To the Accreditation Council
of the Eurasian Center
for Accreditation and Quality Assurance
in Education and Health Care
December 5, 2025

REPORT
OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE ASSESSMENT OF EDUCATIONAL PROGRAMME 7R01110 "ONCOLOGY AND HEMATOLOGY (PEDIATRIC)" OF THE CORPORATE FOUNDATION "UNIVERSITY MEDICAL CENTER" FOR COMPLIANCE WITH THE STANDARDS FOR PROGRAMME ACCREDITATION OF THE POSTGRADUATE EDUCATION (RESIDENCY) OF THE EURASIAN CENTER FOR ACCREDITATION AND QUALITY ASSURANCE IN EDUCATION AND HEALTH CARE

external expert assessment period: November 17-19, 2025

Almaty, 2025

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LIST OF DESIGNATIONS AND ABBREVIATIONS

Abbreviation	Designation
ECAQA	Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health Care
EHEA	European Higher Education Area
WFME	World Federation for Medical Education
MH RK	Ministry of Healthcare of the Republic of Kazakhstan
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
RLA	Regulatory and Legal Acts
EP	Educational Programme
ESG	Standards and Guidelines for Quality Assurance in Higher Education in the European Higher Education Area
CF	Corporate Foundation
HSCT	Hematopoietic Stem Cell Transplantation
CAD	Clinical and Academic Departments
NRCMC	National Research Center for Motherhood and Childhood
NROC	National Research Oncology Center
DC	Diagnostic Center
SC	Simulation Center
SM	School of Medicine
NU	Nazarbayev University
JC	Journal Clubs
NROC	National Research Oncology Center
MN	Malignant Neoplasms
EMC	Educational and Methodological Council
EEC	External Expert Commission
CPR	Cardiopulmonary Resuscitation
GVHS	Graft-versus-Host Disease
AMC	Academic Medical Center
OSCE	Objective Structured Clinical Examination
RW	Research Work
FSC	Final State Certification
FC	Final Certification
JCI	Joint Commission International

1. Composition of the External Expert Commission

In accordance with the order of the ECAQA No.29 dated October 28, 2025, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external assessment of the educational programme of the residency in the specialty "Oncology and hematology (pediatric)" from November 17 to 19, 2025, consisting of the following members:

No.	Status on the EEC	Full name	Academic degree/title, position, place of work/place of study, year, specialty
1	Chairperson	MORENKO MARINA ALEXEYEVNA	Doctor of Medical Sciences, Professor, Head of the Department of Children's Diseases No.1 at NJSC “Astana Medical University”
2	International expert	YENCHEV YAVOR PETKOV	Doctor of Medical Sciences, Professor of Neurosurgery, Head of the Department of Neurosurgery and ENT Diseases at the Medical University of Varna. Head of the Neurosurgery Clinic at the “St. Marina” University Hospital of the Medical University of Varna (Varna, Bulgaria).
3	Academic expert	MADYAROV VALENTIN MANARBEKOVICH	Doctor of Medical Sciences, Head of the Department of Surgery with a Course in Anesthesiology and Resuscitation at NEI “Kazakh-Russian Medical University”
4	Academic expert	YESSENKULOVA SAULE ASKEROVNA	Doctor of Medical Sciences, Professor of Postgraduate Education Center of JSC “Kazakh Research Institute of Oncology and Radiology””
5	Academic expert	ABEUOVA BIBIGUL AMANGELDIYEVNA	Doctor of Medical Sciences, Professor of the Department of Family Medicine No.3 of NJSC “Astana Medical University”
6	Academic expert	TASHENOVA GULNARA TALIPOVNA	Doctor of Medical Sciences, Professor, Head of the Professor N.A. Barlybayeva Department of Children's Diseases of NJSC “S.D. Asfendiyarov Kazakh National Medical University”
7	Academic expert	TALKIMBAYEVA NAILYA ANUAROVNA	Doctor of Medical Sciences, Head of the Simulation Center at NJSC “S.D. Asfendiyarov Kazakh National Medical University”
8	Academic expert	IZBASSAROVA AKMARAL SHAIMERDENOVNA	Candidate of Medical Sciences, Associate Professor, Head of the Department of Physical Medicine and Rehabilitation, Sports Medicine at NJSC “S.D. Asfendiyarov Kazakh National Medical University”
9	Academic expert	SALIMBAYEVA DAMILYA NURGAZIYEVNA	Candidate of Medical Sciences, Head of the Strategic Development and Science Department at JSC “Scientific Center for Obstetrics, Gynecology and Perinatology”
10	Academic expert	RUSTEMBEKKYZY ZHANSAYA	Researcher-Teacher, PhD of the Department of Obstetrics, Gynecology and Perinatology at NJSC “Karaganda Medical University”
11	Expert employer	TUGELBAYEVA	Head/Chief of the Educational Programmes

		KYZYLGUL ALIMOVNA	Department at Republican State Enterprise on the Right of Economic Management “Scientific and Production Center for Transfusiology” of the Ministry of Healthcare of the Republic of Kazakhstan
12	Expert student	MAKHMUTOV TIMUR NURZHANOVICH	First-year postgraduate doctor in the specialty "Urology and Andrology Adult, Pediatric " at JSC “National Research Oncology Center”

The EEC report includes a description of the results and conclusion of the external assessment of the educational programme "Oncology and Hematology (Pediatric)" for compliance with the Standards for Programme Accreditation of the Postgraduate Education (Residency) (developed on the basis of the WFME 2023 International Standards for Improving the Quality of Postgraduate Education Programmes) and conclusions (hereinafter referred to as the Standards for accreditation), EEC’s recommendations for further improvement of approaches and conditions for the implementation of the above-mentioned educational programme and recommendations on accreditation for the ECAQA Accreditation Council on accreditation.

2. General part of the final report

2.1 Presentation of the residency educational programme in the specialty "Oncology and Hematology Pediatric"

Organization name, legal form of ownership, BIN	CF “University Medical Center”. A non-profit organization in the legal form of a foundation, established by Nazarbayev University.
Governing body	Corporate Foundation
Full name of the first head	Yuriy Vladimirovich Pya, Chairman of the Board of Directors, Doctor of Medical Sciences, Professor
Date of establishment	September 20, 2015
Location and contact information	Republic of Kazakhstan, 010000 “Nura” District, Astana, Turan Street, 32 Tel.: +7 (7172) 69 24 50
State license for educational activities in residency (date, number)	According to Article 8 of the Law "On the Status of “Nazarbayev University”, “Nazarbayev Intellectual Schools” and “Nazarbayev Foundation" Nazarbayev University, the Intellectual Schools and their organizations carry out educational activities without a license or state certification.
Year of commencement of the accredited educational programme (EP)	since 2016.
Information on placement in the Register of the EHEA of the Ministry of Science and Higher Education of the Republic of Kazakhstan	The residency programme in “Oncology and Hematology Pediatric” has been implementing since 2023 and was approved by the Educational and Methodological Council by Minutes No.5 dated April 27, 2023. The EP was registered in the registry on June 27, 2023.
Duration of study	2 years
Total number of graduates since the beginning of the EP	29
Number of postgraduate doctors in the EP since the beginning of the	11

current academic year	
Full-time teachers/part-time faculty involved in the EP	Total number of teachers: 9, including 9 full-time and 0 part-time. Academic degree holder rate, % - 22 Category, % - 44
Website	www.umc.org, kz, section "Science and Education - Residency"

2.2 Information about previous accreditation

The previous specialized accreditation for "Oncology and Hematology (Pediatric)" was completed in 2021, and the results were published in the ECAQA Accreditation Center Registry https://www.ecaqa.org/index.php?option=com_content&view=article&id=1197

2.3 Brief Description of the Analysis Results of the Self-Assessment Report of the Educational Programme of the Residency in Specialty "Oncology and Hematology (Pediatric)" **and Conclusions on Its Completion**

The self-assessment report for the residency educational programme in "Oncology and Hematology Pediatric" (hereinafter referred to as the report) consists of 42 pages of the main text, 42 pages of annexes, and copies or electronic versions of the documents located at https://drive.google.com/drive/folders/1zd1ZDYM-FeWq-Kz5Pzig_dJW_fe2SZK2.

The report is characterized by complete responses to all 8 key standards for accreditation and criteria, structured in accordance with the recommendations of the Guidelines for Conducting Self-Assessment of Educational Programmes provided to the educational organization by the accreditation center - ECAQA, and internal unity of information. A cover letter signed by Nurgul Kaliyevna Khamzina, Deputy Chairperson of the Board of Directors of the CF "University Medical Center", is attached to the report, confirming the accuracy of the quantitative information and data included in the self-assessment report.

The report includes a list of 32 members of the internal self-assessment committee, indicating the responsibilities of each employee, and information about the representative of the organization responsible for conducting the self-assessment of the educational programme: Alma Alibekovna Syzdykova, Director of the Education Department of the CF "University Medical Center", MSc, MBA. The self-assessment of the educational programme "Oncology and Hematology Pediatric" was conducted based on the university rector's order No.78-n/k dated February 25, 2025, "On approval of the composition of the working group for preparation for specialized accreditation of the Corporate Foundation "University Medical Center".

All standards provide the Corporate Foundation's actual practices for training postgraduate doctors in the specialty "Oncology and Hematology Pediatric" taking into account the start of student admission in 2016. They also provide substantiated data, examples of the implementation of educational programme objectives, national and international events, and methodological support, confirming compliance with standards for accreditation. The descriptions in the self-assessment report are sufficiently comprehensive and up-to-date in terms of the number of postgraduate doctors, teachers and administration, information on selection and admission, learning outcomes, knowledge and skills assessment results, the university's clinical facilities and clinical facilities, contractual obligations with partners (universities, associations and sites), financial information, and development and improvement plans.

The report was submitted to the ECAQA in its final form, with data adjusted according to the above recommendations. It is written in a competent language, the wording for each standard is clear and understandable and is described in accordance with the criteria of the standards. The tables contain references in the text and are numbered consecutively.

3. Description of the external expert assessment

The external expert assessment of the educational programme (hereinafter referred to EP) "Oncology and Hematology Pediatric" was organized in accordance with the Guidelines for Conducting External Assessment of Educational Organizations and Educational Programmes of the ECAQA. The visit to the organization was scheduled for November 17-19, 2025. The detailed schedule for the 3-day visit is presented in Annex 3 to this report.

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

- conversation with management and administrative staff (directors of clinical and academic departments) – 6 people;
- interviews with postgraduate doctors – 3 people;
- study of the website https://umc.org.kz/about-umc (www.umc.org.kz , section "Science and Education - Residency")
- interviewing 5 employees, 5 clinical supervisors;
- questionnaires for teachers and postgraduate doctors – 17 and 16, respectively;
- observation of postgraduate doctor learning: attendance at 1 practical multidisciplinary lesson - a clinical case on the topic: Chronic kidney disease, end-stage against the background of hemolytic uremic syndrome. Condition after unrelated HSCT. Severe GVHD (intestinal, pulmonary, cutaneous, scleroderma). Teacher - Balzhan Bolatovna Umirbekova (Head of the HSCT Division), 1-year postgraduate doctors - 3 students and 4 students for 2 years, UMC small conference hall (location)
- review of resources in the context of meeting standards for accreditation: 3 practice/clinical engagement sites were visited, including the NRCMC, the Diagnostic Center and the NROC, where learning in the educational programme "Oncology and Hematology Pediatric" is conducted with the participation of 9 full-time/part-time faculty;
- review of 12 educational and methodological documents both before the organization visit and during the visits to divisions (the list of documents reviewed is in Annex 2).

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

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

No.	Position	Quantity
1	Chairperson of the Board of Directors of CF “UMC”	1
2	Director of the Education Department of the CMC	1
3	Directors of Clinical and Academic Departments	6
4	Head and teachers of the accredited educational programme "Oncology and Hematology, Pediatric"	5
5	Postgraduate doctors of the accredited educational programme "Oncology and Hematology, Pediatric"	3
6	Graduates of the accredited educational programme "Oncology and Hematology, Pediatric"	12
7	the accredited educational programme "Oncology and Hematology, Pediatric"	5
8	Head of the Simulation Center of the Nazarbayev University (NU) School of Medicine	1
9	Head of the NU Library	1
10	Staff of support divisions (finance, quality management, human resources)	3
11	Representatives of clinical facilities for related disciplines (National Research Oncology Center, Diagnostic Center, Heart Center)	3

On the final day of the visit, a meeting of the EEC members was held to discuss the external assessment. A final discussion was held regarding the external assessment of the educational programme, document review, conversation, interview and survey results. The EEC members began drafting the final EEC report. The external assessment results were summarized. The experts individually completed the "Quality Profile and Criteria for External Assessment of the Educational Programme “Oncology and Hematology Pediatric” for Compliance with the ECAQA Standards for accreditation". The EEC members made no comments. Recommendations for improving the educational programme were discussed, and Chairperson M.A. Morenko held a final open vote on the recommendations for the ECAQA Accreditation Council.

Comfortable conditions were created for the EEC, with access to all necessary information and material resources. The Commission notes the University's high level of corporate culture and the team's openness in providing information to the EEC members.

In a survey, 16 postgraduate doctors rated the work of the External Expert Commission on Accreditation as positive (87.5%) and satisfactory (6.25%). The majority of respondents (87.5%) believe that accreditation of educational institutions or educational programmes is necessary.

According to 52.9% of teachers, the survey conducted by the ECAQA is useful for developing recommendations for improving key areas of the educational institution being accredited.

At the end of the visit, the EEC chairperson presented recommendations based on the results of the external assessment as part of the specialized accreditation to the educational institution's management and staff.

4. Analysis of Compliance with Standards for accreditation Based on the Results of the External Assessment of the Residency Educational Programme "Oncology and Hematology Pediatric"

Стандарт 1: MISSION AND VALUES

1.1 Stating the mission

During the program's implementation, specifically, following an interview with the organization's top manager, members of the advisory body of the UMC Board of Trustees on June 11, 2024 (No. 11.06.24), and interviews with residents and faculty, compliance with the criteria of Standard 1 was established. All participants in the educational process are aware of the educational program's mission and participated in developing proposals for formulating the mission. The mission has been communicated to potential residents through the website, social media, and informational letters to medical organizations. The organization's strategic plan for 2024-2028 was reviewed, including management areas such as improving the healthcare delivery system with a focus on patient needs, quality and innovation in education and practical training of healthcare professionals, research activities, and ensuring financial sustainability and an effective system. This confirms compliance with the standards for accreditation and demonstrates the organization's goals, objectives, and prospects. Interviews with residents revealed that before classes begin, teachers inform students about the mission and work plans of the educational organization, and tell them where to obtain necessary information about the educational program, teachers, and training facilities.

During their visits to the educational organization's departments, ECAQA experts noted the strengths of the UMC Foundation in general and in relation to the educational programme being accredited, including:

- Developing residency training that integrates education, clinical practice, and science while implementing modern principles for training healthcare specialists;
- Developing a special educational status and collaborating with leading medical schools worldwide (University of Pittsburgh);
- Developing a strong reputation among medical organizations and promising development opportunities that meet the modern demands of healthcare professionals.

UMC has departments directly related to the Pediatric Oncology and Hematology educational program, which can be considered best practice in education. Specifically, the Academic Medical Center, chaired by a Joint Steering Committee comprised of the executive leadership of Nazarbayev University, UPMC (our strategic partner is the University of Pittsburgh Medical Center), and UMC.

This status allows for residency training to be structured around the integration of education, clinical care, and science, with the implementation of modern principles of training healthcare specialists through the use of cutting-edge clinical facilities and practical skills training centers, such as the NROC, the CC, and the SC, SM NU. This conclusion is drawn because access to these centers allows for resident training in a highly technological environment. The residency program utilizes qualified specialists from leading international organizations, and also collaborates with leading medical schools worldwide, such as the University of Pittsburgh, a partner. The UMC Foundation is working to become the official representative of the European Resuscitation Center (ERC) in the Central Asian region.

The results of the documentation review demonstrate that the organization's mission and the mission of the Pediatric Oncology and Hematology educational programme are aligned, and the educational process is structured in accordance with the State Educational Standard and current regulatory legal acts in postgraduate education and healthcare. At the same time, during meetings with graduates and employers, the experts identified the need for greater stakeholder engagement and documentation in the development and approval of the organization's mission and strategic development plan.

The educational organization conducts training for residents at the following clinical sites: the National Research Center for Motherhood and Childhood (NRCMC) in the oncology and hematology departments, the blood stem cell transplant department, and the day hospital department, where it provides a patient-centered approach. To ensure a patient-centered approach, primarily for patient safety, a privilege sheet is compiled for each resident based on their year of training and level of theoretical and practical knowledge, in accordance with the requirements of JCI international standards for accreditation. The privilege sheet is a document authorizing a resident physician to have access to patients at the UMC CF. It specifies the list of medical services/procedures/operations and the degree of independence with which each resident physician studying at the UMC CF proficiency in them. The completed privilege sheet is reviewed and signed by the resident physician, the resident physician's supervisor, approved by the head of the centers' departments, and approved by the head of the relevant UMC CF center where the training is taking place. Also, to obtain the right to participate in the treatment process, the resident physician is required to read and sign an informed consent regarding non-disclosure of confidential information about patients.

Experts determined that residents have appropriate working conditions to support their own health, as the educational institution ensures compliance with Article 48 of the Law on Education "Protection of Students' Health" and Section 4 of the Labor Code of the Republic of Kazakhstan "Occupational Safety and Health." UMC is committed to providing healthy and safe conditions for residents studying at clinical sites. Residents at clinical sites have created favorable working conditions for high-quality learning, taking into account their own needs, including health. Students are assigned to a duty team according to a prepared duty schedule, report on their work progress at morning conferences, supervise their patients, and, if possible, are sent home early.

Basic competencies of residents in the accredited specialty, such as skills in planning and conducting clinical and laboratory examinations, interpreting clinical and laboratory data, formulating a diagnosis, and providing safe and effective treatment based on the principles of evidence-based medicine, as well as specialized competencies, including mastery of scientific analysis and synthesis methods, writing scientific articles, and preparing presentations for clinical consultations, help educational organizations implement innovative forms of training. This will allow residents to develop skills and qualities such as independent work with children with oncohematological diseases, healthcare education, and cancer awareness among the population, with the goal of early detection of malignant diseases and the most common hematological disorders, thereby improving the healthcare and quality of life of the pediatric population. The educational organization encourages residents to participate in

research in their chosen specialty by organizing individual research projects. A specific topic is assigned in the first year of training, which the student develops throughout their residency. For example, an analysis of five-year survival rates in children with leukemia at the UMC branch of the Karelian Medical Center (CF UMC). Interim and final research results also enable residents to participate in academic events such as student olympiads and conferences for young scientists. Furthermore, regular journal clubs, a mandatory part of the program, instill a patient-centered approach in residents' daily activities. The primary goal of the journal club is to search for answers in an international database to the question of how to improve medical care in the department (suggestions can be both clinical and managerial).

At the same time, experts have identified a shortage of faculty with academic degrees, experience in research, or participation in projects and grants, to rapidly develop the scientific competence of residents, as 90% of faculty and clinical supervisors do not hold academic degrees, with or without ranks.

1.2 Participation in mission formulation

Experts found that the development of the goals and objectives (mission) of the educational programme "Pediatric Oncology and Hematology" involved a wide range of stakeholders, including representatives of the teaching staff, resident physicians, healthcare and education authorities, medical organizations, and professional medical associations, which was confirmed during interviews with these stakeholders. When issuing updated regulatory acts and orders in education and healthcare, the developers of the educational programme rely on the opinions and suggestions of employees, students, and teaching staff, based on the results of a systematic survey and participation in roundtables. For example, the Mission of the UMC Foundation is reflected in the strategic plan of the UMC Foundation, approved by the decision of the Board of Trustees of the UMC Foundation dated June 11, 2024, No. 11.06.2024. All structural divisions of the UMC Foundation participated in its development, and the discussion also took place at the level of advisory bodies, including the At the Academic and Methodological Council meeting, administrative and clinical staff noted the need for synergy between research, education, and clinical activities to achieve UMC's mission of becoming an academic medical center.

Meanwhile, during discussions with residents, employers, and experts, no clear answers were received to the questions "Are you involved in formulating the mission and goals of the organization and educational program?" and "What is the personal contribution of residents to improving the educational program?" Residents responded to these questions by stating that pediatric oncohematology residents were aware of the contents of this document, while employers suggested further involvement of employers in the final assessment of graduates in the specialty of "Pediatric Oncology and Hematology."

In a survey of 16 residents (on https://webanketa.com/), several of the 22 questions focused on the quality of the educational process and program. It was found that 81.25% of residents would recommend studying at this educational institution to their acquaintances, friends, and relatives. And 75% of respondents believe that the educational programme *directors and teachers are aware of students' learning needs. To the question, "Do you think this educational institution allows you to acquire the necessary knowledge and skills in your chosen specialty?", 93.75% of residents answered positively, 0% were unsure, 6.25% were unsure, and 0% were willing to believe so.*

The 17 teachers surveyed (21 survey questions) also responded that 70.59% were satisfied with the work organization and workplace at this educational institution, and 23.53% partially agreed with this statement. The experts determined that the organization has a healthy microclimate, as the director is readily accessible to both residents and staff and responds promptly to requests and suggestions. In the survey, 70.59% of teachers were satisfied with the microclimate of the organization, and 23.53% were partially satisfied. According to 76.47%, teachers at the educational institution have the opportunity to realize themselves as professionals in their specialty. A total of 17 teachers responded (out of a total of 17 on staff), with 17.65% having up to 5 years of teaching experience, 35.29% having up to 10 years,

and 47.06% having over 10 years of teaching experience.

Conclusions of EEC by criteria. Comply with 15 standards: 6 - fully, 0 - partially, 0 - not compliat

Standard 2: EDUCATIONAL PROGRAMME

2.1 Educational programme and certification

Experts have established a correlation between the content and the required qualifications of residents upon completion of the Pediatric Oncology and Hematology program, which is confirmed by the issuance of a state-issued certificate. Upon completion of training, residents are admitted to an independent examination at the National Center for Independent Examination, which allows them to obtain a specialist certificate in Pediatric Oncology and Hematology and be admitted to clinical practice in pediatric medical institutions specializing in the relevant field.

In 2024, 83.3% of graduates of the Pediatric Oncology and Hematology residency program passed the independent assessment with a "good" grade, and 16.7% with an "excellent" grade. Graduates passed the examination with a "good" grade in 2021 (5 out of 5 residents) and 100% (3 out of 3 residents) in 2023.

Experts reviewed documents confirming the fulfillment of this standards for accreditation criterion: Orders on admission to annual certification and its implementation for resident physicians of the CF "UMC"; the student population for the residency program in Pediatric Oncology and Hematology for the 2024–2025 academic year; and the percentage of resident physicians' final grades in the specialty for 2021–2024.

The residency educational programme in Pediatric Oncology and Hematology has been included in the EHEA Register since 2016.

2.2 Intended learning outcomes

The intended learning outcomes have been defined and included in the document. The educational programme is based on the standard curriculum in accordance with the State Educational Standard of the Republic of Kazakhstan for the specialty "Oncology and Hematology (Pediatric)," which was developed by the team of the Clinical and Academic Department of Pediatrics of the CF "UMC" and approved by the Educational and Methodological Council (Protocol No. 5 dated April 27, 2023). The intended learning outcomes are presented in the documents available at the link: https://drive.google.com/drive/folders/1H89yCt3NgcCymg6Lt-4ZtiTWyddRedz2

Stakeholders are informed about the final training outcomes of residents in the specialty "Oncology and Hematology (Pediatric)" by posting the final competencies of residency graduates on the official website of the CF "UMC", in accordance with the State Educational Standard for Residency. Competency assessment criteria are also reflected in syllabi, which are freely available on the organization's website. Experts have confirmed that residents' professional behavior and communication skills are developed through practical training. Faculty members, along with supervisors, teach residents how to work and apply communication skills when interacting with patients. These are reflected in the relevant document of the "Oncology and Hematology (Pediatric)" program and the discipline syllabi.

The ethical standards and professional conduct of students in the CF "UMC" residency program are governed by a system of corporate and professional ethics built on the regulatory legal acts of the Republic of Kazakhstan and the organization's internal regulations. The fundamental document is the UMC Code of Business Ethics, approved by the Board's decision No. 17 dated December 26, 2022. Faculty and residents are informed of the Code of Ethics. Students are required to build relationships with colleagues, faculty, patients, and their families based on respect, responsibility for the patient's health, and adherence to medical ethics. These guidelines are also enshrined in the Rules for the Organization of the Educational Process in the Residency Program (Board's decision No. 9 dated June 3, 2024), which can be found on the website in the internal documents section of the CF "UMC" **(ESG II Part 1.2).**

At the UMC level, there is a Bioethics Committee, information about which is posted on the organization's official website: https://umc.org.kz/?ethics-commission=post . The Committee considers issues related to ethics in scientific and educational activities, including the actions of faculty and supervisors.

It has been established that the expected learning outcomes meet the requirements of national professional standards for the specialty of Pediatric Oncology and Hematology. There are no external reviews of the accredited educational program, only reviews by experts from the Registry of Medical and Higher Education Institutions. Thus, the requirements of the professional community for the specialty of Pediatric Oncology and Hematology have been taken into account.

The educational programme defines learning outcomes for the specialty of Pediatric Oncology and Hematology, including knowledge, skills, and professional behavior. Each skill can be assessed and measured, for example, using the "Resident Skills Log" and the "Resident Physician Privilege Sheet." Residents receive regular oral feedback after each session and are surveyed annually. A survey of residents in various specialties, including Pediatric Oncology and Hematology, found that the opportunity for independent patient management, the responsibility afforded to residents, and physician support, as well as the high availability of patients and practical skills, were highly rated. However, the effectiveness of educational activities such as the journal club, lectures, and the assessment system received lower ratings. Access to resources (literature, service centers, and computer programs) was assessed unevenly, which may indicate a lack of educational and methodological support. Overall, satisfaction with the program was 7.11 out of 10.

Participation in providing medical care to the public is a mandatory component of resident training. Residents undergo training at medical facilities such as the Diagnostic Center, the NRCMC, and the NROC, where practical training comprises 80% of the entire program. Clinical activities from the first days of training include manage a patient, performing medical procedures, completing medical records, participating in rounds, consultations, and conferences. For example, in the specialized departments of the NRCMC, residents learn procedures such as bone marrow aspiration and spinal tap with chemotherapy administration. Residents' independent study includes library visits and journal clubs. Residents prepare and study scientific literature, develop and complete clinical assignments, maintain a portfolio, and participate in journal club presentations. All results of independent work are documented in the form of a skills and achievements sheet for the resident's independent educational activity. Residents are encouraged to publish, present at conferences, and participate in various educational events at and outside the UMC Foundation. The Foundation organizes competitive placements for resident physicians in international internships through the UMC Extended Observership Program (UMC EOP). The program's terms and conditions are governed by the Rules for the Selection and Dispatch of Resident Physicians, approved by Resolution No. 12 of the Educational and Methodological Council dated May 16, 2025. Between 2021 and 2025, 12 resident physicians were sent on international internships under the UMC EOP program.

Residents' professional conduct is ensured by building relationships with colleagues, faculty, patients, and their families based on respect, responsibility for patient health, and adherence to medical ethics. Residents have been familiarized with the CF Code of Business Ethics, which was developed and approved by Board Resolution No. 17 dated December 26, 2022. During a survey of employers, experts inquired about their satisfaction with residents' behavior. Overall, residents maintain ethical behavior toward faculty, fellow students, and medical staff.

A disciplinary mechanism is in place through the Incident Review Committee. The Committee reviews violations of the Code of Business Ethics, including unprofessional behavior in clinical and educational settings.

There have been no such violations over the past 3 years. Residents themselves, during meetings with experts, confirmed that faculty adhere to ethical standards with respect to them. When asked whether conflict resolution studies had been held for teachers in the past few years, the response was that they had been held at least once a month and focused on discussing academic, disciplinary, and professional-ethical issues.

When determining the intended learning outcomes, the Department of Education staff considered previous undergraduate and internship learning outcomes, as well as the goals and objectives of subsequent continuous professional development in the chosen specialty. The educational institution provides training in additional and informal education (continuous professional development), including programs in the specialty of the accredited educational program. For example, programs have been developed and implemented on the topics of: Oncological Alertness in Children and Early Diagnosis of Hematological and Oncological Diseases, each lasting 24 hours.

Experts have established clear continuity between the final outcomes of residents' prior training (prerequisites) and their residency training and subsequent continuing professional development programs. The organization has developed 14 continuing education programs, including six for the specialty of "Oncology and Hematology." Residents are informed about these.

52.94% of the respondent teachers believe that students of this educational organization have a high level of knowledge and practical skills after completing the training program, and 23.53% partially agree with this.

The faculty surveyed during the external assessment responded that 29.41% were fully satisfied with the level of prior training of residents, 52.94% were partially satisfied, and 5.88% were completely dissatisfied.

The qualification obtained by completing the educational programme in pediatric oncologist and hematologist corresponds to level 8 of the National Qualification Framework **(ESG 1.2)** and has the code 7R01110. Completion of residency training results in the issuance of a residency completion certificate, which is required to obtain a specialist clinical certification.

2.3 Educational programme organization and structure

The educational programme model for the specialty of Pediatric Oncology and Hematology is based on the intended learning outcomes of residents and includes the following: working curricula and individual curricula. The duration of training is two years. The consistency and transparency of resident training is ensured by the training process, including methods, teaching tools, and assessment, being communicated on the CF website. A program review procedure and learning outcomes monitoring are also used.

To implement the educational programme in the specialty of Pediatric Oncology and Hematology, the organization's documents include teaching and methodological documents that define the program's objectives, integrate practical and theoretical components, and provide independent work. Compliance with the State Educational Standard (GOSO) and standard requirements, including the professional standard, has been established.

Attending a practical lesson (clinical case) on the topic: Chronic renal failure, end-stage, secondary to hemolytic uremic syndrome. Condition after unrelated HSCT. Severe GVHD (intestinal, pulmonary, cutaneous, scleroderma), 2 hours in duration. Experts received convincing evidence that the training was being conducted as planned. Residents completed quizzes before class, received feedback from the instructor, and had the opportunity to hone their clinical reasoning skills. The organization ensures ethical compliance in the implementation of the educational program, as experts reviewed the Code of Ethics (December 26, 2022, No. 17), and during interviews, residents responded that they were aware of the contents of this document.

An analysis of educational activities revealed that the scientific foundation and all scientific advances in the relevant disciplines have been taken into account, additions have been made to the teaching and methodological bibliography and syllabi, and instructors apply them in the classroom.

The supervising system, which is unique to the UMC residency programs, was evaluated. When training resident physicians, special emphasis is placed on developing their practical skills, and the UMC faculty consists primarily of qualified clinical staff who are full-time employees of the faculty and are recruited as full-time faculty for the residency program.

A total of nine faculty and supervisors (all in one person) are tasked with improving clinical skills in accordance with advanced medical technologies. Their list is reflected in the Order "On the Approval of

Faculty and Clinical Supervisor in Residency Specialties at UMC," No. 57 dated October 7, 2024.

Therefore, when training resident physicians, special emphasis is placed on developing their practical skills, a characteristic of the UMC residency programs.

The procedure for informing residents of their rights and responsibilities is reflected in the Resident Handbook. Additionally, the "Rules for the Organization of Educational Programs at the CF "UMC"" are also regulated by the Agreement concluded within the residency training program. Furthermore, key aspects of rights and responsibilities are also discussed during introductory courses and orientation sessions.

The faculty uses the following teaching methods for residents: theoretical teaching methods (lectures, seminars, research papers, oral presentations), interactive theoretical teaching methods (group discussion method, small group teaching method, presentations, practical training through scientific research, simulation technologies, etc.), clinical teaching (practical skills): patient management, participation in clinical analysis of complex cases and bedside rounds with heads of department), active teaching methods (analysis of clinical cases, maintaining medical records, examination of the quality of medical care).

The list of teaching methods is described in the Department of Education Regulations and subject syllabi. These methods enable residents to participate in providing medical care to patients. Faculty members can supervise up to 10 specialized patients assigned to a clinical supervisor, participate in surgeries, and complete medical documentation with the physician's approval. For example, residents in the Pediatric Oncology and Hematology specialty program can, upon completion of their training, perform procedures such as bone marrow and lumbar punctures, trephine biopsies, and more.

Experts determined that the educational institution fully implements the principles of academic integrity and anti-plagiarism. Academic integrity and quality assurance principles have been developed and approved at the institutional level. The overall commitment to quality is confirmed by UMC's strategic plan, which calls for the implementation of a quality management system in accordance with international standards, such as JCI.

This is reflected in the Code of Business Ethics of the CF "UMC", approved by Board Decision No. 17 on December 26, 2022. Academic integrity applies at such stages of resident training as ethical principles in working with patients, colleagues, and in clinical decision-making. Anti-plagiarism measures are also applicable when residents are engaged in research. Residents are trained to promptly collect informed consent from patients for all diagnostic and therapeutic procedures. Experts noted that the patient's medical records contain a corresponding document signed by the patient.

Thus, by the end of the two-year training, residents will acquire the basic skills and abilities in the profession of "Oncology and hematology (pediatric)", which will allow them to work in such institutions as the NROC, the CF "UMC", regional multidisciplinary hospitals and clinics of the country **(ESG 1.2).**

Experts have not identified any violations of the principle of equality in postgraduate education and continuing professional development, as the educational institution complies with the Constitution of the Republic of Kazakhstan, the Law on the Languages of the Peoples of the Republic of Kazakhstan, and other regulatory legal acts in the fields of education and healthcare. For example, as of 2025, the institution employs 113 faculty members, 70% of whom are women and 30% men.

The educational institution has a mechanism for regularly adapting teaching and learning methods to the requirements of modern science, education, and the current needs of practical healthcare. This mechanism incorporates teaching methods based on the principles of evidence-based medicine, interdisciplinary interaction, clinical reasoning, and the development of self-study skills, and is built using ACGME and WFME standards, as well as national regulations. Electronic resources and digital educational platforms (UpToDate, Coursera, AMEE, PubMed) are also used, ensuring residents have constant access to up-to-date information and enabling them to develop sustainable motivation for independent learning throughout their professional careers. Clinical training actively utilizes simulation technologies, interdisciplinary case studies, case conferences, and Journal Club educational sessions.

This demonstrates compliance with Standard 2 regarding tailoring training to residents' needs. At the same time, despite the principles of quality and academic integrity described in the UMC Code of Business Ethics and other documents, the organization does not have an anti-plagiarism system. Residents can use a free, accessible online plagiarism checker if needed.

2.4 Educational programme content

There are documents containing requirements for the structure and content of educational programs, including educational programs, workbooks, individual educational programs, and syllabuses. The Department of Education is responsible for selecting and implementing innovations in the educational process.

The curriculum and catalog of elective courses reflect the needs of the healthcare system, including "Features of Surgical Tactics and Chemotherapy in Oncology" and "Treatment of Emergencies in Drug Therapy for Pediatric Cancers," as well as the specifics of research and the scientific achievements of faculty members. These include the "Research" course. Graduating-year residents present the results of their research projects, completed throughout their residency training under the supervision of their supervisor, at meetings of the UMC. UMC has an official website (www.umc.org.kz), which provides comprehensive information on its research facilities and priority areas of ongoing research. The Department of Education staff informs UMC staff and residents about research competitions, conferences, and other scientific events both in Kazakhstan and abroad. To successfully implement the educational programme in "Pediatric Oncology and Hematology," the organization has resources for assessing residents' practical skills (a 62.0 m² simulation classroom located at the CMC and a simulation center at Nazarbayev University). However, there are challenges in planning, developing, and approving educational programs, including the development of educational and methodological kits for the disciplines, due to the insufficient competence of clinical supervisors in gout. Experts determined that the educational programme complies with legal requirements, including the State Educational Standard of the Republic of Kazakhstan and the Technical University Curriculums for the relevant medical specialties, which include a mandatory component of basic and core disciplines, as well as an elective component.

Classroom work accounts for 10% of each course, independent clinical work under the supervision of a supervisor accounts for 75%, and self-regulatory work accounts for 15%. The theoretical component of the educational programme comprises 798 hours, covering seven disciplines/topics. The practical component of the educational programme consists of independent clinical work under the supervision of a supervisor and the student's own independent work. Potential future roles for residency graduates, namely, medical expert and manager, are developed and integrated into the required disciplines (or topics). Legal aspects of physician practice are discussed in classes in the same disciplines and in daily work at various levels of medical care.

The scientific component of resident training is formed through the right of resident physicians to independently choose the topic of their research and the research supervisor. The topic, the resident physician's scientific supervisor, and the research schedule are agreed upon with the head of the CF “UMC” and approved at a meeting of the UMC.

The educational organization guarantees adjustments to the structure, content, and duration of the educational programme in the event of any changes in various sciences, demographics, and in response to the needs of the healthcare system. To this end, a mechanism exists for designing and annually reviewing residency programs at UMC through an analysis of the level of clinical and communication competencies developed by internship graduates; the content and performance of core courses in related disciplines; and entrance examination results. This data allows for adjustments to the residency program structure without duplicating subjects already covered during internship, as well as strengthening practice-oriented modules that require further development.

Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, with 75% being fully satisfied and 25% being partially satisfied.

The organization has its own clinical facility at the Central Medical Center (CMC) with 500 beds and 500 outpatient visits at the CC. It also has a number of agreements with medical organizations, including City Children's Hospital No. 2, the Multidisciplinary Medical Center, and the Neurosurgery Center. 100% of residents responded with complete agreement to the survey question, "Is there sufficient time for practical training (patient management, etc.)." *Furthermore, 68.75% of residents stated that the instructor provides feedback after classes (listening to their opinions, conducting a mini-survey, and* error analysis session*). Meanwhile, when asked, "Are resident representatives involved in the development of educational programs?", 31.25% responded, "Sometimes, I don't know anything about it, I doubt it." 62.5% of residents surveyed were completely satisfied with the training schedule.*

The residency program includes 30 hours of components on the fundamentals and methodology of scientific research, including clinical research and clinical epidemiology. Faculty members employ a critical appraisal of scientific literature and medical research data, which is demonstrated through the review of documents such as the resident's portfolio and research reports. This form of training is organized through a "journal club" meeting once a month.

Residents confirmed that evidence-based medicine is integrated into their training. Specifically, by applying clinical protocols in manage a patient, residents are familiar with evidence-based literature.

A survey of residents revealed that the educational institution provides access to student participation in research, with 75% of respondents fully satisfied, 12.5% partially satisfied, and 6.25% dissatisfied. Residents should engage in research, and in their responses to the survey, 81.25% indicated they were already engaged in research, 12.5% planned to begin, and 6.25% were not currently engaged.

2.5 Learning methods and experience

The primary methods of residency are theoretical and clinical training. Supervising is provided in accordance with the UMC Residency Regulations, approved by Resolution No. 9 of the UMC Board of Directors dated June 3, 2024. Resident physicians are assigned a clinical supervisor. Experts have found that faculty members most often organize systematic, individualized work with an experienced physician to develop the necessary skills and abilities in the student's professional work. The clinical supervisor is responsible for ensuring the resident masters the necessary practical skills. Feedback is provided daily, and residents can ask the supervisor any questions they may have and also have access to medical records and the patient management information system through the supervisor's account (under their control).

Virtual learning methods are used, including AMEE, ACGME, and Coursera platforms, and residents have earned a number of training certificates. Simulation-based training is provided in the center's simulation classroom and the Nazarbayev University Simulation Center. Residents of the accredited educational programme have access to the following simulation equipment: mannequins for performing high-quality cardiopulmonary resuscitation with feedback devices. This equipment is designed for practicing emergency practical skills in neonatology and pediatrics. Simulation training is included in the first-year curriculum, totaling 90 hours.

The principles of quality, academic integrity, and anti-plagiarism **(ESG II Part 1.3)** are documented in the UMC Code of Business Ethics, approved by the Board of Directors on December 26, 2022, No. 17. The experts asked residents, "What do they understand by academic integrity?" and received the following response: "avoiding cheating and plagiarism, adherence to academic standards, honesty, and integrity in scientific research and publications." The experts concluded that the principles of academic integrity in residency programs primarily relate to areas such as UMC academic policies, including integrity requirements and the prohibition on plagiarism. Furthermore, information about these principles is communicated to residents during introductory classes, through course syllabi, and through ongoing interaction with faculty.

Residents are informed of their rights and responsibilities by familiarizing themselves with the following regulatory documents: the "Handbook and Guide for Resident Physicians," which contains separate sections detailing the rights and responsibilities of trainees, and the "Rules for the Organization of Residency Educational Programs at the UMC Foundation," approved by the Foundation's Board,

which also contain a complete list of the rights, duties, and responsibilities of resident physicians. The rights and responsibilities of UMC resident physicians are also regulated by the Agreement concluded within the framework of the residency training program.

Experts note that the educational organization provides residents with the necessary skills and abilities that can impact their personal development and be applied in their future careers **(ESG II Part 1.3).** The center's resident physician is an active participant in shaping their educational trajectory, and the faculty member acts as a supervisor-facilitator, sharing responsibility for the educational process with the student. This format promotes the development of professional independence, critical thinking, and a conscious approach to learning. This is confirmed by the results of a review of documents such as resident portfolios, graduate research papers, and individual curricula. It is also confirmed by the results of class attendance, meetings with graduates, and resident surveys.

Equality principles, including gender, cultural, and religious ones, are upheld for residents and faculty, as enshrined in the organization's internal regulations—the Code of Business Ethics of the CF "UMC", approved by Board Decision No. 17 dated December 26, 2022. A visit to the center revealed no instances of non-compliance with these principles. The primary documents for the educational institution are the Constitution of the Republic of Kazakhstan and the Law of the Republic of Kazakhstan on Education, which, in Article 3, paragraph 3, establishes the principle of equal rights for all citizens to education, regardless of gender, age, social status, or other factors.

Teaching and learning methods are regularly adapted to changing conditions **(ESG II Part 1.5)** and the demands of practical healthcare. For example, the leadership of the educational programme (oncology department) has added elective courses on "Treatment of Emergency Conditions with Drug-Induced Polychemotherapy of Tumors" and "Characteristics of Surgical Tactics and Polychemotherapy" to the 2024 curriculum. These courses were developed based on feedback from employers, graduates, and students. The selection of the clinical site for resident training was also based on an analysis of the training needs of pediatric oncologists-hematologists.

The CF "UMC" facilities enable the effective implementation of active learning methods (case analysis, medical documentation, medical quality assessment, patient management, in-clinic training with real patients, attendance at medical conferences and consultations, and teaching using modern technologies). Electronic resources and digital educational platforms (UpToDate, Coursera, AMEE, PubMed) are utilized, ensuring residents have constant access to up-to-date information and fostering a strong motivation for independent learning throughout their professional careers.

Of the 17 residents surveyed, 75% responded that teachers use active and interactive teaching methods in classes quite often, while 25% believe that they do so rarely or sometimes.

2.6 Educational programme and learning facilities

Residents of the accredited educational programme are trained at the CF "UMC", Moscow City Children's Hospital No. 2, the Medical Medical Center, and the Neurosurgery Center. This includes training at the primary, secondary, and tertiary levels of medical care. To cover patients with the most common hematological diseases, clinical sites at city outpatient clinics and city children's hospitals are necessary. Residents can work in the laboratories of the NRCMC and the Diagnostic Center. A contract has been signed with each clinical site until 2026. The Education Department of the CF "UMC" is responsible for this. This center has six contracts with third-party organizations as of this year.

Experts visited the following clinics: the NRCMC and the Diagnostic Center, which have seven classrooms with a total area of 586.3 square meters and nine supervisors involved in the educational process. Currently, the accredited program enrolls three first-year residents and seven second-year residents, who are fully provided with clinical training (a sufficient number of patients in the specialty profile is at least three and no more than ten).

The selection of clinical sites was based on the structure of the educational programme and related disciplines. The authority to select/determine the clinical site for resident training rests with the Regional Clinical Administration of Pediatrics, Pediatric Surgery, Radiology and Nuclear Medicine,

Anesthesiology and Intensive Care, Laboratory Medicine, Pathology, and Genetics. These medical organizations are accredited (for a period of three years, beginning September 14, 2024).

Experts ensured that residents have access to the resources of the medical organizations. In a survey, residents confirmed that they were 87.5% satisfied with the resource provision.

The following staff and stakeholders participated in the planning, development, discussion, and approval of the educational programme **(ESG II Part 1.2):** the Department of Education, Clinical and Academic Pediatrics faculty and clinical supervisors, students, employers, and graduates. The residency program "Pediatric Oncology and Hematology" was approved at a meeting of the Educational and Methodological Council. Minutes No. 5 dated April 27, 2023. Approval of the residency program includes only an external review in the Register of Educational Programs of the Ministry of Health of the Russian Federation.

The educational process management reflected in the self-assessment report (Standard 2) and the general management approaches were confirmed during a visit to the Clinical and Academic Department of Pediatrics of the Department of Education and discussions with the heads of these departments, clinical departments, and clinical supervisors. This includes a broad range of residency educational programme specialties at relevant JCI-accredited clinical sites and their relevance to potential students. The emphasis is on clinical practice and bedside training for residents. At the same time, verification of Standard 2 revealed the need to expand primary care clinical sites in city hospitals and clinics.

The experts reviewed the work of departments, including the educational department. Five meetings were held, and cross-sectional interviews with stakeholders revealed that the organization has ensured high-quality implementation of educational programs. The training of residents in the specialty "Pediatric Oncology and Hematology" is aimed at meeting the needs of practical healthcare, as an analysis of the specialist shortage for 2024 identified a shortage of approximately 10 positions in regional hospitals. During discussions with the organization's management, the experts received information about the provision of clinical competencies in the workplace, and faculty confirmed that resident training is conducted directly in clinical departments (oncology, radiation diagnostics, cytology and pathology laboratory, genetics, and day hospital). Additionally, there is access to alternative clinical sites, research centers, and organizations providing outpatient care. Resident physicians can also train in clinical skills in various departments, in accordance with the practical training topics and competencies defined in the educational programs for their respective specialties. The training program also includes topics on public healthcare promotion and disease prevention.

Residents in this specialty can oversee patients with diseases such as acute leukemia, aplastic anemia, histiocytosis, lymphomas, solid tumors, and others.

During a two-hour practical session on a multidisciplinary clinical case, "End-stage chronic renal failure with hemolytic uremic syndrome. Post-unrelated HSCT. Severe GVHD (intestinal, pulmonary, cutaneous, scleroderma)," and a discussion with residents, experts demonstrated that the organization promotes the development of residents' practical competencies. Residents also deepen their theoretical knowledge and develop communication skills.

2.7 Opportunities for higher degrees and research

The educational institution offers the following research opportunities, both within the postgraduate medical education program and independently, leading to the award of an academic degree. The presence of an active research base is confirmed by the UMC Strategic Plan (2024–2028), which provides for, among other things, "fundamental, clinical, and other research in healthcare."

A list of UMC research projects is available on the UMC website: http://umc.org.kz/?science=post#projects . A list of UMC staff publications for 2016–2023 is available on the website: http://umc.org.kz/?publications=post

The list of security documents received by UMC CF employees in 2019 is posted on the UMC CF website: http://umc.org.kz/?science=post#science_results

Faculty members of the accredited program participate jointly with the National Center for

Pediatric Oncology (the main executor) in the implementation of the scientific and technical program of the PCF on the topic: "Development and implementation of a sustainable model of pediatric oncology care based on a precision approach in pediatric oncology." Residents can be informally included in scientific research and participate in the collection of material.

Between 2020 and 2025, residents published 25 scientific papers in Kazakh and international journals, including a journal with a non-zero impact factor. Eight resident physicians presented papers at international forums and conferences, and 14 resident physicians participated in domestic and international conferences. Monthly journal clubs are held where residents develop skills and knowledge in critically evaluating literature, articles, and scientific data in Russian and English. This helps familiarize medical staff and students at UMC and its centers with cutting-edge scientific literature in their respective fields of research. Journal clubs consider the latest publications that are of scientific, educational, and practical interest in the relevant field of research.

The residency program provides two credits (60 hours) for residents to conduct research. Residents interviewed confirmed that they are provided with access to research equipment and ongoing scientific events at the training facilities.

Thus, the center's strengths include the implementation of educational programs at relevant JCI-accredited clinical sites, extensive clinical practice, and resident bedside training. However, there is a need to provide educational and methodological documentation for educational programs in the state language in accordance with the provisions of the Law of the Republic of Kazakhstan dated July 11, 1997, No. 151-I "On the Languages of the Republic of Kazakhstan" (as amended on May 24, 2018), as well as to ensure the participation of all stakeholders in the development of the educational programme (residents, clinical supervisors, employers, alumni, and representatives of professional associations).

Conclusions of EEC by criteria. Comply with 28 standards: 27 - fully, 1 - partially, 0 - not compliat

Standard	Standard implementation	Recommendations for improvement
2.4.2	Partially implemented	To improve the training trajectory for residents by introducing rotations of students at the level of primary health care organizations (GP, city hospitals) to master the provision of specialized medical care at all levels of healthcare.

Standard 3: **ASSESSMENT OF POSTGRADUATE DOCTORS**

3.1 Assessment policy and system

A review of the assessment tools (100 tests, 30 tasks) revealed that the organization has implemented an appropriate assessment policy that allows for a comprehensive assessment of residents' academic achievements. During interviews, residents described the assessment methods, which include a combination of formative and summative assessment. Formative assessment is conducted at each stage of practical training and is aimed at tracking the resident's ongoing progress. It includes observing bedside procedures, completing assessment forms on acquired skills, and maintaining a portfolio. Summative assessment is used upon completion of a course or clinical rotation and is conducted according to the approved form in the Instructions for the Development of Educational and Methodological Documentation and the System for Assessing the Academic Achievements of Resident Physicians of the "University Medical Center" Corporate Foundation, dated February 19, 2025, No. 2. Objective methods are used to assess practical skills, professional behaviour and clinical reasoning, including elements of the OSCE (Objectively Structured Clinical Examination), mini-clinical examinations, and expert opinions from clinical supervisors, allowing for regular feedback from faculty.

Final knowledge assessment at the end of each course is conducted in the form of an oral exam or a test and case study.

Interim assessment of resident physicians is conducted once a year by the Clinical Competencies

Committee, which evaluates the resident physician's progress in competencies according to the assessment form. Final assessment (FA) of resident physicians is conducted within the timeframes stipulated by the academic calendar.

The appeals committee is formed by order of the head of the CF “UMC” and reviews appeals the following day. The appeals committee's work is documented in a protocol signed by the chairperson and all committee members. The appeals committee's procedures for conducting residency entrance examinations are described in Section 4 of the CF “UMC” Residency Admission Rules, approved by Resolution No. 6 of the CF “UMC” Board on April 8, 2024. During the 2020-2025 period, there were no appeals committees from applicants entering the residency program in Pediatric Oncology and Hematology.

The assessment covers not only knowledge and skills but also professional behavior and communication skills. The assessment is conducted at the National Center for Neuroscience in two stages in accordance with Order No. RK MOH-249/2020 of the Minister of Health of the Republic of Kazakhstan dated December 11, 2020, "On Approval of the Rules for Assessing the Knowledge and Skills of Students and Assessing the Professional Readiness of Graduates of Educational Programs in Healthcare and Healthcare Specialists" **(ESG II Part 1.3).**

The educational organization has a practice of engaging external examiners to assess residents, which is documented in the Order of the AD CF "UMC" and the UMC protocol. Thus, in 2024, T.B. Dautov, Director of the Center for Radiology and Nuclear Medicine, was appointed Chairman of the State Attestation Commission. This ensures the independence and objectivity of assessment results. **(ESG II Part 1.3)**

Thus, to verify the data of *standard 3,* experts posed questions to the head of the Department of Education department and reviewed documents and methods for assessing residents.

The organization has a 300-question test database, compiled by clinical faculty and approved at a meeting of the Educational and Medical Council (Minutes No. 13, dated May 28, 2025). The assessment tools have been cross-reviewed by faculty from other educational institutions. The head of the education department stated that additions and updates to the assessment tools are planned, including updating the database by 30%. Experts also believe that systematic validation and reliability assessment of resident assessment methods (tests, tasks, and cases) is required.

Results of final exams and independent assessments for UMC residency graduates are available in the resident's personal account (after completing the exam), and a report on the residency specialties is sent to the center's management. Based on the final exam results for 2024, 5 residents out of 6 graduates of the Pediatric Oncology and Hematology program received an "excellent" grade, and 1 resident received a "good" grade. To date, there have been no appeals from residents.

During a site visit and an interview with A.A. Sadykova, Head of the Education Department at UMC, the commission confirmed that a documentation system exists that is transparent and accessible to all faculty and staff. This system includes documents such as annual operational plans, annual reports, department regulations, faculty and resident agreements, educational and methodological documentation (work programs, curricula, syllabi, and journals), assessment tools (checklists, reports), certificates, and credentials. A website review revealed that all of these necessary documents for residents are posted on its pages, along with regularly updated information on key events and regulatory documents for residents.

During a visit to the organization, management was asked: "Are external examiners involved to improve the fairness, quality, and transparency of the assessment process?" The answer was no.

During interviews with five faculty members regarding assessment methods, experts received convincing information regarding the use of 360-degree assessments, bedside practical skills training, and procedures. Residents also shared their opinions on the timeliness of test delivery, pre-exam counseling, and the clarity and fairness of the entire assessment process. For example, residents reported being well-versed in the checklists and rules for assessing theoretical and practical knowledge.

The three employers surveyed also noted that graduate training is aligned with the current developments in medical practice and science, as the program takes into account current healthcare

strategies (roadmaps, regulatory legal acts of the Ministry of Health of the Republic of Kazakhstan). The employers stated that they themselves participate in resident assessments, as they provide references from the management of clinical rotation sites. However, the educational organization did not provide systematic feedback to them. Employers believed that residency graduates' strongest skills were communication and knowledge of advanced disease detection and differential diagnosis.

At the same time, there are difficulties in developing control and measurement tools, including MSQ and Mini-CEX tests.

3.2 Assessment in support of learning (formative assessment)

The assessment system regularly identifies residents' strengths and weaknesses, as it includes a Skills Log, a structured document listing practical skills approved by the Working Curriculum of the Ministry of Health of the Republic of Kazakhstan and serving as a basic set of clinical procedures necessary to prepare residents for independent professional work.

Formative assessment is conducted weekly, typically after the completion of a seminar and using case problem or tests. Residents' formative assessment also includes a section on resident call assignments. Formative assessments are recorded in Logs, which are reviewed by experts. Faculty regularly provide feedback to residents based on their assessments. Residents' feedback is collected in a form that allows residents to leave comments and is published in resident reports. In interviews, residents confirmed that they receive feedback after completing a training cycle and rotations, for example, through 360-degree surveys.

Through feedback from residents, improvements were made, including individualized selection of additional activities and rotations, including participation in simulation exercises and complex clinical cases; the inclusion of supervisors for in-depth supervising support during the initial stages; and increased resident participation in journal clubs and clinical case studies to develop analytical skills.

The experts reviewed the resources for organizing the assessment of knowledge and practical skills, namely, computer labs and the simulation center.

The experts determined that the selection of resident assessment methods is based on assessing residents' clinical achievements, as the practical component of training is central. For example, ongoing assessment methods such as communication and collaboration promote interprofessional learning. Methods such as patient management and supervision demonstrate integrated learning and an emphasis on clinical skills. The established assessment methods ensure that residents have mastered all sections of the educational programme and acquired the necessary practical skills.

Resident faculty members report being provided with information about their assessment results and the opportunity to provide written comments and recommendations aimed at improving their clinical competence. **(ESG II Part 1.3)**

3.3 Assessment in support of decision-making (summative assessment)

The summative (final) assessment of residents includes a section for scoring learning outcomes, conducted on a 100-point scale, and dedicated to assessing the practical skills performed by the resident during rotation.

The criteria for admission to the final assessment include completion of the full residency program at the CF “UMC” in accordance with the requirements of the Individualized Competency Plan (IEP) and the portfolio. At the Committee meeting, a decision is made on admitting the resident physician to the independent assessment. The Committee's decision is approved by the minutes of the meeting of the Clinical Competency Committees for the relevant residency program and serves as the basis for the order admitting residents to the independent examination. In the educational organization's practice, residents (including those in other specialties) pass the independent examination 100% of the time.

The assessment of residents' clinical decision-making is conducted using automated computer testing and test questions. Skills are assessed using an assessment form in the assessment information system. The results of the resident physician's comprehensive examination are recorded in the

examination record, which is used to prepare the final assessment protocol. For the final assessment of resident physicians, the CF "UMC" is organized by residency specialty.

The fairness and objectivity of the summative assessment is confirmed by the participation of examination and final certification committees and documented in the corresponding final protocols, which are submitted to the Department of Education and the ISO system.

The reliability and validity of the quantitative data from the resident assessment results is ensured by the Department of Education and the Clinical Academic Department of Pediatrics **(ESG II Part 1.3).**

3.3 Quality assurance of the assessment system

The mechanisms that guarantee the quality of all assessment methods applied and the existing resident assessment system as a whole are supported by the following: the use of well-developed assessment tools (tests, case problems, practical skills forms); the use of criteria-based assessment with a formal specification of all manipulations and tasks assessed during the rotation; the presence of an appeals procedure in the form of a commission that considers student complaints within 24 hours of the results being announced. The educational organization engages independent examiners in resident assessment. For example, in 2024, specialists from other medical organizations and professional associations were included in the certification commissions, and in 2022, experts from the National Center for Neuroscience participated. This is reflected in the Rules for the Organization of Educational Programs for Residency at the CF "UMC", approved by Decision No. 9 of the CF "UMC" Board on June 3, 2024.

The results of formative and summative assessments are discussed at meetings of the Academic and Methodological Council, and conclusions are drawn regarding the methods and content of the assessment.

Resident assessments include questions about patient safety. For example, in accordance with JCI requirements, incidents are filed when errors occur on the part of resident physicians, and these incidents are analyzed and addressed at residency working meetings.

The Department of Education reviews formative and summative assessment methods annually based on an analysis of formative and summative assessment results, final assessments, and feedback from residents, faculty, supervisors, employers, and external experts. The review is documented in the minutes of the Educational and Methodological Council. In 2023, a faculty survey was conducted, and based on the ECAQA EEC report, changes were made to the implementation of assessment tools for interdisciplinary interaction and teamwork.

A 2025 employer survey found that 90% of graduates of the Pediatric Oncology and Hematology program demonstrated a good level of preparation for independent work in healthcare settings. **(ESG II Part 1.3)**

The experts also reviewed the results of the 2025 resident survey, which rated residents highly for their independent patient management and responsibility, as well as support from physicians. However, the effectiveness of educational activities (journal club, lectures) and the assessment system received lower ratings, with overall satisfaction with the residency program being 7 out of 10. The experts recommend considering streamlining the documentation of student assessments (implementing an electronic journal) and training faculty in maintaining these records.

Conclusions of EEC by criteria. Comply with 15 standards: 13 - fully, 2 - partially, 0 - not compliat

Standard	Standard implementation	Recommendations for improvement
3.1.2	Partially implemented	To incorporate interim assessment and final assessment into the assessment system to objectively monitor learning progress and determine the rating for residents' final certification.
3.4.1	Partially implemented	To improve the quality of assessment by introducing

		objective assessment forms (checklists for call assignments, mini-clinical exams, computerized testing) with the involvement of primary care examiners.

Standard 4: POSTGRADUATE DOCTORS

4.1 Selection and progression policy

4.2 Performance improvement and exit from the programme

The processes and opportunities for improving the academic performance and professional preparation of residents, as well as the conditions under which a resident may be excluded from their program, are documented in the Rules for the Organization of Educational Programs for the UMC Residency Program, approved in 2024.

Residents receive academic advising from faculty and supervisors, who regularly monitor their progress and assess their clinical skills and competencies following each rotation. Based on their performance, residents receive recommendations and develop an individualized academic support plan based on the aforementioned document. Academic advising, personal support for residents, and the development of non-professional skills were assessed by experts through residents' portfolios. Interviews with residents and graduates yielded the following information regarding individual advising throughout the academic year, including the exam preparation period.

Faculty members prevent unexpected incidents involving residents that could potentially cause harm to patients. This is accomplished through the following: CF "UMC" staff, together with the Department of Quality Management and Patient Safety and other stakeholders, hold incident review meetings. According to faculty members, no such incidents have been observed in the past period. At the same time, the Center has developed a policy that sets out requirements for residents, including introductory and internal briefings for resident physicians and a handbook.

Each resident is familiar with and applies informed patient consent for examination, treatment, and medical procedures in their clinical work. Before classes begin, the resident is instructed by the instructor on compliance with the rules of conduct in a medical organization and signs a document providing instructions on:

1) rules for handling medicinal products;
2) international patient safety targets;
3) safety codes;
4) incident reports;
5) fire safety and emergency preparedness, etc.

This was confirmed by residents during a meeting with experts.

Social, financial, and personal support for residents is provided in accordance with internal regulations and documented in the Rules for the Organization of the Educational Process. Recently, support was provided to residents for their participation in international educational and research events, including one resident in an accredited educational program. In 2022, S.M. Zhumataev, a resident physician specializing in pediatric oncology and hematology, participated in the international scientific and practical conference "European Hematology Association (EHA) 2022 Hybrid Congress" in Vienna, Austria. For example, in order to provide social support to residents, in 2020, the CF "UMC" supported the proposal to provide 30% discounts on medical examinations and laboratory tests for resident physicians at UMC centers.

Financial support for residents is provided in the form of a state stipend, which is established in accordance with the Rules for the Appointment, Payment, and Amount of State Stipends for Students in Educational Institutions, approved by Decree No. 116 of the Government of the Republic of Kazakhstan dated February 7, 2008. Psychological safety is ensured through a supervising system, regular feedback, supervisor support, and the ability to contact program management in cases of overload, conflict, or emotional burnout. Confidentiality of this assistance is regulated.

The UMC Foundation allocates appropriate resources for the social and personal support of resident physicians to support their participation and provide financial assistance for them to participate in an

international congress or conference as a speaker. The Department of Education initiates the process of arranging the secondment of a resident physician in accordance with the Rules for the Selection and Assignment of Resident Physicians on Secondment, approved by Resolution No. 12 of the Educational and Methodological Council dated May 16, 2025.

To plan the careers of residency graduates, consulting work is carried out for resident physicians in their final years on issues of employment and the use of state educational grants in accordance with the Law on Education and the Rules for the assignment of specialists to work, reimbursement of expenses incurred from budgetary funds, granting the right to independent employment, exemption from the obligation or termination of the obligation to work for citizens of the Republic of Kazakhstan studying on the basis of a state educational order, approved by Order No. 403 of the Acting Ministry of Education and Science of the Republic of Kazakhstan dated August 11, 2023.

The employment rate for graduates of this residency program was 100% in 2024. The Department of Education has structures monitoring employment **(ESG II Part 1.4)** and operates in accordance with the above Regulation.

4.3 International medical graduates

The UMC Residency Admissions Policy, approved by Board Resolution No. 6 of April 8, 2024, regulates the recognition policy for residency qualifications. Admission of international applicants to the residency program is also carried out in accordance with the UMC Strategic Plan 2024–2028, which declares commitment to global WFME standards/ACGME recommendations and integration with NUSOM. A contract is concluded with residents, a copy of which is given to the resident, and one copy is kept in the Legal Department and the Department of Education.

There are currently no residents who do not speak the state language or Russian, so the experts found no problems with completing professional clinical training. There were no foreign residents during the review period.

4.4 Postgraduate doctor work and study

Residents are provided with a program that defines goals, objectives, overall workload and work hours, their areas of responsibility, and the intended learning outcomes. Residents are informed about their supervisors. Currently, nine clinical supervisors at three clinical sites are involved in resident training under the accredited program. Residents are informed about the number and timing of ongoing assessments and final examinations. Clinical supervising is regulated by the Regulation on the Educational Process in Residency, which defines the roles of the clinical supervisor, the forms and criteria for assessment, and the participation of the clinical committee. The experts reviewed the information on the website in the Residency section.

Residents participate in events organized by clinical sites, in accordance with the Comprehensive Plan for the Joint Continuity of Clinical Education. Experts reviewed this plan for 2024-2025 and found that residents participate in the following activities: scientific information exchange in the form of conferences, seminars, and symposia; department rounds; morning medical conferences; providing care in departments according to the specialty being trained; night/day shifts as part of the on-call team, etc. The head of the clinical site is responsible for developing this plan. The clinical training program for residents includes supervision of 20 patients per month and four shifts. All of this is regulated in the "Resident's Journal."

Department faculty inform residents of the conditions for their participation in providing medical care through supervisors, based on the Regulation on the Organization of the Educational Process. However, the participation of clinical supervisors and the CAD is regulated so that the resident's participation in providing medical care does not dominate the program.

If a resident is forced to interrupt their studies (due to pregnancy, maternity leave, illness, or military service), the educational institution provides for academic leave in accordance with the current legislation of the Republic of Kazakhstan. For this purpose, an individual training plan is developed for the resident in accordance with the IEP. Currently, there are no such students enrolled in the accredited program.

4.5 Postgraduate doctor safety

The resident's legal status regarding the provision of medical care to patients is defined in the Residency Training Agreement and performs practical skills under the supervision of a supervisor and within the approved privilege sheet. Residents' physical safety during training is regulated by the Safety Procedures, which the resident signs before beginning training, as well as by clinic documents.

Psychological safety is achieved through a supervising system, regular feedback, supervisor support, and the ability to contact program management in cases of overload, conflict, or emotional burnout.

4.6 Postgraduate doctor renumeration

Residents receive a monthly stipend of 123,122 tenge starting September 1, 2024, and 134,664 tenge starting September 1, 2025, in accordance with the Rules for the Appointment and Payment of State Stipends, approved by Government Resolution No. 116 of February 7, 2008 (as amended on October 10, 2022).

The official document "Rules...," which describes resident funding, is posted in the regulatory documents section of the UMC official website (Regulatory Documentation section) https://umc.org.kz/regulatory-documentation/ and on government agency websites (Adilet).

4.7 Postgraduate doctor health and welfare

Residents are provided with professional and personal support focused on physical health, personal well-being, and psychological well-being, including burnout, through the UMC Residency Program Guidelines and the Resident Handbook. During a meeting with experts, residents stated that they can obtain all necessary assistance by contacting the relevant departments.

Conclusions of EEC by criteria. Comply with 19 standards: 19 - fully, 0 - partially, 0 - not compliat

Standard 5: TEACHERS AND CLINICAL SUPERVISORS

5.1 Teachers and clinical supervisor establishment

There are nine full-time faculty members, nine of whom are full-time instructors. The residency program instructor requirements include professional education in the relevant field, and a first or highest qualification category. There are nine clinical supervisors. The composition of the UMC faculty and supervisors is agreed upon by the heads of clinical departments, reviewed by the UMC Director or their authorized representative, and approved annually by order of the UMC Director or their authorized representative, taking into account new admissions for the corresponding academic year.

22% of residents hold a PhD, 75% hold the highest qualification category, and 25% hold a first category. Residents in the specialty of "Pediatric Oncology and Hematology" are trained by staff of the Pediatric Clinical Directorate within the oncology department.

The experts reviewed the job descriptions and regulations for faculty and clinical supervisors, as well as the regulations of the Department of Education (No. 57 of October 7, 2024).

The experts were familiarized with the personnel policy. The Strategic Document outlines a transition to a "dual appointment" system—combining the roles of teacher, physician, and researcher. As of 2025, 228 specialists are involved in the educational activities of the UMC Faculty, including 13 doctors of medical sciences, 34 candidates of sciences, and 112 specialists with the highest qualification category. Training is provided in 21 specialties. The ratio of faculty to residents in this specialty is 1:3.

The UMC faculty and clinical supervisor incentive system includes annual awards for educational and research activities. Winners receive certificates and commemorative gifts in various categories (Best Faculty and clinical supervisor of the Year). Participants in the educational process also receive salary supplements. The principles of faculty ethics and academic integrity are reflected in the Bioethics

Committee, information about which is posted on the organization's official website: https://umc.org.kz/?ethics-commission=post. The Committee considers issues related to ethics in research and educational activities, including the actions of faculty and supervisors. During interviews with faculty, they confirmed their awareness of this issue.

To verify the data from the self-assessment report for standard 5, external experts obtained faculty input on the HR policy, which includes continuous professional development for faculty and clinical supervisors in their discipline and research. Discussions with clinical supervisors covered topics such as enhancing teaching competencies, incentives, and performance indicators. This enabled the experts to learn about approaches to recruiting clinical site staff for teaching (there are nine such faculty members), the strategy and tactics for recruiting residents, and the availability of information for the educational program. They also identified challenges in human resource management and development, as most clinical supervisors are not fully proficient in teaching methods.

Technical and administrative staff are available to support the educational programme **(ESG II Part 1.5),** including the Information Technology Department and specialists from the Department of Education. A meeting was held with staff from support divisions such as the Human Resources Department and the Finance Department.

A survey of faculty members revealed that the majority (70.59%) were completely satisfied with the organization of work and the workplace at this educational institution, while 23.53% were partially satisfied. Faculty members at this educational institution have the opportunity to engage in research and publish their research results—76.47% completely agree, while 17.65% were partially satisfied. 64.71% were completely satisfied with the HR service, while 29.41% were partially satisfied. 35.29% were completely satisfied, while 23.53% were partially satisfied with their salaries.

5.2 Ethics and conduct of teachers and clinical supervisors

The personnel policy defines the responsibilities and obligations of faculty members in ensuring the high-quality education of residents. This is described in paragraph 62 of the Rules for the Organization of Residency Educational Programs.

The responsibilities and obligations of clinical supervisors are described in the clinical supervisor Regulations (approved by the CF "UMC" on February 19, 2025). The responsibilities of faculty and clinical supervisors in matters of ethics and academic integrity are formally regulated by the CF "UMC" Code of Business Ethics, dated December 26, 2022. According to Chapters 6 and 8 of the document, faculty and supervisors are required to strictly adhere to the principles of respect, professionalism, confidentiality, and honesty in their relationships with students, colleagues, and patients. Faculty interviewed confirmed that they were aware of the documents. The official publication of the documents is available at https://umc.org.kz/?ethics-commission=post.

The Department of Education, in conjunction with the Department of Human Resources Management, is implementing a KPI system covering academic and clinical activity, enabling the dynamic tracking of faculty and supervisor progress. The monitoring system and performance improvement process for faculty **(ESG II Part 1.5)** and clinical supervisor is regulated by the "Rules for the Organization of the Educational Process in the UMC Residency Program," approved by Resolution No. 9 of the UMC Board of Directors dated June 3, 2024. A faculty survey, called "Assessment of the Supervising Physician by a Resident Physician" or "360-Degree Survey," was conducted by the Department of Education. Resident physicians were surveyed on the criteria for assessing the supervising physician in the department. For example, in the specialty of "Pediatric Oncology and Hematology," the supervising physician, R.B. Omarova (oncologist-hematologist in the Department of Pediatrics), received the highest score of 10 on all questions.

5.3 Continuing professional development of teachers and clinical supervisory staff

During a meeting with the head of the Human Resources Department and interviews with faculty, experts obtained feedback on approaches to developing faculty pedagogical competence, motivation to

work with residents, and supervising, which includes developing pedagogical and digital competencies, mastering methods of objective assessment, clinical simulations, and maintaining a resident portfolio.

The experts determined that faculty and residents have sufficient time for teaching, supervising, and training. Faculty work schedules are set from 8:00 AM to 3:40 PM. Faculty conduct seminars lasting up to three hours. Clinical reviews and bedside rounds are scheduled for four hours. On-call hours are 12 hours.

Experts received responses regarding the annual faculty development program. Four faculty members participating in the program's implementation completed training for 30 individuals in 2024-2025, including four faculty members from the accredited educational programme in "Pediatric Oncology and Hematology." These activities are funded by the educational organization. The expert verified the teachers' certificates on topics such as "Development of Educational Programs Based on a Competency-Based Approach."

Supervisor funding is provided in accordance with UMC Foundation Board Resolution No. 15 of July 2, 2021. This resolution approved the distribution procedure and calculation methodology for UMC Foundation employees engaged in educational, scientific, and innovative activities. This procedure governs compensation for research activities and ongoing projects.

Experts found that faculty initiate research topics for residents, stimulating the need for additional training and independent work with literature and medical documentation. From September 1 to December 30, 2022, the UMC Foundation conducted an educational programme on the "Professional Development Program (PDP) in Scientific Research" for 22 UMC Foundation employees.

The human resources policy **(ESG II Part 1.5)** and approaches to engaging clinical supervisors are reviewed annually in line with evolving needs in postgraduate medical education. The most recent review was conducted in 2025, and the following changes and additions were made: the CF “UMC” is developing a competency-based model for the "Effective UMC Teacher" and continues to train physicians in advanced educational technologies. Requirements and responsibilities for clinicians involved in educational activities are being strengthened, while the role of motivational tools is being enhanced.

There are opportunities for career growth and development in teaching at educational institutions—64.7% of surveyed teachers responded, and 29.4% partially agreed. 47.1% attended professional development programs less than one year ago, 35.3% for between one and five years, 5.9% more than five years ago, and 11.76% answered "I don't remember when."

The organization implements social support programs for teachers - 5.88% answered that “yes, such programs exist”, 5.9% “I have already taken advantage of this”, 23.53% of respondents answered that there are no such programs, and 47.1% of respondents do not know about this.

Conclusions of EEC by criteria. Comply with 8 standards: 7 - fully, 1 - partially, 0 - not compliat

Standard	Standard implementation	Recommendations for improvement
5.3.3	Partially implemented	Promoting PhD-qualified faculty with extensive scientific and teaching experience to positions of head and coordinator of the educational programme to enhance the scientific competencies of residents and develop skills in continuous medical education.

Standard 6: EDUCATIONAL RESOURCES

6.1 Clinical facilities for learning and research

Residents are trained at the Center for Maternal and Child Health, including residents of the accredited educational programme in Pediatric Oncology and Hematology. The center has 500 beds. The diagnostic center has a capacity of 500 visits per shift. There are three classrooms for 10–20 people, a 200-seat conference hall for seminars and journal clubs, a 324.67 m² library, a 34-seat reading room, and a 20-seat computer lab.

Before starting the relevant discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he should acquire and develop during the course of study.

The educational organization provides residents with opportunities for practical and theoretical training through a modern clinical facilities that supports the implementation of postgraduate medical education programs. Access to the latest professional literature and international sources is provided through access to resources from the Nazarbayev University School of Medicine (PubMed, UpToDate, Clinical Key, etc.) and the Republican Scientific Medical Library.

Access to simulation equipment is provided in the Simulation Classroom (SCL), which has been in operation since 2016, occupies 62 m² and is equipped with 14 simulators.

A safe learning environment in the functional/instrumental diagnostics laboratories/rooms **(ESG II Part 1.6)** is ensured by familiarizing residents with safety and healthcare regulations before classes, as well as through an introductory briefing by the Department of Education. Experts reviewed the safety regulations. Laboratory facilities, clinical sites, and simulation rooms operate according to international JCI standards. Residents interviewed confirmed their awareness of these documents.

The educational organization conducts research in the following areas: "Study of epidemiological data for osteogenesis imperfecta in Kazakhstan and (Central Asia)" and "Experience in interdisciplinary treatment of children with osteogenesis imperfecta in Kazakhstan based on the CF "UMC," the goal of which is to study and obtain epidemiological data on osteogenesis imperfecta in children at the national level. Over the past 5 years, progress has been made in "Assessing the impact of neutropenia in patients with childhood ALL and AML on vancomycin TDM." Second-year residents are involved in the implementation of the research work (or parts of it). They perform tasks such as collecting and processing data. All information about the research work is included in the resident's portfolio, the structure of which is based on the Resident Regulations.

The curriculum includes topics where residents study medical research methods (the "Research" elective). The total number of hours is 2 credits.

If residents carry out scientific and practical research, they are provided with access to instrumental and laboratory equipment.

For example, the accredited specialty plans to conduct research on the topic "Development and implementation of a sustainable model of pediatric oncology care based on a precision approach in pediatric oncology." This information was obtained through interviews with faculty members G.O. Zhienkulova and Z.N. Kyzdarbekova.

The library's facilities, including the library's library resources, are updated annually. Over the past five years, periodicals have been updated, with the library receiving 20 journals and two newspapers, and the data center receiving 45 journals and nine newspapers. The SMNU library's resources (PubMed, UpToDate, Clinical Key, etc.) are available in Kazakh, Russian, and English. AMEE, ACGME, Coursera, MOOCs, and FOAMed are also actively utilized to support clinical and scientific training. **(ESG II Part 1.6)**

Interviews with 17 faculty members, including 9 full-time faculty, revealed both successes and challenges in educational management, depending on the specific facility (resident access to equipment, sufficient number of relevant patients, time for maintaining medical records, independent work).

6.2 Postgraduate medical education based on clinical learning

Experts assessed the documentation maintained by residents, including the resident journal, portfolio, privilege sheet, etc.

A review of resources showed that they are aligned with the goals and objectives of educational activities. For example, clinical sites of the Central Medical Clinic (CMC) with a capacity of 500 beds and a Dispensary Center with a capacity of 500 visits per shift were visited. The educational organization's staff ensures collegial and ethical relationships with medical staff and clinical site management to achieve the residents' final results. A sufficient number of specialized patients (e.g., with acute leukemia and aplastic anemia) are provided, modern equipment is demonstrated and accessible to

students, and the faculty ensure high-quality education while adhering to ethical and deontological principles.

During a visit to the clinical sites of the maternal and child healthcare center, experts assessed the resources, their compliance with the curriculum, accessibility for faculty and residents, and the extent to which the equipment is modern and meets the needs of students and practical healthcare.

To validate the self-assessment report and obtain evidence of program quality, interviews were conducted with residents. Experts asked questions about satisfaction with training, sufficient time for patient management, managing medical documentation, satisfaction with teaching methods and faculty qualifications, social and moral support for residents who need it, participation in Journal Clubs, and access to international professional literature databases. Residents were satisfied with the training and assessment methods at the Center and specifically enrolled in this organization because they believe the educational institution has good resources, a strong reputation, and international connections. At the same time, residents would like more autonomy in patient management and hosting international events.

A simulation center is equipped with 14 pediatric simulators. Residents in the Pediatric Oncology and Hematology specialty program can practice CPR, lumbar puncture, and bone marrow puncture. Providing emergency care to children in shock is also included in the curriculum. Thus, resident training in the simulation center is an integrated part of clinical education.

Residents demonstrated their commitment to the educational organization, actively responded to questions from external experts, and provided insight into the organization of training, skill assessment, advisory support, opportunities to participate in research, and funding. They also demonstrated a broad range of knowledge. The experts reviewed residents' documents (portfolios, resident assessment checklists, and resident survey results).

To develop teamwork experience among residents, the educational organization conducts events such as interdisciplinary reviews, discussions, and role-playing games. The experts attended a journal club meeting on "Allogeneic Transplantation in Malignant Neoplasms," where the results of resident teamwork across specialties were presented. Interprofessional collaboration is achieved through the development of communication skills in working with patients, families, and specialists from other fields.

Residents can conduct healthcare education activities for patients and training sessions for their colleagues in their respective fields. For example, residents actively participate in Open Day, Pediatrician Day, and Cancer Day.

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 88.24% of teachers completely agree with this, 5.88% partially agree, 5.88% found it difficult to answer.

Regular updates to clinical facilities and equipment and other educational resources are conducted in accordance with changing resident training needs. The planned and current number of residents is taken into account to ensure a 3:1 resident-to-faculty ratio. The Department of Education determines the profile of clinical supervisors, and their compliance with the residency program's goals and objectives, educational level, and proficiency in teaching methods is assessed. Thus, during 2024-2025, four clinical supervisors completed training at the "Effective Teacher" seminar. Clinical supervisors are provided with the following resources for resident training: testing and measurement tools, teaching materials.

The educational organization participates in educational projects such as the 024 budget program "Targeted Contribution to Nazarbayev University" and the "Technology Transfer" subprogram. As a result of these projects, supervising programs and master classes with international experts have been introduced. From 2019 to 2023, 158 specialists were trained at international centers. Furthermore, through a strategic partnership with UPMC, the capacity of administrative and clinical specialists on current issues of AMC development was enhanced (a total of 89 UMC specialists were trained at UPMC medical centers from 2018 to 2023).

Under budget program 024, 50 employees, including UMC physicians, were sent to UPMC in 2023 to study "Management of the Academic Medical Center of the Nazarbayev University Integrated Academic Healthcare System."

The Education Department staff conducts annual monitoring of the quality of educational programs, and the results are incorporated into workbooks, syllabi, measurement tools, and other educational and methodological materials.

Sociological surveys, including education quality issues, could become one of the mechanisms for assessing education. However, they are not conducted at this educational institution.

The assessment is weak in terms of analyzing specialist needs and resident training methods, and the results allow conclusions to be drawn about the quality of innovative changes in postgraduate education.

The experts did not identify any mechanisms for motivating and developing the interest of staff and faculty in conducting research in the field of postgraduate education.

6.3 Training postgraduate doctors at alternative clinical facilities

The academic training policy for residents includes the option of studying at institutions if existing clinical sites do not cover all the topics of the educational program. However, residents in the specialty "Pediatric Oncology and Hematology" are trained at the NRCMC, which have specialized departments with a total of 500 beds. Residents study outpatient pediatric oncology and hematology courses at the Central Medical Children's Hospital day hospital, meaning there is no first-level training, as stated in the recommendations. Scientific publications are prepared under the supervision of a faculty member and do not require additional training facilities. However, NRCMC residents do not participate in academic mobility within the country; they only have agreements with international clinics. Thus, in 2022, memoranda of cooperation were signed with the Ospedale Pediatrico Bambino Gesù Children's Hospital (Italy) for a period of five years, providing for the joint development and implementation of projects aimed at educational and clinical training in the field of pediatrics and specialized fields, molecular genetics (clinical diagnostics and research), personalized medicine, rare diseases and clinical research.

The procedure for the transfer of educational credits is carried out. The Regulation on the procedure for the transfer of credits was developed in accordance with the Law of the Republic of Kazakhstan "On Education" and "On Ratification of the Convention on the Recognition of Qualifications concerning Higher Education in the European Region", the Rules for the Organization of the Educational Process using the Credit Technology of Education (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 20.04. 2011 No. 152), and other current legislative acts of the Republic of Kazakhstan in order to establish rules and regulations for education under the credit system, considering the basic principles of the European Credit Transfer System (ECTS). **(ESG II Part 1.2)**

Agreements and memoranda were concluded with organizations, universities, associations, including for 2019–2023, memoranda of cooperation were concluded with foreign centers, including scientific ones, namely in 2019 – 6 memoranda, 2020 – 3 memoranda, 2021 – 2 memoranda, 2022 – 4 memoranda, 2023 – 4. (with the children's hospital Ospedale Pediatrico Bambino Gesù (Italy), with Samsung Medical Center (Korea).

This collaboration allows for the implementation of teaching methods and technologies, such as professor visits, in residency programs. For example, in the specialty of the accredited educational program, international collaboration is underway with University Hospital Medical Park Goztepe and Acibadem Altunizade (Istanbul, Turkey).

The educational organization's faculty actively participates in national and international events. For example, four faculty members participated in the Clinic and Outpatient Clinic of Internal Medicine, Department of Hematology and Oncology III, Clinical Research Institute of the Institute of Pediatrics, Technical University Hospital of Munich (Munich, Germany); the Department of Pediatrics, Innsbruck Medical University (Innsbruck, Austria); and the Pediatric Oncology and Hematology Department, Charité-University Medicine Berlin (Berlin, Germany).

This participation allows for the application of the information gained in the educational process. For example, the Pediatric Oncology and Hematology program conducts scientific and practical events, such as S.M. Zhumataev's participation in the international scientific and practical conference "European Hematology Association (EHA) 2022 Hybrid Congress" in Vienna, Austria.

Over a five-year period, three faculty members have been trained abroad on the topics of "Oncological Alertness in Children" and "Intensive Care in Pediatric Oncology."

6.4 Information sources, resources and use

The experts assessed residents' and faculty's access to essential web resources, including ACGME, WFME, Coursera, MOOCs, and FOAMed, as well as access to electronic media (UpToDate, Coursera, AMEE, PubMed). Residents confirmed that they could use these platforms, including when preparing for classes.

The experts visited the library, which provides residents and faculty with access to ACGME and WFME. The total number of electronic publications on the accredited specialty is 5,390.

There is access to international databases: Clarivate Analytics, Elsevier, BMJ: SpringerLink, and Nature Publishing Group. Residents are aware of this.

Information and communication technologies are represented by the following: the Medical Information System "AKGUN", Ministry of Health of the Republic of Kazakhstan (RPN, BG, APP/EPS, ERSB), as well as 1C and LIS "Ariadna" systems, communication tools (Dect), WhatsApp groups. The educational programme utilizes the following distance learning technologies. During independent study, residents use library and internet resources, Thomson Reuters (Web of Science), Springer Link, OXFORD JOURNALS Medline, and Scopus. Access to patient data and the healthcare information system is provided through the Medical Information System "AKGUN", Ministry of Health of the Republic of Kazakhstan (RRP, Free Medical Care, Outpatient and Polyclinic Care, ERCP). Residents supervise 3-10 patients per day, including completing the necessary documentation under the supervision of a teacher.

Distance learning methods such as MOOCs, FOAMed, Coursera, and clinical supervisor, as well as cloud-based information systems (MIS and eHealth), are used to train residents on various topics. Ethical practices documented in digital patient interaction tools (personal accounts, online appointments, and teleconference appointments) are also adhered to.

Thus, the educational organization provides residents, faculty, and clinical supervisors with access to information and the use of innovative and information and communication technologies. **(ESG II Part 1.8)**

Over the past 2-3 years, the following information and communication technologies have been implemented: video broadcasting systems for online conferencing and training. Constant access to international educational platforms is provided: UpToDate, PubMed, ClinicalKey. Microsoft Power BI is used to organize independent learning for residents. Communication tools (Dect) and WhatsApp groups are used to ensure unimpeded information exchange with classmates. Access to relevant patient data from the Academy of Medical Sciences, the Ministry of Health of the Republic of Kazakhstan (RRP, Free Medical Care, Outpatient and Polyclinic Care, ERCP) and healthcare information systems is organized through the Rules for the Organization of Educational Programs for the Residency of the CF "UMC", which regulates the use of ICT and DET in training. This Rules is available at the link on the official UMC website: https://umc.org.kz/ in the "Science and Education" section. **(ESG II Part 1.6).** The experts reviewed the documents regulating these processes.

Conclusions of EEC by criteria. Comply with 15 standards: 15 - fully, 0 - partially, 0 - not compliat**.**

Standard 7: QUALITY ASSURANCE AND IMPROVEMENT IN POSTGRADUATE TRAINING

7.1 Quality assurance system

UMC Centers have been repeatedly accredited according to Joint Commission International (JCI) standards for accreditation, thereby promoting international experience in ensuring the safety and quality of medical services in Kazakhstan.

The decision-making and change management process related to residency programs is regulated by the UMC Center's Rules for the Organization of the Educational Process. This document was developed by the Department of Education and approved by **ESG II Part 1.1** on June 3, 2024.

Experts evaluated the program for monitoring the processes and results of the educational program, which includes a program review phase (familiarized with the review by an internal expert), a program discussion at a meeting of the Educational and Methodological Council (Minutes No. 5 dated April 27, 2023), and feedback collection on various elements of the residency program through a survey of faculty, residents, graduates and employers.

A resident survey, "360-Degree Analysis," is conducted annually and focuses on topics such as resident physicians' attitudes toward the residency program in three key areas: understanding the program's goals and learning environment, assessing the effectiveness of the educational process, and overall satisfaction with the program. The results of the resident survey, conducted by the Department of Extended Care in 2015, highlighted the program's strengths: a wide range of patients, opportunities for hands-on clinical care, engaging supervisors, and modern learning environments. However, problem areas remain: insufficient urgent practice, poor organization of lectures and research activities, a shortage of educational materials, and rotations that do not meet residents' expectations.

The Department of Distance Learning also conducts a survey of 360 graduates, and the Career Center conducts a survey of employers. An analysis of the employer survey results reveals strengths: modern training, the opportunity to examine rare pathologies, compliance with international protocols, and positive experience in a number of clinical sites. However, challenges remain related to practice-oriented training and the uniformity of clinical rotations. A 15-question questionnaire was developed for the faculty survey. The results of the faculty survey conducted by the Department of Distance Learning in 2025 showed an overall high rating for the organization and content of the residency educational programs**. (ESG II Part 1.)**

The selection and alignment of faculty and teaching methods is also determined through resident feedback. For example, a survey of 30 residents in 2025 indicated a generally high rating for the organization and content of the residency educational programs.

Program assessment takes into account the goals and objectives of the training, as well as the intended learning outcomes (through resident assessment and independent examination). The implementation of the educational programme is assessed through feedback from residents and faculty, as well as graduate achievements. For example, a survey of second-year residents in the specialties "Oncology and Hematology" demonstrated the following: Resident physicians are directly involved in the development of the individual curriculum plan for each academic year, together with their supervisor, which allows the resident physician to choose their individual learning path. Resident physicians are also given the freedom to choose the courses included in the curriculum.

A survey of five faculty members conducted in 2024 demonstrated that the quality of educational programme implementation is ensured by the participation of all stakeholders (faculty, resident physicians, and clinical supervisors).

Resident knowledge and skills assessment methods are assessed using assessment tools such as tests, oral interviews, case problems, practical skills training at the patient's bedside, and simulation equipment. This assessment covers all key components of training: knowledge, clinical skills, professional behavior, and attitude toward patients and the profession.

Education Department specialists assess the adequacy and quality of educational resources and demonstrate a high level of educational process.

The quality assessment of residency educational programs revealed that, along with achievements (external review at the planning and approval stage, assessment by the educational and methodological council, and feedback from participants), there are a number of problems and shortcomings, including in terms of feedback from participants in the educational process and analysis of the data obtained.

Feedback from clinical supervisors includes a survey, which includes questions about the quality of the educational process and its improper implementation, conducted by the Department of Education.

Thus, stakeholders are involved in the monitoring program and activities for evaluating the educational programme **(ESG II Part 1.9),** including representatives of the public, authorized bodies for education and health care, and professional organizations.

The results of the clinical practice assessment of residents and residency program graduates are published on the UMC website in the Residency section and announced at meetings of the Academic and Methodological Council. Therefore, stakeholders such as employers, members of the public, and professional associations are informed of the monitoring results and receive feedback. Those responsible for resident admissions and educational programme planning are also informed. The latest changes are documented in the UMC Strategic Plan for 2024–2028, which defines areas for management system transformation, process digitalization, and enhancing the sustainability of the educational environment.

An interview with 10 employers was conducted online and included questions such as: knowledge of the university's mission, participation in the development of the mission and proposals for the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through supervising, providing the department and residents with the necessary resources for practical training and the development of clinical thinking, problems of interaction with centers in general, 100% employment of residency graduates of the accredited educational program.

Employers valued graduates for their readiness for independent clinical practice. However, they also noted weaknesses, such as poor communication and management skills. The employment rate over five years ranged from 80% to 100%.

The results of residents and graduates are indicators of the quality of educational programs. The final certification results for residents in various specialties in 2024 show the following: of the six graduates in the specialty "Pediatric Oncology and Hematology," five residents passed the final certification at the National Center for Neuroscience with an "excellent" grade and one resident with a "good" grade.

Faculty assessed the level of clinical training for residents in 2023 and 2024. The experts noted the following successes in residents' clinical training: readiness to work effectively in the healthcare system. At the same time, the experts also identified shortcomings in residents' clinical training, including increased involvement of employers and the professional community in the development and regular updating of the educational program; and expanded mechanisms for monitoring the achievement of educational goals.

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The educational organization does not regularly initiate procedures for systematization, review, and updating its organizational structure. The organizational structure of the postgraduate education sector (residency) was approved a long time ago and requires staffing expansion due to the large number of residency programs. The UMC Foundation Strategic Plan for 2024–2028 defines areas for transforming the management system, digitalizing processes, and enhancing the sustainability of the educational environment, but does not envisage changes to the structure of the academic profile.

The resident training process, program structure and content, resident competencies, and knowledge and skill assessment methods are reviewed annually based on prospective analysis, current indicators, internal monitoring, educational performance, and the combined experience of faculty and supervisors. The experts reviewed the minutes of the Educational and Methodological Council (EMC) meeting for three years, as well as the minutes of the Pediatrics Advisory Committee (PAD) meeting. For example, Minutes No. 3 of February 20, 2020, discussed the selection of residency training

methods. Minutes No. 6 of March 6, 2025, resolved on resident assessment methods. Approval of the electives for the accredited residency program was discussed at the EMC meeting.

The resident portfolio form was approved at the EMA meeting (2023). Experts reviewed the portfolio of resident Amina Valieva.

The assessment of educational resources and the compliance of clinical sites with the goals and objectives of the residency program in the specialty "Oncology and hematology, pediatrics" is carried out on the basis of a prospective analysis, current indicators, internal monitoring, the results of educational activities and the general experience of teachers and supervisors and is documented in educational and methodological materials approved by the Educational and Medical Council.

Deficiencies identified during educational programme quality monitoring are documented in internal audit and monitoring reports, and a plan for their elimination is developed. The latest version of these requirements is set out in UMC Instruction No. 2 dated February 19, 2025.

The curriculum update process is based on prospective studies, including data from current international literature and educational practices, as well as an analysis of feedback from faculty and supervisors **(ESG II Part 1.10).** Benchmarking of postgraduate education (residency) is being conducted with educational organizations such as Samsung Medical Center (Korea) and Ospedale Pediatrico Bambino Gesù (Italy). As a result of the benchmarking, research projects in the fields of molecular genetics (clinical diagnostics and research), personalized medicine, rare diseases, and clinical research will be implemented starting in 2024.

Faculty members participate in international and national educational events. Based on their participation, the following KTP topics have been incorporated into the residency program: "Febrile Neutropenia (Sepsis) in Patients After Bone Marrow Transplantation and High-Dose Chemotherapy" and "Treatment of Graft-Versus-Host Disease."

7.2 Patient safety

A quality assurance system has been implemented, including resident error analysis and patient safety, and is reflected in the "Privilege Sheet." Resident error analysis is the responsibility of the clinical supervisor.

This document outlines the list of medical services/procedures/operations and the degree of independence with which each resident physician training at UMC is able to perform them. The completed Privilege Sheet is reviewed and signed by the resident physician, the resident physician's supervisor, approved by the head of the center's department, and approved by the head of the relevant UMC center where the resident is training. The resident also signs an informed consent form declaring non-disclosure of confidential patient information.

Conclusions of EEC by criteria. Comply with 10 standards: 9 - fully, 1 - partially, 0 - not compliat

Standard	Standard implementation	Recommendations for improvement
7.1.7	Partially implemented	To systematize procedures for regular review of the resident training process, the structure and content of the program, and the key competencies of students specific to graduates of this program, with subsequent external examination (review) for the continuous improvement of the program and the development of corrective measures.

Standard 8: GOVERNANCE AND ADMINISTRATION

8.1 Governance

The experts reviewed the management structure for postgraduate medical education, which includes the Department of Education, a structural division of the Foundation. This structure was approved by the UMC Foundation Board of Directors dated August 1, 2023, No. 11. The Clinical and

Academic Department is responsible for supervising. The Department of Education is responsible for selecting clinical training sites and concluding contracts with them.

During the meeting with management, they received evidence that UMC Foundation has an approved management structure for postgraduate medical education, including supervising, learning environments, and clinical sites for postgraduate medical education. The experts reviewed the strategic development plan for 2024-2028, which outlines five development areas, including postgraduate education.

The Department of Education has a work plan for the current year. After reviewing the Department's documentation, experts concluded that work is underway in several areas, including faculty development, research, and clinical work.

Residency training is conducted in accordance with the requirements of regulatory regulations regarding resident admission, such as the Law of the Republic of Kazakhstan "On Education" dated July 27, 2007, and the University Medical Center Corporate Foundation's Residency Admission Rules. Knowledge and skills assessment is based on formative and summative assessments, verification of the resident physician's skills log maintained by the supervisor, and other measures. To implement the educational program, the educational institution has an organizational structure in which the educational sector is represented by the Department of Education and the Clinical and Academic Department.

The experts reviewed the resident training completion documents, including the final certification protocols. Upon completion of training and successful completion of state certification, graduates of the UMC residency program in the specialty of "Pediatric Oncology and Hematology" are awarded a residency completion certificate conferring the qualification of "Pediatric Oncologist and Hematologist," signed by the chairperson and secretary of the State Certification Commission, as well as the head of the CF “UMC”.

The "Rules for Organizing the Educational Process at CF “UMC” have been developed and approved for the quality assurance program for postgraduate education. The program's development involved staff from the Department of Preschool Education, the Clinical Administration, physicians, teachers, and clinical supervisors.

All stakeholders have been informed about the program through stakeholder meetings and the CF “UMC” website.

The educational programme in Pediatric Oncology and Hematology is supported by relevant teaching and methodological documents and faculty.

Completion of resident training is documented by the issuance of a certificate of completion of residency in the specialty "Oncology and Hematology, Pediatric," which is recognized by the national authorized healthcare authority. Thus, the educational organization complies with the recommendations of national authorized bodies, including the Ministry of Science and Higher Education of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan. Thus, in accordance with the classifier of residency specialties *(On approval of the nomenclature of specialties and specializations in the field of healthcare, the nomenclature and qualification characteristics of healthcare worker positions. Order* of the Minister of Health of the Republic of Kazakhstan dated December 21, 2020 No. ҚР ДСМ-305/2020).

8.2 Shared governance

The responsibilities and duties of management and staff in postgraduate medical education are defined by the Department of Education and codified in the "Regulations on the Department of Education." Transparency of management and decision-making in the educational process is ensured by the Educational and Methodological Council, approved by Order No. 10 of the Deputy Chairman of the Board of the CF “UMC” dated June 21, 2024.

The educational organization evaluates the management of the educational process and employees in relation to the achievement of the residency program mission, the expected intended learning outcomes by providing feedback to residents and teachers (see Section 7.2 of the report), conducting

certification based on the document “Rules for the selection, hiring and certification of employees of the CF “UMC””, audits on issues of internal control and quality.

In response to the survey question “Do the organization’s management listen to your opinion regarding issues related to the educational process, research, and clinical work?”, 70.59% of teachers answered that they do so systematically, 17.65% answered “sometimes,” 5.88% “quite rarely,” and 0% “never.”

Funding for educational activities is provided by revenues from educational services, grants, and other sources, ensuring sustainable budgetary support for all areas of activity. The Financial and Economic Department is responsible for planning and distributing funds for residency programs. The scope of duties, responsibilities, and authorities are reflected in the job descriptions of the Financial and Economic Department and the Department of Residency, approved by the Board of Directors of the UMC Foundation. A financial plan is prepared annually, including a target budget for training, which was 570 million tenge. The financial plan is aligned with the strategic plan for 2024-2028. The share of funding for residency programs, given the expansion of residency specialties, has increased in recent years. The largest portion of funding, approximately 100 million tenge, is spent on the acquisition of simulation and digital equipment (Cursera, Platonus). During a meeting with financial sector employees, experts found that base and additional salaries range from 180,000 to 1.2 million tenge, depending on the level, with an average of 800,000 tenge.

An annual financial report is submitted and approved by the Chairman of the Board of the KF. It demonstrates, among other things, the distribution of educational resources in accordance with needs and the coverage of all expenses for the implementation and development of the residency program.

Today, experts are confident that the educational organization is financially and organizationally sustainable, as funding totals approximately 60 billion tenge.

The educational organization annually allocates 2 billion tenge for continuous improvement. To specifically improve the educational process, sociological research is conducted, including identifying high-risk areas that may impact patients, family members, and clinical staff, as well as the quality and safety of treatment. Literature on postgraduate medical education is also reviewed. This analysis has led to a review of approaches to teaching in the residency program, and methods such as the "360-Degree Survey" have been introduced.

8.3 Postgraduate doctor and staff representation

The educational institution has the following advisory and consultative bodies: the Educational and Methodological Council, which is attended by department heads (CAD and PE), residents, faculty, and clinical supervisors. Mechanisms for rewarding residents for their community service include certificates of recognition and gifts. In a survey of residents, experts found that they were satisfied with the organization of educational and social processes.

The educational institution has a resident development program, which includes: Residents are included in advisory bodies such as the Educational and Methodological Council and the Program Update Working Groups.

8.4 Administration

The corresponding administrative (5 people) and teaching (197 people) staff is in place, including the leadership of the Director of the Education Department, A.A. Syzdykova. To ensure effective management of the educational process, the Education Department staff completed advanced training in 2024-2025 on the topics "Effective Teacher" and "Management in Medical Education."

The assessment of the administration and management of the educational process as a whole and the educational programme for the residency program in the specialty "Pediatric Oncology and Hematology" is conducted by the Advisory Body (AB) on issues of educational, methodological, and organizational support for the educational process at the CF “UMC” **(ESG II Part 1.9).**

Conclusions of EEC by criteria. Comply with 8 standards: 7 - fully, 1 - partially, 0 - not compliant

Standard	Standard implementation	Recommendations for improvement
8.4.1	Partially implemented	To ensure the quality of monitoring of the educational process, expand the staff of methodologists and specialists of the Department of Education, staff the teaching staff in the specialty "Oncology and hematology, pediatric" with PhD-qualified personnel with experience in scientific and pedagogical work, at least the head of the educational program.

CONCLUSION: During the external assessment of the educational programme, it was determined that 103 of the 109 standards for accreditation demonstrated full compliance. 6 standards were partially completed. No non-compliance was found.

5. Recommendations for improvement of the educational programme

Standard	Recommendations for improvement
2.4.1.	Improving the learning path for postgraduate doctors by introducing rotations of students to the level of primary medical organizations (clinics, city hospitals) to master the provision of specialized medical care at all levels of healthcare.
3.1.2	Introduce midpoint and interim assessments into the assessment system to objectively monitor learning progress and determine the admission rating for final certification of postgraduate doctors. Improve monitoring of assessment methods when training postgraduate doctors on a third-party facility. Regulate the student assessment process, clearly defining the methods and number of process grades, supporting documentation and organizing teacher training on maintaining this documentation.
3.4.1.	Improving the quality of assessment by introducing objective assessment forms (checklists for calls, mini-clinical exams, computerized testing) with the involvement of examiners from the primary care clinical facility. Improving the level of teaching skills and competencies through training in relevant programmes.
5.3.3	Promoting qualified teachers with extensive experience and research and teaching expertise to positions as head and coordinator of the educational programme “Oncology and Hematology Pediatric” to enhance the scientific competencies of postgraduate doctors and develop their skills in continuous medical education.
7.1.7.	Systematize procedures for regularly reviewing the postgraduate doctor learning process, programme structure and content, and key student competencies specific to graduates of the educational programme “Oncology and Hematology Pediatric”, followed by external review to continuously improve the educational programme and develop corrective measures. Plan academic mobility for postgraduate doctors and teachers.
8.4.1.	To ensure the quality of monitoring of the educational process, expand the staff of methodologists and specialists of the Department of Education, recruit the teaching staff in the specialty "Oncology and hematology, pediatric" with PhD-certified personnel with experience in scientific and pedagogical work, at least the head of the educational programme.

6. Recommendations to the ECAQA Accreditation Council

The EEC members unanimously recommended that the Accreditation Council accredit the educational programme **7R01110 "Oncology and Hematology (Pediatric)" of the Corporate Foundation "University Medical Center"** for a period of 5 years.

EEC Chairperson	MORENKO MARINA ALEXEYEVNA
International expert	YENCHEV YAVOR PETKOV
International expert	AKHVLEDIANI LEYLA TEIMUROVNA
Academic expert	MADYAROV VALENTIN MANARBEKOVICH
Academic expert	YESSENKULOVA SAULE ASKEROVNA
Academic expert	ABEUOVA BIBIGUL AMANGELDIYEVNA
Academic expert	TASHENOVA GULNARA TALIPOVNA
Academic expert	TALKIMBAYEVA NAILYA ANUAROVNA
Academic expert	IZBASSAROVA AKMARAL SHAIMERDENOVNA
Academic expert	IVANCHENKO NELLYA NIKOLAYEVNA
Academic expert	KABILDINA NAILYA AMIRBEKOVNA
Academic expert	SALIMBAYEVA DAMILYA NURGAZIYEVNA
Academic expert	RUSTEMKYZY ZHANSAYA
Expert-employer	TUGELBAYEVA KYZYLGUL ALIMOVNA
Expert-doctoral student	YKTIYAROV AYAZ ABDIRAKHYMULY
Expert-postgraduate doctor	MAKHMUTOV TIMUR NURZHANOVICH

6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу **7R01110 «Онкология и гематология (детская)» Корпоративного фонда «University Medical Center»** на период 5 лет.

Председатель ВЭК	МОРЕНКО МАРИНА АЛЕКСЕЕВНА	
Международный эксперт	ЕНЧЕВ ЯВОР ПЕТКОВ	
Международный эксперт	АХВЛЕДИАНИ ЛЕЙЛА ТЕЙМУРОВНА	
Академический эксперт	МАЛЬЯРОВ ВАЛЕНТИН МАНАРБЕКОВИЧ	
Академический эксперт	ЕСПКУЛОВА САУЛЕ АСКЕРОВНА	
Академический эксперт	АБЕУОВА БИЗИГУЛЬ АМАНГЕЛЬДИЕВНА	
Академический эксперт	ТАШЕНОВА ГУЛЬНАРА ТАЛИПОВНА	
Академический эксперт	ТАЛКИМБАЕВА НАЙЛЯ АНУАРОВНА	
Академический эксперт	ИЗБАСАРОВА АКМАРАЛ ШАЙМЕРДЕНОВНА	
Академический эксперт	ИВАНЧЕНКО НЕЛЛЯ НИКОЛАЕВНА	
Академический эксперт	КАБИЛДИНА НАЙЛЯ АМИРБЕКОВНА	
Академический эксперт	САЛИМБАЕВА ДАМИЛЯ НУРГАЗИЕВНА	
Академический эксперт	РУСТЕМБЕККЫЗЫ ЖАНСАЯ	
Эксперт-работодатель	ТУГЕЛЬБАЕВА КЫЗЫЛГУЛЬ АЛИМОВНА	
Эксперт- докторант	ЫҚТИЯРОВ АЯЗ ӘБДІРАХЫМҰЛЫ	
Эксперт- резидент	МАХМУТОВ ТИМУР НУРЖАНОВИЧ	

Приложение 1.

Профиль качества и критерии внешней оценки образовательной программы (обобщение)

Стандарт	Критерии оценки	Количество стандартов	Оценка		
			Полностью соответствует	Частично соответствует	Не соответствует
1.	**МИССИЯ И ЦЕННОСТИ**	**6**	**5**		**-**
2.	**ОБРАЗОВАТЕЛЬНАЯ ПРОГРАММА**	**28**	27	1	**-**
3.	**ОЦЕНКА РЕЗИДЕНТОВ**	**15**	13	2	**-**
4.	**РЕЗИДЕНТЫ**	**19**	19		**-**
5.	**ПРЕПОДАВАТЕЛИ И КЛИНИЧЕСКИЕ НАСТАВНИКИ**	**8**	7	1	**-**
6.	**ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ**	**15**	15		**-**
7.	**ОБЕСПЕЧЕНИЕ И УЛУЧШЕНИЯ КАЧЕСТВА ПОСЛЕДИПЛОМНОЙ ПОДГОТОВКИ**	**10**	9	1	**-**
8.	**УПРАВЛЕНИЕ И АДМИНИСТРИРОВАНИЕ**	**8**	7	1	**-**
	Всего:	**109**	**103**	**6**	**-**
			109		

Приложение 2

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

№	Наименования документов/дата утверждения	Количество
1.	Стратегический плане КФ «UMC», утвержденной решением Попечительского совета КФ «UMC» от 11 июня 2024 года №11.06.2024	1
2.	Кодекс деловой этики КФ «UMC», утвержденный решением Правления от 26 декабря 2022 года №17	1
3.	Должностные инструкции департамента образования, утверждение 23.04.2023	1
4.	Положение о департаменте образования, утвержденный решением Правления 01 августа 2023 г. № 11	1
5.	Положение о КАП педиатрии, утвержденный решением Правления 29.11.2021	1
6.	Правила оплаты труда работников за образовательную деятельность Фонда, от 21.04.2022	1
7.	Приказ по основной деятельности сотрудников, от 07.02.2023	1
8.	Положение о бюджетной комиссии КФ, 29.03.2024	1
9.	Правила отбора, поиска, найма работников Фонда, 29.11.2021	1
10.	Договора с сторонними организациями, резидентами, стажировки	4
11.	Меморандумы с зарубежными мед организациями	3
12.	Положение о Учебно-методическом совете, Правления 01 августа 2023 г. № 11	1
13.	Образовательная программа по специальности «Онкология и гематология, детская» Протокол No 5 от «27» апреля 2023 года.	1
14.	Рабочие учебные планы по специальности «Онкология и гематология, детская», 11.08.2024	2
15.	Силлабус специальности «Онкология и гематология, детская»	4
16.	Графики и протоколы журнального клуба	12
17.	Оценочные формы специальности «Онкология и гематология, детская»	5
18.	Исследовательская работа выпускников	4
19.	Портфолио резидентов 1 и 2 года обучения	6
20.	Приказы о допуске к ежегодной аттестации врачей -резидентов, 30.07.25	2
21.	Приказ по Комитету по клиническим компетенциям, 24.06.2025	1
22.	Внутренние нормативные документы по резидентуре, 19.02.2025	7