers. The employers routinely evaluate the skills of anesthesiology and resuscitation residents, and they gave high praise when interviewed. Also, believe that skills in residency graduates, such as critical thinking and communication skills, are the ones they wanted to see as the strongest skills.

EEC conclusions on the criteria: Comply with 11 standards: fully compliant - 9, partially compliant - 2, non-compliant - 0

Standard 3: fulfilled

Recommendations:

1) Develop and implement a program to determine the validity and reliability of resident evaluation methods (subparagraphs 3.1.4 and 3.1.6, basic standards)

Standard 4: RESIDENTS

Proof of compliance:

4.1 Enrollment and Selection Policies

In KMU NJSC the policy of enrollment and selection of citizens in residency is developed in accordance with the Standard Rules for Training in Educational Organizations Implementing Educational Programs of Higher and Postgraduate Education (Order of MES RK No. 600 dated October 31, 2018) and the Rules of Placing the State Order, Enrollment and Training of Medical Personnel in Residency (Order of MH RK No. KR DSM-270/2020 dated December 15, 2020).

Enrollment of students in the residency program is based on the KMU NJSC Academic Policies section “Rules of Enrollment, Student Progress, and Certification” which are reviewed on an annual basis. Enrollment of citizens in the residency is carried out on a competitive basis based on the results of entrance examinations. Entrants to the residency pass an entrance exam in the specialty. At enrollment in the residency program, the applicant's personal achievements, results of research work are taken into account.

Dean of the School of Residency and Professional Development, Tashkenbayeva V.B. and Head of the EP on 7R01106 “Pediatric Surgery” specialty, Dr. M.Sc., Professor Askarov Meirambek told about the policy on admission of residents. Enrollment of persons entering KMU NJSC on 7R01106 “Pediatric Surgery” residency educational program is carried out on their applications on a competitive basis according to the results of the entrance examination. For the period of entrance examinations to the residency program, examination and appeal commissions for specialties are formed.

Revision of the number of applications is carried out regularly, taking into account the need, the situation on the labor market. The procedure for determining the number of accepted resident physicians is regulated by the State Order of the Ministry of Health Care of the Republic of Kazakhstan, taking into account the possibilities of clinical, practical training of the maximum allowable load on mentors, the provision of educational, educational-methodological and scientific literature, the capacity of clinical bases, as well as material and technical resources of the University. Enrollment of persons in the residency program is carried out on the basis of the results of the

entrance examination on the major and those who have scored at least 50 points out of a possible 100 points on a paid department. For training under the state educational order on a competitive basis are enrolled persons who have scored the highest points on the entrance examination: for residency - not less than 75 points. Evaluation of knowledge on the basis of a point-rating system taking into account all forms of activity - scientific, educational, etc. - ensures the validity of the procedure for enrollment of residents and guarantees the availability of the necessary basic knowledge of applicants.

The length of mastering the 7R01106 “Pediatric Surgery” residency educational program is 3 years. Changes regarding enrollment in the residency program are reflected in the Graduate School's Academic Policies and Enrollment Regulations. For example, in 2020, in accordance with the circular letter of the Ministry of Health Care (out. No. 14-02-11/3875-I dated July 16, 2020), graduates of internship in 2020 should be employed in medical institutions until July 22 of the current year in accordance with the decision of the Republican Committee for the Personal Allocation of Young Specialists dated June 30, 2020. A prerequisite for enrollment in the residency program in 2020 and 2021 is to be employed in medical organizations. Persons working in provisory, infectious disease hospitals, outpatient clinics, and ambulance stations will have priority in the competitive selection process.

The KMU NJSC website provides information materials on enrollment - list of documents, programs for enrollment; Academic Policy, catalog of elective disciplines, academic calendar, schedules. The page is accessible to an external user.

The number of residents is determined based on clinical training opportunities as well as practical healthcare needs.

Thus, the experts have validated the data according to **standard 4**. In general, all criteria are met, there are no shortcomings. The experts reviewed the documentation on the admission of residents, including the “Academic Policy”. Regarding academic advising practices, personal support for residents, and developing more than just professional skills, experts interviewed clinical tutors. The organization has a resident development program that includes residents in advisory bodies like EPC, AC, and Council of Young Scientists.

4.2 Number of Residents

The number of enrolled residents is regulated by the State Order of the Ministry of Health Care of the Republic of Kazakhstan for training of medical personnel and taking into account the possibilities of clinical, practical training, maximum allowable load on the HETP, provision of academic, educational and methodical and scientific literature, as well as material and technical resources of the University.

7R01106 “Pediatric Surgery” specialty in KMU NJSC exists since 2018; enrollment of residents was under the grant of the Ministry of Health Care of the Republic of Kazakhstan. Enrollment numbers for individual years are listed in the google drive appendix.

4.3 Support and Advising of Residents

During the conversation of EEC experts with residents, it was established that safe training conditions for residents were created and provided in KMU NJSC. To protect the interests of residents, to assist them in educational, scientific, extracurricular activities, there are various services to organize advisory, psychological, social, medical support for students. The EEC experts confirmed that experienced teachers, professors are involved in the advisory session. In addition, before the beginning of each module, the group instructor informs his/her residents of his/her schedule, the times when residents can seek advising in that discipline.

There is a sufficient resource base for personal growth and development, sports and creative activities (Internet, 100% WIFI coverage of the center's territory, library, computer classes, reconstructed and landscaped areas of the center's buildings). Study rooms are equipped with projectors, screen, video wall, all necessary office equipment.

Implementation of educational programs of residency in 7R01106 “Pediatric Surgery” specialty is provided by free access of the resident to information resources and library funds, availability of

methodical manuals and recommendations for all modules, disciplines and for all types of academic work.

To develop the intellectual level of residents to expand knowledge in various scientific fields, residents take an active part in scientific and practical conferences organized by the University. The residents are involved in the work of the Council of Young Scientists, where arising concerns are also addressed.

According to the data of the questionnaire: in the process of training residents are used a variety of teaching methods: lectures (18.75%), oral analysis of the topic (59.38%), rewriting of thematic information from monographs (6.5%), problem-oriented learning (71.88%), interactive learning (43.75%), abstracts (6.25%), projects, term papers (37.5%), practical training on clinical skills in the training and clinical center (53.6%), analysis of situational tasks (81.25%), drawing up and solving cases (56.25%), oral questioning of students (59.38%), solving tests (46.88%), working in small groups (59.38%), written assignments (50%).

4.4 Resident Representation

In the course of conversation with representatives, it was found out that the quality of implementation of the educational program is ensured by residents' participation in discussions of the EP mission, access to which is available through posting on the KMU NJSC website. Along with heads and teachers, residents are included to participate in the consideration of issues related to the educational process and approval of educational materials for residency, development of individual working curriculum and elective disciplines. This fact was also confirmed by the residents during their interviews. *According to the results of the survey, 79.37% of respondents believe that program heads and teachers constantly involve students in the work of advisory bodies (methodological council, academic council, committees of educational programs), 4.76% responded that no, they do not involve, while 11.11% do not know about it, 4.76% are doubtful with the answer.*

During the visit of EEC experts, it was confirmed that feedback is collected from residents at the stage of mastering the taught discipline (at the end of the discipline), as well as on issues related to training/labor conditions, challenging situations.

4.5 Work Environment

Combining studies with work (not more than 0.5 rate) in the spheres of activity close to his/her future specialty, in his/her free time, is allowed with the consent of the mentor, department head and mentor.

With a professional certificate, 2nd year residents are allowed to carry out independent treatment activities in public and private medical institutions, outside of school hours.

During the visit to the clinical base, EEC experts found that residents have unrestricted access to patients, to all medical manipulations, can work in the KMIS electronic system, to all types of medical equipment and to all departments of the clinical bases. Consulting on all issues of organization of the educational process on mastering compulsory and elective disciplines is carried out by HETP of the Department of Surgical Diseases, the Head of EP, Askarov M.S., SRPE. The SRPE staff, in conjunction with departmental staff, provides information support to all students. Information about residency training is also posted on the University's official website <https://www.qmu.edu.kz/media/qmudoc/OPResRus.pdf>

The 88.89% of residents responded that they personally have access to equipment (training and real-life) in order to learn practical skills in the specialty, with 7.94% partially agreeing. There are rooms for theoretical trainings with residents; there is a separate room for rest, change of clothes, for meals, etc.

The 90.48% of residents are fully satisfied with the environment and equipment of classrooms, lecture halls of this educational organization, partially - 7.94%, fully dissatisfied - 1.59%.

The academic load of residents is planned in accordance with the Law of RK "On Education". The mode of classes from 08.00 to 17.00 hours is regulated by the EP, designed on the basis of SCES 2022, sanitary and epidemiological rules and norms, curricula and recommendations of health care and education authorities.

Residency work is the primary and predominant responsibility of the resident.

The EP has a balance of all activities: managing patients, working in KMIS, participating in anesthesia, night duty, participating in clinical-anatomy conferences, etc. A schedule is prepared for resident duty in a specific unit of the clinical site, according to discipline. For residents with work experience, an individual training trajectory can be envisaged (in case of rotation by departments), also the choice of elective discipline influences the training trajectory.

EEC conclusions on the criteria. Comply with 30 standards: fully compliant - 30

Standard 4: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 5: TEACHERS

Proof of compliance:

5.1 Employment and Selection Policy

The EEC experts confirmed that, according to the SCES (as amended in 2022), the persons assigned to resident physicians for mastering the necessary theoretical and practical skills are appointed from among HETP and/or practical health care professionals with an academic degree, first or highest qualification category, with appropriate training in medical education.

The Department of Surgical Diseases has a sufficient number of teachers on 7R01106 “Pediatric Surgery” (out of 7 full-time faculty members, 2 faculty members with scientific degrees and the highest qualification category of pediatric surgeon teach in the residency).

To work with residents in 2022-2023 academic year 5 clinical tutors with the highest qualification category in the specialty were involved. The experience of clinical and scientific research work of HETP is more than 5 years. The staff of HETP of the residency is determined according to the main provisions of the order of the Minister of Health Care of the Republic of Kazakhstan dated June 14, 2004 No. 474 “On Approval of Calculation Standards of the Cost of Education of One Student, Residency Student, Master’s Student, Doctoral Student (PhD) in Educational Organizations and Scientific Organizations in the Field of Health Care within the Country under the State Educational Order”.

In order to verify the data of standard 5, external experts obtained the opinion of teachers on personnel policy, which includes the employment and recruitment policies of teachers and clinical tutors, incentives and motivation of health care practitioners. All clinical tutors have been trained in pedagogical direction. The conversation with the Head of HR Department of KMU NJSC included such issues as how specialists are attracted and incentivized to educational activities and allowed the experts to learn about approaches to attracting clinical base staff for teaching, strategy and tactics of faculty recruitment, information provision of the educational program, as well as to identify issues of management and human development.

During the questionnaire survey of teachers it was found that the majority (93.75%) are fully satisfied with the organization of work and workplace in this educational organization, but 6.25% are partially satisfied. In this educational organization, the teachers have the opportunity to engage in research work and publish the results of WR - 90.63% of them strongly agree, 9.38% of them partially agree. Satisfied with the work of HR Service (personnel) - 87.5% are strongly agree, 9.38% are partially agree. Satisfied with the salary - 53.13% strongly agree, 12.5% disagree, 25% more “YES” than “NO”, 9.38% more “NO” than “YES”.

5.2 Faculty Commitment and Development

During the conversation of the EEC experts with the representatives of the management personnel, it was established that the personnel policy of KMU NJSC on personnel development consists in planning, development of measures to stimulate and reward for achievements in work. Types of incentives and the procedure for their application are determined by the legislation of the Republic of Kazakhstan.

One of the priority areas of development of the residency HETP is to improve the level of pedagogical skills. HETP have the opportunity to undergo various scientific and practical trainings and internships.

During the reporting period, advanced training in pedagogy was provided in the following cycles: “Tools for Evaluating Graduate Competencies” (54 hours), “Professional, Leader, Organizer” (60 hours), “Topical Issues of Urology and Andrology, including Pediatric” (216 hours), “Topical Issues of Pediatric Surgery” (216 hours), “Independent Expertise” (216 hours).

On September 19-30, 2022, Prof. Askarov M.S. underwent scientific and clinical training in Seoul, South Korea (SoonChunHyang University Hospital Seoul) within the framework of academic mobility, including “Educational Technologies in Teaching Clinical Disciplines” in the amount of 60 hours for clinical tutors.

In order **to verify the data of standard 5**, during the meeting with the Head of HR Department and during the interviews with teachers, the experts obtained an opinion on the approaches to the development of teaching competence of teachers, motivation to work with residents, the implementation of mentoring, which the organization of cycles of pedagogical professional development (certificate of completion of the cycle in the amount of 60 hours), material incentives in the form of bonuses for employees. However, taking into account the level of EP - residency, the experts have identified a limited possibility of international professional internships of the HETP.

As for support of participation in conferences (international, national), 62,5% answered that they were paid travel, business trip, registration fees, 9,38% - only travel, expenses were not paid according to 3,13%, 15,63% did not apply to the management in this regard, 9,38% did not answer.

The experts found that faculty members initiate RW topics for residents, stimulate the need for additional training and independent work with literature and medical documentation. Confirmation of this fact was obtained by talking to the residents. As well as the attached publications of residents' research results and certificates of participation in conferences with reports.

In HEI, there is an opportunity for career growth and development of teacher's competencies - 9.63% of questioned teachers confirmed this, and 9.38% partially agree with this fact. 87.5% have attended professional development courses, with 9.38% - more than 5 years ago, 3.13% do not remember when it was.

The HEI implements social support programs for teachers - 78.1% answered that “yes, there are such programs”, 3.1% “I have already used it”, 3.3% of respondents answered that there are no such programs, and 15.63% of respondents do not know about it. At the same time, 95.2% of the surveyed residents are satisfied with the activities of mentors, supervisors and scientific supervisors, 4.8% are partially satisfied.

EEC conclusions on the criteria. Comply with 7 standards: fully compliant – 7.

Standard 5: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 6: LEARNING RESOURCES

Proof of compliance:

6.1 Material and Technical Support and Equipment

The University has a developed material and technical base for the implementation of professional training of residents in the 7R01106 “Pediatric Surgery” specialty. The material and technical base of the University includes: lecture halls, classrooms, teaching and research laboratories, library, information technology facilities, cultural and social facilities, university clinics, clinical bases - leading medical institutions of Karaganda city.

The lecture halls are equipped with the necessary means of technical support - stationary multimedia projectors. The total area of the main academic buildings of the University is 29160.6 square meters.

All clinical sites have study rooms that are equipped to conduct classes, with the necessary furniture, teaching aids, including personal computers and multimedia projectors.

For working out practical skills, there is the Center of Simulation and Educational Technologies located on 1300 sq.m. with 42 study rooms. The Center is equipped with more than 400 types of simulation equipment, including 57 high-tech simulators. Visiting the Center is possible within the framework of independent work of the resident by appointment in a specially designed form. For surgical specialties, there is an extensive amount of simulation equipment available that involves working on basic practical skills; however, there is limited simulation equipment available for residents to practice hands-on skills

The faculty survey showed that 93.75% of respondents strongly agree that the organization has sufficient equipment and resources to conduct resident education in accredited programs, while 6.25% agree partially.

Fully satisfied with the organization of the educational process 87.5%, partially - 12.5%. The 93.75% of teachers are fully satisfied with the organization of work and workplace in KMU NJSC , 6.25% are partially satisfied.

6.2 Clinical Facilities

Residency in 7R01106 “Pediatric Surgery” specialty is realized in the departments of the University Clinic of KMU NJSC , Regional Pediatric Clinical Hospital Municipal State Enterprise (Agreement No. 347 dated September 01, 2022), and Pavlodar Pediatric Clinical Hospital (Agreement No. 401 dated February 15, 2023). The clinic of the Medical University has 100 beds, including 60 surgical beds, including 6 beds for children with surgical and urological diseases. The Regional Pediatric Clinical Hospital MSE has 50 general surgical beds and 30 beds for children with surgical infection. On the basis of Pavlodar Pediatric Clinical Hospital, there are 25 surgical beds, 22 beds for purulent surgery, 3 beds for neonatal surgery.

A review of the resources showed that they are in line with the aims and objectives of the educational activities. The University staff provides collegial and ethical relationships with nursing staff, clinical site leadership to achieve resident outcomes. A sufficient number of case patients and modern equipment is provided and demonstrates accessibility to students, and staff members, who act as both teachers and mentors (tutors), provide quality training in an ethical and deontological manner. Before starting the relevant discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he/she should acquire and develop during the training period.

During visits to clinical sites where experts surveyed resources, their relevance to training programs, accessibility for faculty and residents, how up-to-date the equipment is and how it meets the needs of trainees and practical healthcare. The experts obtained evidence of compliance with **standard 6**, as well as validation of the information in the self-evaluation Report.

In order to validate the implementation of the self-evaluation Report data and to provide evidence of program quality, interviews were conducted with residents in the 7R01106 “Pediatric Surgery” specialty. The experts asked questions about satisfaction with training, sufficiency of time to supervise patients, work in Damu-med with medical documentation, satisfaction with teaching methods and qualification of teachers, social and moral support for residents in need, accessibility of the resource of international databases of professional literature. In general, the residents are satisfied with the training, evaluation methods, and purposefully enrolled in this organization because they believe that the educational organization has good resources, image, and international connections. Visits to clinical sites revealed that residents do have autonomy in clinical decision making, there is the opportunity to consult with tutors, and free access to patients and the operating room. The residents showed their commitment to the organization of education, were active in answering questions from external experts, demonstrated their judgment on the organization of training, evaluation of their skills, advisory support, opportunities to participate in RW, funding. The experts studied residents' documents (portfolios, results of residents' evaluation-checklists, results of residents' questionnaires).

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

6.3 Information Technology

For the implementation of EP on 7R01106 “Pediatric Surgery” specialty there is a wide base of information resources, which was reflected during the visit to the library: Cochrane Library, CBS eBooks, EBSCO, BMJ Learning, BMJ Learning, “Doctor's Consultant” “Student's Consultant”, “Epigraph”, “Aknurpress”, and there are corporate subscriptions Web of Science (Clarivate), Scopus Elsevier, Science Direct. The report on the self-evaluation of the educational program contains information on the application of distance platforms: Webex in conducting practical classes in a hybrid format with the 3rd year residents of the field residency program. At the time of the visit, all residents were on clinical bases and videos of previously conducted distance learning sessions were reviewed.

The 90.5% of residents responded that they fully agree with the provision of students with methodical and didactic materials, additional literature to prepare for classes. The 87.3% of residents note that they are fully satisfied with the system of independent learning of students, 12.7% - are partially satisfied with it.

6.4 Clinical Teams

On a daily basis, anesthesiology and critical care residents participate with tutors in the co-management of patient anesthesia, patient management, diagnostic and treatment interventions, and more. The residents themselves conduct seminars on current issues in anesthesiology and resuscitation, with attendees ranging from students at all levels to health care professionals and HETP. A resident in the “Adult and Pediatric Anesthesiology and Resuscitation” specialty is a tutor at the University's Simulation Center.

Students and residents develop skills in working cohesively with colleagues and other health care professionals during patient examination, treatment, and especially in the delivery of patient care.

When asked "Is there sufficient time for hands-on training (patient supervision, clinical rounds, clinical reviews, assisting in surgeries) - 90.48% of residents said they strongly agree, 9.52% said partially agree.

A total of 87.3% of residents believe that the organization of clinical (practical) training is excellent, 11.11% - good, 1.59% - satisfactory. The residents have a sufficient number of patients to supervise or assist in surgeries - 90.48% of residents strongly agree, 4.76% partially agree, 4.76% did not answer this question.

6.5 Medical Scientific Research and Advances

Scientific research of the staff of the Department of Emergency Medicine, Anesthesiology and Resuscitation is the basis of scientific work in residents. In the course of conversation with residents it was found out that, they take an active part in realization of scientific work of the department and clinical bases. *The 74.6% of residents confirmed that they are currently engaged in research work under the guidance of their teacher or tutor, 11.1% - not engaged; 11.1% have started planning the implementation of research work; 1.6% - in the search for the topic of research work; 1.6% of residents do not want to engage in research work. However, 41.3% have published printed works (articles, theses, reviews) during their studies at the University, 39.7% have more than one publication, 3.2% have none; 11.1% plan to publish in the near future.*

The interviews with faculty showed that there are no problems in educational management, depending on the specific base (admission of residents to equipment, sufficient number of case patients, surgical manipulations, etc., time for medical records, independent work).

6.6 Expertise in the Field of Education

Examination of the quality of the implemented educational program on residency at the University is a systematic process and is carried out by the following structures: DAA (EP approval), Dean's Office of Internship and Residency (EP implementation), Educational Programs Committee (EPC) (planning, development and evaluation of the EP), Department of Teaching and Learning (EP monitoring), Department of Quality Management System. The EPC includes teachers, representatives

of professional associations, employers, and students. The Accreditation and Rating Department monitored various aspects of educational activities to obtain independent information aimed at improving the quality of educational process organization. In the process of each study recommendations for changes were formed in order to improve the organization of the educational process in the departments and modules of the University.

The expertise is conducted in the form of analyzing the needs for specialists, analyzing resident training methods, and the results allow conclusions to be drawn 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 organization of teaching, 4.76% are partially satisfied with it.*

6.7 Training in Other Institutions

The possibility of training residents in other medical organizations is provided by the University's agreements with the Health Department of 4 regions of Kazakhstan and 52 agreements/memorandums with foreign universities and research centers, with 24 medical universities of Kazakhstan, with 83 universities of near and far abroad.

During the reporting period in 7R01106 “Pediatric Surgery” specialty, only once was a field residency organized within the framework of academic mobility. *At the same time, according to the results of the questionnaire survey of residents in the “Pediatric Surgery” specialty, the amount of new material mastered decreases with the increase of the course, which may be associated with the lack of the necessary exchange of experience and knowledge with the partner universities.*

The possibility of academic freedom is determined by the fact that the EP is developed on the basis of the National Qualifications Framework, which corresponds to the qualifications framework for the European Higher Education Area.

The experts found that there is a need to expand the geography of academic mobility for residents in an accredited specialty.

EEC conclusions on the criteria. Comply with 21 standards: fully compliant - 19, partially compliant - 2, not compliant - 0

Standard 6: fulfilled

Recommendations for improvement identified during the external visit:

1) Upgrade and modernize the facilities of the Simulation and Educational Technology Center to meet the needs of the “Pediatric Surgery” residency educational program in developing appropriate practical skills (6.1.2 improvement standard).

Standard 7: EVALUATION OF THE EDUCATIONAL PROGRAM

Proof of compliance:

7.1 Monitoring and Evaluation Mechanisms

Having analyzed the residency educational program in 7R01106 “Pediatric Surgery” specialty, the EEC experts established that the monitoring and evaluation of the EP is carried out at all levels, a multilevel approach is used, including the profile/graduating and related departments, profile EPC, DAA, Academic Council, Senate, Student Government, Center for Admission and Professional Guidance of Students (general monitoring of the quality of educational programs through a survey of stakeholders (employers, professional associations and students).

The EP created by the authors' team on 7R01106 “Pediatric Surgery” specialty was discussed at the level of the department staff (discussion in the working group, at the meeting of the Department of Surgical Diseases (Minutes No. 6 dated February 02, 2020), at the meeting of the Residency and Professional Development School Council (Minutes No. 7 dated March 12, 2020). The EP was developed in 2018 and it has been reviewed and adjusted annually with input from external reviewers.

In accordance with the Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III “On Education”, “Rules of Competitive Replacement of Vacant Positions of Higher-Education Teaching Personnel and Scientific Workers of KMU NJSC”, the University has a system of quality control of educational and methodical documentation, including the content of educational programs..

In order to monitor the implementation of the EP and as problems are identified, including those related to resource provision, the following documents are approved and updated at the University: Regulations on Academic Policy (approved by the Senate on August 27, 2021), Regulations on Educational Program Management (September 09, 2020, Resolution No. 14, amended on January 11, 21, Order No. 1).

7.2 Feedback from Faculty and Residents

The faculty and residents have the opportunity to participate in the evaluation and subsequent improvement of the educational program on a regular basis through various feedback channels. The feedback on 7R01106 “Pediatric Surgery” specialty EP at the department is conducted once a year. The Head of the Department and the faculty member in charge of the residency program are responsible for the collection and processing of the discussion results.

The QMS department monitors the satisfaction of internal and external consumers of the University. The results of feedback are analyzed, discussed at the meetings of departments, EPC, AC, and published on the University website <https://qmu.edu.kz/r>. The main principles of surveying consumers of educational services are as follows:

1. Relevance of questionnaire content to strategic goals and objectives.
2. Anonymity of participation.
3. Systematic approach and consistency of survey procedures.
4. Use of standardized survey procedures and criteria.
5. Continuity.
6. Informativeness.

The survey is conducted on the following types: “Teacher as viewed by Students”, “Students' Satisfaction with the Conditions and Results of Training”, “Satisfaction with the Infrastructure”, “Graduate Satisfaction with the Quality of Training”, “Freshman Questionnaire”. The survey is conducted online via Google, as well as in hard copy. The coverage of respondents on different questionnaires ranged from 75% to 95%.

According to the results of the survey “Teacher as Viewed by Students”, a report and a certificate for each teacher with the evaluation of students is prepared. The materials of the survey of all stakeholders (students, employers, and teachers) are discussed at the department, an analytical report on the results of the survey is considered. The Report data are analyzed, compared with real facts, cause-and-effect relations are found out and then a decision is made to make changes in the organization of the educational process, educational program.

A survey of employers is conducted annually for feedback purposes. Thus, the degree of employers' satisfaction with the University graduates is evaluated to identify the compliance of the educational program with the real requirements of the labor market, opportunities for its improvement, as well as the degree of compliance of graduates' competencies to the positions at workplaces.

7.3 Resident and Alumni Outcomes

An important role in the evaluation of the educational program is played by the results of the final attestation of residents conducted at the testing stage by the National Center for Independent Examination, as well as the results of certification examinations conducted by the Committee for Control of Medical and Pharmaceutical Activities of the Ministry of Health and Social Development of the Republic of Kazakhstan.

The final state certification on 7R01106 “Pediatric Surgery” specialty is planned to be held in 2 stages: determination of the level of theoretical training on disciplines in the form of testing; certification of practical skills in the CSET.

The QMS department monitors the satisfaction of internal and external consumers of the University. In 2022, resident satisfaction with educational programs was 88%. A high level of satisfaction was noted with respect to clinical facilities, technical equipment, and competence of HETP. In 2022, there was graduation of 1 resident in the 7R01106 “Pediatric Surgery” specialty.

7.4 Stakeholder Engagement

Participation of a wide range of stakeholders in the evaluation and improvement of educational programs at KMU NJSC is ensured by the authorized bodies in the field of education and health care (MH RK), representatives of the public, professional organizations, as well as persons and structures responsible for postgraduate education:

1. MH RK - independent evaluation of residents' knowledge.
2. Employers.
3. Representatives of the Committee for the Control of Medical and Pharmaceutical Services and representatives of practical health services.

All stakeholders (faculty, residents, and employers) are engaged in the program evaluation process through representation on appropriate structures. The work of all structures ensuring the implementation and evaluation of the educational program is regulated by the Articles of Association of the University, the strategic development plan of the University, annual plans and reports of the University, as well as the relevant QMS procedures. The evaluation results are heard at the meetings of the Clinical Council, Schools, TB and BS, published in the University newspaper and on the HEI website.

The 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 residency and etc. The employers in Anesthesiology and Resuscitation have noted the high level of knowledge and practical skills of residency graduates.

7.5 Procedure for Approval of Educational Programs

The educational program for 7R01106 “Pediatric Surgery” specialty is developed in accordance with the State Educational Standards and the Model Curriculum for this specialty.

The University has developed mechanisms for the approval of educational programs that provide for the evaluation of programs at the stages of planning, implementation, analysis of results and implementation of changes, which allows monitoring the process of EP implementation and progress of residents, and ensures the identification and timely resolution of emerging problems.

Examination of the EP is carried out for compliance with the State Educational Standards, the CED is approved in accordance with stakeholder proposals and taking into account pre- and post-requisites, and the choice of methods for evaluating the results of resident training is evaluated. There is a systematic study and comprehensive evaluation of the EP for the purpose of improvement and quality assurance (determination of the value of the program, achievement of the goal, implementation of tasks, the degree of compliance with the needs of society, the requirements of employers, the effectiveness of teaching methods), as well as the evaluation of educational and methodological support and maintenance of the educational process, evaluation of the quality of the EP. For this purpose, an external evaluation of the EP is carried out by a competent representative of practical health care.

A questionnaire survey of faculty members revealed that 84.38% personally participate in the development of teaching materials for the residency program, 12.5% do not participate, and 3.13% responded that they participated in the development of electives.

EEC conclusions on the criteria. Comply with 15 standards: fully compliant – 15.

Standard 7: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 8: MANAGEMENT AND ADMINISTRATION

Proof of compliance:

8.1 Management

The guarantee of the implementation of 7R01106 “Pediatric Surgery” specialty EP is its strict compliance with the requirements of regulatory rules regarding the enrollment of residents (selection criteria and number), training process, evaluation of knowledge and skills, established learning outcomes, program management, which are stipulated in the Republic of Kazakhstan by regulatory legal acts of the Ministry of Health Care of the RK and the Ministry of Education and Science of the Republic of Kazakhstan.

The students who have mastered the residency EP in 7R01106 “Pediatric Surgery” and successfully passed the state certification will be issued a nationally recognized document on conferring the qualification of adult, pediatric anesthesiologist-reanimatologist/intensivist. Based on the order of MES RK dated January 28, 2015 No. 39 “On Approval of Types and Forms of National Educational Documents and Rules for their Issuance”, in accordance with subparagraph 6-3), Article 5 of the Law of the Republic of Kazakhstan “On Education” dated July 27, 2007 will be issued a certificate of residency graduation, as well as after passing the FA, NCIE will be issued a certificate of specialist without category in the specialty.

All measures to implement the EP are carried out under the direct control of academic departments, members of the Committee of educational programs, dean's office, and independent experts.

Transparency of EP management is exercised through discussion of teaching and methodological documentation on the residency program at the meetings of the departments/modules of EPC, AC of KMU NJSC and after receiving their positive opinion is approved by the Vice-President for Academic Affairs. The syllabuses, test assignments will be placed in “Platonus” AIS.

There is an electronic moving news line in the center of the University's campus to quickly communicate useful information to residents and faculty, with daily updated information. In KMU NJSC, there is a blog of the President at <https://www.qmu.edu.kz/ru/hall/ask>, and once every two months there is a meeting of the President with the students.

According to the survey, 96.88% of faculty members strongly agree that ethics and subordination between colleagues, faculty members and management are observed in the University, the remaining 3.13% strongly disagree. The 90.63% of respondents are fully satisfied with the organization of work and workplace, 9.38% are partially satisfied.

8.2 Academic Leadership

The management of the educational process, including postgraduate level is carried out according to the [organizational structure](#) of KMU NJSC. The executive body of the University is its President, the Chairperson of the Board. The President, Chairperson of the University Board is personally responsible for financial and economic activities, safety of the University property, for the organization of anti-corruption, establishes the competence of the Provosts, Vice-Presidents and other executive officers of the University, decides all issues of the University activities in accordance with its competence, determined by the legislation of the Republic of Kazakhstan and the Articles of Association of KMU NJSC. Residency issues are supervised by the Vice-President for Academic Affairs in terms of the educational process and the Provost in terms of clinical activities.

Direct management of residency programs and coordination of residents' activities is carried out by the Dean of the School of Residency and Professional Education, appointed by the President's order. General management of the Dean's office, is carried out by an elected representative body - the Faculty Council, which organizes its work under the guidance of the Dean of Internship and Residency School.

The composition of the Council is approved by the order of the Vice-President. The Council of the Dean's Office includes by position: the Dean of the Internship and Residency Faculty ('Chair of the Council'); Heads of Departments, Professors and Associate Professors of Departments; representatives of stakeholders (interns, residents, employers). The Dean's Office is responsible for making the following decisions: development and approval of the mission of the programs, rules for the organization of the educational process in the residency, recommendations for the recruitment of residents training residents.

The Dean's Office provides supervision of residents, communication support with the practical health sector and residency alumni, interaction with other structural units of the University involved in the implementation and support of residency programs (DAA (DEPC and CID), DIT). For the purpose of effective management of the educational process, there are EPCs in place.

A total of 84.38% of teachers believe that the University administration listens to the opinion of faculty members regarding the issues of educational process, research and development, clinical work, 12.5% - believe that sometimes, and 3.13% - did not answer.

8.3 Training Budget and Resource Allocation

The budget of the University is formed from several sources: the republican budget (state order for personnel training in higher and postgraduate education, professional development of medical workers, development of scientific research, transfers); the local budget; provision of paid educational and other services.

Funding for the residency program is contingent upon the formation of an annual state order. Annually, the Decree of the Government of the Republic of Kazakhstan approves the state educational order for the training of specialists with higher and postgraduate education, in accordance with which the financing of bachelor's, master's, doctoral and residency programs by types of educational institutions is determined.

8.4 Administration and Management

The University makes changes and additions to the organizational structure on an annual basis. The staff schedule of departments/modules providing residency educational programs is approved annually taking into account changes in the number of residents. According to Article 52 of the Law of RK "On Education" dated July 27, 2007 No. 319-Sh.

The total number of faculty is based on an average resident to faculty ratio of 3:1.

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

In 2015, the University was certified by the SGS certification body (Switzerland). In 2016, the University passed accreditation in the field of health care for compliance with accreditation standards for medical organizations 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 programs is carried out through attestation of HETP in all types of activities.

8.5 Requirements and Regulations

The University determines and approves the educational program on 7R01106 "Pediatric Surgery" specialty according to the State Standard of the Ministry of Health Care of the Republic of Kazakhstan No. 647 dated July 20, 2022.

Program approval takes place in close collaboration with all stakeholders. The structure and content of the WC correspond to the State Educational Standards for 7R01106 "Pediatric Surgery", the programs of disciplines are developed at the proper scientific and methodological level. The sequence of study of residency disciplines is built using a system of pre- and post-requisites.

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

Standard 8: fulfilled

Recommendations for improvement identified during the external visit: none

Standard 9: CONTINUOUS IMPROVEMENT

Proof of compliance:

KMU NJSC always strives to respond to changing internal and external conditions in a timely manner. For the purpose of continuous improvement of the educational process, in accordance with the

best practices of the world educational management, taking into account the needs of practical healthcare of the RK, which is in the stage of reform, regularly initiates review and updating of processes.

Adapts resident selection policies, selection and admission practices annually to changing expectations and circumstances, human resource needs, changes in basic medical education and curriculum requirements.

The mentoring provision is updated annually to reflect the changing needs of postgraduate education. A convincing example of the process of continuous improvement of approaches to the implementation of residency educational programs is the active participation of stakeholders (primarily representatives of employers) in the formation of educational strategy, which reflects the social responsibility of the Institute for the development of advanced innovative technologies in practical medicine and science, the use of achievements of information and communication technologies, as well as health promotion of the population.

Developing organizational structure, governance and management to cope with the changing circumstances and needs of postgraduate education, and over time gathering the interests of different stakeholder groups.

One of the significant changes aimed at improving the work with graduates of KMU NJSC, on the basis of the Department of distribution and employment of graduates, the Career Development Center was created.

EEC conclusions on the criteria. Comply with 4 standards, fully compliant – 4

Standard 9: fulfilled

Recommendations for improvement identified during the external visit: none

CONCLUSION:

During the external evaluation of 7R01106 “Pediatric Surgery” educational program, it was found that out of **147 standards** (including basic standards - 91 and improvement standards - 56) 142 accreditation standards demonstrate full compliance, including 88 basic standards and 54 improvement standards. Partially met 2 basic standards and 3 improvement standards. No non-compliance with the standards was found. Compliance with the standards of improvement indicates the compliance of the educational organization with the best international practice in such areas as, education, clinic and science.

5. Recommendations for improvement of 77R01106 “Pediatric Surgery” educational program

- 1) Develop a catalog of elective disciplines taking into account vertical and horizontal integration of disciplines (IS 2.3.4.).
- 2) Develop and implement a program to determine the validity and reliability of resident evaluation methods (BS 3.1.4; 3.1.5);
- 3) Upgrade and modernize the facilities of the Center for Simulation and Educational Technology to meet the needs of the Pediatric Surgery residency educational program in the development of appropriate practical skills (IS 6.1.2).

6. Recommendation to the ECAQA Accreditation Council

The EEC members came to the unanimous opinion to recommend the Accreditation Council to accredit the **7R01106 “Pediatric Surgery”** educational program of **Karaganda Medical University** **NJSC** complying with the Standards for Accreditation of Residency Educational Programs of Medical Education Organization for the period of 5 years.

Chairperson of the External Expert Committee

KUDABAYEVA KHATIMYA ILYASOVNA

/Signature/

Foreign Expert

RYZHKIN SERGEY ALEXANDROVICH

/Signature/

Foreign Expert

AFRIKYAN SHUSHANIK GEVORKOVNA

/Signature/

National Academic Expert

URAZOVA SALTANAT NURGOZHAYEVNA

/Signature/

National Academic Expert

SHABDARBAYEVA DARIYA MURATOVNA

/Signature/

National Academic Expert

RAMAZANOVA RAIGUL MUKHANBETOVNA

/Signature/

National Academic Expert

ZHUMALINA AKMARAL KANASHEVNA

/Signature/

National Academic Expert

TULEUTAYEVA RAIKHAN YESENZHANOVNA

/Signature/

National Academic Expert

BAIGOZHINA ZAURE ALPANOVNA

/Signature/

National Academic Expert

RAMAZANOVA SHOLPAN KHAMZAYEVNA

/Signature/

National Academic Expert

YERALIYEVA BIBIKHAN ABDALIYEVNA

/Signature/

National Academic Expert

ISPOSUNOVA GULNARA AKHMETKAZYEVNA

/Signature/

National Academic Expert

DOSHAKANOVA ASSEL BAIDAULETOVNA

/Signature/

National Academic Expert

DOSANOVA ASEM KALELOVNA

/Signature/

Expert - Representative of Practical Health Care

DANIYAROVA BAYAN LASHINOVNA

/Signature/

Expert - Representative of Doctoral Students

ORAZBAY AKNUR DAURENKYZY

/Signature/

Expert - Representative of Residents

KURAK AIDANA ZHANAIDAROVNA

/Signature/

6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу 7R01106 «Детская хирургия» 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

Quality profile and criteria of external evaluation and 7R01106 “Pediatric Surgery” residency educational program (summary)

Standard	Evaluation criteria	Number of standards	BS*/IS	Evaluation		
				Fully compliant	Partially compliant	Not compliant
1.	MISSION AND FINAL RESULTS	17	10/7	10/7		
2.	EDUCATIONAL PROGRAM	30	22/8	22/7	0/1	
3.	EVALUATION OF RESIDENTS	11	7/4	5/4	2/	
4.	RESIDENTS	30	18/12	18/2		
5.	ACADEMIC STAFF/TEACHERS	7	5/2	5/2		
6.	LEARNING RESOURCES	21	10/11	10/9	0/2	
7.	EVALUATION OF THE EDUCATIONAL PROGRAM	15	10/5	10/5		
8.	MANAGEMENT AND ADMINISTRATION	15	8/7	8/7		
9.	CONTINUOUS IMPROVEMENT	1	1/0	1/0		
		147	91/56	89/53	2/3	
				142	5	

List of documents reviewed by the EEC members as part of the external evaluation of the residency educational program

No.	Name of documents	Quantity
1.	Certificate of International Accreditation of Educational Programs 2016.	3
2.	State Standard SCES 2022 (Order No. 63 dated July 04, 2022)	1
3.	Law of the Republic of Kazakhstan No. 319-III “On Education” dated July 27, 2007	1
4.	Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 “Standard Rules of Enrollment in Educational Organizations Implementing Educational Programs of Higher Education”	1
5.	Order of the Minister of Health Care of the Republic of Kazakhstan dated December 15, 2020 No. KR DSM-270/2020 “On Approval of the Rules for Placement of the State Order, Enrollment for Education and Training of Medical Personnel in Residency”	1
6.	Order of the Minister of Health Care of the Republic of Kazakhstan dated July 4, 2022 No. KR DSM-63 “On Approval of State Compulsory Standards by Levels of Education in the Field of Health Care”	1
7.	Order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152 “On Approval of the Rules for the Organization of the Educational Process on Credit Technology of Education”	1
8.	Order of the Minister of Health Care of the Republic of Kazakhstan dated December 11, 2020 No. KR DSM-249/2020 “On Approval of the Rules for Evaluation of Knowledge and Skills of Students, Evaluation of Professional Preparedness of Graduates of Educational Programs in the Field of Health Care and Specialists in the Field of Health Care”	1
9.	“Regulations on the Residency of KMU NJSC”, approved by the decision of the Board dated August 23, 2022, Resolution No. 18	1
10.	Order No. 182 dated September 05, 2023 "On Residency"	1
11.	Academic Policy of KMU NJSC (approved by the decision of the Senate dated August 27, 2021, Resolution No. 1)	1
12.	KMU NJSC Code of Business Ethics	1
13.	Articles of Association of the KMU NJSC	1
14.	Register of educational programs of the UHEMS of the MES RK	1
15.	7R01106 “Pediatric Surgery” educational program	1
16.	List of QMS documents in force in KMU NJSC	1
17.	Composition of collegial advisory bodies of KMU NJSC : Senate of KMU NJSC , Council of SRPD	1
18.	TM in 7R01106 “Pediatric Surgery” specialty	12
19.	Profiles of social pages of KMU NJSC , Department of Surgical Diseases	3
20.	Catalog of elective disciplines on 7R01106 “Pediatric Surgery” specialty	1
21.	“Session”, “Platonus” automated systems	2
22.	Documents confirming participation of residents in scientific and practical conferences of national and international importance	4
23.	Acts of implementation in the specialty of the accredited educational program	2
24.	Personalized resident work plan	9
25.	Reprints of resident articles	1

26.	Certificates of additional resident training	1
27.	Documents confirming the participation of residents in the sanitary and educational work of medical organizations	4
28.	Minutes of the meeting of the academic committee of the residency school	4
29.	Results of the employer's survey	2
30.	Results of the survey "Evaluation of Satisfaction with the Educational Process among Students"	1
31.	Certificates of HETP on professional development in the field of interpersonal interaction in medicine and professional behavior	2
32.	Algorithm for critical appraisal of clinical protocols for diagnosis and treatment AGREE II	1
33.	Order No. 1 "On Approval of the List of SUE Members by Residency Specialties"	1
34.	Order of the Minister of Health Care of the Republic of Kazakhstan dated December 21, 2020, No. KR DSM-304/2020, "On Approval of Provisions on Clinical Base, Clinic of Health Care Education Organization, University Hospital, Residency Base, Integrated Academic Medical Center and Requirements for them"; SCES, Order of the MH RK dated July 04, 2022, No. KR DSM-63	1
35.	Contracts with clinical facilities https://disk.yandex.ru/d/Wx2LxPDGo4UA3w	7
36.	Certificate of state registration of rights to the copyright object No. 99 dated January 22, 2015 "Estimated Forms of Independent Work of a Student in a Medical University (scientific work)", authors Dosmagambetova R.S., Laryushina E.M., Turgunova L.G. et al.	2
37.	Employer survey results for 2022	1
38.	Evaluation sheet "night / day / daily duty in a surgical hospital"	1
39.	Evaluation sheet "medical record keeping / medical record" in a surgical inpatient unit	1
40.	Evaluation sheet "360° - resident evaluation" for all areas of training	1
41.	Evaluation sheet of the residency portfolio	1
42.	Brief description of information resources available to the units and residents of the accredited educational program (to standard 6 "educational resources", p.6.3).	1
43.	Appendix. Table 10. International cooperation (to the standard "educational resources", p.6.7)	1
44.	Table 11. Information about employment of graduates of the educational program (to standard 7 "evaluation of the educational program")	1
45.	"Regulations on inclusive education in KMU NJSC " in 2020 dated December 09, 2020. Resolution No. 26	1
46.	"Policy for student enrollment at KMU NJSC " for the 2019-2020 academic year (approved by resolution of the KMU NJSC Senate, October 22, 2019, app.1), 2021-2022 academic year (approved by resolution of the KMU NJSC Senate on May 21, 2021, app.10), and 2022-2023 academic year (approved by resolution of the Board of Directors on May 27, 2022, app.37)	1
47.	"Policy of applicants' enrollment in the educational programs of postgraduate education" KMU NJSC , approved by the decision of the Senate on October 22, 2019, app.1	1
48.	Composition of the Board of the School of Residency and Professional Development	1
49.	"Regulations on sending on a trip of KMU NJSC students", approved on	1

	June 10, 2019 amended on September 02, 2022, version 1, (https://disk.yandex.ru/d/4cuwsLZDQXVvTA)	
50.	KMU NJSC Student Support Services Regulations (KMU NJSC Board Regulation 19-2, version 1 dated July 08, 2019, as amended on October 23, 2020, app. 20)	1
51.	Regulations on the scientific society of young scientists and students of the University	1
52.	Order No. 182PO dated September 05, 2022 “On Field Residency”	1
53.	Certificates from the resident's work place	10
54.	Diplomas, certificates, diplomas of HETP	29
55.	Personalized teacher's work plan	1
56.	Job description of the Head of the educational program	1
57.	Position description of the professor	1
58.	Extract from the minutes of the Senate meeting of KMU NJSC 37 dated April 28, 2022. “On the distribution of teaching load of HETP”	1
59.	Staff schedule of the Department of Surgical Diseases of the KMU NJSC	3
60.	Teaching load on residency in the 7R01106 “Pediatric Surgery” specialty	3
61.	Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 606: “On Approval of the Average Ratio of the Number of Students to Teachers for Calculation of the Total Number of HETP of Higher and (or) Postgraduate Education Organizations, Except for Military, Special Educational Institutions, Organizations of Education in the Field of Culture”	1
62.	Faculty work time standards for the year 2022 - 2023	2
63.	Safety record	3
64.	List of literature on 7R01106 “Pediatric Surgery” specialty in Kazakh and English language	2
65.	“Pediatric Surgery” WC	3
66.	Certificates confirming residents' participation in scientific activities	12
67.	Review of the residency educational program	2
68.	Resident enrollment document for the 2019-2022,2020-2021,2021-2022 and 2022-2023 academic years	3
69.	Rules for competitive filling of vacant positions at KMU NJSC	1
70.	Annual report on the activities of the KMU NJSC University	1
71.	Regulations on the Board of the KMU NJSC as amended on May 26, 2020	1