REPORT
OF EXTERNAL EXPERT COMMISSION
ON THE RESULTS OF EDUCATIONAL PROGRAM EVALUATION
7R01131 ADULT AND PEDIATRIC ENDOCRINOLOGY
OF KARAGANDA MEDICAL UNIVERSITY NON-PROFIT
JOINT STOCK COMPANY
FOR THE COMPLIANCE WITH THE STANDARDS FOR PROGRAMME
ACCREDITATION OF POSTGRADUATE EDUCATION
(RESIDENCY SPECIALTIES) OF MEDICAL EDUCATIONAL
ORGANIZATIONS

External peer review period: May 24-26, 2023

Karaganda, 2023
**CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Membership of the external expert commission</td>
<td>4</td>
</tr>
<tr>
<td>2. General part of the final report</td>
<td>6</td>
</tr>
<tr>
<td>2.1 Educational program presentation on the specialty - 7R01131 Adult and Pediatric Endocrinology</td>
<td>6</td>
</tr>
<tr>
<td>2.2 Information about previous accreditation</td>
<td>8</td>
</tr>
<tr>
<td>2.3 Conclusion on the results of the report review on self-assessment of educational program 7R01131 Adult and Pediatric Endocrinology for compliance with the Accreditation Standards of Postgraduate Education Programs (Residency Specialty) of Medical Education Organizations and conclusions</td>
<td>8</td>
</tr>
<tr>
<td>3. External peer review description and conclusion</td>
<td>9</td>
</tr>
<tr>
<td>4. Analysis on compliance with accreditation standards on the results of external evaluation of educational program 7R01131 Adult and Pediatric Endocrinology</td>
<td>12</td>
</tr>
<tr>
<td>5. Recommendations for improvement of the educational program 7R01131 Adult and Pediatric Endocrinology</td>
<td>37</td>
</tr>
<tr>
<td>6. Recommendation to the Accreditation Board</td>
<td>38</td>
</tr>
<tr>
<td>Appendix 1. Quality profile and criteria of external evaluation and educational program of residency in the specialty of educational program 7R01131 Adult and Pediatric Endocrinology</td>
<td>39</td>
</tr>
<tr>
<td>Appendix 2. List of documents reviewed within the framework of the external expert evaluation</td>
<td>40</td>
</tr>
</tbody>
</table>
# LIST OF SYMBOLS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Academic Committee</td>
</tr>
<tr>
<td>AP</td>
<td>Academic Policies</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
</tr>
<tr>
<td>SCES</td>
<td>State Comprehensive Education Standard</td>
</tr>
<tr>
<td>DAA</td>
<td>Department of Academic Affairs</td>
</tr>
<tr>
<td>DET</td>
<td>Distance education technologies</td>
</tr>
<tr>
<td>DIID</td>
<td>Department of Informatisation and Infrastructure Development</td>
</tr>
<tr>
<td>D.M.</td>
<td>Doctor of Medicine</td>
</tr>
<tr>
<td>HRMD</td>
<td>Human Resources Management Department</td>
</tr>
<tr>
<td>UHEMS</td>
<td>Unified higher education management system</td>
</tr>
<tr>
<td>QA</td>
<td>Eurasian Centre For Accreditation and Quality Assurance In Higher Education And Health Care</td>
</tr>
<tr>
<td>FAC</td>
<td>Final Attestation Commission</td>
</tr>
<tr>
<td>FA</td>
<td>Final attestation</td>
</tr>
<tr>
<td>IEP</td>
<td>Individual Education Plan</td>
</tr>
<tr>
<td>IWP</td>
<td>Individual work plan</td>
</tr>
<tr>
<td>SC</td>
<td>Selection component</td>
</tr>
<tr>
<td>IHIS</td>
<td>Integrated healthcare information system</td>
</tr>
<tr>
<td>CED</td>
<td>Catalogue of elective disciplines</td>
</tr>
<tr>
<td>CQASRDP</td>
<td>Commission for Quality Assurance of the School of Residency and Professional Development</td>
</tr>
<tr>
<td>SOPE</td>
<td>State-Owned Public Enterprise</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>Doctorate Degree in Medicine</td>
</tr>
<tr>
<td>MH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>LEB</td>
<td>Local Executive Board</td>
</tr>
<tr>
<td>NJSC</td>
<td>Non-Profit Joint Stock Company</td>
</tr>
<tr>
<td>KMU NJSC</td>
<td>Karaganda Medical University Non-Profit Joint Stock Company</td>
</tr>
<tr>
<td>NCIE</td>
<td>National Centre for Independent Examinations</td>
</tr>
<tr>
<td>SC</td>
<td>Science Centre</td>
</tr>
<tr>
<td>RDC</td>
<td>Research and Development Centre</td>
</tr>
<tr>
<td>RDW</td>
<td>Research and Development Work</td>
</tr>
<tr>
<td>OCCH</td>
<td>Oblast Children's Clinical Hospital</td>
</tr>
<tr>
<td>OCH</td>
<td>Oblast Clinical Hospital</td>
</tr>
<tr>
<td>EP</td>
<td>Educational Program</td>
</tr>
<tr>
<td>PSA</td>
<td>Practical skills assessment</td>
</tr>
<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
</tr>
<tr>
<td>TRA</td>
<td>Tolerance rating assessment</td>
</tr>
<tr>
<td>OSCE</td>
<td>Objective structured clinical examination</td>
</tr>
<tr>
<td>MS</td>
<td>Middle School</td>
</tr>
<tr>
<td>PS</td>
<td>Principal Subject</td>
</tr>
<tr>
<td>PC</td>
<td>Principal Competences</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>HETP</td>
<td>Higher-Education Teaching Personnel</td>
</tr>
<tr>
<td>RK</td>
<td>The Republic of Kazakhstan</td>
</tr>
<tr>
<td>LO</td>
<td>Learning Outcomes</td>
</tr>
<tr>
<td>WC</td>
<td>Working Curriculum</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>SSS</td>
<td>Student Support Services</td>
</tr>
<tr>
<td>IWR</td>
<td>Independent Work of Residents</td>
</tr>
<tr>
<td>IWRT</td>
<td>Independent Work of Residents With Teachers</td>
</tr>
<tr>
<td>EPMS</td>
<td>Employee Performance Management System</td>
</tr>
<tr>
<td>SES</td>
<td>Secondary Education School</td>
</tr>
<tr>
<td>SC</td>
<td>Secondary School</td>
</tr>
<tr>
<td>TByte</td>
<td>Terabyte</td>
</tr>
<tr>
<td>VET</td>
<td>Technical and Vocational Education/</td>
</tr>
<tr>
<td>LLP</td>
<td>Limited Liability Partnership</td>
</tr>
<tr>
<td>MC</td>
<td>Model Curriculum</td>
</tr>
<tr>
<td>TP</td>
<td>Teaching Package</td>
</tr>
<tr>
<td>KOHD</td>
<td>Karaganda Oblast Health Department</td>
</tr>
<tr>
<td>ATF</td>
<td>Advanced Training Faculty</td>
</tr>
<tr>
<td>CSET</td>
<td>Centre for Simulation and Educational Technologies</td>
</tr>
<tr>
<td>PSC</td>
<td>Practical Skills Centre</td>
</tr>
<tr>
<td>CCE</td>
<td>Centre for Continuing Education</td>
</tr>
<tr>
<td>SRPD</td>
<td>School of Residency and Professional Development</td>
</tr>
<tr>
<td>SRMEE</td>
<td>Association for Medical Education in Europe</td>
</tr>
<tr>
<td>CBL</td>
<td>Clinical based learning</td>
</tr>
<tr>
<td>ECTS</td>
<td>European Credit Transfer and Accumulation System</td>
</tr>
<tr>
<td>GPA</td>
<td>Grade Point Average</td>
</tr>
<tr>
<td>PBL</td>
<td>Problem-Based Learning</td>
</tr>
<tr>
<td>RBL</td>
<td>Research-Based Learning</td>
</tr>
<tr>
<td>TBL</td>
<td>Team- Based Learning</td>
</tr>
<tr>
<td>ON</td>
<td>Learning Outcomes</td>
</tr>
</tbody>
</table>
1. **Membership of the External Expert Commission**

In accordance with the order № 15 of 11.05. 2023, the External Expert Commission (hereinafter - EEC) was formed to conduct an external evaluation of the educational program of the residency in the specialty 7R01131 Adult and Pediatric Endocrinology in the period from 24 to 26 May 2023 in the following members:

<table>
<thead>
<tr>
<th>No.</th>
<th>Status as a member of the EEC</th>
<th>Full name</th>
<th>Academic degree, academic title, position, place of work/place of study, course, specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chairman</td>
<td>KUDABAEVA KHATIMYA ILYASOVNA</td>
<td>Associate Professor, Candidate of Medical Sciences, Professor of the Department of Internal Diseases No. 1 of the West Kazakhstan Marat Ospanov State Medical University NJSC</td>
</tr>
<tr>
<td>2</td>
<td>Foreign expert</td>
<td>RYZHKIN SERGEY ALEXANDROVICH</td>
<td>Doctor of Medical Sciences, Head of the Department of Radiotherapy and Radiology named after Academician A.S. Pavlov, Head of the Department of Additional Professional Education of the Russian Medical Academy of Continuous Professional Development (Moscow), Scientific Secretary of the Department of Medical and Biological Sciences of the Academy of Sciences of the Republic of Tatarstan, accredited expert of the Federal Service for Supervision of Education and Science (Rosobrnadzor)</td>
</tr>
<tr>
<td>3</td>
<td>Academic expert</td>
<td>AFSHIKYAN SHUSHANIK GEVORKOVNA</td>
<td>PhD in Pharmacy/Candidate of Pharmaceutical Sciences, Associate Professor of the Department of Pharmacy, Head of the Department of Organization of Computer Examinations of Yerevan State Medical University named after M. Heratsi, Republic of Armenia</td>
</tr>
<tr>
<td>4</td>
<td>Academic expert</td>
<td>URAZANOVA SALTANAT NURGOZHAYEVNA,</td>
<td>Doctor of Medical Sciences, Head of the Department of Family Medicine No. 3 of the Astana Medical University NJSC</td>
</tr>
<tr>
<td>5</td>
<td>Academic expert</td>
<td>SHABDARBAYeva Daria Muratovna,</td>
<td>Doctor of Medical Sciences, Professor, pathologist of the highest category, medical examiner of the highest category, Head of the Department of Pathological Anatomy and Forensic Medicine named after Professor Yu.V. Y.V. Pruglo of the Semey Medical University NJSC</td>
</tr>
<tr>
<td>6</td>
<td>Academic expert</td>
<td>RAMAZANOVA RAIGUL MUKHANBETOVNA</td>
<td>Doctor of Medical Sciences, Professor of the Department of Internal Diseases of the S.D. Asfendiyarov Kazakh National Medical University NJSC</td>
</tr>
<tr>
<td>7</td>
<td>Academic expert</td>
<td>ZHUMALINA AKMARAL KANASHEVNA,</td>
<td>Doctor of Medical Sciences, Professor, Head of the Department of Pediatric Diseases with Neonatology of the West Kazakhstan Marat Ospanov State Medical University NJSC</td>
</tr>
<tr>
<td>Academic expert</td>
<td>Candidate of Medical Sciences, Head of the Department of Pharmacology and Evidentiary Medicine of Medical University NJSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic expert</td>
<td>Candidate of Medical Sciences, Dean of the School of Nursing of the Astana Medical University NJSC, Member of the Association for Medical Education in Europe (AMEE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic expert</td>
<td>Candidate of Medical Sciences, Acting Associate Professor of the Department of Clinical Disciplines of Al-Farabi Kazakh National University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic expert</td>
<td>Candidate of Medical Sciences, Assistant of the Department of Clinical Pharmacology of the S.D. Asfendiyarov Kazakh National Medical University NJSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic expert</td>
<td>PhD, Associate Professor of the Department of Pediatric Surgery of the Astana Medical University NJSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic expert</td>
<td>Candidate of Medical Sciences, Head of the Department of Postgraduate Education of Kazakh Order &quot;Badge of Honor&quot; Scientific Research Institute of Eye Diseases LLP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Representative of employers</td>
<td>Deputy Director for Strategic Development of the Regional Clinical Hospital of the Karaganda Region Health Department;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Representative of doctoral students</td>
<td>doctoral student of the first year of study in the specialty &quot;Biology&quot; of the Karaganda Buketov University NJSC Buketov NJSC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ECAQA observer is Makpal A. Umarova, Head of Accreditation and Monitoring Department. The EEC's work was held in accordance with the Regulation on the EEC (Order of the Director General of ECAQA No. 4 dated February 13, 2017). The EEC report contains the evaluation of the educational program 7R01131 Adult and Pediatric Endocrinology for compliance with the Accreditation Standards for Postgraduate Education Programs (Residency Specialty) of Medical Education Organizations and Conclusions (hereinafter - Accreditation Standards), recommendations of the EEC on further improvement of approaches and conditions for the implementation of the above educational program and recommendations for the ECAQA Accreditation Board.

2. General part of the final report
2.1 Presentation of the residency educational program in the specialty Adult and Pediatric Endocrinology

| Name of organization, legal form of ownership, BIN | Karaganda Medical University non-profit joint stock company, BIN 190140033600 |
| Management body | The Ministry of Health of the Republic of Kazakhstan |
| Full name of the first supervisor | Anar A. Turmukhambetova |
Karaganda Medical University Non-Profit Joint Stock Company was established in 1950. Now it is a leading medical university of Kazakhstan in training qualified personnel for the health care system and has a high reputation in the provision of educational, scientific and therapeutic-diagnostic services, has a high national rating among medical universities of Kazakhstan.

KMU NJSC is included in the Directorate of Medical Schools Avicenna of WHO and the World Federation for Medical Education. The HEI is a member of the Association for Medical Education in Europe (AMEE), Association for the Study of Medical Education (ASME), Organization of PhD in Biomedicine and Health Sciences European System (ORPHEUS), European University Association (EUA), University Mobility in Asia and the Pacific (UMAP), International Association for Development and Empowerment (IADE), Association of HEIs of the Republic of Kazakhstan, Asian Medical Education Association (AMEA), League of Academic Integrity.

Training is provided in Kazakh, Russian and English languages. The University provides educational services in the specialties of medicine, pediatrics, medical and preventive medicine, dentistry, pharmacy, Oriental medicine of higher medical education.

The educational program (EP) for the specialty 7R01131 Adult and Pediatric Endocrinology was developed for the first time in KMU NJSC in 2015. In accordance with the license (No. 14020603, April 14, 2015) for the specialty Adult and Pediatric Endocrinology the university realized the first enrollment on the basis of a grant, contractual order.

In 2017 the EP was accredited by the Independent Kazakhstan Agency for Quality Assurance in Education/IQAA (registration number: SO №0121/4, accreditation validity period until June 17, 2022). One of the recommendations of the accreditation examination was to conduct career guidance meetings with potential applicants for admission to the residency program. In this regard, the university conducted career guidance work in schools of the region and among interns with the subsequent report of the staff at the department meeting. Another recommendation was to carry out activities to improve the pedagogical qualification of teaching staff in other universities and abroad. The experts recommended conducting interdisciplinary trainings within the framework of residents' key competencies.
In the implementation of the EP, the great attention is paid to the research work of residents, the development of academic mobility of residents between universities within the country, the arrival of visiting professors from near and far abroad.

For the last 5 years, the contingent of residents in the specialty Adult and Pediatric Endocrinology amounted to 92: in 2017-2018 academic year - 15 residents, in 2018-2019 academic year. 20 residents (12 by state order, 4 - commercial contract, 4 - MIO grant), in 2019-2020 academic year trained 15 residents, of which 3 by state order, 7 - commercial contract, 5 - MIO grant); in 2020-2021 academic year - 10 residents on commercial contract. In 2021-2022 academic year - 16 residents (6 - state order, 10 - commercial contract), in 2022-2023 academic year - 16 residents (8 - state order, 8 - commercial contract).

Associate Professor N.V. Vasilieva was the head of the educational program until 2021. Since 2022 in this position is D.T. Amirkhanova the Associate Professor, a member of the Educational Programs Committee for the specialty Adult and Pediatric Endocrinology.

Graduates of the educational residency program Adult and Pediatric Endocrinology are in great demand, the employment rate is 100%.

2.2 Information about previous accreditation
The educational program (EP) on specialty 7R01131 Adult and Pediatric Endocrinology was accredited by the Independent Kazakhstan Agency for Quality Assurance in Education in 2017 until 17.06.2022 (www.qmu.edu.kz; @officialkmu).

2.3 Conclusion on the results of the report review on self-assessment of educational program 7R01131 Adult and Pediatric Endocrinology for compliance with the Accreditation Standards of Postgraduate Education Programs (Residency Specialty) of Medical Education Organizations and conclusions
The report on self-assessment of the educational program of the residency specialty Adult and Pediatric Endocrinology (hereinafter - the report) is presented on 109 pages of the main text, appendices on 16 pages, located at the link https://drive.google.com/drive/folders/1pdCvvFIzipqSvbyN9b9UVEg5NlqvJdI?usp=sharing.

The report has a completed form and is characterized by completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for the self-assessment of the educational program provided to the educational organization by the accreditation center - , as well as the internal unity of information. The report is accompanied by a cover letter signed by the rector Türmukhambetova A.А., which confirms the reliability of quantitative information and data included in the self-assessment report.

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

Self-evaluation of the educational program Adult and Pediatric Endocrinology was conducted based on the order of the Rector of the University № 274 of 16.09.2022 "On the creation of a working group to conduct specialized self-evaluation and report writing".

Accreditation expert Kudabaeva H.I. reviewed the report, the review noted the strengths and areas for improvement, as well as recommendations for additions and revisions, which in the process of feedback with the representative of the HEI were taken into account, and appropriate changes and additions were made to the self-assessment report.

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

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

The quality of the self-assessment report served as a basis for the transition to the next stage of the accreditation procedure - external assessment. The experts planned validation of the report data, comparison of the 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

External expert work within the evaluation of the educational program Adult and Pediatric Endocrinology was organized in accordance with the Guidelines for external evaluation of QA educational organizations and educational programs and under the program approved on 20.05.2022 by QA General Director Sarsenbaeva S.S. and agreed upon with the Rector of Medical University of Karaganda NJSC Turmukhambetova A.A. Visit dates: May 24 -26, 2023.

The external evaluation is aimed at validation of the self-assessment report data and verification of indicators certifying 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 Program (hereinafter - the program), which is in the documentation of the accreditation center. The program is a proof of implementation of all planned activities within the framework of the external expert review.

May 24, 2023- on the first day of the visit a meeting was held with Toleubekov K.K., Turgunov E.M the members of the Board of KMU NJSC. Discussed 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 training residents, scientific directions of the university, motivation systems and participation in research and development of teachers of residency departments. RDW members met with employees of departments responsible for admission and employment of graduates with the head of the Career Development Department Tokzhumanova G.M., Dean of the Residency School Tashkenbaeva V.B., Dean of Nursing Education Estemesova K.A., Director of the Institute of Life Sciences Kluyev D.A., the questions about the formation of the state order for specialties, selection and admission procedures, paid training, career guidance work, feedback with applicants and applicants, work with departments, monitoring the employment of graduates, satisfaction with the quality of training of graduates were discussed.

They visited the university library, the area of which is 1526 square meters, the area of book storage - 941.6 square meters. The number of seats in the reading rooms is 443. The library includes: the department of acquisition and bibliography and the department of service of scientific and educational literature (consists of the scientific literature subscription, two subscriptions of educational literature, reading room and periodicals hall, hall of electronic resources, interactive hall). The computer park of the library consists of 113 computers.

Wi-Fi zone is spread throughout the library. There are 2 scanners for users in the e-resources room. The Interactive Hall is equipped with a short-focus projector. For students there is the Hall of the Researcher, equipped with 15 computers connected to the Internet, which allows to have access to all information resources of the university. Service of users in the electronic halls is provided from Monday to Friday from 09-00 to 20-00, on Saturday from 09.00 to 18-00. For realization of educational process on specialty Adult and Pediatric Endocrinology book supply of basic and additional literature is 100%. From them the total number of textbooks, including in the Kazakh language - 2110 copies, of which in the Kazakh language - 673, in Russian - 1315, in English - 122.
The experts also visited the university gym and the Student Service Center (SSC). In the SSC a student and resident can get all the necessary documents signed with an electronic digital signature through a personal account on the portal cos.qmu.edu.kz, previously ordering the necessary service. The result of the service is sent to the student’s e-mail.

Then the experts visited the Centre for Simulation and Educational Technologies (CSET). The area of the Centre for Simulation and Educational Technologies is 1300 square meters, 42 training rooms. It is equipped with 400 types of simulation equipment, including 57 high-tech simulators.

Meetings were held with members of the Academic Senate Committee and the Quality Assurance Committee of the Residency School; with members of Human Resource Management and the Center for Simulation and Educational Technology Department; and with members of the Economics and Finance Department.

On the second day of the visit - 25.05.2023 - the experts visited 3 clinical training bases, including Hematology Center LLP (17 Saken Seyfullina str.); Regional Children's Clinical Hospital SME, Healthcare Department of Karaganda Region (8 Yerzhanova str.), where training on the program Adult and Pediatric Endocrinology is conducted with participation of 3 full-time teachers. Visited Regional Clinical Hospital SME, Healthcare Department of Karaganda Region (41/43 Yerubaeva str.), where training of the residency in the specialty Adult and Pediatric Endocrinology is conducted with the participation of 4 full-time teachers.

The experts attended practical classes in the CBL format on the topic "Clinical Case Analysis of a Congenital Hypothyroidism" for the first-year residencies in the specialty "Adult and Pediatric Endocrinology". Professor, Ph.D. Eremicheva G.G. conducted the lesson based on the Regional Children's Clinical Hospital SME, Karaganda Oblast Health Department. Visited an open lesson organized by the faculty of the Department of Internal Diseases of Karaganda Medical University Non-Profit Joint Stock Company. 18 residents of the 1st and 2nd years of training in specialties Hematology adult, Adult and Pediatric Endocrinology, Pulmonology adult, pediatric participated. The topic "Multidisciplinary Consilium: diagnosis and treatment of bleeding".

During the second part, interviews with students, teachers, graduates and employers were conducted. The EEC members used the following methods and their results to obtain objective information:

- interview with management and administrative staff - 7 people;
- interviews with residents - 75 people;
- exploring the Web site https://www.qmu.edu.kz/ru;
- interviewing 402 faculty members;
- faculty and resident questionnaires - 63 and 32 respectively;
- observation of resident education: attendance at a practice session in the format (see above) and an open class on "Multidisciplinary Consilium: diagnosis and management of bleeding disorders".
- Review of resources in the context of meeting accreditation standards: visited 3 clinical engagement bases (see above).
- From the side of the team of the accredited organization ensured the presence of all persons specified in the visit program and according to the lists of interview and interview sites (Table 1).

Table 1 - The number and category of participants participating in meetings, interviews, conversations with EEC members

<table>
<thead>
<tr>
<th>No.</th>
<th>Full name</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Meeting with Vice-Rectors of Karaganda Medical University Non-Profit Joint Stock Company</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Meeting with members of the Academic Board, Committee of Educational Programs by Level of Education (Residency)</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Meeting with employees of departments responsible for admission and employment of graduates</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Meeting with educational program managers</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Meeting with the staff of the Human Resources Management Department and the Center for Simulation and Educational Technologies</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Interviews with learners</td>
<td>75</td>
</tr>
<tr>
<td>7</td>
<td>Interviews with lecturers</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>Interviews with employers</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>Interviews with graduates</td>
<td>38</td>
</tr>
</tbody>
</table>

On the last day of the visit – May 26, 2023 - a meeting of EEC members on the results of external evaluation was held in the organization. Final discussion of the results of the external evaluation of the educational program, study of documents, results of interviews, colloquium, 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 educational program "Adult and Pediatric Endocrinology" for compliance with the ECAQA Accreditation Standards". The EEC members made no remarks. Recommendations for improvement of the educational program were discussed and the chairperson Kudabaeva H.I. held the final open voting on recommendations for the ECAQA Accreditation Board on the accreditation period - 5 years.

Comfortable conditions were created for the work of the EEC, organized access to all necessary information and material resources. The Commission notes the high level of corporate culture of the University, a high degree of the staff’s openness in providing information to the EEC members.

During the questionnaire of residents, 88.9% assessed the work of the External Expert Accreditation Commission as positive, 9.5% as satisfactory. The majority of respondents (85.7%) believe that it is required to carry out accreditation of educational organization or educational programs.

Based on the opinion of 90.6% of the lecturers, the questionnaire survey conducted by ECAQA is useful for developing recommendations for upgrading key areas of the accredited educational organization’s activities.

In conclusion of the visit program the Chairperson of the EEC announced recommendations on the results of external evaluation within the framework of specialized accreditation for the management and staff of the educational organization.

3. Analysis on compliance with accreditation standards on the results of external evaluation of educational program 7R01131 Adult and Pediatric Endocrinology.

Standard 1: MISSION AND FINAL RESULTS

Evidence of Compliance:

1.1 Mission Statement

During the implementation of the program activities, namely, according to the results of interviews with the first head of the organization, members of the Management Board, employees of departments, heads of OPs, Departments of Economics and Finance, Human Resources Management, visits to clinical bases, interviews with residents and teachers, compliance with the criteria of standard 1 was established. All participants of the educational process know the mission of the educational program, participated in the formation of proposals for mission formulation, with the mission communicated to potential residents through the website, social networks, newsletters to medical organizations.

Reviewed the Development Program of Karaganda Medical University Non-Profit Joint Stock Company for 2019 - 2023 years (Approved by the Decree of the Government of the Republic of Kazakhstan from June 27, 2019 № 453), including such areas as: Place and role of Karaganda Medical University NJSC in the system of higher and postgraduate education of Karaganda Medical University NJSC; Development of innovation potential of Karaganda Medical University NJSC and its achievement; Commercialization of scientific and technical developments of Karaganda Medical University NJSC; Target indicators of the Development Program, etc., which confirms the
implementation of the accreditation standard and demonstrates the goals, objectives and prospects of the organization.

From the interviews with residents it was established that before the beginning of classes the professors inform about the mission, plans of the university, tell where to get the necessary information about the educational program, teachers, training bases.

In the process of visiting the units of Karaganda Medical University NJSC, the experts noted the strengths, including: the definition of the mission and the final results of training of the residency program are carried out in cooperation with the main stakeholders. The EP on the specialty Adult and Pediatric Endocrinology is included in the register of the UHEMS of the MSE RK and contributes to the achievement of the stated mission of the EP (http://esuvo.platonus.kz/#/user/rep/submissions/application/31236).

At the University there are departments directly related to the educational program Adult and Pediatric Endocrinology, which can be noted as the best practice in education, specifically the Residency School, Department of Internal Medicine, CSET. Forms of training and monitoring of residents are provided in the leading clinics of the region, which allows to apply patient-centered and holistic approach in the implementation of care and treatment of patients. Experts visiting clinics, interviewing residents and graduates noted active interaction with advanced clinical bases, where the trinity of education, science and practice is fully realized. The EP includes the profile competence (PC1) to provide residents with effective patient-centered care, including activities aimed at the treatment and prevention of diseases. The concept of patient-centered approach in the EP is a central element of the quality of medical care provided to patients.

The results of the documentation study demonstrate that the mission of the organization and the mission of the educational program are aimed at the implementation of six fundamental profile competencies of the residents of the Adult and Pediatric Endocrinology, which ensures the training of a professional endocrinologist with versatile competencies. The competencies of the Karaganda Medical University NJSC residency graduate are presented on the website and are available for all interested parties (https://qmu.edu.kz/ru/contents/view/314).

The educational process is organized in accordance with the State Educational Standards and current normative and legal acts (NLA) in postgraduate education and health care. The University determines the main directions of introduction and application of innovative teaching technologies. Modern educational methods of teaching (CBL, small group work, RBL, interdisciplinary training with discussion of clinical cases, Moodle platform) and evaluation are actively used in the EP, and innovative teaching technologies are introduced.

However, during the meetings with 26 employers, the experts noticed that not all interviewees have full knowledge of the University's Mission and educational program, as well as the ways of its implementation.

1.2 Personal professionalism and professional autonomy

To verify Standard 1, a meeting was held with the Chairman and members of the University Board. During the conversation the experts asked the following questions: "What in general has changed in the HEI after obtaining the status of a research university?" During the answers, Vice-Rector for scientific and clinical research Turgunov E.M. confirmed that "Funding for research activities is increasing, including the involvement of faculty, students, in the implementation of grant research of the Ministry of Education and Science of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan, the implementation of intra-university grants. It is planned to equip the research laboratories of the university with high-tech equipment, which will allow the university to participate in international grants. In the future it is planned to obtain GLP certificates by the laboratories of the university".

During the survey of 63 residents (on the resource https://webanketa.com/), out of 22 questions, a number of them were devoted to the quality of the educational process and educational program. It was found that 80.95% of residents will recommend to their acquaintances, friends and relatives to study at this university.
82.54 % of respondents believe that the supervisors of the educational program and teachers are aware of students' problems related to training. To the question "Do you think that this university allows you to acquire the necessary knowledge and skills in your chosen specialty?" - 96.83% of residents answered positively, 1.59% are not sure and 1.59% would like to believe it.

Interviewed 32 teachers (21 questions of the questionnaire) answered that 93.75% are satisfied with the organization of work and workplace in the university, and 6.25% partially agree with this statement. 96.9% of lecturers are satisfied with the microclimate of the HEI, and 3.1% are partially satisfied. According to 93.75% of respondents, a teacher has an opportunity to realize himself/herself as a professional in his/her specialty. Teaching experience of the respondents: up to 5 years - 6.25%, up to 10 years - 12.5%, over 10 years - 81.25%. Thus, the experts determined that the organization has a healthy microclimate, as the manager is quite accessible to both residents and staff, responds promptly to requests.

1.3 Final learning outcomes

The University has determined the model of educational program based on the established final results of residents' training and qualifications received by them, ensuring systematic and transparent training. The content of the residency program Adult and Pediatric Endocrinology meets the requirements of the State Educational Standards of the Republic of Kazakhstan 2020, 2022 and provides training of residents in accordance with the name of the program and special.


The Working Curriculum, EP demonstrates the logical sequence of modules/disciplines that ensure the formation of competencies. Learners have free access to patients at the clinical bases of the university or to the practice base resources.

The EP Adult and Pediatric Endocrinology provides residents with both academic knowledge and the necessary skills and competencies that can influence their personal development and may find application in their future careers (ESG G 1.2). The University has an effective system of resident mentoring, which is regularly evaluated, including through feedback. The content of the training program is adjusted and changed in accordance with the changing conditions and needs of the health care system.

The reviewers established a clear continuity between the outcomes of prior resident training (prerequisites) and residency training, and subsequent continuing professional development programs.

At admission to the residency program, according to the "Admission policy of students in Karaganda Medical University NJSC is carried out on a competitive basis and the competencies achieved at the level of bachelor's degree and internship are taken into account and this is evaluated in the entrance exams (https://www.qmu.edu.kz/media/qmudoc/OPResRus.pdf)."

1.4 Participation in mission and outcome statements

The mission and goals of the EP are implemented taking into account the opinions and proposals of other stakeholders: patients, employers, association of doctors, representatives of trade union organizations of health care and population. Analysis and integration of proposals and wishes of all stakeholders in the educational process, study of requests and expectations of all categories of consumers of the university, interaction of structures, provides internal and external independence in the development and implementation of the mission of the EP. The objectives, learning outcomes of the educational program implemented by the HEI are presented in the register of the Unified higher education management system of the MES RK (http://esuvo.platonus.kz/#/register/education_program/application/31236.) are available for all stakeholders.

Residents have a real opportunity to participate in the discussion of the educational program that they confirmed during the meeting with experts.
At the same time, when talking to employers, experts did not get a clear answer to the question "Do you participate in the formulation of the mission and goals of the organization, educational program?"

In response to the question "How do the residents personally contribute to the improvement of the educational program?" the learners answered that they are actively involved in the improvement of the EP. The results of residents' questionnaire survey using "360°-residents' assessment" give the opportunity to further influence the EP in formulating the competence and final results of residents' training. Residents' suggestions are taken into account when forming the catalog of elective disciplines.

During the interview with employers it was noted a positive dynamic in achieving the final results of training by residents, sufficient level of practical skills and knowledge. Expanding the circle of stakeholders gives an opportunity for a more reliable assessment of postgraduate EP residency in the specialty of Adult and Pediatric Endocrinology and improvement of the process for continuous improvement in the formulation of mission and goals.

The EEC's conclusions on criteria. Meet out of 14 standards (including 9 basic, 5 improvement standards): fully-14.

Standard 1: implemented
Recommendations for improvement identified during the external visit: none.

Standard 2: EDUCATIONAL PROGRAM.
Evidence of Compliance:

2.1 Framework for a postgraduate medical education program

The EP is realized in accordance with the SCES 2020,2022. The duration of training in the residency in the specialty Adult and Pediatric Endocrinology is 2 years and includes 4200 academic hours, which is 140 credits (1 credit equals 30 academic hours).

For the implementation of the educational program there are teaching materials, where the aim is defined, the integration of practical and theoretical components, independent work is taken into account. The experts have established compliance with the State Educational Standards and standard requirements.

While attending the practical training session on "Clinical Case Management of Congenital Hypothyroidism", the experts received convincing evidence that the training was conducted according to the plan, the 1st year residents answered the tests before the start of the session, and then received feedback from the instructor.

The University provides observance of ethical aspects in the implementation of the educational program. The experts studied the Code of Ethics (Academic Policy of Karaganda Medical University NJSC, approved by the decision of the Senate on 27.08.2021, Minutes No. 1) and during the interview the residents answered that they are informed about the content of this document.

The analysis of educational activity has indicated that the scientific basis and all achievements of science on advising disciplines are taken into account, additions are made to the bibliography of teaching materials and syllabuses, and lecturers apply them in classes. At the student portal there is teaching materials, which allows to familiarize oneself with the goals, final results of training, which should be mastered by the resident upon completion of training.

The system of mentoring, which is defined by the "Regulations on Residency" (approved by the Decision of the Board of the Karaganda Medical University NJSC dated 23.08.2022, Minutes No.18), was evaluated.

Residency training is carried out under the guidance of a lecturer and a clinical preceptor, the activity of whom is regulated by the "Job descriptions of the clinical preceptor". 7 preceptors, who are highly qualified specialists of practical healthcare in endocrinology, participate in the training of residents:
1. Tutkushbaeva Z.M. - external endocrinologist of the Karaganda Region Health Department, head of endocrinology department of the Regional Clinical Hospital SME of Health Department of the Karaganda Region, endocrinologist of the highest category, 29 years of work experience.

2. Stanbekova R.K. - external pediatric endocrinologist of the Karaganda Region Health Department, head of the endocrinology department of the Regional Children's Clinical Hospital in Karaganda, pediatric endocrinologist, highest category, 12 years of work experience.

3. Rapikhova G.T. - endocrinologist of the highest category, Multiprofile hospital No.2 SME, Karaganda, 27 years of work experience.

4. Karelkhan A.K. - endocrinologist of the highest category, Polyclinic No.3 SME, Karaganda, work experience - 28 years.

5. Tusupova G.T. - endocrinologist of the highest category, "Polyclinic 15" LLP, Karaganda, 28 years of work experience.

6. Hen M.V. - endocrinologist of the highest category, Regional Clinical Hospital SME, work experience 28 years.

7. Oleg M. Mazurchak - Head of Radiation Diagnostics Department of Hippocrates LLP, doctor of the highest qualification category, 14 years of practical work experience.

Clinical preceptors are jointly and severally responsible for the training of the resident and for the results of his/her training. They participate in the preparation and conduct of interim and final certification of residents.

Teachers and preceptors receive regular professional development on instructional technologies and assessment methods at CSET and other educational organizations.

At the university, research on the application of mentoring is conducted and articles on the educational process are published. For example, the article "Structured approach umbrella mentoring": clinical mentors' reflections on their contribution to the formation of a therapeutic specialist", authors - Turgunova L. G., Laryushina E. M., Kemelova G. S. and others. M., Kemelova G. S. et al.

At intermediate and final controls are widely used originality check in the system "Strikeplagiarism.com" (system "Anti-plagiarism" Plagiat.pl with coding of residents' works, ensuring the objectivity of evaluation).

Information about the EP, rights and obligations of residents, including the discipline policy, ethics obligations, is provided by the head of the EP, the lecturer, as well as available for independent study of residents in the module/discipline syllabuses, placed in the teaching and methodological complex of disciplines on the student portal of the Karaganda Medical University NJSC. This indicates compliance with Standard 2 in terms of adapting training to the needs of residents.

Being a member of the Academic Integrity League, Karaganda Medical University NJSC guarantees the conscientious fulfillment of its obligations and recognizes that the promotion and protection of academic integrity is the result of mutual efforts of all participants in the educational process. The educational program in the specialty 7R01131 Adult and Pediatric Endocrinology is implemented in accordance with the Code of Academic Integrity, which is part of the content of the Academic Policy of Karaganda Medical University NJSC (approved by the Board on 27.08.2021, Minutes No. 1. updated on 14.07.2022, Minutes No. 9).

2.2 Scientific method

The educational program includes scientific foundations and methodology of medical research. The EP Adult and Pediatric Endocrinology provides mastering of the competence "Research" (PC5). Residents have the opportunity to be involved in scientific and technical projects (STP) implemented at the department by being included in a temporary scientific team. Residents of endocrinology take an active part in the implementation of STP "COVID-19: Scientific and technological justification of the system of response to the spread of new respiratory infections, including coronavirus infection".

The catalog of elective disciplines (CED) for 2nd year residents includes the discipline "Research Project" (4 credits - 120 hours), which provides an in-depth study of research standards, organization of scientific research, working in a research team, studying the elements of a research project, a systematic approach to planning, formulation of a research question and hypothesis, research design and
methodology, information gathering, evidence-based medicine and international databases, information technology, and research methodology.

In talking with residents, the experts learned that they use scientific evidence in teaching and know the basics of evidence-based medicine. Teachers told that they teach residents how to critically evaluate literature, articles and scientific data, and how to apply scientific developments. During training, residents present the results of scientific - research activities in the form of oral, poster presentations at student scientific circles (SSC), scientific conferences, publications in the collections of scientific congresses, peer-reviewed journals.

During 2018-2022 residents of the EP Adult and Pediatric Endocrinology published 14 works, including in the database of the Russian Science Citation Index - 6, Scopus - 2, in the collections and materials of International and Republican conferences - 6. The results of research were reported at 5 scientific-practical conference.

During the questionnaire survey of residents, it was established that the university has access to the participation of students in research work and 92.16% of people are fully satisfied with it, 6.4% are partially satisfied and 1.6% are not satisfied.

On the question "Do you personally have published printed works (articles, theses, reviews) during your studies at the university?". 39.7% of residents answered that they have more than one article, 41.3% - one article and 3.2% have no publications. At the same time, 11.1% plan to publish in the near future.

2.3 Structure, content and duration of the residency program

The responsibility of the administration and faculty in the management of the educational program is ensured through the procedure of development, review and approval of the program successively through the hierarchy: Academic Committee, Quality Assurance Committee, SRPD Board, Senate of Karaganda Medical University NJSC, Chairman of the Board-Rector of Karaganda Medical University NJSC, which is confirmed by the minutes of the meetings.

The EP has duly passed internal and external expertise and is included in the national Educational Programs Register (http://esuvo.platonus.kz/#/user/tep/submissions/application/31236).

According to the Academic Policy of Karaganda Medical University NJSC, the University has autonomy and in accordance with the license for the right to conduct educational activities within the groups of educational programs according to the classifier of training areas develops the EP on the basis of the current SCES and Model curriculum. In the case of changes to the EP, the "List of changes in the educational program" (F Karaganda Medical University NJSC 1.4/21-05/1) is filled in. In accordance with the developed EP and Model curriculum, Independent work of residents, module/discipline syllabus and CED are developed, the form, structure and procedure of development of which is determined by the HEI independently.

EP of residency Adult and Pediatric Endocrinology was discussed by the Academic Committee (Minutes No.4, 07.06.2019), approved by the Academic Board (Minutes No.7, 18.06.2019), approved at the meeting of the Academic Board and the Chairman of the Board-Rector of Karaganda Medical University NJSC (27.06.2019, Minutes #10).

EP "Adult and Pediatric Endocrinology" (with updates in 2022), was approved at the SQAC meeting (Minutes No.3 dated 05.07.22), discussed at the meeting of the Board of SRPD (Minutes No.11, 07.07.22) and approved by the decision of the Board of Karaganda Medical University NJSC (Minutes No.16, 13.07.22).

The analysis and integration of proposals and requirements of all stakeholders involved in the educational process, the study of requests and expectations of all categories of consumers of the university, the interaction of structures, provides internal and external independence in the development and implementation of the mission of the EP is carried out on a regular basis.

The catalog of elective disciplines includes the following disciplines: Comorbid Patient in Endocrinology, Patient-Centered Care and Compliance in Endocrinology, Insulin Pump and Intensified Treatment Regimen in Pediatric Diabetes Mellitus, Research Project, Genetic Syndromes in Pediatric
Endocrinology. Resident endocrinologist can choose to study any elective. The catalog of elective disciplines is systematically updated and actualized taking into consideration the opinion of stakeholders.

The student portal has a discipline/module teaching package, which allows to independently familiarize the objectives, final learning outcomes to be mastered by the resident upon completion of training.

Karaganda Medical University NJSC has sufficient and appropriate resources to ensure the quality of the educational process (Regulation "Planning and Provision of Educational Resources" (Academic Policy of Karaganda Medical University NJSC, Section 7-2)).

The experts got acquainted with the resources for assessment of residents' practical skills (clinical bases, center of simulation and educational technologies).

Lecturers provide residents with methodical and didactic materials, additional literature for preparing to classes, in what 90.5% of surveyed residents are fully satisfied, 9,5% are partially satisfied.

To the question of the questionnaire "Is there enough time for practical training (patient supervision, etc.)", 90.5% of residents answered with full agreement, 9.5% partially agreed. At the same time, 92.1% of residents say that after the completion of the classes the instructor provides feedback (listening to your opinion, conducting a mini questionnaire, working on errors).

At the same time, to the question "Do supervisors of programs and teachers involve students in the work of advisory bodies (methodological board, scientific board, committees)?", the experts received the following answer: 79.4% - are involved constantly, 4.8% - not constantly, 4.8% - are not involved. The questioned residents are fully satisfied with the schedule of academic classes 92.1%.

2.4 Learning organization and the interrelationship between postgraduate medical education and health care delivery

The management of the educational process as reflected in the self-evaluation report (Standard 2) and general management approaches were confirmed by visiting the Department of Academic Affairs and speaking with members of the Academic Senate Committee, Quality Assurance Committee of the Residency School.

The Residency and Professional Development School is responsible for decision making: development and implementation of educational programs, introduction of new educational programs in the residency” specialties, development and formation of working curricula taking into account the requirements of state general education standards of education, educational programs of residency and the catalog of elective disciplines, recommendations on recruitment of residents and selection of teachers in the departments that train residents. The school carries out the control of residents, support of relations with the sector of practical health care and graduates of the residency, interaction with other structural units of Karaganda Medical University NJSC.

The experts examined the work of all the above-mentioned subdivisions and subdivision boards. During the cross-interview it was established that the Academic Work Department carries out planning, organization, provision, coordination and control of educational activities at the university on a regular basis.

While attending a practical CBL session on "Clinical case analysis of congenital hypothyroidism" and conversation with residents, the experts saw that the organization promotes the development of practical competencies of residents, including on simulation equipment. At the same time, residents deepen their theoretical knowledge, develop communication skills.

Training of residents in the specialty Adult and Pediatric Endocrinology is targeted to meet the needs of practical healthcare, to ensure the high quality of the educational process and training of competitive specialists in residency, taking into account the needs of the labor market.

For the implementation of the EP and training in the residency Karaganda Medical University NJSC concludes a Joint Activity Agreement with clinical bases in accordance with the Ministry of Healthcare of the Republic of Kazakhstan dated December 22, 2020 № KR DSM-304/2020 "On approval of regulations on the clinical base, the clinic of the health care educational institution, the university hospital, the residency base, the integrated academic medical center and requirements for them".
The demand for EP Adult and Pediatric Endocrinology in the labor market is high, which is confirmed by 100% employment of graduates in the specialty.

The experts received information during the conversation with the leadership of the university that training of medical personnel in residency is carried out at clinical bases providing training at all levels of medical care (primary, outpatient, inpatient, highly specialize. The lecturers confirmed that the training of residents is carried out directly in the endocrinology departments of the Regional Clinical Hospital (RCH), the Regional Clinical Children's Hospital (RCCCH), the Clinic of Professional Health of Karaganda Medical University NJSC, the Clinic of the Medical University of Karaganda Medical University NJSC, Multidisciplinary Hospital named after Prof. H.J.Makazhanov Municipal state enterprise on the right of economic management Karaganda Oblast Health Department, Multidisciplinary Hospital No. 2 SOPE, Polyclinics No. 3 and No.15.

The endocrinology department of Oblast Clinical Hospital, which has 30 beds, provides emergency and planned medical care to adults with various endocrinologic diseases, and in Oblast Children's Clinical Hospital - to children with endocrinologic diseases. This is facilitated by tutoring.

Out of 63 questioned residents, 92.1% responded that lecturers apply active and interactive teaching methods at classes quite often, 4.8% believe that rarely or sometimes. When visiting the university, the experts noted the introduction of new teaching methods, including a quest-game on the topic “Multidisciplinary Concilium: diagnosis and treatment of bleeding”.

To the question “The content of the educational program in the chosen specialty meets my expectations” 93.2% of residents answered “completely”, 3.2% - partially. The overwhelming number of residents (90.5%) are satisfied with the fact that they study at Karaganda Medical University NJSC, 7.9% - partially.

**The EEC’s conclusions on criteria.** Meet out of 22 standards (including 19 basics, 3 improvement standards): fully meet - 22.

**Standard 2:** implemented

**Recommendations for improvement identified during the external visit:** none.

**Standard 3: RESIDENTS EVALUATION.**

**Evidence of Compliance:**

**3.1 Evaluation Methods**

The analysis of control and measurement tools (50 tests, 20 clinical tasks/cases) showed that the university has implemented an appropriate assessment policy that allows for a comprehensive evaluation of the educational achievements of residents. The developed cases allow residents to master the issues of interdisciplinary approach to solving patient's problems.

During interviews, residents spoke about forms of assessment such as, comprehensive testing, practical/clinical skills assessment at the patient bedside and, 93.65% of the residents surveyed were satisfied with the methods of knowledge and skills assessment.

The Department of Internal Medicine develops control and measurement tools (CMTs) for current and final control, including extended clinical tasks for written examination, test tasks based on clinical situation, 2 and 3 levels of complexity with multiple-choice answers (MCQs), allowing to assess the knowledge, skills and abilities of residents, the level of clinical thinking. They also receive regular feedback from faculty members.

Facility Instrumentation approved at the meeting of the department (extract from the minutes № 2 of the Department of Internal Medicine dated September 05, 2022). All testing tools are subject to internal review at the department, annually reviewed and approved at the department meeting. External experts - doctors of practical health care are involved for reviewing control and measurement tools.

The appeal system of the evaluation results is specified in the "Regulations on the residency of Karaganda Medical University NJSC. The results of the appeal are posted on the University website (https://qmu.edu.kz/ru/contents/view/1296). A student who disagrees with the final grade has the right to appeal the results no later than the next working day after the grades for the exam in Automated
information system (AIS) Platonus. There were no appeal precedents during the period of the EP implementation.

For verification of the data of Standard 3, the experts asked questions to the Dean of the Residency and Professional Development School Tashkenbaeva V.B. and the Head of the Internal Medicine Department Laryushina E.M. To the question "Does the resident have the right to retake the exam in case of unsatisfactory evaluation? If yes, then how often?". The answer was received that in case of receiving an unsatisfactory grade, the student has the opportunity to retake the final control without retaking the program of the discipline/module. In the period of intermediate attestation of the student is allowed to retake the exam on the discipline (module) no more than once. In the case of obtaining an assessment of "unsatisfactory", the student re-studies the discipline.

The question was also asked: "Is it possible to retake the final attestation?". Answer: "The retake of the comprehensive examination for persons who received a grade of "unsatisfactory" on the final attestation is not allowed in the current academic year in the residency program. Residents who have not passed the independent examination are allowed to retake it in the next academic year with the result of passing the self-assessment in NCIE with a score of at least 70, in accordance with the "Karaganda Medical University NJSC Regulations on the residency".

The University has created all conditions for maximum approximation of the system of assessment and control of residents' competencies to the conditions of their future professional activity and correspond to student-centered learning. Control forms are updated annually at the meetings of the department and SRMEE. Assessment methods and control and measuring tools for evaluating the achievements of residents are annually reviewed and approved at the meeting of the department, undergo expert evaluation of representatives of practical health care.

While visiting the organization and interviewing Professor G.G. Ermicheva, the expert committee verified that there is a documentation system that is transparent and accessible to all faculty and staff, and includes such documents as annual operating plans, annual reports, unit regulations, faculty and resident agreements, and teaching and learning documentation (work program, work study plans, syllabi, journals), assessment tools (checklists, sheets), report, certificates and credentials.

A review of the website www.qmu.kz showed that the pages contain documents required for residents and contain information that is regularly reviewed and updated.

3.2 Relationship between evaluation and learning

In order to standardize approaches to the evaluation of trainees, the Internal Medicine Department has developed evaluation sheets for the control of various types of resident's activities: extracurricular activities of the resident - "Maintaining medical documentation / case history" in the therapeutic hospital, "Night / day duty" in the therapeutic hospital, "360˚ - evaluation of the resident", for the final control - "Evaluation sheet of the Clinical Examination", checklist for the evaluation of the written examination, "Evaluation sheet of the portfolio", which define the criteria for evaluation of the resident's activities. Evaluation sheets are presented in syllabuses by disciplines/modules, which makes the evaluation clear, transparent and objective.

The university has developed standardized approaches to the evaluation of learners with automated systems "Session", "Platonus", which determine the criteria for evaluating the learner's mastery of the required learning outcomes.

The results of resident assessment are put in electronic sheets in the automated information system (AIS) Platonus, where the tolerance rating assessment sheet is formed.

While interviewing 32 faculty members regarding assessment methods, the experts received strong evidence that assessment methods and benchmarks for evaluating resident achievement are reviewed and approved annually at the department meeting and are peer-reviewed by representatives of practical health care.

However, the analysis revealed that an additional set of assessment methods and formats are lacking according to their applicability, which includes validity, reliability, impact on learning, acceptability and effectiveness in relation to expected learning outcomes.
Residents shared their opinion about the timeliness of test delivery, counseling before exams, clarity of the whole assessment procedure and its fairness. The residents confirmed that they are satisfied with the methods of knowledge and skills assessment, point-rating system of knowledge assessment. The faculty evaluation of the educational achievements of endocrinology residents is conducted according to the approved evaluation criteria based on the general principles of the Academic Integrity League (https://adaldyq.kz/documents).

The administration was asked during the visit to the university: "Are external examiners involved in order to improve the fairness, quality and transparency of the evaluation process? The answer was received that representatives of practical health care are necessarily involved in the interim certification. Portfolio defense is conducted by the commission, which includes the head of the EP, faculty members of departments, clinical mentors, representatives of practical health care. During interim certification at the 2nd stage (at the patient's bedside) the examination committee included the head of endocrinology department Tutkushbaeva Z.M. and external pediatric endocrinologist Stanbekova R.K.

For the final certification in 2022-2023 academic year by the order № 316 from 30. December 22, "On approval of the composition of the certification commission" included representatives of practical health care. Toksambaev G.S., director of Multidisciplinary Hospital No. 3 was approved as the Chairman.

The chair submits proposals on the composition of the attestation commission at the SRPD board. Subsequently, the composition of the attestation commission is approved by the Senate decision (29. December 22, Minutes No. 5).

The experts inspected the resources for organizing the assessment of knowledge and practical skills. Material and technical resources are annually reviewed to update and replenish the fund of basic and additional literature, necessary training equipment. The University has the possibility of wide use by residents of the CSET.

26 representatives of employers interviewed indicated that the training of graduates corresponds to the modern development of medical practice and science, as the competency-based approach and practice-oriented approach allow to ensure successful mastering of competencies. Employers confirmed that they themselves participate in the evaluation of residents, as they are included in the commissions for intermediate and final certification.

The EEC's conclusions on criteria Meet out of 11 standards (including 7 basics, 4 improvement standards): fully -9, partially -2, not meet - 0.

Standard 3: implemented

Recommendations for improvement identified during the external visit:

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

Standard 4: RESIDENTS Evidence of Compliance:

4.1 Selection and Admission Policy

The organization has a policy on selection and admission of residents, which is recorded in the Academic Policy of Karaganda Medical University NJSC (approved by the decision of the Senate on 27. August 2021, Minutes No. 1) and "Students admission policy of Karaganda Medical University NJSC" (approved by the decision of the Board of Directors on 27. 05. May 2022, Minutes No. 37).

K.K. Toleubekov, Vice-Rector for Academic Work, informed about the resident admission policy. Approaches to the admission of residents are built on the requirements of the country and internal regulations, which allows the autonomy of the university in such key areas as the selection and admission of residents in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated " October 31, 2018 № 600 "Model rules of admission to training in educational organizations implementing educational programs of higher education". For the period of 2016-2022,
45 residents were admitted to the educational program in the specialty "Adult and Pediatric Endocrinology". 2 came out of academic leave, 47 people successfully completed their studies. In 2022-2023 academic year 16 residents were enrolled, 2 of them were expelled at their own will, 1 resident took a academic leave. In 2023, 7 residents are expected to graduate.

All year’s 100% of residents in the specialty "Adult and Pediatric Endocrinology" successfully passed the independent examination from the first time. The average final certification score of the 29 graduates for 2019-2022 was 89.5% (38% "excellent", 62% "good").

Overall, all criteria of Standard 4 meet the requirements of the University’s admissions and student selection policy.

Regarding the practice of academic advising, personal support of residents, development of residents not only professional skills, the experts interviewed the head of the Career Development Department Tokzhumanova G.M. The university implements a program of resident development, which includes the institute of mentoring, which allows clinical mentor not only to participate in the practical training of students, forming skills of independent work with patients, but also to be responsible for the further development of the resident, becoming a specialist in accordance with the requirements of the University.

Student Support Services of the Youth Services Department operates at the University, and the Medical University Clinic has a psychologist's office.

In order to provide consultative support to trainees, there is a schedule of consultations of faculty members. If necessary, individual consultations with residents are additionally conducted.

4.2 Number of residents

The number of residents accepted during the implementation of the EP Adult and Pediatric Endocrinology - 45 people, including 13 residents under the state order, 27 residents under business contracts, 2 - LEB. In dynamics for the last 5 years the number of accepted residents on the EP Adult and Pediatric Endocrinology varies due to the change in the number of residents accepted on a grant basis and those studying on a business contract.

The Educational Program- Adult and Pediatric Endocrinology trains a sufficient number of residents each year, taking into account the ability of the clinical sites to accommodate a certain number of residents.

The number of accepted residents is constantly coordinated with relevant stakeholders, taking into account the need for medical personnel, in particular endocrinologists. The procedure for determining the number of residents accepted to the EP is regulated by the State Order of the Ministry of Health of the Republic of Kazakhstan, taking into account the possibilities of clinical, practical training, the maximum allowable load on teachers and 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.

4.3 Support and counseling for residents

The support and counseling in the Adult and Pediatric Endocrinology specialty residency is provided through the direct involvement of faculty and clinical preceptors.

Consultations on all issues of the organization of the educational process on the mastering of compulsory and elective disciplines are carried out by the Higher-Education Teaching Personnel, the head of the EP, the head of the SRPD department. The staff of the SRPD together with the staff of the department provide information support to all residents.

Currently, Karaganda Medical University NJSC has a service center for students and staff, providing services on the principle of "one window". Experts positively assess the work of the Center, which demonstrates the quality and availability of services for the provision of certificates, extracts, various documents.

The University provides support in case of professional crisis and involves endocrinology residents in solving their problem situations. When cases of various disagreements with colleagues arise, the situation is solved by discussing the problems personally with the head of the EP, faculty member while maintaining confidentiality. In case of professional crisis, the resident has the opportunity to apply to the
staff psychologist of the clinic of the medical university of Karaganda Medical University NJSC. There is a call-center with a multichannel line (+77212503930) and a telegram-bot (https://t.me/mukinsider), where trainees can contact with any questions.

4.4 Residents' representation

The University has a policy of student representation and their participation in the development, management and evaluation of EP (Academic Policy of Karaganda Medical University NJSC, section "Policy of student representation and their participation in the development, management and evaluation of educational programs").

The activities of the University's advisory bodies - School Board, Senate, which include academic leaders and representatives of a wide range of stakeholders, including residents, allow to improve and effectively implement educational programs, ensure effective management and administration.

Residents are the members of the collegial bodies of the University, student self-government, which means a real opportunity for their participation in the development and improvement of the EP, in the process of development of the admission policy and selection of residents.

Endocrinology Resident have a real opportunity to participate in the discussion and approval of the EP through the development of the personalized resident plan and proposal of topics of elective disciplines at the meetings of the SRPD Board, Senate. Endocrinology Resident are regularly invited to the meetings of advisory bodies and take part in the discussion of issues in the context of the specialty. Proposals and recommendations of the trainees are necessarily taken into account by the members of the advisory bodies and taken into account when forming the final decision of the meeting. Resident-endocrinologist of the 2nd year of training Orazbayeva Elmira is a member of the Board of SRPD.

Moreover, 79.4% of surveyed residents believe that program directors and teachers involve students in the work of advisory bodies (methodological board, academic board, committees of educational programs)

4.5 Labor conditions

Karaganda Medical University NJSC in accordance with Article 48 of the Law on Education "Health protection of students" and Section 4 of the Labor Code of the Republic of Kazakhstan "Occupational Safety and Health" undertakes to provide healthy and safe conditions for residents during training at the clinical bases. At the clinical bases of the Department of Internal Medicine, where residents are trained in the specialty 7R01131 Adult and Pediatric Endocrinology favorable working conditions for quality training are created, taking into account the residents' own needs, including with regard to health.

Resources to ensure the conditions for the education of persons with special needs are defined and approved in the "Work Plan for Inclusive Education", which was approved at the meeting of the Senate in October 2020. "Regulations on Inclusive Education in Karaganda Medical University NJSC" (approved by the decision of the Board on December 9, 2020, Minutes No. 26), allows students with disabilities to ensure access to quality education.

Special educational programs of residency for persons with special educational needs (SEN) are not developed. The University proceeds from the fact that inclusiveness implies not exclusion, but inclusion of students with SEN in the educational process, creating conditions for mastering educational programs. At the same time, if there are such residents, the university will be able to offer flexible organization of training, schedule, classes, individual mode of final control. The solution of such issues is delegated to the Residency and Professional Development School in coordination with the Department of Internal Medicine and DAA. Among endocrinology residents there are currently no persons with SEN.

In connection with the unfavorable epidemiological situation, approaches to the conduct and management of the educational program were revised. In 2020, new communication and information platforms for distance learning were mastered: Microsoft Teams, Webex Cisco, Zoom. With the development and implementation of distance technologies, the opportunities for participation of endocrinology residents in international webinars and Congresses in online format have expanded.
The EEC's conclusions on criteria. Meet out of 20 standards (including 14 basics, 6 improvement standards): completely - 20.

Standard 4: implemented

Recommendations for improvement identified during the external visit: none

Standard 5: FACULTY MEMBER

Evidence of Compliance:

5.1 Recruitment and selection policies

The rules of admission and selection of employees are regulated by the labor legislation of the Republic of Kazakhstan, the Charter of Karaganda Medical University NJSC, internal regulatory documents, as well as the personnel policy of the University, which reflects the procedure and rules of selection of potential employees in accordance with the requirements of the standard qualification characteristics of medical education positions.

The policy of selection and admission of academic staff at the University is implemented in accordance with the Labor Code of the Republic of Kazakhstan dated November 23, 2015 No. 414-V.

The responsibility of teachers and criteria for evaluating their performance are outlined in the following legal documents: Academic Policy, Personnel Policy, Internal Labor Regulations. The requirements for teachers' qualifications for employment, duties, rights and responsibilities of teachers are also defined in job descriptions.

Karaganda Medical University NJSC has developed the EP Management Policy and has mechanisms of continuous monitoring of the EP aimed at its improvement.

4 teachers and 6 clinical mentors are involved in the implementation of the EP Adult and Pediatric Endocrinology for the training of 12 residents.

In the rules of admission of employees at employment in Karaganda Medical University NJSC, Rules of competitive filling of vacant positions, personnel policy, which reflects the procedure and rules of selection of potential employees in accordance with the requirements of the standard qualification characteristics of positions of medical education employees on the basis of the order of MSE RK dated July 13, 2009 № 338 "On approval of standard qualification characteristics of positions of pedagogical workers and persons equated to them“ with additions and amendments as of 31. March 2022.

Announcements about the competitions are publicly available on the university website, which allows both university employees and external applicants to participate in the competition.

CSET functioning in the structure of the University creates favorable conditions for improving the pedagogical competencies of teaching staff. Faculty members have access to full-text journals in the field of medical education.

In order to verify the data of Standard 5, the external experts interviewed G.G. Ermicheva, professor of the department, G.T. Rakhipova, clinical preceptor, and D.T. Amirkhanova, head of Adult and Pediatric Endocrinology EP: "How is the selection of clinical mentors carried out?", "Is their activity monitored?", "For what period of time is the contract with the mentor signed?". The experts were able to learn about approaches to attracting clinical base staff for teaching (there are 6 lecturers in total), the strategy and tactics of resident recruitment, information provision of the educational program, as well as to identify problems in human resources management and development.

The experts were familiarized with the results of a questionnaire survey of teachers conducted in 2020. Human Resources Department to study the teachers' opinion on working conditions. The level of satisfaction was 90.1%, with only 71% of the teaching staff satisfied with their salaries.

The questionnaire survey conducted by EEC showed that the majority (93.8%) of lecturers are fully satisfied with the organization of work and workplace in the university, and 6.3% are partially satisfied. At the university, lecturers have the opportunity to engage in scientific work and publish the results of research and development - 90.6% fully agree, 9.4% partially agree. They are satisfied with the work of HR (personnel) service - 87.5% fully agree, 9.4% partially agree. Satisfied with the salary - 53.1% completely agree, disagree - 12.5%.

5.2 Faculty Commitment and Development
Experts note that the university provides lecturers with a wide range of opportunities for professional and personal improvement: internships, seminars, internal system of professional development, courses in the state, English and German languages, cooperation with foreign universities. There is a developed system of social support - sports infrastructure, preferential service in the Dental Clinic, active trade union, catering. Staff members of the department, including clinical mentors systematically undergo advanced training in educational, clinical, scientific areas of activity.

The responsibility of lecturers and criteria for evaluating their performance are outlined in the following legal documents: Academic Policy, Personnel Policy, Internal Labor Regulations. The requirements for lecturers' qualifications for employment, duties, rights and responsibilities of lecturers are also defined in job descriptions.

In order to stimulate employees to quality labor results, the University has a system of incentives and rewards, which is tied to the achievement of certain performance results by employees, taking into account the level of qualification, competence and performance of lecture. The University has implemented the Employee Performance Management System (EMS), the competition "Best in Profession" for the teachers of Karaganda Medical University NJSC, the questionnaire of students "Teacher through the eyes of students" to assess the achievements of the teachers of EP residency.

In order to verify the data of Standard 5, during the meeting with the head of the human resources department and during the interviews with teachers, the experts obtained an opinion on the approaches to the development of pedagogical competence of teachers, motivation to work with residents, implementation of mentoring.

Faculty motivation tools regarding research in medical education have been implemented. Karaganda Medical University NJSC lecturers have publications on the role of mentoring in resident training, presentations on evaluating the effectiveness of teaching and assessment methods, and methodological recommendations.

The indicator of the department’s activity is the availability of publications of lecturers. To stimulate the scientific activity of faculty members, incentive bonuses are established for the publication of scientific papers in journals with impact factor >1, in international peer-reviewed scientific publications (indexed in Web of Knowledge, Scopus).

An additional payment of 100% of the basic salary is provided for full-time and part-time lecturers (masters, doctoral students) for teaching in English if the lecturer has an IELTS (>5.5 points) or TOEFL (>525 points) certificate.

90.63% of the participants of the questionnaire survey conducted by EEC fully agree that there is whether the university offers an opportunity for career development and competence development of a lecturer", while 9.4% partially agree.

Young lecturers under the age of 30 are supported in the form of a monthly incentive payment.

The data of the questionnaire survey conducted by EEC showed that the university implements social support programs for lecturers - 78.1% answered that "yes, there are such programs", 3.1% "I have already used it", 3.1% of respondents answered that there are no such programs, and 15.6% of respondents do not know about it.

The experts received answers about the professional development program for lecturers, which is held annually and all lecturers involved in the implementation of the educational program are trained on a regular basis. During the reporting period, all staff members (100%) involved in the implementation of the EP "Adult and pediatric endocrinology" have undergone advanced training in their specialty. These activities are financed by the University.

The experts checked the certificates of lecturers and mentors (Vasilieva N.V., Zholdybaeva A.G., Eremicheva G.G.) on such topics as: "Endocrinology of early childhood" - 108 hours, Karaganda; "Nuclear Medicine" - 240 hours, Israel; "Endocrine aspects of infertility" 120 hours, Almaty.

All full-time lecturers and tutors underwent pedagogical professional development on the following topics: "Training of tutors of problem-oriented learning with the use of virtual patients" (54 hours, Karaganda); "Effective teacher" (60 hours, Karaganda); "Methodology of conducting expert examination of educational programs of additional education" (8 hours, Astana).
Questionnaire data conducted by EEC demonstrates that 87.5% attended professional development programs less than 1 year ago, 87.5% within a given year, 9.38% more than 5 years ago and 3.13% answered "don't remember when it was"

The experts revealed that faculty members initiate research and development topics for residents, stimulate the need for additional training and independent work with literature, medical documentation. Faculty members and residents have the opportunity to use the resources of the Research Laboratory, Research Sanitary and Hygienic Laboratory, vivarium. Residents were involved in the STP "COVID-19: Scientific and technological substantiation of the system of response to the spread of new respiratory infections, including coronavirus infection". Under the guidance of faculty members, residents published 13 articles and abstracts, including 2 articles in the Scopus database.

The EEC's conclusions on criteria. Meet out of 8 standards (including 7 basics, 1 improvement standard): fully -8.

Standard 5: implemented

Recommendations for improvement identified during the external visit: none

1526A full-fledged and sufficiently capable material and technical base, which allows creating favorable conditions for training residents, conducting scientific research by the teaching staff of the departments and residents, and using modern information communication technologies. The experts noted the strengths of the university: the presence of a unified system of updating the material and technical base and library fund; participation of residents in teamwork of health care professionals of different profiles at clinical bases under the guidance of teachers and clinical mentors. The experts noted that the university has appropriate clinical bases in the region with a sufficient number of patients with endocrine system pathology. There is a sufficient number (6) of experienced clinical mentors. Constant access to modern information resources is provided.

In conversation with staff of the Economics and Finance Department and the Life Sciences Institute, annual increases in funding for research and equipment purchases have been identified. A complete renovation of the CSET is planned.

During the survey of the faculty members it was revealed that 93.8% fully agree, 6.3% partially agree with the statement that the discipline I teach is provided with sufficient resources (classrooms, equipment). On the question "Evaluate the timeliness of execution of requests for the purchase of methodical and didactic materials, office equipment, stationery to ensure the educational process in the university", 93.8% of surveyed teaching staff noted the timeliness of execute.

Questioning of residents showed that 90.5% of respondents are fully satisfied, and 7.9% are partially satisfied with the conditions and equipment of study rooms and classrooms of the university. 93.7% of residents are fully satisfied with access to electronic educational resources and 6.3% are partially satisfied.

6.2 Clinical facilities

Karaganda Medical University NJSC has 3 own clinics (University Clinic, Clinic of Professional Health, Dental Clinic) and cooperates with 60 medical organizations of Karaganda city, Karaganda region and Astana city.

According to the contracts, clinical facilities are jointly and severally responsible for the quality of training of future specialists, providing the departments with training facilities, providing access to patients and modern diagnostic equipment. Actualization of the above documents is controlled by the clinical department and the head of the Internal Medicine Department of the University. Agreements with clinical facilities for the implementation of the residency program are updated annually.

The review of resources showed that they correspond to the goals and objectives of educational activities. Clinical facilities were visited, including the Regional Multidisciplinary Hospital of Karaganda Region Health Department (contract No. 353 of 01. September 22), including a polyclinic (future endocrinologists can learn and develop skills to help patients with endocrine diseases at the level
of primary health care) and a hospital, where among 25 departments there is an endocrinology department with 30 beds.

The experts visited the Regional Children's Clinical Hospital (contract No. 347 of 01. September 22) with 290 beds, including the endocrinology department, where residents supervise children with endocrinopathies and develop skills in pediatric care. In the hospital, residents acquire disease management skills and act as physician assistants, diagnosticians, researchers, analysts (help physicians conduct analytical reviews of scientific and professional literature, write reports on department activities, write articles and theses), and mentors’ interns (can monitor the clinical activities of interns, assist and mentor them).

The experts visited Polyclinic No.15 LLP in Karaganda (contract No.361 dated September 01, 22), where 42263 people (adults and children) are served. On the basis of the polyclinic residents-endocrinologists are engaged not only in therapeutic work, but also in sanitary and educational work and work in interdisciplinary teams (therapist, endocrinologist, cardiologist, nephrologist, surgeon, pediatrician). The university staff provides a collegial and ethical relationship with the nursing staff, clinical site leadership to achieve resident outcomes.

A sufficient number of thematic patients in accordance with the topics of the educational program is provided. The clinics have modern equipment, which is available to residents under the supervision of a clinical mentor, and the staff, who perform both the roles of teachers and supervisors (mentors), ensure quality training in compliance with ethics and deontology. Before starting any discipline of the educational program, the resident receives a syllabus from the instructor and knows what skills he/she should acquire and develop during the training.

In order to validate the fulfillment of the self-assessment report data and to obtain evidence about the quality of the programs, interviews with residents were conducted. Experts asked questions about satisfaction with training, sufficiency of time for patient supervision, work in DamuMed with medical documentation, satisfaction with teaching methods and qualification of teachers, social and moral support for residents in need, participation in "Journal Clubs", accessibility of resources of international databases of professional literature (both through the university library and "from home", see p.6.3). In general, residents are satisfied with the training, their assessment methods, and purposefully enrolled in this university because they believe that Karaganda Medical University NJSC has good resources, image and extensive international connections.

The residents showed their commitment to the university, were active in answering the questions of external experts, demonstrated their judgment on the organization of training, assessment of their skills, advisory support, opportunities to participate in Research Work, funding, demonstrated their competence in answering the questions of the foreign expert Prof. S.A. Ryzhkin (Moscow, Russia). The experts studied the residents’ documents (portfolios, results of residents’ assessment - checklists, results of residents’ questionnaires).

6.3 Information technology

The Internal Medicine Department actively utilizes and implements innovative teaching technologies, e.g., teaching error-based education (TAME), multidisciplinary consilium (https://www.instagram.com/p/Co6ziIyNKSf/?igshid=MDJmNzVkJY).

The library annually develops and updates the user's manual of the University's subscription electronic resources. The website of the University has a section "Library" in Kazakh, English and Russian languages, where on the page "Links to information resources" there are links to user manuals for electronic resources. Guidelines for users of electronic resources of the University are also posted on the "Student Portal" in the "Library" section.

Residents and teaching staff have access to the following educational electronic resources: Cochrane Library, CBS eBooks, EBSCO, BMJ Best Practice, BMJ Learning, Electronic Library of Medical School "Student's Consultant", Electronic Medical Library "Doctor's Consultant", Electronic Library System "Lan", Electronic Library "Epigraph", Portal of Multimedia Textbooks "Epigraph", Digital Library "Aknuropress", Republican Interuniversity Electronic Library (RIEL). The overwhelming majority of questioned residents (92.06%) are fully satisfied with library resources. At the same time,
they say that it is more convenient for them to use electronic versions of monographs, scientific articles. The lecturers help them to conduct scientific searches in international databases and process the studied literature by preparing literature reviews.

In order to inform residents about evaluation criteria, exams and other types of control, the university uses the academic electronic database automated information system (AIS) Platonus.

In connection with the unfavorable epidemiological situation, the approaches to the organization of seminars, studying additional literature, solving situational tasks are revised. In 2020, university faculty and residents mastered new communication and information platforms for distance learning: Microsoft Teams, Webex Cisco, Zoom.

During questioning by the expert commission, 93.65% of residents noted unimpeded access to electronic educational resources.

6.4 The clinical teams

Physicians residents in the specialty Adult and Pediatric Endocrinology work closely in a team with residents and physicians of therapeutic, surgical, obstetrics and gynecology, laboratory, radiation diagnostics and other specialties. Residents take an active part in conducting interdisciplinary consilium with subsequent entry of the results of the interdisciplinary Consilium into Integrated healthcare information system (IHIS), participate in pathology conferences as attending physicians and opponents. This was confirmed when attending a practical training on May 25, 2023 on the topic "Multidisciplinary Consilium: diagnosis and treatment of bleeding", which brought together 18 residents in the specialties "Hematology adult", "Adult and Pediatric Endocrinology", "Pulmonology adult, pediatric". The experts concluded that such classes are held frequently and their effectiveness is significant.

The comorbidity of patients with endocrine system diseases necessitates teamwork to solve joint therapeutic and diagnostic issues, which creates a clinical environment for mastering teamwork skills. Analysis of international recommendations on diagnosis and treatment of endocrine system diseases, theoretical analysis of the main provisions in practical classes, participation of residents in scientific and practical conferences, instills the skills of continuous improvement through continuous learning.

87% of the questioned residents evaluate the organization of clinical (practical) training as "excellent" and 11.1% as "good". 96.9% of faculty members questioned by experts believe that residents have free access to patients at clinical bases and all conditions to improve their practical and 3.13% partially agree with this statement.

6.5 Medicine science research and achievements

Research activities of the University are carried out in accordance with the Research University Development Program for 2019-2023, the target indicators of which are approved by the Government of the Republic of Kazakhstan on June 27, 2019, #453.

To increase the rating of scientific research and publication activity of the university staff by promoting its scientific works in the Internet, in 2018 "Karaganda Medical University NJSC Repository" was created, which is included in the global catalog of open access repositories Open DOAR and in the Google Scholar search engine. In 2022, the number of publications and scientific papers posted in "Karaganda Medical University NJSC Repository" - 528 scientific papers.

The staff of the Internal Medicine Department (including the head of the educational program, Associate Professor Amirkhanova D.T.) participates in the scientific and technical project "COVID-19: Scientific and technological substantiation of the system of response to the spread of new respiratory infections, including coronavirus infection" (2021-2023). 26 articles and theses have been published on the results of research of the department staff.

In the first year of resident training, the topic of the planned research project is included in their individual plan, on which residents conduct a set of research material.

Residents have the opportunity to participate in temporary research teams to fulfill fragments of scientific research (STP, GRANT) conducted at the university. Residents: Orazbayeva E.A, Negmanova A.M., Sukharev V.S., Esenbek M.M, Aen A.E, Zarubaev R.M., Seitkozha M., Bilal A.A. analyzed literary sources, retrospective analysis of COVID-19 patients' case histories, worked on filling the
prospective database of patients 3 months after COVID-19 infection and monitored the state of endocrine system in patient.

*Interviews with faculty members, showed that there are no problems in the management of education in the specialty "Adult and Pediatric Endocrinology", including admission of residents to the equipment. There is a sufficient number of thematic patients, time to keep medical records, independent work with educational and scientific literature, access to information about patients in the medical information system DAMUMED.*

### 6.6 Expertise in the field of education

One of the priority activities of Karaganda Medical University NJSC Development Program is research in medical education. Stimulation of faculty activities is one of the mechanisms to promote the aspirations and interests of staff in conducting research in medical education.

The university has developed mechanisms to motivate and develop the interest of staff and faculty in conducting research in postgraduate education. To motivate faculty members to conduct research on medical education, the availability of publications on education is included as an indicator of departmental performance.

The experts familiarized with the publications of the faculty on the role of mentoring in resident training and the thesis (presentation) of the presentation on the evaluation of the effectiveness of teaching and assessment methods, as well as methodological recommendations.

For the reporting period, the Internal Medicine Department published a series of articles on education: "Structured approach "umbrella of mentoring": reflections of clinical mentors on their contribution to the formation of a therapeutic specialist", "Effectiveness of clinical skills acquisition in the conditions of distance learning", "Use of simulation educational technologies as a necessary way to improve the competence of bachelors of medicine", "Application of competence-oriented approach in the study of radiology diagnostics.

The subject studies include analyzing the needs of endocrinology specialists, analyzing the effectiveness of resident education methods, and the results of these studies draw conclusions about the quality of innovative changes in postgraduate education.

### 6.7 Training in other organizations

The Academic Policy of Karaganda Medical University NJSC (Section 7-7) describes approaches to the implementation of academic mobility of students and . On one side, academic mobility is not mandatory for residents, and also taking into account the postpandemic situation in the world, limiting active exchanges of students, the difference in the structure and content of educational programs of postgraduate education, language barrier. At the same time, the plan of development of the educational program in the specialty Adult and Pediatric Endocrinology provides for incoming and outgoing academic mobility of residents to partner universities, invitation of visiting professors. The experts noted the implementation of the development plan of the department, as in May 2022 residents of 1.2 years in the specialty Adult and Pediatric Endocrinology took a distance learning course Course Diabetology, which was conducted by Professor Maria Orbetsova from the Medical University of Plovdiv (Bulgaria). 12-23.11.2018 residents of the specialty Adult and Pediatric Endocrinology Yernazarova E.N., Kabakasheva M.K., Bimagambetov K.K., Toyymbekova A.S., Khomenko L.E. in the framework of academic mobility were trained in Kazakh National Medical University JSC (Almaty).

*The EEC's conclusions on the criteria. Meet out of 18 standards (including 11 basics, 7 improvement standards): fully - 18.*

**Standard 6:** implemented

**Recommendations for improvement identified during the external visit:** none

**Standard 7: EVALUATION OF EDUCATIONAL PROGRAMS**

**Evidence of Compliance:**

7.1 Monitoring and evaluation mechanisms
Assessment of the quality of education at the institutional level is provided by the Strategic Development and Quality Management Department. One of the forms of monitoring the quality of the educational program (EP) is interim and final independent attestation, which are conducted in the form of a comprehensive examination with the involvement of external examiners. The results of the independent examination conducted by the NCIE, discussed annually at the meeting of the Department, the Board of SRPD, the Senate and determine the need to improve the EP.

One of the mechanisms of continuous monitoring and improvement of the EP is a systematic approach in conducting surveys of teachers, students and employers. The obtained results are discussed at the meetings of the department, SRPD, meetings of the Academic Committee, University Senate.

The staff of the Strategic Development and Quality Management Department told the experts about internal quality assessment procedures (internal audit), external quality assessment procedures (accreditation in accordance with the procedure “Organization of preparation for institutional and specialized accreditation in Karaganda Medical University NJSC), as well as different external inspections/audits by authorized bodies (Ministries). As a rule, following the audit results, a plan of corrective actions is developed, post-monitoring control is carried out. Monitoring of the quality of the educational process is carried out by the School Quality Assurance Commission, heads of educational programs, the School.

According to the results of the survey, 40.63% of teachers were involved in the activities on preparation for accreditation of educational programs. 28.13% of respondents would like to become external experts, 18.75% have already participated in the work of commissions for accreditation of HEIs. When interviewing teachers, most of them are familiar with expert work on assessment of EPs. They have more than once carried out the expert evaluation of the quality of EP (self-evaluation), which they teach themselves, preparing it for accreditation, and participated in writing the report. They believe that participation in the self-assessment of EP allows to really improve the training program.

7.2 Faculty and resident feedback

The HEI has an effective, continuous mechanism of internal quality assessment and expertise of educational programs, providing control over the implementation of the curriculum and tasks, as well as feedback from the main stakeholders (teachers, administration, residents, clinical preceptors, employers) for their improvement. In the advisory bodies of the University (SRPD, Quality Assurance Commission) there is representation of stakeholders in the evaluation of the educational process and final results of resident training programs.

Feedback from the library is provided on the Student Portal and Telegram bot, where students have the opportunity to ask questions, view the calendar of events, documents, instructions and videos on working with electronic resources and so on.

The EP Adult and Pediatric Endocrinology is regularly evaluated by obtaining feedback from residents, residency graduates, faculty and employers, as well as analyzing residents' learning achievements. After that, corrective action plans are made to make improvements to the EP.

The Internal Medicine Department conducts resident questionnaires to analyze satisfaction with the quality of training, identify weaknesses and strengths, and reasons for dissatisfaction with the training process. Regularly conducted questionnaire survey of students "Teacher through the eyes of students", which contains 18 questions. Employers are annually surveyed on their satisfaction with the level of training of graduates.

The experts studied the extract from the minutes No. 9 of the meeting of the Board of the Residency and Professional Development School dated April 13, 2023. The agenda: "discussion of the results of the questionnaire on the satisfaction of students with the educational process". Chairman of the Quality Commission Zhusupova A.M. presented the analysis of resident satisfaction, which amounted to 86%. According to the results of the analysis a number of corrective measures were proposed. The extract from the minutes No. 7 dated March 09, 2023 contains information about the discussion of the results of the employers’ questionnaire survey to assess the satisfaction with the graduates of the university. The questionnaire was conducted from October 20.10.2022 to November 03, 2022, in which 32 employers
(heads of medical organizations) participated. Satisfaction with the graduates of the residency program - 91%.

Employers confirm that they are involved in the discussion of final learning outcomes; in the assessment of students' learning achievements, formation of educational trajectories. Based on their feedback and recommendations, key and final competencies of residency graduates are formed.

7.3 Resident and graduate outcomes

Final certification in the form of independent examination is conducted by the National Center for Independent Examination (NCIE) of RK, and the results are included in the indicators of activity of the department (the share of residency graduates who successfully passed the independent examination from the first time), SRPD and the university. For all year’s 100% of residents in the specialty "Adult and Pediatric Endocrinology" successfully passed the independent examination from the first time. The average score of the final certification of 29 graduates in 2019-2022 was 89.5% (38% - "excellent", 62% - "good"). Thus, the EP "Adult and Pediatric Endocrinology" demonstrates performance, there's definitely a room for improvement to achieve a higher indicator (e.g., 95-100%).

7.4 Stakeholder engagement

In Karaganda Medical University NJSC the assessment and monitoring of EP is carried out in accordance with the Regulation on Academic Policy (approved by the Senate on August 27, 2021), the Regulation on Educational Program Management ( September 09, 20, 20, Order No. 14, amended on January 11, 2021, Order No.1). The monitoring system is a continuous multilevel process, which covers the assessment of all areas affecting the quality of EP. The monitoring mechanism of the EP includes several stages: planning, data collection, analysis/conclusions, necessary improvements and subsequent monitoring of changes.

In 2022, 36 employers were surveyed (response rate 89%). The level of graduates' achievement of the required competencies was 4.6 points out of 5, including 4.5 points out of 5 for the specialty " Adult and Pediatric Endocrinology". All 36 employers noted that graduates have sufficient level of knowledge and skills for qualitative and effective performance of their duties; the average level of satisfaction with the quality of training of graduates of residency training in different specialties was 91%, and in the specialty Adult and Pediatric Endocrinology - 100%.

Interviews with employers included such questions as: knowledge of the university mission, participation in the development of the mission and proposals to the strategic plan, participation in deliberative bodies, satisfaction with the basic knowledge and skills of residents, participation in resident education 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.

Annual employment of graduates of the program Adult and Pediatric Endocrinology reaches 100%, which reflects the demand for graduates in the system of practical healthcare. Annual feedback with employers on the basis of questionnaires, their participation in the meetings of the SRPD, allows to determine the needs of the practical health care system for the formation of the EP mission.

7.5 Approval procedure for educational programs

The EP 7R01131-Adult and Pediatric Endocrinology is developed in accordance with the license for the right to conduct educational activities within the groups of educational programs according to the classifier of training directions and in accordance with the "Regulations on the management of the educational program of Karaganda Medical University NJSC. On the basis of this document the procedure of EP approval is carried out. The process map "Development, coordination and approval of the educational program" was developed, with which the experts were familiarized.

EP was agreed with representatives of practical health care, reviewed by the Quality Assurance Commission of the Residency and Professional Development School, discussed at the SRPD meeting and approved at Karaganda Medical University NJSC Board meeting.

EP has passed external expertise for inclusion in the Register of EPs of Unified higher education management system.
The residency program Adult and Pediatric Endocrinology received positive reviews from Idrisov A.S., Doctor of Medical Sciences, Associate Professor of the Department of Family Medicine № 2 Medical University of Astana NJSC and Molotov-Luchansky V.B., Professor of the Department of Internal Medicine Karaganda Medical University NJSC, Chairman of the Committee of the Project Management Group "Endocrinology".

The EEC's conclusions on the criteria. Meet out of 10 standards (including 7 basics, 3 improvement standards): fully - 10.

**Standard 7:** implemented

**Recommendations for improvement identified during the external visit:** none.

**Standard 8: MANAGEMENT AND ADMINISTRATION**

**Compliance Evidence:**

**8.1 Governance**

In Karaganda Medical University NJSC the assessment and monitoring of EP is carried out in accordance with the Regulation on Academic Policy, the Regulation on the management of the educational program.

The decision of questions on the management of the educational program is assigned to the Board of SRPD, which consists of 60% of teachers, 20% of employers and 20% of students. The Quality Assurance Commission consists of teachers from among the members of the SRPD, representatives of students and employers.

The Commission for the quality assurance of EP, the main function of which is to monitor the implementation of the educational program, and to assess the satisfaction of all stakeholders, has been established since 2020-2021 academic year (Regulation on the EP Department).

Ensuring quality assessment at the institutional level is provided by the Department of Strategic Development and Quality Management.

In accordance with the "Regulations on the management of Karaganda Medical University NJSC educational program the quality of the EP is ensured by the participants of its implementation: Dean of the School, the Head of the EP, module coordinators, those responsible for the discipline, heads of departments, lecturers, students.

During the conversation with the members of the Academic Committee it was revealed that the participation of stakeholders in the assessment of the quality of EP is realized through the assessment of students' satisfaction with the educational program, assessment of employers' satisfaction with the quality of graduates' training; annual data collection and analysis of employment, analysis of career development.

**8.2 Academic leadership**

Employees of clinical departments are members of professional societies, accredited independent experts, participate in visiting medical and health care national programs, in visiting medical and health care teams, in the development of standards and protocols of diagnosis and treatment, participate in the work of specialized and standing commissions of health care organizations and local authorized bodies.

The university faculty participates in the development and implementation of clinical protocols for the diagnosis and treatment of various diseases.

On the questionnaire "Do the heads of the organization listen to your opinion regarding the issues on the educational process, research and development, clinical work", 84.4% of teachers answered that systematically, 12.5% answered "sometimes".

Residents can be involved in the process of evaluation of academic leadership (dean, head of department, teachers) by expressing their opinions and wishes at the end of the course of study or mastering a particular discipline or by questionnaires to identify opinions and take into account comments and suggestions. Comments and suggestions of students on the organization of the educational process (class schedule, etc.), on the list of elective disciplines, on the library fund and other issues related directly to the learning process can be taken into account.
The educational program of residency formulates 6 main profile competencies, including personal and professional development, according to which residents acquire the necessary skills and competencies that influence the personal development of the learner and his/her professional growth. For example, by acquiring research skills, in the future residents can continue doctoral studies in their specialty. For example, resident Aliya B. Kuntuganova, after graduating from the residency program, is currently continuing her Ph-doctoral studies.

8.3 Budget for training and resource allocation

The financial and economic policy of Karaganda Medical University NJSC and the management structure of the university is the function of the management body - the Board of Directors.

The Board of the University manages the current activities of the university, implements financial and economic policy within the established powers. Financial issues are supervised by the Managing Director and structural units responsible for budget management: Department of Economics and Finance, Department of Public Procurement.

Funding of the residency educational program depends on the formation of the annual state order, which is annually approved by the Resolution of the Government of the Republic of Kazakhstan.

In order to increase the scientific potential of Karaganda Medical University NJSC, increase the publication activity of teaching staff and students, involvement of students in the scientific process, support and development of new promising research areas since 2016 the practice of competitions for intra-university grant funding of projects was introduced. 14 grants for the total amount of 34,052,99 thousand tenge were approved and are being implemented. According to the results of the competition for intra-university funding of scientific research in 2019, five projects were approved.

The analysis of the data on the table "Information on financing and main expenses for training" showed positive dynamics of financing: expenses for library resources, office equipment and software increased from 4.04% in 2020 to 6.85% in 2023; expenses for faculty and students (academic mobility, professional development, internship and practice, participation in conferences and public events, rector's scholarship, etc.) increased from 0.44% in 2020 to 0.84% in 2023.

The average teaching load of residency faculty is reviewed annually, which amounted to 650 hours in the 2022-2023 academic year (Senate Decision April 28, 2022, Minutes No.7).

The University has developed the Regulations on sending students of Karaganda Medical University NJSC on a trip, approved on April 05, 2021, which regulates issues related to the financial provision of trips of residents (and other categories of students) to internships, conferences, forums, cultural and mass events held outside the university.

*During the conversation with the residents-endocrinologists it was revealed that the university finances their trips to internships, conferences, forums, cultural and mass events.*

For the period 2018-2023, residents of the program Adult and Pediatric Endocrinology published 13 articles, of which 5 - in RSCI publications, 2 - Scopus, 6 - in the Proceedings of International and Republican conferences, 5 speeches at international and national conferences were prepared.

The experts noted that annually more than 300 students participate in international scientific conferences and research. This is a significant indicator of providing students and residents with the opportunity to publicly demonstrate their scientific and educational achievements and affects the image of the university. On the initiative of the University since 2012 the Central Asian International Conference on Medical Education is held, the main purpose of which is to exchange experience in improving medical education in the countries of Central Asia. Residents take part in this conference both as listeners and speakers, accompany the guests of the conference.

8.4 Administration and management

Karaganda Medical University NJSC has an appropriate administrative staff and contingent of teachers. Academic leaders are the heads of the Vice-Rectorate and structural units responsible for decision-making on academic issues.

The management structure of the university assumes effective implementation of the educational program, effective management, timely provision of necessary educational resources.
The Policy in the field of quality assurance of the educational process is developed within the framework of the Quality Management System of Karaganda Medical University NJSC (ISO 9001:2015). Revision of the Policy in the field of quality assurance of the educational process is carried out in case of changes in the laws and regulations, strategic goals of the university, changes in the requirements of stakeholders.

The experts were convinced that the university has established a procedure for documenting, studying evaluation methods, analyzing their reliability and validity during internal and external audits of quality management system units. Residents are active participants of the educational process, together with teachers participate in its evaluation by participating in the meetings of the SRPD, annual questionnaire.

The activities of Karaganda Medical University NJSC advisory bodies - School Board, Senate, which include academic leaders and representatives of a wide range of stakeholders (employers, representatives of practical health care, residents) allow to improve and effectively implement educational programs, ensure effective management, administration.

8.5 Requirements and regulations

The quality assurance policy of the University's educational process is in line with international approaches to quality assurance in higher education, including the requirements of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), as well as the national policy of educational activities in the field of health care.

Interaction of Karaganda Medical University NJSC with authorized bodies (MH RK, MES RK) on the organization of educational process in the residency is carried out through the implementation of the Order of the Minister of Health of the Republic of Kazakhstan from July 4, 2022 № KR DSM-63 "On approval of state compulsory standards for levels of education in the field of health care" and is consistent with the priorities of national legislative and program documents.

The EEC's conclusions on the criteria. Meet out of 11 standards (including 8 basics, 3 improvement standards): fully meet - 11.

Standard 8: implemented

Recommendations for improvement identified during the external visit: none.

Standard 9: CONTINUOUS IMPROVEMENT

Evidence of Compliance:

Every year the forms of control are revised, test questions and written assignments are updated by 30% taking into account new concepts of diagnostics and treatment. Thus, in 2021-2022 academic year interim certification of residents in the form of portfolio defense at the end of the academic year is introduced. Monitoring of current academic performance is conducted and discussed monthly at the meeting of the department, the SRPD Board. The results of interim certification at the end of the academic year and the results of the independent examination of the NCIE are also discussed at the meetings of the Department, the SRPD Board and the Senate. The results of the analysis, recommendations of the attestation committee determine the need to improve the EP.

Processes for updating and refining EPs, clinical competencies, resident evaluation methods, and teaching methods are based on prospective studies and data from current literature on the educational process.

In 2019-2020 academic year, EP Adult and Pediatric Endocrinology was completely revised. As a result, the profiling competencies and learning outcomes required to achieve a certain level in the learning process have been revised.

The annual modernization of the syllabus is based on the achievements of science and practice, which is ensured by the participation of faculty members at Congresses, conferences, webinars, as well as monitoring by faculty members of new international clinical protocols and recommendations for diagnosis and treatment.
Resources are monitored annually for continuous improvement. The library fund is constantly updated with basic and additional literature in three languages (Kazakh, Russian, English). Residents have a good opportunity to work in various information resources of the library and publishing center, CSET (electronic textbooks, discs with films and illustrations, electronic manuals, simulators and mannequins with software), as well as educational resources of the Internet. The availability of the Internet and interactive classroom at the clinical bases allows residents to work online, participate in various webinars, master classes, etc.

Thus, continuous improvement of the educational process in the residency in the specialty of Adult and Pediatric Endocrinology assists to modernize the EP and produce well-trained specialists in demand in different regions of the Republic of Kazakhstan.

**The EEC’s conclusions on the criteria.** Comply out of 2 standards (including 1 basic, 1 improvement standard): fully met - 2.

**Standard 9:** implemented

**Recommendations for improvement identified during the external visit:** none.

CONCLUSION: During the external evaluation of the educational program it was found that out of 147 standards (including 91 basic standards and 56 improvement standards) 145 accreditation standards demonstrate full compliance, including 89 basic standards and 56 improvement standards. 2 basic improvement standards were partially met. No non-compliance of standards was found. Fulfillment of improvement standards indicates the compliance of educational organization with international best practice in such areas as quality assurance of postgraduate medical education in the framework of national policy of educational activities and training healthcare professionals.

5. **Recommendations for improvement of the educational program Adult and Pediatric Endocrinology:**

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

6. **Recommendation to the ECAQA Accreditation Council**
The members of the EEC established the compliance of the educational program of the residency in the specialty Adult and Pediatric Endocrinology with the Accreditation Standards and came to the unanimous opinion to recommend the ECAQA Accreditation Council to accredit this program for a period of 5 (five) years.

<table>
<thead>
<tr>
<th>No. n/a</th>
<th>Position within the EEC</th>
<th>Full name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chairman</td>
<td>Khatimya I. Kudabayeva</td>
</tr>
<tr>
<td>2</td>
<td>International expert</td>
<td>Sergey A. Ryzhkin</td>
</tr>
<tr>
<td>3</td>
<td>International expert</td>
<td>Shushanik G. Afrikyan</td>
</tr>
<tr>
<td>4</td>
<td>Academic expert</td>
<td>Saltanat N. Urazova</td>
</tr>
<tr>
<td>5</td>
<td>Academic expert</td>
<td>Daria M. Shabdarbayeva</td>
</tr>
<tr>
<td>6</td>
<td>Academic expert</td>
<td>Raygul M. Ramazanova</td>
</tr>
<tr>
<td>7</td>
<td>Academic expert</td>
<td>Akmaral K. Zhumalina</td>
</tr>
<tr>
<td>8</td>
<td>Academic expert</td>
<td>Raihan E. Tuleutayeva</td>
</tr>
<tr>
<td>9</td>
<td>Academic expert</td>
<td>Zaure A. Baigozhina</td>
</tr>
<tr>
<td>10</td>
<td>Academic expert</td>
<td>Sholpan K. Ramazanova</td>
</tr>
<tr>
<td>11</td>
<td>Academic expert</td>
<td>Bibikhan A. Yeralieva</td>
</tr>
<tr>
<td>12</td>
<td>Academic expert</td>
<td>Gulnara A. Isposunova</td>
</tr>
<tr>
<td>13</td>
<td>Academic expert</td>
<td>Asel B. Doshakanova</td>
</tr>
<tr>
<td></td>
<td>Position</td>
<td>Name</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>14</td>
<td>Academic expert</td>
<td>Asem K. Dosanova</td>
</tr>
<tr>
<td>15</td>
<td>Employers' representative</td>
<td>Bayan L. Daniyarova</td>
</tr>
<tr>
<td>16</td>
<td>Expert - doctoral student representative</td>
<td>Aknur D. Orazbay</td>
</tr>
<tr>
<td>17</td>
<td>Resident representative</td>
<td>Kurak Aidana</td>
</tr>
</tbody>
</table>
6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу 7Р01131 «Эндокринология взрослых, детская» НАО «Медицинский университет Караганды», соответствующую Стандартам аккредитации образовательных программ резидентуры медицинских организаций образования на период 5 лет.

Председатель Внешней экспертной комиссии
КУДАБАЕВА ХАТИМЯ ИЛЬЯСОВНА

Зарубежный эксперт
РЫЖКИН СЕРГЕЙ АЛЕКСАНДРОВИЧ

Зарубежный эксперт
АФРИКЯН ШУШАННИК ГЕВОРКОВНА

Национальный академический эксперт
УРАЗОВА САЛТГАНАТ НУРТОЛАЕВНА

Национальный академический эксперт
ШАБДАРБАЕВА ДАРИЯ МУРАТОВНА

Национальный академический эксперт
РАМАЗАНОВА РАЙГУЛЬ МУХАЙЙЕТОВНА

Национальный академический эксперт
ЖУМАЛИНА АКМАРАЛ КАНАШЕВНА

Национальный академический эксперт
ТУЛЕУТАЕВА РАЙХАН ЕСЕНЖАНОВНА

Национальный академический эксперт
БАЙТОЖИНА ЗАУРЕ АЛПАНОВНА

Национальный академический эксперт
РАМАЗАНОВА ШОПЛАЙ ХАМЗАЕВНА

Национальный академический эксперт
ЕРАЛИЕВА БИБИХАН АБДАЛИЕВНА

Национальный академический эксперт
ИСПОСУНОВА ГУЛЬНАРА АХМЕТКАЗИЕВНА

Национальный академический эксперт
ДОШАКАНОВА АСЕЛЬ БАЙДАУЛЕТОВНА

Национальный академический эксперт
ДОСАНОВА АСЕМ КАЛЕЛОВНА

Эксперт - представитель практического здравоохранения
ДАНИЛАРОВА БАЙН ЛАШИНОВНА

Эксперт – представитель докторантов
ОРАЗБАЙ АКНУР ДЖУРЕНКЫЗЫ

Эксперт – представитель резидентов
КУРАК АЙДАНА ЖАНАЙДАРОВНА
### Quality profile and criteria for external evaluation of the educational program (summary).

<table>
<thead>
<tr>
<th>Standard</th>
<th>Evaluation criteria</th>
<th>Number of standards</th>
<th>BS*/IS</th>
<th>Fully compliant</th>
<th>Partially compliant</th>
<th>Not compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MISSION AND OUTCOMES</td>
<td></td>
<td>17</td>
<td>10/7</td>
<td></td>
<td></td>
<td>10/7</td>
</tr>
<tr>
<td>2. EDUCATIONAL PROGRAM</td>
<td></td>
<td>30</td>
<td>22/8</td>
<td></td>
<td></td>
<td>22/8</td>
</tr>
<tr>
<td>3. RESIDENT EVALUATION</td>
<td></td>
<td>11</td>
<td>7/4</td>
<td></td>
<td></td>
<td>5/4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2/0</td>
</tr>
<tr>
<td>4. RESIDENTS</td>
<td></td>
<td>30</td>
<td>18/12</td>
<td></td>
<td></td>
<td>18/12</td>
</tr>
<tr>
<td>5. ACADEMIC STAFF/FACULTY</td>
<td></td>
<td>7</td>
<td>5/2</td>
<td></td>
<td></td>
<td>5/2</td>
</tr>
<tr>
<td>6. EDUCATIONAL RESOURCES</td>
<td></td>
<td>21</td>
<td>10/11</td>
<td></td>
<td></td>
<td>10/11</td>
</tr>
<tr>
<td>7. EDUCATIONAL PROGRAM EVALUATION</td>
<td></td>
<td>15</td>
<td>10/5</td>
<td></td>
<td></td>
<td>10/5</td>
</tr>
<tr>
<td>8. MANAGEMENT AND ADMINISTRATION</td>
<td></td>
<td>15</td>
<td>8/7</td>
<td></td>
<td></td>
<td>8/7</td>
</tr>
<tr>
<td>9. CONTINUOUS IMPROVEMENT</td>
<td></td>
<td>1</td>
<td>1/0</td>
<td></td>
<td></td>
<td>1/0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>147</td>
<td>91/56</td>
<td>89/56</td>
<td>2/0</td>
<td></td>
</tr>
</tbody>
</table>
## List of documents studied by the EEC members within the framework of external evaluation of the residency educational program

<table>
<thead>
<tr>
<th>No.</th>
<th>Names of documents</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>EP of residency 7R01131 Adult and Pediatric Endocrinology was discussed by the Academic Committee (Minutes N0.4 from June 07, 2019), approved by the Academic Council (Minutes No.7 from June 18, 2019), approved at the meeting of the Academic Council and the Chairman of the Board-Rector of Karaganda Medical University NJSC (June 27, 2019, Minutes No.10). EP Adult and Pediatric Endocrinology (with updates, 2022), approved at the meeting of the SQAC (Minutes №3 from July 05, 2022), discussed at the meeting of the Board of SPRD (Minutes №11 from July 07, 2022) and approved by the decision of the Board of the Karaganda Medical University NJSC (Minutes №16, from July 13, 2022).</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Elective disciplines catalog for the educational program 7R01131 Adult and Pediatric Endocrinology, 2022, reviewed and approved at the meeting of the Board of the School of Residency and Professional Development, Minutes № 4, from November 10, 22</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Regulations on the individual work plan of the faculty member of Karaganda Medical University NJSC dated November 16, 2022 Minutes No.29</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>List of clinical skills taught by the Department of Internal Medicine in CSET for students of the 1st year of the educational program in the discipline 7R01131 Adult and Pediatric Endocrinology in the academic year 2022 - 2023, approved by the head of the EP, head of the Department of Internal Medicine Laryushina E.M., dated September 05, 2022</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Joint activity agreement with Karaganda Medical University NJSC: - Regional Children's Clinical Hospital SME Karaganda Region Health Department (No. 347 of 01. September 2022) - Regional Clinical Hospital SME Karaganda Region Health Department (contract No. 353 dated September 01, 2022).</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>Methodological recommendations with the use of active, innovative teaching methods on the topic: Interdisciplinary patient: diagnosis and treatment of bleeding&quot; (intellectual quest game) for residents in 3 specialties: Adult and Pediatric Endocrinology, Hematology adult, Pulmonology adult, pediatric.</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Extract from Minutes No. 9 of 13. April 13, 2023 from the meeting of the Board of the Residency and Professional Development School. Discussion of the results of the questionnaire on the satisfaction of students with the educational process. Chairman of the Quality Commission Zhusupova A.M.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9.</td>
<td>Members of the SME committees in the direction of training - Health Care for the academic year 2020 - 2021. Minutes № 6 of the meeting of the CID (Curriculum &amp; Instruction Department) from February 10, 2021.</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Regulations on the organization of inclusive education in Karaganda Medical University NJSC from &quot;December 09, 2020. Protocol No. 26&quot;</td>
<td>1</td>
</tr>
<tr>
<td>11.</td>
<td>Karaganda Medical University Non-Profit Joint Stock Company Personnel policy from January 11, 2021 Minutes No.1.</td>
<td>1</td>
</tr>
</tbody>
</table>
| 12. | Materials on academic mobility of teaching staff:  
- Program of classes on the discipline "Strategic planning and quality assurance in medical school" by Head of the Internal Medicine Department, Candidate of Medical Sciences Elena M. Laryushina for Tajik State Medical University faculty members of their the period from 19 to 21 December 2022.  
- Invitation letter from the Rector of the Tajik State Medical University, D.M. Gulzoda M.K. to participate in the academic mobility of professors Turgunova L.G. and Laryushina E.M., dated 14. December 2022. | 2 |
| 13. | Acts of innovative teaching methods of implementation in the educational process:  
- Title of the proposal: "Quest Game", approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC, January 23, 2023  
- Title of the proposal: "Multidisciplinary Consilium", approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC, October 13, 2022.  
- Title of the proposal: "Young Internist School" approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC, February 10, 2022  
- Title of the proposal: "Training based on prevention of medical errors (TAME)," approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC, October 13, 2022. | 4 |
| 14. | Acts of implementation of the research results in the educational process:  
- Title of the proposal: "Algorithm of preventive counseling: individual in-depth preventive counseling", approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC., September 29.2022  
- Title of the proposal: "Individual cardiovascular disease risk cards", approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC, May 04,2022  
- Title of the proposal: "Preventive model of cardiovascular disease risk factor management in primary patient counseling", approved by the Vice-Rector for Academic Work Ricklefs V.P. of Karaganda Medical University NJSC, April 28, 2023. | 3 |
| 15. | Analysis of the questionnaire:  
- Residents' satisfaction with the quality of the educational process, considered at the meeting of the Quality Assurance Commission at the Residency and Professional Development School, protocol No. 3, dated April 06, 23, signed by the Chairperson Zhusupova A.M. | 3 |
- satisfaction of graduates' employers of 2021-2022 academic year, considered at the meeting of Quality Assurance Commission at the Residency and Professional Development School, Minutes No. 2, dated February 02, 23, signed by the Chairperson Zhusupova A.M.
- Analysis of the questionnaire survey of Karaganda Medical University NJSC residents on the specialty Adult and Pediatric Endocrinology for 2021-2022 academic year, conducted at the end of training in each discipline; discussed at the meeting of the Internal Medicine Department, Minutes No. 10A, dated June 29, 2022.

16. Materials of the final control:
- Test task specification of the 2nd stage of the final control for the 2nd year residents of the specialty 7R01104 Adult and Pediatric Endocrinology, approved at the meeting of the Internal Medicine Department, protocol No. 2, dated September 05, 2022
- Clinical task for the final control in a written assignment on the Session platform for the module "Endocrinology" for 1st year residents of the specialty 7R01104 - Adult and Pediatric Endocrinology; materials of the final control approved at the meeting of the Internal Medicine Department, Minutes No 2, dated September 05, 2022.
- Clinical task for the final control in a written assignment on the Session platform for the module "Endocrinology" (discipline "Ultrasound diagnostics") for 1st year residents of the specialty 7R01104 - Endocrinology.
- Review (external) on test tasks for the final control on the discipline Adult Hepatology for residents’ specialty 7R01104 Adult and Pediatric Endocrinology for 2022-2023 academic year by the Head of hepatology center of SME OCH, chief supernumerary hepatologist of Karaganda Oblast Health Department, doctor-endocrinologist of the highest category Tutkusheva Z.M., August 31, 2022.
- Review (internal) on the materials of the final control on the module "Clinical laboratory diagnostics in endocrinology" for 2nd year residents in the specialty 7R01104 Adult and Pediatric Endocrinology, by Therapy Deputy Director of the Regional Clinical Hospital Zhumakaeva J.K.
- Extract from the minutes of the Internal Medicine Department meeting, Minutes No. 2 dated September 05, 2022. On discussion of the forms and materials of the residents' final control in the specialties of residency.
- Extract from the Board Meeting Minutes of the Residency and Professional Development School, Minutes No. 2 dated September 08, 2022. Discussion of the results of summer interim and final certification of the residency graduates.
- Review of clinical tasks for the final control on the module "Endocrinology" for residents of the specialty Adult and Pediatric Endocrinology for 2022-2023 academic year, by the Head of hepatology center of SME OCH, chief supernumerary hepatologist of Karaganda Oblast Health Department, doctor-endocrinologist of the highest category Tutkusheva Z.M from September 02, 2022.

17. "Peer Review methodology in ensuring the quality of higher medical education". Methodological Recommendations/ Karaganda Medical University NJSC, 2022, page 77. Riklefs V.P., Laryushina E.M.
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Journal Club Work Plan of the Internal Medicine Department for 2022-2023 academic year, reviewed and approved at the meeting of the Internal Medicine Department, Minutes No. 2, dated September 05, 2022.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Program of the Young Internist School of the Internal Medicine Department for 2022-2023 academic year, reviewed and approved at the meeting of the Internal Medicine Department, Minutes No. 2, dated September 05, 2022.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>REGULATION ON THE RESIDENTURE OF KARAGANDA MEDICAL UNIVERSITY NJSC dated August 23, 2022 Minutes No.18</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>