

To the Accreditation Council of the
Eurasian Center for Accreditation
and Quality Assurance
of Education and Health Care
12.05.2025

**REPORT
OF THE EXTERNAL EXPERT COMMISSION
ON THE RESULTS OF THE ASSESSMENT OF THE EDUCATIONAL
PROGRAMME
7R01115 "RADIATION ONCOLOGY"
OF LLP "NATIONAL SCIENTIFIC ONCOLOGY CENTER"
FOR COMPLIANCE WITH THE STANDARDS FOR PROGRAMME
ACCREDITATION: POSTGRADUATE EDUCATION (RESIDENCY
SPECIALTIES) OF MEDICAL EDUCATIONAL ORGANIZATIONS**

period of external expert assessment: April 28-29, 2025

Astana, 2025

TABLE OF CONTENTS

	List of designations and abbreviations	2
1.	Composition of the external expert commission	3
2.	General part of the final report	4
2.1	Presentation of the educational programme in the specialty - 7R01115 "Radiation Oncology"	4
2.2	Information about previous accreditation	4
2.3	Brief description of the analysis results of the self-assessment report of the educational programme 7R01115 "Radiation Oncology" and conclusions on completion	4
3.	Description of the external expert assessment and conclusion	5
4.	Analysis for compliance with standards for accreditation based on the results of the external assessment of the educational programme 7R01115 "Radiation Oncology"	7
5.	Recommendations for improving the educational programme 7R01115 "Radiation Oncology"	30
6.	Recommendation to the Accreditation Council for accreditation of the educational programme 7R01115 "Radiation Oncology"	31
7	Annex 1. Quality profile and criteria for external assessment and educational programme of residency in the specialty of the educational programme 7R01115 "Radiation Oncology"	32
8	Annex 2. List of documents studied as part of the external expert assessment	33

LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Designation
ECAQA	Eurasian Center for Accreditation and Quality Assurance in Education and Health Care
EEC	External Expert Commission
PEC	Postgraduate Education Center of the LLP “National Scientific Oncology Center”
DLT	distance learning technologies
FS	final certification
IC	individual curriculum
NSOC	National Scientific Oncology Center
CED	catalog of elective disciplines
MH RK	Ministry of Healthcare of the Republic of Kazakhstan
MES RK	Ministry of Education and Science of the Republic of Kazakhstan
NSCOT	National Scientific Center of Oncology and Transplantology
RSC EMC	Republican Scientific Center for Emergency Medical Care
PE	postgraduate education
AT	advanced training
CC	certification course
TS	teaching staff
EP	educational programmes
WC	working curriculum
NCIE	national center for independent examination
QMS	quality management system
JWPT	joint work of a teacher with a postgraduate doctor
IWP	independent work of a postgraduate doctor
EMC	educational and methodological council
SCES	state compulsory educational standard

1. Composition of the External Expert Commission

In accordance with the order of the ECAQA under No.10 dated 10.04.2025, the External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external assessment of the educational programme of residency in the specialty 7R01115 "Radiation Oncology" in the period from April 28-29, 2025, consisting of the following members:

No.	Status in the EEC	Full name	Academic degree/title, position, place of work/place of study, year, specialty
1	Chairperson	Kabildina Nailya Amirbekovna	Candidate of Medical Sciences, Professor, Head of the Department of Oncology and Radiation Diagnostics of the NJSC "Karaganda Medical University", surgeon
2	International Expert	Stanzhevsky Andrey Alekseyevich	Doctor of Medical Sciences, Deputy of Center for Scientific Work, Lecturer of the Center and other medical institutions in the field of radiation imaging of the Russian Scientific Center of Radiology and Surgical Technologies named after Academician A.M. Granov, St. Petersburg, Russian Federation. Member of the European Society of Radiologists, Associate Member of the European Association of Nuclear Medicine
3	Academic Expert	Shabdarbayeva Darya Muratovna	Doctor of Medical Sciences, Professor. Vice-Rector for Science and Strategic Development of the NJSC "Semey Medical University". Pathologist of the highest category, forensic doctor of the highest category
4	Academic Expert	Urazayev Olzhas Nurlanovich	PhD, Associate Professor, Coordinator of the Oncology Service of the Medical Center of the NJSC "West Kazakhstan Medical University named after Marat Ospanov"
5	Employer Expert	Bibekov Zharas Zhanuzakovich	Transfusiologist of the highest category, Head of the Department of Blood and Its Components Collection of the Republican State Enterprise based on the Right of Economic Management "Scientific Production Center of Transfusiology"
6	Student Expert	Turarova Akbota Maratkyzy	First-year postgraduate doctor in the specialty "Nuclear Medicine" of the NJSC "Astana Medical University"

The EEC report includes a description of the results and the conclusion of the external assessment of the educational programme 7R01115 "Radiation Oncology" for compliance with the Standards for Programme Accreditation: Postgraduate Education (Residency Specialties) of Medical Education Organizations (updated based on the 2023 World Federation for Medical Education Standards) and conclusions (hereinafter referred to as the Standards for Accreditation), EEC recommendations for further improvement of approaches and conditions for the implementation of the above-mentioned educational programme 7R01115 "Radiation Oncology" and recommendations for accreditation for the ECAQA Accreditation Council for Accreditation.

2. General part of the final report

2.1 Presentation of the residency educational programme in the specialty 7R01115 "Radiation Oncology"

Name of the organization, legal form of ownership, BIN	LLP "National Scientific Oncology Center" BIN 1807400003103
Management body	Chairperson of the Board
Full name of the first director	Burkitbayev Zhandos Konyssovich
Date of establishment	May 11, 2018 No.255
Location and contact details	The Republic of Kazakhstan, 010000 "Nura" district, Astana Kerey, Zhanibek khandar Str., 3 Tel.: +7 (7172) 70 29 59 E-mail: kense.777@mail.ru
State license for educational activities in residency (date, number)	License No.KZ59LAA00035999 dated 14.12.2023
Year of commencement of the implementation of the accredited educational programme (EP)	Start year - 2025 Total number of graduates since the beginning of the residency programmes - none.
Duration of study	2 years
Number of postgraduate doctors in the current academic year	-
Quality indicators in residency	Number of postgraduate doctors in the programmes "_23_", expelled over a period of 5 years - 0, including for poor performance - 0 people.
Full-time teachers/part-time workers involved in the implementation of the EP, including % of academic degree holders rate	Total number of teachers - 5, including full-time - 5, part-time - 0, teachers-mentors (clinical) - 5. Academic degree holders rate, % - 20% Categorization, % - 100%
Website Instagram Facebook with active pages	Instagram account – https://www.instagram.com/astana.nroc/ . Facebook account - https://www.facebook.com/astana.nroc Official website: http://cancercenter.kz

2.2 Information about previous accreditation

Until now, the educational programme (EP) "Radiation Oncology" has not been accredited.

2.3 Brief description of the analysis results of the self-assessment report of the residency educational programme in the specialty 7R01115 "Radiation Oncology" and conclusions on completion

The self-assessment report of the residency educational programme in the specialty 7R01115 "Radiation Oncology" (hereinafter referred to as the report) is written in accordance with the Standards for Programme Accreditation: Postgraduate Education (Residency) (based on the International Standards of the WFME 2023) and includes 8 main standards. The report is presented on 126 pages of the main text, 23 pages of annexes, copies or electronic versions of 18 documents located at the link https://drive.google.com/drive/folders/1RFFvfo4Zr0Wh-5ZGTO_I8F5JzXRBxLgy?usp=drive_link.

The report is characterized by the completeness of answers to all 8 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for conducting self-assessment of the educational programme provided to the educational organization by the accreditation center - ECAQA, as well as internal unity of information. The report is accompanied by a cover letter

signed by the Deputy Chairperson of the Board for Strategic Development, Scientific and Educational Activities Shatkovskaya O.V., which confirms the reliability of the quantitative information and data included in the self-assessment report.

The report contains a list of 2 members of the internal self-assessment commission indicating the responsibility of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational programme - Zhukubayeva Almira Asetkyzy. Self-assessment of the educational programme "Radiation Oncology" was carried out on the basis of the order of the rector of the university under No.111 dated 12.03.2025 "On preparation for specialized accreditation of residency educational programmes".

All standards provide the actual practice of the Center for training postgraduate doctors in the specialty 7R01115 "Radiation Oncology" taking into account the start of admission of students in other specialties in 2020, substantiated data, examples of the implementation of the objectives of the educational programme, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is sufficiently complete and updated in terms of the number of postgraduate doctors, faculty, administration, information on selection and admission, learning outcomes, knowledge and skills assessment results, the physical facilities of the university and clinical settings, contractual obligations with partners (universities, associations, settings), financial information, development and improvement plans, etc.

The report is submitted to the ECAQA in its completed form, with data adjustments based on the above recommendations, written in literate language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, tables and figures contain links in the text and are numbered sequentially.

3. Description of the external expert assessment

The external expert work within the framework of the programme assessment in the specialty - 7R01115 "Radiation Oncology" was organized in accordance with the Guidelines for the external assessment of educational organizations and educational programmes of the ECA / Dates of the visit to the organization: April 28-29, 2025. The sequence of the visit over 2 days is presented in detail 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 - 6 people;
- interviews with postgraduate doctors - 38 people (postgraduate doctors of different specialties and different years of study who are studying at the NSOC were interviewed to assess the general principles and approaches to organizing the educational process at the NSOC);
- study of the website <https://ksph.edu.kz/>;
- interviews ___25 employees, 29 teachers, 10 mentors in different areas of training postgraduate doctors at the NSOC;
- survey of teachers and postgraduate doctors - __37__ and __37__, respectively (postgraduate doctors of different specialties who are studying at the NSOC were surveyed in order to determine general trends in the educational activities of the NSOC, approaches to organizing the educational process, teaching methods, provision of postgraduate doctors with patients, resources for learning, etc.);
- Review of resources in the context of fulfilling accreditation standards: structural and clinical departments were visited - practices/clinical engagement, including the proton center, the radionuclide department, where learning is planned with the participation of 1 full-time teacher, acting as a clinical teacher and mentor. NSOC plans to expand the staff of teachers and mentors when accepting more postgraduate doctors for this specialty. Given that the admission of postgraduate doctors is planned for the new academic year, NSOC cannot accept full-time teachers, since it will be necessary to provide for expenses for the payment of salaries. At the same time, given the profile of NSOC, there will be no shortage of oncology teachers and

clinical mentors. The management of NSOC announced that an analysis is conducted annually to determine "who can become a teacher and mentor from among the NSOC employees." In this case, experience in the specialty and the presence of an academic degree are taken into account;

- Study of educational and methodological documents in the amount of 29 units both before the visit to the organization and during the visit to the divisions (the list of documents studied 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 conversations participants (Table 1).

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

No.	Position	Number
1	Acting Chairperson of the Board of the NSOC	1
2	Deputy Chairperson of the Board for Strategic Development, Scientific and Educational Activities	1
3	Deputy Chairperson of the Board for Medical Activities	1
4	Head of the Center for Coordination and Strategic Development of the Oncology Service	1
5	Head of the Center for Postgraduate Education	1
6	Head of the Department of Scientific Management	1
7	Academic Secretary	1
8	Specialists of the Center for Postgraduate Education	6
9	HR Department, HR Specialist	1
10	Library, Librarian	1
11	Department of Economics and Finance	1
12	Head of the Center for the Implementation of Radiation Oncology and Nuclear Medicine	1
13	Radiation Safety Engineer	1
14	Head of the Cyclotron Production Complex	1
15	Head of the Department of Medical Physicists	1
16	Radiation Therapy Engineer	1
17	Head of Radioisotope Diagnostics	1
18	Medical Personnel for Radiation Therapy	3
19	Head of the Proton Therapy Department	1
20	Head of the Department of the Center for Cytopathomorphology, IHC and Translational oncology	1
21	Pathologists	5
22	Head of the Center for Oncohematology and BMT (bone marrow transplant)	1
23	Postgraduate doctor in the specialty of Gastroenterology adults and pediatric	7
24	Postgraduate doctor in the specialty of Angiosurgery adults and pediatric	13
25	Postgraduate doctor in the specialty of Anesthesiology and resuscitation adults and pediatric	10
26	Postgraduate doctor in the specialty of Hematology adults	16
27	Postgraduate doctor in the specialty of General Surgery	17
28	Postgraduate doctor in the specialty of Oncology adults	13
29	Postgraduate doctor in the specialty of Radiology	18
29	Postgraduate doctor in the specialty of Urology and Andrology adults and children	9

30	Chief physician of the Kostanay Regional Hospital	1
31	Deputy Chairperson of the Board of the LLP Hematology Center	1
32	Head of the Angiosurgery Department of the KB UMC	1
33	Teacher, Head of the Simulation Center	1
34	NSOC residency graduates	4

On the last day of the visit to the organization, a meeting of the EEC members was held on the results of the external assessment. The final discussion of the results of the external assessment of the educational programme, the study of documents, the results of the conversation, interviews and questionnaires was held. The EEC members began drafting the final report of the EEC. The results of the external assessment were summarized. The experts individually filled in the "Quality profile and criteria for external assessment of the educational programme 7R01115 "Radiation Oncology" for compliance with the ECAQA Accreditation Standards." The EEC members did not make any comments. The recommendations for improving the educational programme were discussed and the Chairperson N.A. Kabildina, held a final open vote on the recommendations for the ECAQA Accreditation Council.

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

When conducting a survey of postgraduate doctors, 95% rated the work of the External Expert Commission for Accreditation as positive. The majority of respondents (86.7%) believe that it is necessary to conduct accreditation of an educational organization or educational programmes. According to 69.5% of teachers, the survey conducted by the ECAQA is useful for developing recommendations for improving key areas of activity of the accredited educational organization. The remaining respondents believe that they themselves are aware of approaches to improving educational activities, as they have extensive work experience.

At the end of the visit programme, the Chairperson of the EEC announced recommendations for the management and employees of the educational organization based on the results of the external assessment as part of the specialized accreditation.

4. Analysis of compliance with standards for accreditations based on the results of the external assessment of the residency educational programme in the specialty 7R01115 "Radiation Oncology".

Standard 1: MISSION AND VALUES

1.1 Stating the mission

In the implementation of the programme activities, namely, based on the results of a conversation with the first head of the organization, members of the advisory body of the Educational and Methodological Council, in an interview with postgraduate doctors and teachers, compliance with the criteria of *Standard 1* was established. All participants in the educational process know the mission of the educational programme, took part in the formation of proposals for formulating the mission, while the mission was communicated to potential postgraduate doctors through the website, social networks and information letters to medical organizations. The strategic plan of the organization for a period of 5 years was reviewed, including such areas as Improving the availability and quality of oncological care for the population of the Republic of Kazakhstan; Improving the system of diploma and postgraduate education and continuing professional development of personnel in the oncology service; Improving the quality of scientific research, which confirms the implementation of the Standard for accreditation and demonstrates the goals, objectives and prospects of the organization. From interviews with postgraduate doctors, it was established that before the start of classes, teachers

inform about the mission, work plans of the educational organization, tell where to get the necessary information about the educational programme, teachers, learning settings.

During the visit to the NSOC divisions, experts noted the strengths of the educational organization in relation to the accredited educational programme, including: personnel and material and technical equipment with modern equipment.

The NSOC has divisions that are directly related to the educational programme "Radiation Oncology", which can be noted as the best practice in education, namely, a modern fleet of radiation machines, highly qualified employees and patient accessibility. This conclusion was made, since this division uses advanced diagnostic and treatment methods, which are reflected in the educational process.

The results of the study of the documentation demonstrate that the mission of the organization and the mission of the educational programme "Radiation Oncology" and the educational process are built in accordance with the State Compulsory Educational Standard and current regulatory legal acts (RLA) in postgraduate education and healthcare. During the meeting with the management of the Center, heads of centers and administrative and managerial personnel, no shortcomings in the implementation of this section of accreditation were identified.

The educational organization conducts learning of postgraduate doctors at its own clinical setting in the radiation therapy unit, where it provides a patient-oriented approach through the involvement of multidisciplinary teams, the use of modern clinical protocols and mentoring from experienced professionals. The educational organization pays due attention to the safety and autonomy of patients by ensuring informed consent for all types of interventions, observing confidentiality standards and creating conditions that facilitate patients' independent decision-making within the framework of the treatment process.

Experts have found that postgraduate doctors have appropriate working conditions to support their own health, since the educational organization ensures compliance with the regime and rest, the presence of a comfortable and safe educational environment, access to medical care and also provides resources for psychological support.

Such core competencies of postgraduate doctors in the specialty of "radiation oncology" as knowledge of anatomy and physiology, fundamentals of radiobiology, understanding of the principles of radiation therapy and clinical thinking skills, as well as special competencies including planning and conducting radiation therapy using modern technologies, interpreting diagnostic images and participating in interdisciplinary consultations, help the educational organization to apply innovative forms of learning. This allows developing such skills and qualities in postgraduate doctors as clinical responsibility, critical thinking, communication competence, as well as readiness for continuing professional development. The educational organization encourages postgraduate doctors to strive to participate in research in the chosen specialty through grant research programmes and also ensures the participation of postgraduate doctors in such academic events as the Educational and Methodological Council.

At the same time, experts have identified the presence of individual factors requiring improvement, including optimization of the teaching load, increasing the effectiveness of feedback with mentors.

1.2 Participation in mission formulation

In developing the goals and objectives of the educational programme "Radiation Oncology", teachers of specialized disciplines, clinical mentors, representatives of employers and graduates of the programme took part, which is confirmed by the document "Minutes of the meeting of the working group on the development of the educational programme". The following proposals were made: an emphasis on the development of practical skills in working with modern radiotherapeutic equipment, the inclusion of modules on interdisciplinary interaction (radiotherapist-chemotherapist-surgeon), strengthening training in radiation safety and management of side effects of treatment. When updated regulatory legal acts and orders in education and healthcare are issued, the developers of the educational programme take into account the current requirements of state compulsory educational

standards (SCES), professional standards and recommendations of the Ministry of Healthcare of the Republic of Kazakhstan and make appropriate changes to the structure and content of the programme, the curriculum and the system for assessing the results of mastering.

At the same time, when talking with postgraduate doctors and employers, experts did not receive a clear answer to the question "Do you participate in formulating the mission and goals of the organization, educational programme?", "What is the personal contribution of postgraduate doctors to improving the educational programme?" Postgraduate doctors responded to these questions by providing suggestions for elective courses, and employers responded as follows: in order to achieve the learning outcomes, postgraduate doctor doctors have the opportunity to practice practical skills at the NSOC with direct participation in diagnostic and treatment procedures for patients using modern equipment, under the supervision of a clinical mentor.

Conclusions of the EEC by criteria. Comply out of 6 standards: fully - 6, partially - 0, do not comply - 0.

Standard 2: CURRICULUM

2.1 Curriculum and certification

The educational organization ensures the relationship between the content of the residency programme, the qualification that a postgraduate doctor must achieve upon completion, and the established requirements for obtaining certification, which grants the right to carry out clinical practice in the relevant specialty. The content of the programme meets the certification requirements: curricula and programmes are developed taking into account the current requirements of the certification body (Ministry of Healthcare, professional associations, etc.); the programme includes mandatory components (clinical rotations, theoretical modules, practical skills, etc.) that correspond to the profile of the specialty.

The qualification requirements for the graduate are defined:

- The competencies and levels of qualification that the postgraduate doctor must demonstrate upon completion of learning are clearly formulated.
- Qualification assessment is carried out on the basis of objective criteria (assessment of knowledge, abilities, skills, professional behavior and clinical decision-making).

The programme prepares the postgraduate doctor for successful passing of the certification exam, which is a mandatory stage of admission to independent clinical practice. The educational process includes preparation for state exams and other forms of final certification approved by accrediting and certifying bodies. The educational organization regularly reviews the content of the programme in accordance with changes in certification requirements, clinical practice and the development of medicine.

The programme provides for feedback mechanisms from graduates, faculty and certification bodies. There is documentation demonstrating the compliance between the programme, the graduate's qualifications and the certification requirements. And also ensures transparency and accessibility of this information for all interested parties (students, faculty, accrediting bodies).

The management of the educational process, reflected in the self-assessment report (Standard 2) and general approaches to management were confirmed during a visit to the CPE department and a conversation with the head and staff. At the same time, verification of Standard 2 showed that the CPE is responsible for conducting final certification, drawing up employment contracts for graduates, etc. The registrar's office is responsible for registering all educational achievements of students.

2.2 Intended learning outcomes

The intended learning outcomes are defined and included in the educational programme "Radiation Oncology", which was developed at the CPE and approved by the Educational and Methodological Council and the Academic Board (Minutes of the Meeting of the Educational and Methodological Council dated 20.04.2023 and Minutes of the Meeting of the Academic Board dated 27.01.2025 No.039). Informing stakeholders about the intended learning outcomes of postgraduate

doctors in the specialty "Radiation Oncology" is carried out through the publication of reporting materials, presentation of the results of the final state certification, provision of data on the employment of graduates, as well as through interaction with employers. The experts were convinced that the professional behavior and communication skills of postgraduate doctors are formed through systematic inclusion in clinical practice, mentoring, participation in interdisciplinary consultations and teamwork, as well as through regular assessment and feedback from faculty and are reflected in the relevant document - the Report. Faculty and postgraduate doctors are informed about the code of ethics. You can read the content of the code of ethics on the official website.

Faculty and postgraduate doctors are informed about the code of ethics. The NSOC, by the decision of the NSOC Supervisory Board dated October 31, 2019, approved the NSOC Code of Business Ethics, which serves as the basis for the formation of proper morality in the team, respectful attitudes among themselves and towards patients.

When determining the intended learning outcomes, the employees of the Education Center took into account the previous learning outcomes in the bachelor's degree and internship, and also took into account the goals and objectives of subsequent continuing professional development in the chosen specialty. The educational organization provides learning in additional and non-formal education (continuing professional development), including programmes in the specialty of the accredited educational programme.

The surveyed teachers answered that 34.8% are fully satisfied with the level of previous training of postgraduate doctors, and 47.9% are partially satisfied.

The experts established a clear continuity between the intended outcomes of the previous learning of postgraduate doctors (prerequisites) and learning in residency, and subsequent programmes of continuing professional development. The organization has developed additional education programmes, including for the specialty "Radiation Oncology". Postgraduate doctors are informed about this.

100% of the teachers-respondents believe that students of this educational organization have a high level of knowledge and practical skills after completing the learning programme.

2.3 Educational programme model and structure

The educational programme "Radiation Oncology" is designed for 2 years of study, consists of the following major disciplines: inpatient radiation therapy, inpatient oncology, medical physics, radiation diagnostics in radiation therapy and oncology, intensive care in radiation therapy and oncology, functional diagnostics in radiation therapy and oncology, pathomorphological diagnostics in radiation therapy and oncology. And also, an elective component consisting of 4 credits.

There are documents containing requirements for the structure and content of educational programmes set out in the Academic Policy of the Center, including according to the State Compulsory Educational Standard-2022 dated 04.06.2022 (Order of the Ministry of Healthcare of the Republic of Kazakhstan No.KR DSM-63). The Center for Postgraduate Education is responsible for the selection and implementation of innovations in the educational process.

The content of the work programmes reflects the needs of the healthcare system, including the personnel of a radiation oncologist, as well as the specifics of R&D in the scientific achievements of faculty. These include the following: analysis and review of scientific literature, identification of key issues, planning of research activities, conducting research, correct interpretation of data and presentation of results. All this is reflected in the scientific publications of postgraduate doctors co-authored with faculty. For the successful implementation of the educational programme in the specialty "Radiation Oncology", the organization has resources for organizing the assessment of practical skills of postgraduate doctors (simulation equipment based at the CPE, a simulation center based at Nazarbayev University). The development and approval of educational programmes, including "Radiation Oncology" is carried out by the employees of the CPE center with subsequent approval by the EMC.

According to the State Compulsory Educational Standard of the Ministry of Healthcare of the Republic of Kazakhstan and the Working Curriculum, mastering the major disciplines of the

compulsory component and the elective component, 20% is allocated to work with a teacher, independent work is carried out in two directions: IWRCM (with a clinical mentor) - 60%, and IWR - 20% of hours, that is, 80% of the IWRCM and IWR organization of education guarantees the adjustment of the structure, content and duration of the educational programme in the event of any changes in various sciences, demographic, as well as in response to the needs of the healthcare system.

Teachers provide postgraduate doctors with methodological and didactic materials, additional literature to prepare for classes, in which 80% are fully satisfied, 20% are partially satisfied.

The organization has entered into an agreement with the AOC. And to the question of the questionnaire "Is there sufficient time for practical training (patient supervision, etc.)", 86.67% of postgraduate doctors answered with full agreement, 6.67% partially agree, 0% disagree. At the same time, 86.67% of postgraduate doctors claim that after the end of classes, the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, error analysis session).

At the same time, to the question "Do representatives of postgraduate doctors participate in the development of educational programmes?", the experts received the following answer: yes, they participate in the formation of the catalog of elective disciplines. *The surveyed postgraduate doctors are completely satisfied with the schedule of classes (66.7%), the rest of the respondents in the comments expressed the opinion that they would like to study according to an individual schedule, since some of them work. At the same time, there were no people who absolutely disagreed with the schedule of classes.*

2.4 Educational programme content

The educational programme for the specialty "Radiation Oncology" is compiled in accordance with the State Compulsory Educational Standards and the Standard Curriculum of the Ministry of Healthcare of the Republic of Kazakhstan. All procedures for approving educational programme documents are carried out in accordance with the regulatory documents of the Ministry of Science and Higher Education and the Ministry of Healthcare of the Republic of Kazakhstan. The residency EP complies with international requirements, level 8 of the national qualification framework in medical education and the Framework for Qualifications in the European Higher Education Area.

The model of the educational programme for the specialty 7R01115 "Radiation Oncology" is determined on the basis of the intended learning outcomes of postgraduate doctors, therefore it includes the following: The learning consists of a mandatory component and an elective component. The content of the academic disciplines of the mandatory component is strictly regulated by the State Compulsory Educational Standards and the Standard Curriculum of the Ministry of Healthcare of the Republic of Kazakhstan and is reflected in the standard curricula of the disciplines of the educational programme.

The implementation of the educational programme of residency in the specialty 7R01115 "Radiation Oncology" is planned using the following educational and clinical activities: According to the State Compulsory Educational Standard of the Ministry of Healthcare of the Republic of Kazakhstan and the Working Curriculum, independent work is carried out in two areas: IWRCM (with a clinical mentor) - 60%, IWR - 20% of hours, and 20% is allocated for work with a teacher. Duration of study is 2 years. The systematicity and transparency of learning is guaranteed by the fact that the educational programme is attached to the website. The list of the most common diseases and conditions subject to diagnosis and treatment by a nuclear medicine physician, given in the Standard Curriculum for the specialty "Radiation Oncology" is fully covered by the list of nosologies and conditions that a postgraduate doctor must master according to programme 7R01115 "Radiation Oncology" developed on the basis of a study of the requirements of regulatory documents, the needs of practical healthcare. A working curriculum and an educational programme are developed, providing for a modular study of disciplines in compliance with the logical sequence of studying the disciplines and approved by the Chairperson of the Educational and Methodological Council and at a meeting of the Academic Board. The working curriculum contains a complete list of academic disciplines grouped into modules with disciplines, indicating the labor intensity of each academic discipline in credits and academic hours.

To implement the educational programme in the specialty 7R01115 "Radiation Oncology", the organization's documents contain teaching materials, which define the goal, take into account the integration of practical and theoretical components and independent work. Compliance with the State Compulsory Educational Standard and standard requirements, including the needs of practical healthcare, has been established.

The organization ensures compliance with ethical aspects in the implementation of the educational programme, since the experts have studied the code of ethics (the Code of Business Ethics of the NSOC was approved on October 31, 2019) and during the interview, the postgraduate doctors responded that they were informed about the content of this document.

2.5 Learning methods and experiences

Faculty use learning methods for postgraduate doctors such as cross-disciplinary seminars, case-based learning (CBL), team-based learning (TBL), problem-based learning (PBL) and use of situational tasks in practical classes. The list of learning methods is described in the discipline syllabuses. With these methods, postgraduate doctors can participate in providing medical care to patients. Faculty can provide postgraduate doctors with supervision of approximately 5 issue-related patients per day and 20 patients per month. For example, upon completion of their studies, postgraduate doctors of the educational programme in the specialty "Radiation Oncology" can perform such procedures as calculating the required activity for PET studies, followed by conducting and interpreting the results (positron emission tomography combined with computed tomography, positron emission tomography combined with magnetic resonance imaging), planning radionuclide therapy using nuclear medicine methods, interventional procedures related to the administration of radiopharmaceutical drugs.

The mentoring system described in the document "Regulations on the clinical mentor" order No.262-OD dated September 12, 2022 and the "Rules for the assessment of academic achievements" approved by order No.58-OD dated March 5, 2020 was assessed. Upon admission, postgraduate doctor doctors are familiarized with the academic policy and the IRD of the NSOC and are obliged to comply with all its rules.

Only 3 mentors, whose tasks are: organizing and monitoring the practical activities of the postgraduate doctor at a clinical setting; teaching clinical thinking, decision-making and ethics of medical practice; ensuring compliance with quality standards of medical care.

Experts have established that the principles of academic honesty and anti-plagiarism are fully implemented in the educational organization. This is reflected in the document Regulation on academic honesty, adopted by LLP NSOC on August 29, 2024. Academic honesty is applicable at such stages of postgraduate doctor learning as practical training in hospitals and maternity institutions. And anti-plagiarism is applicable when postgraduate doctors are engaged in R&D work. Postgraduate doctors are trained to promptly collect informed consent from patients for any diagnostic and treatment procedures. Experts noted that the medical records contain a corresponding document signed by the patient.

Thus, by the end of 2 years of study, postgraduate doctors will acquire basic skills and abilities in the profession, which will allow them to work in institutions such as oncology divisions of multidisciplinary hospitals, oncology dispensaries and scientific oncology centers (**ESG 1.2**).

The experts did not find any violations regarding the principle of equality in postgraduate education and continuing professional development, since the educational organization complies with the Constitution of the Republic of Kazakhstan, the Law on the Languages of the Peoples of the Republic of Kazakhstan and other regulatory legal acts in the field of education and healthcare. For example, the educational organization employs 169 people, of which 96% are women and 4% are men.

The educational organization has a mechanism for regularly adapting teaching and learning methods to the requirements of modern science and education, as well as to the current needs of practical healthcare. This mechanism includes the work of the education department, which is headed by Zhukubayeva A.A., a doctor of the highest category in public healthcare, emergency medicine

doctor, master's degree. It is planned to train teachers and clinical mentors in modern teaching methods and assess the quality of the implementation of educational programmes.

This indicates compliance with Standard 2 in terms of adapting training to the needs of postgraduate doctors. There is an anti-plagiarism system StrikePlagiarism.com Agreement 2023 StrikePlagiarism.pdf.

2.6 Educational programme delivery and training settings

The experts got acquainted with the work of the divisions, including the intensive care unit, visited the proton center, as well as the nuclear medicine unit with its own production of radiopharmaceuticals. The experts visited the library, clinical laboratories of the NSOC. The experts held 5 meetings and during the cross-interview it was established that all postgraduate doctors have access to all patients, units of the laboratory and diagnostic service, including X-ray diagnostics, MRI and the library fund of the center.

Thus, clinical settings are selected for compliance with the residency programme by the education department, which draws up contracts with clinical settings. The lawyer of LLP NSOC is responsible for concluding and registering contracts with clinical settings. Clinical settings are determined where the postgraduate doctor can get maximum access to patients according to his/her profile of the residency educational programme at all levels of medical care. Clinical settings are selected for compliance with the residency programme by the education department, which draws up agreements with clinical settings. These are: NJSC "Astana Medical University"; KB "University Medical Center"; RSE "Hospital of the Medical Center of the Ppostgraduate doctoral Administration of the Republic of Kazakhstan" based on the right of economic management; LLP "Aesthetic Life"; LLP "ART Clinic"; State-owned utility Enterprise based on the right of economic management "City Polyclinic No.9" of the Akimat of Astana; State-owned utility Enterprise based on the right of economic management "Multidisciplinary Regional Hospital No.3". Such a variety of clinics allows postgraduate doctors of the accredited specialty to obtain knowledge in radiation oncology both in private medical centers and at a highly specialized level, to get acquainted with the operation of various equipment, including at different levels of medical care.

Compliance of clinical settings with accreditation requirements is carried out by specialized accreditation agencies and is reflected in the relevant documents.

The training of postgraduate doctors in the specialty "Radiation Oncology" is aimed at meeting the needs of practical healthcare. This organization is specialized in the field of radiation therapy, and provides a lot of opportunities and conditions for qualified training of professionals. Thus, during a conversation with the management of the organization, experts received information that postgraduate doctors have access to patients, laboratories, work in the library, a conference room, have classrooms equipped with modern equipment, and faculty confirmed that the training of postgraduate doctors is carried out directly in the clinical units. In accordance with the current agreements with clinical settings, the "Clinic undertakes to ensure access of students to patients and to all structural divisions of the Clinic", including basic units, the resuscitation unit, the intensive care unit. Postgraduate doctors of this specialty can supervise patients with benign and malignant tumors. This is facilitated by mentoring, which is carried out in the organization.

The practical lesson was provided for postgraduate doctors of another specialty, due to the absence of postgraduate doctors in the educational programme "Radiation Oncology". In a conversation with postgraduate doctors, experts saw that the organization promotes the development of practical competencies of postgraduate doctors, including on simulation equipment. At the same time, postgraduate doctors deepen their theoretical knowledge and develop communication skills.

Integration between learning and the provision of medical care (on-the-job training) is carried out by mastering practical skills. Learning is conducted in accordance with clinical protocols.

Of the 15 postgraduate doctors surveyed, 80% responded that teachers use active and interactive learning methods in classes quite often, 20% believe that rarely or sometimes.

The following employees took part in the planning, discussion, approval and review of the educational programme in the specialty "Radiation Oncology": the head of the EP, curator, clinical mentors, employers.

2.7 Opportunities for higher degrees and research

The educational programme includes achievements of basic biomedical and clinical sciences that contribute to the formation of medical research methodology in students, scientific knowledge that is fundamental for mastering and improving clinical research and the formation of scientific thinking in the section of independent work with a teacher. Postgraduate doctors' R&D is a mandatory component of learning. Young employees under 35, including postgraduate doctors, are members of the "Council of Young Scientists", where they are taught the skills of performing research work. During a conversation with postgraduate doctors, the experts learned that they use scientific data in learning and know the basics of evidence-based medicine. Teachers said that they teach postgraduate doctors in methods of critically assessing literature, articles and scientific data, and the application of scientific developments.

An analysis of educational activities showed that the scientific basis and all scientific achievements in the relevant disciplines are taken into account, additions have been made to the bibliography of the teaching materials and syllabuses, and teachers use them in the classroom.

Conclusions of the EEC by criteria. Compliance out of 28 standards: fully - 28, partially - 0, do not comply - 0.

Standard 3: POSTGRADUATE DOCTOR ASSESSMENT

3.1 Assessment policy and system

A study of the control and measuring equipment (1000 tests, 150 tasks, 75 clinical situations, assignments for laboratory and other work) showed that the organization has implemented an appropriate assessment policy that allows for a comprehensive assessment of the academic achievements of postgraduate doctors. During the interview, postgraduate doctors spoke about the forms of assessment, for example, using interactive technologies in the study of a clinical case in the form of a discussion, and that they are satisfied with everything. They also receive regular feedback from faculty. The system of appealing the assessment results is reflected in the Academic Policy document and there have been no precedents of appeal during the period of operation of the educational organization. The assessment covers not only knowledge and skills, but also professional behavior and communication skills, which is confirmed by the following: during the interview, postgraduate doctors talked about the forms of assessment, for example, using interactive technologies in the study of a clinical case in the form of a discussion and that they are satisfied with everything. And they also receive regular feedback from faculty.

The criteria for admission to the final attestation are the successful mastery of the educational programme by the student at the corresponding level of education, which is confirmed by the positive results of the midterm assessment. This is documented in the Academic Policy.

Admission to the independent examination of postgraduate doctors is the fulfillment by the student of all the requirements provided for by the curriculum, confirming the mastery of the programme at the corresponding stage of learning. In the practice of the educational organization, postgraduate doctors (including other specialties) pass the independent examination in 100% of cases.

Validation and reliability assessment of postgraduate doctor assessment methods (tests, tasks, cases) is carried out as follows: content validity analysis is assessed by experts with the involvement of professionals in the relevant field; structural validity is assessed by the method of assessing the expected competencies (objective structured clinical exam); reliability is assessed by the degree of consistency of assessments, statistical analysis and stability of results when re-taking the test.

The educational organization has a practice of involving external examiners in assessing postgraduate doctors, which is documented in the Academic Policy. This ensures the independence and objectivity of the assessment results.

Thus, to verify the *Standard 3* data, the experts asked questions to the head of the Postgraduate Education Center, A.A. Zhukubayeva, and checked the documents and methods for assessing postgraduate doctors.

The organization has 1000 test questions and tasks, which are compiled by those responsible for the discipline and approved at a meeting of the Educational and Methodological Council. The control and measuring equipment are reviewed by external and internal experts. The head of the education department responded that additions and updates to the control and measuring equipment are planned to be made next year.

The results of the postgraduate doctor assessment are documented as follows: the results of formative academic performance and midterm control in disciplines are reflected in the postgraduate doctor's academic performance journal. The grade for the exam, annual and final certification is derived as the average of the grades of two stages (theoretical and practical). The results of the postgraduate doctors' achievements are posted on the academic records. Additionally, after each completed discipline, a survey of postgraduate doctors is conducted.

At the same time, based on results of the final exam, 2 postgraduate doctors received "excellent", 9 - "good", 0 - "satisfactory".

There is a document for appealing the assessment results - Academic Policy, which was approved in 2024. To date, there have been no appeals from postgraduate doctors.

During a visit to the organization and a conversation with Zhukubayeva A.A., the commission was convinced that there is a documentation system that is transparent and accessible to all faculty and employees, and includes such documents as annual operational plans, annual reports, divisions regulations, agreements with faculty and postgraduate doctors, individual work plans for postgraduate doctors, a database of test assignments and examination tickets, educational and methodological documentation (work programme, working curricula, syllabuses, journals), assessment tools (checklists, statements), extracts from the minutes of advisory bodies, feedback from postgraduate doctors and teaching staff, certificates, evidences and verifications. A review of the website showed that the documents required by postgraduate doctors are posted on its pages and there is information about the residency programmes, which is updated regularly.

During the visit to the organization, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" and the answer was "yes".

3.2 Assessment in support of learning (formative assessment)

During interviews with 10 teachers regarding assessment methods, the experts received convincing information that the assessment methods used in the residency are justified, correspond to the goals of the educational programme and are aimed at checking the formation of professional competencies. Postgraduate doctors also shared their opinions on the timeliness of testing, pre-examination counseling, the clarity of the entire assessment procedure and its fairness. For example, postgraduate doctors said that the assessment criteria were explained to them in advance, the forms of assessment corresponded to the disciplines, and the assessment process took place in an atmosphere of objectivity.

The experts examined the resources for organizing the assessment of knowledge and practical skills, namely, the simulation center at Nazarbayev University, where phantoms, simulators and computer programs are presented.

The experts determined that the choice of postgraduate doctor assessment methods is based on the acquisition of practical skills, since the practical part of the learning is the main one. For example, such methods of formative assessment as case analysis contribute to interprofessional training. And such a method as OSCE demonstrates the integration of learning and an emphasis on clinical skills. The established assessment methods guarantee that the postgraduate doctor has mastered all sections of the educational programme and acquired the necessary practical skills.

Feedback from postgraduate doctors based on the results of their assessment is collected in the "Postgraduate doctor Questionnaire" form in GOOGLE FORM, the results are in the Center. In the

interview, postgraduate doctors confirmed that they are provided with feedback after completing the learning.

The 3 employer representatives interviewed also pointed out that the training of graduates is in line with the modern development of medical practice and science, since residency graduates have a good theoretical and practical base. The employers said that they themselves participate in the assessment of postgraduate doctors, since they are included in the examination committee. However, the educational organization did not conduct systematic feedback with them. The employers believe that residency graduates have all the skills, such as communication and knowledge in the specialty.

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

The educational organization has implemented a comprehensive assessment system aimed at making informed decisions on the promotion of postgraduate doctors within the framework of the postgraduate clinical learning programme and the completion of their training. This system includes structured summative (final) assessments designed to objectively measure the academic and clinical progress of students.

The assessment system is focused on:

- monitoring and analyzing the postgraduate doctor's progress at all stages of learning;
- making decisions on transfer to the next stage of learning;
- determining readiness for final certification and admission to independent practice.

The assessment covers all key components of professional training: knowledge, clinical skills and professional behavior. Summative assessment is carried out using validated and standardized tools, including:

- final exams (written, oral);
- objectively structured clinical examinations (OSCE);
- clinical portfolio analysis;
- simulation tasks;
- case discussions and presentations;
- assessment of professional behavior and clinical maturity.

Each form of assessment is accompanied by clear criteria and scales approved by methodological commissions.

To ensure reliability and validity:

- uniform assessment standards are applied;
- external experts are involved;
- results are regularly analyzed and assessors are calibrated.

These measures help eliminate subjectivity and increase the reliability of the results. The results of the summative assessment serve as the basis for decisions on transfer to the next academic year and allow to take state certification and attestation. The assessment is not limited to interim results, but is also aimed at developing long-term clinical competencies that meet certification requirements and real clinical practice. All assessment stages are documented. Postgraduate doctors receive feedback on the assessment results.

3.4 Quality assurance of the assessment system

The organization has developed, approved and implemented a sustainable assessment quality assurance system that covers both individual methods and the assessment system as a whole. These mechanisms are aimed at increasing the authenticity, validity, reliability and objectivity of the assessment results, including the active participation of qualified examiners with various professional backgrounds. The institution has approved local regulations (standards, regulations, instructions) that define the rules for developing, conducting and analyzing all forms of assessment. There is a single quality Standard for all assessment methods, with a focus on compliance with educational and professional competencies. The involvement of various examiners is regulated. Faculty, clinical mentors, representatives of specialized departments, as well as external independent experts participate in the assessment process. A system of rotation and independence of examiners at the final stages (for

example, at OSCE, state certification) is organized. Examiners undergo preliminary learning on the assessment criteria, which increases the objectivity and consistency of the results.

The implementation of internal and external control mechanisms, the participation of different examiners and systematic work on learning and standardization of processes, the organization ensures the quality and reliability of the entire assessment system, which contributes to an objective assessment of the achievements of postgraduate doctors and increased confidence in the results of postgraduate education.

Conclusions of the EEC by criteria comply with 15 standards: fully - 15, partially - 0, do not comply - 0.

Standard 4: POSTGRADUATE DOCTORS

4.1 Selection and progression policy

The educational organization has a policy for the admission of postgraduate doctors, which is called "Academic policy". Approaches to the admission of postgraduate doctors are based on the requirements of the country and internal regulations, namely, the Constitution of the Republic of Kazakhstan <https://adilet.zan.kz/rus/docs/K950001000/links>; Law of the Republic of Kazakhstan dated July 27, 2007 No.319-III "On Education" <https://adilet.zan.kz/rus/docs/Z070000319>; Order of the Ministry of Healthcare of the Republic of Kazakhstan No.KR DSM-270/2020 dated December 15, 2020 "On approval of the rules for placing a state order, admission to study and training of medical personnel in residency" <https://adilet.zan.kz/rus/docs/V2000021802>; Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 under No.600 "On approval of the Standard rules for admission to study in educational organizations implementing educational programmes of higher and postgraduate education" <https://adilet.zan.kz/rus/docs/V1800017650>; Order of the Ministry of Healthcare of the Republic of Kazakhstan under No.27 dated January 30, 2008 "On approval of the lists of clinical specialties for training in internship and residency" (with amendments and additions as of May 14, 2021) <https://adilet.zan.kz/rus/docs/V080005134>.

Transparency of the selection procedure and equal access to residency programmes are achieved through the use of uniform and formalized admission criteria, as well as ensuring the openness of information on the procedure and conditions for selection, which is confirmed in paragraph 3 of the document "Academic Policy".

The document takes into account the requirements for residency applicants in terms of their previous achievements in undergraduate and internship (for example, "persons who have mastered higher education programmes are admitted to residency"), and also describes the safety requirements (for example, mandatory safety training, availability of current medical certificates, compliance with sanitary norms and rules).

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

Approaches to the admission and transfer of postgraduate doctors from other educational organizations are reflected in paragraph 3 of the document "Academic Policy". At the same time, key points are taken into account that ensure transparency, objectivity and compliance with the academic rights of students, namely: compliance with educational programmes, academic performance, compliance with deadlines and the procedure for submitting an application, etc.

The appeal procedure for the results of admission to residency is prescribed in the Academic Policy. To date, there have been no precedents of appeal.

Representatives of students, namely postgraduate doctors, are included in the process of developing the policy for admission and selection of postgraduate doctors. Feedback is provided to postgraduate doctors on this issue.

The review of the admission and selection policy, the number of postgraduate doctors is carried out annually, the Center for Postgraduate Education is responsible for this.

Thus, the experts validated the data according to **Standard 4**. In general, all criteria are met. The experts familiarized themselves with the documentation on the admission of postgraduate doctors, including the Regulation on the clinical mentor. Many documents are well drawn up, but there are comments regarding the quality management system

4.2 Performance improvement and exit from the programme

For the period 2020-2024, 127 postgraduate doctors were accepted to all educational programmes (11). Enrollment was not previously carried out for the programme in the specialty "Radiation oncology". The total number of postgraduate doctors graduating on the start dates of admission to residency in all specialties was 11 people. The educational organization analyzed the practical healthcare needs for radiation oncologists and determined that the annual admission to the educational programme in the specialty "Radiation Oncology" will be 4 people. This indicator corresponds to resource capabilities. The sources of information on the needs for radiation oncology professionals are orders from healthcare authorities, the development strategies of the NSOC, as well as targeted referrals for learning.

NSOC has an officially published policy that defines the processes and opportunities for improving academic performance and professional training, as well as the conditions under which a postgraduate doctor can be excluded from their programme. This information is reflected in the document "Academic Policy".

The practice of academic counseling, personal support for postgraduate doctors and the development of not only professional skills were assessed by experts through an analysis of feedback from students, interviews with curators and teachers, as well as monitoring the participation of graduate doctors in educational and clinical events. During interviews with postgraduate doctors and graduates, the following information was obtained: a high level of satisfaction with the quality of training, a positive assessment of interaction with faculty and mentors, participation in clinical work and the relevance of educational content.

The educational organization has a programme for the development of postgraduate doctors, which includes the development of clinical skills, research activities, the formation of competencies, psychological and social support. Postgraduate doctors are included in such advisory bodies as the Educational and Methodological Council.

For example, in order to provide social support to postgraduate doctors, scholarships, financial assistance, psychological support and measures to improve the quality of life are organized. Financial support for postgraduate doctors is provided through the issuance of a scholarship. Psychological support for postgraduate doctors is provided through the implementation of a set of measures aimed at maintaining psycho-emotional well-being, preventing professional burnout and developing resistance to stress, which is carried out confidentially.

To plan the career of residency graduates, a set of activities aimed at professional orientation and employment support is carried out, such as career guidance meetings, participation in job fairs and support for targeted learning. The employment rate of graduates of all residency programmes in 2022 was 100%.

4.3 International medical graduates

The NSOC has an officially published policy for the recognition of qualifications, familiarization with the requirements for postgraduate doctors and support for international graduates, which guarantees them equal opportunities. A structured, multi-level approach to supporting international graduates undergoing clinical training is provided. This not only improves the quality of education and academic performance of foreign postgraduate doctors, but also facilitates their more effective professional integration into the national healthcare system.

4.4 Postgraduate doctor work and study

The following advisory bodies operate in the educational organization: the Educational and Methodological Council and the Academic Board. Postgraduate doctors of the 1st year participate in the work of the Educational and Methodological Council. Mechanisms for rewarding postgraduate doctors for their social work include letters of thanks and letters of recognition, publications on the

successes of postgraduate doctors, taking into account social activity when forming an individual rating, recommendations and characteristics when applying for a job. When interviewing postgraduate doctors, the experts received comprehensive answers about the role of postgraduate doctor representation in the advisory bodies of the Center. They took part in the discussion of the mission of the EP, as well as issues related to the educational process and the approval of educational materials for residency.

Postgraduate doctors receive a monthly stipend in accordance with the established procedure of legislation. Postgraduate doctors are given the opportunity to work outside at extracurricular time, which is reflected in the document - "Academic Policy". There are currently no such postgraduate doctors in the accredited specialty. Various events are held at the clinical settings for training postgraduate doctors, in which postgraduate doctors participate. For example, supervision and participation in patient management, clinical reviews and medical conferences, simulation classes, scientific and practical events. As a rule, postgraduate doctors supervise 5-6 patients per day and about 70 people per month. Postgraduate doctors make thematic reports, such as: "Modern approaches to radiation therapy planning", "Proton therapy: indications and prospects for use", "Complications of radiation therapy and methods of their prevention", etc. They participate in health education work, including lectures and talks for patients and their relatives, participate in promotions and information campaigns, in open days. The educational organization has implemented elements of distance learning for postgraduate doctors, such as the use of ZOOM educational platforms, webinars, online lectures, online testing and knowledge control, remote feedback, virtual simulations and training devices.

In special circumstances (for example, at the request of territorial healthcare authorities), an individual training programme for postgraduate doctors is used, which includes an individual class schedule, a flexible schedule for mastering educational modules, the ability to master theoretical material remotely and regular monitoring of the process. Experts have found that in this case, the duration of learning is observed and is 2 years.

The educational organization has clearly defined the areas of responsibility of the postgraduate doctor when participating in the provision of medical care and informed all participants in the educational process about the permissible conditions for such participation. In order to ensure the safety of patients, postgraduate doctors and mentors, the postgraduate doctor's participation in clinical practice is carried out under the supervision of a qualified mentor, in accordance with the level of training and competence of the postgraduate doctor. Mentoring is provided at all stages of medical care, especially in situations related to emergency or high-risk clinical activities.

The NSOC excludes excessive exploitation of the postgraduate doctor in medical activities and ensures that the clinical workload does not interfere with the development of the educational programme. Participation in the provision of medical care is considered an integral, but not dominant part of postgraduate learning, ensuring the development of clinical skills in a controlled and safe environment.

4.5 Postgraduate doctor safety

The educational organization has officially defined the legal status of the postgraduate doctor as a participant in the healthcare system, who is at the stage of postgraduate professional learning. In accordance with current legislation and regulations, the postgraduate doctor carries out clinical activities under the supervision and with the permission of the mentor, and does not bear independent legal responsibility for treatment decisions outside the established competence.

The legal status of the postgraduate doctor:

- stipulates that the primary responsibility for medical care for patients is assigned to the mentor and the medical organization where the learning takes place;
- a postgraduate doctor has the right to participate in the diagnosis, treatment and care of patients as part of a medical team, within the framework of his/her knowledge, skills and level of training, under the supervision of a certified professional.

4.6 Postgraduate doctor remuneration and fees

In accordance with current legislation and regulations, a postgraduate doctor can be hired at the NSOC for 0.5 of a position as a postgraduate doctor and receive an appropriate salary.

4.7 Postgraduate doctor health and welfare

The educational organization recognizes the importance of comprehensive support for postgraduate doctors at all stages of postgraduate education and provides access to support systems that are aimed at both professional development and maintaining the personal welfare of students. The approach to support is individualized, ethical and confidential, taking into account a wide range of possible difficulties that a postgraduate doctor may encounter during the training process.

Thus, in order to improve the health and welfare of postgraduate doctors, the following activities are carried out at the NSOC:

- Postgraduate doctors' health is constantly monitored, if necessary, referrals for examination and treatment are provided.
- Consultations with a psychologist and psychotherapist are available, including help with symptoms of professional burnout, stress and anxiety.
- All requests are considered confidentially, with due regard for the rights and interests of the postgraduate doctor.
- Postgraduate doctors are provided with access to consultations on career planning, choice of specialization, development of a professional trajectory.
- Seminars are organized to prepare for certification exams, conferences, career days, meetings with potential employers.
- Individual career development plans are developed with the participation of an academic mentor.

The organization consistently implements the principle of holistic support for the postgraduate doctor - both as a future professional and as an individual, providing a safe, professionally oriented and humane educational environment. Thanks to the presence of support structures, postgraduate doctors can cope with difficulties, develop and build a career in medicine on a sustainable basis.

Conclusions of the EEC by criteria. Compliance out of 19 standards: fully - 19, partially - 0, do not comply - 0

Standard 5: TEACHERS AND CLINICAL SUPERVISORS

5.1 Teachers and clinical supervisor establishment

In total, there are 9 employees, including 7 full-time teachers, 2 part-time. The requirements for teachers of the residency programme take into account the academic degree, qualification category and work experience.

The academic degree holder rate is 100%, the highest category is held by 8 people (90%), the first category is held by 0 (0%), the second category is held by 1 (10%). The training of postgraduate doctors in the specialty "Radiation Oncology" is carried out by the following employees: Nalgiyeva Fatima Khamitovna at the Department of Radiation Therapy.

The experts familiarized themselves with the Regulation on the procedure for competitive replacement of positions of teaching staff and research workers of LLP "NSOC", job descriptions for positions of teaching staff and research workers and other acts of LLP "NSOC" adopted in the established manner.

For teachers of clinical departments, a mandatory condition is that applicants have certificates and qualification medical categories and a number of other provisions in pursuance of the Labor Code of the Republic of Kazakhstan, job descriptions of the teaching staff.

In accordance with the Order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020 under No.KR DSM-304/2020 "On approval of the provisions on the clinical setting, the clinic of the educational organization in the field of healthcare, the university hospital, the residency base, the integrated academic medical center and the requirements imposed on them",

supervisors involved in the training of students at clinical settings must meet the following criteria <https://adilet.zan.kz/rus/docs/V2000021848>

The ratio of teachers to postgraduate doctors should be -1:3. The management of the NSOC assured the experts that this indicator will be taken into account when forming the staffing schedule and enrolling postgraduate doctors for the "Radiation Oncology" programme. The experts familiarized themselves with the ratio of teachers and postgraduate doctors in other (previously accredited residency) specialties and made sure that the NSOC adheres to the standard.

The motivation system for teachers and clinical supervisors includes the following main types of incentive payments: - personal allowances - incentive payments made to an employee in addition to the established official salary in order to encourage the achieved success in work and stimulate their further increase, having a regular nature; - bonuses - are one of the types of incentive payments and represent cash payments for achieving certain results in work and in matters of stimulating their further increase.

5.2 Ethics and conduct of teachers and clinical supervisors

The principles of ethics and academic honesty of teachers are reflected in the document - "Academic Policy". During the conversation with the teachers, they confirmed their awareness of this issue.

In order to verify the data of Standard 5, external experts received the opinion of teachers on the personnel policy, which includes the policy of recruitment and admission of teachers and clinical supervisors, stimulation and motivation of practical healthcare professionals. The interview with the head of the HR department of the NSOC included such questions as how professionals are attracted and motivated to educational activities and allowed the experts to learn about approaches to attracting clinical setting employees for teaching (there are 11 such teachers in total), about the strategy and tactics of recruiting teachers, information support for the educational programme, and also to identify problems in managing and developing human resources, since most part-time workers do not know the teaching methodology. It was noted that the NSOC has a sufficient number of full-time teachers and clinical supervisors for the successful implementation of the educational programme for residency in the specialty 7R01115 "Radiation Oncology"

When questioning teachers, it was found that the majority (86.96%) are completely satisfied with the organization of work and the workplace in this educational organization, but 8.7% are partially satisfied. In this educational organization, teachers have the opportunity to engage in scientific work and publish the results of R&D - 91.3% completely agree, 8.7% - partially. Satisfied with the salary – 34.78% fully agree, 39.13% - partially.

5.3 Continuing professional development for teaching and clinical supervisory staff

In order to verify the Standard 5 data, during a meeting with the head of the HR department and during interviews with teachers, experts obtained an opinion on approaches to developing the pedagogical competence of teachers, motivation to work with postgraduate doctors, supervising, which includes organizing cycles of improving pedagogical qualifications (certificate of completion of a cycle of 60 hours and 120 hours), material incentives in the form of bonuses for employees. However, given the level of the EP - residency, the experts identified a limited opportunity to improve the pedagogical qualifications of clinical supervisors.

The experts determined that teachers and postgraduate doctors have enough time for teaching, supervising and learning. The work schedule of teachers is set in accordance with the personnel policy. Working hours: from 8.00 a.m. to 4.00 p.m. Teachers conduct weekly seminars lasting 6 hours. Time for clinical reviews, clinical rounds - daily. Teachers conduct weekly seminars lasting 2 hours. Time for clinical reviews, clinical rounds - daily.

One of the priority areas of development of the teaching staff is to improve the level of pedagogical skills. The teaching staff have the opportunity to undergo various scientific and practical trainings and internships. For example, certificates of professional internships in China, the USA and Turkey were presented by teachers.

The salary fund for the “Residency” programme for 2024 amounted to 80,321.8 thousand tenge, taxes and deductions - 8,974.9 thousand tenge. Financing of clinical supervisors is carried out.

Experts found that teachers initiate R&D topics for postgraduate doctors, stimulate the need for additional training and independent work with literature, medical documentation.

The educational organization has opportunities for career growth and development of teacher competencies - 78.26% of the surveyed teachers answered, and 17.39% partially agreed with this. Studied in advanced professional training programmes - 86.96% during the current year, 13.04% - from 1 to 5 years ago, 0% - more than 5 years ago and 0% answered "I do not remember when it was".

The organization implements social support programmes for teachers - 30.43% answered that "yes, such programmes exist", 4.35% "I have already used this", 0% of respondents answered that there are no such programmes, and 47.83% of respondents do not know about it.

Conclusions of the EEC by criteria. Compliant out of 8: fully -8, partially -0, do not comply – 0.

Standard 6: EDUCATION AND TRAINING RESOURCES

6.1 Physical facilities for teaching and learning

Postgraduate doctors are trained at the NSOC, which is a multidisciplinary clinic and has all clinical areas for training - inpatient care (surgical and therapeutic units, operating unit, anesthesiology and intensive care unit), outpatient clinic, diagnostic units (radiation diagnostics, CT/MRI, X-ray department, endoscopy unit, ultrasound diagnostics, functional diagnostics), pharmacy, rehabilitation and physiotherapy unit. In 2025, a new 5-storey building was put into operation, which is equipped with the latest modern clinical diagnostic and therapeutic equipment, which makes a great contribution to training, development of practical skills of postgraduate doctor doctors and students. The NSOC has the only Proton Center in Kazakhstan, as well as a Nuclear Medicine division with its own production of radiopharmaceuticals. The hospital stock is 283 24-hour inpatient beds and 60 day hospital beds, with the following divisions: Multidisciplinary Surgery Center No.1 with 40 beds (abdominal surgery sector, thoracic surgery sector, otolaryngology and head and neck tumors sector, oncocoloproctology sector, oncurology sector, breast, skin and soft tissue tumors sector); Vascular and Reconstructive Surgery Center (vascular surgery sector, sector of soft tissue tumors, skin and reconstructive surgery); Oncohepatology, Gastroenterology and Organ Transplantation Center with 26 beds (gastroenterology and oncohepatology sector, hepatopancreatobiliary surgery sector, organ transplantation sector); Oncohematology and bone marrow transplant center with oncohematological intensive care and day hospital with 117 beds (oncohematology unit No.1 with day hospital, oncohematology unit No.2, oncohematology department No.3, bone marrow transplant unit, oncohematological intensive care unit); Multidisciplinary therapy center with rehabilitation with 18 beds (palliative care sector, medical rehabilitation sector, social and psychological rehabilitation sector); Orthopedics and osteo-oncology unit with 30 beds, Chemotherapy unit with day hospital with 20 beds of round-the-clock inpatient department and 20 beds of day hospital; Radiation therapy unit with 15 beds; Multidisciplinary fee-based unit with 15 beds; Consultative and diagnostic center with 15 beds; Center of anesthesiology, resuscitation and intensive care with 12 beds (including inpatient beds); admission unit, unit of radiation diagnostics, unit of ultrasound and FD, unit of expert endoscopy and interventional radiology, unit of pathomorphology with cytology, clinical diagnostic laboratory, operating unit.

The experts visited the library, which provides postgraduate postgraduate doctors and employees with access to electronic resources and high-quality replenishment of the electronic library. The University has signed an agreement with Wiley Online, one of the largest international academic publishers publishing full-text scientific resources in all areas of modern science and knowledge. In addition, an agreement was signed with electronic libraries: "Student Consultant" (www.studentlibrary.ru) and "Doctor Consultant" (www.rosmedlib.ru), which allows postgraduate doctors to effectively study materials. In total, there are 2 0pieces of literature on the accredited

specialty on paper, and 50 pieces on electronic media. The main monograph on the specialty 7R01115 "Radiation Oncology" is a "Malignant tumors", author Yessenkulov A.Ye. It is available in the library.

There is access to international databases: Wiley Online Library <https://onlinelibrary.wiley.com/>, Cochrane library <https://www.cochranelibrary.com/>, to the Platform "Web of Science" <http://apps.webofknowledge.com/>, DB "Scopus" www.scopus.com, DB "Science direct" www.sciencedirect.com, Springer Link (Springer) <https://link.springer.com/>. Postgraduate doctors are aware of this.

Before the start of the relevant discipline of the educational programme, the postgraduate doctor receives a syllabus from the teacher and knows what skills he/she should acquire and develop during the training.

Updating the physical facilities, including the library collection, is carried out every 5 years.

6.2 Postgraduate medical education based on clinical training

In order to validate the implementation of the self-assessment report data and obtain evidence of the quality of the residency EP in the specialty 7R01115 "Radiation Oncology", interviews were conducted with postgraduate doctors of other specialties. The experts asked questions about satisfaction with learning, sufficiency of time for patient supervision, work in Damumed with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for postgraduate doctors who need it, participation in "Journal Clubs", availability of resources of international databases of professional literature. In general, postgraduate doctors are satisfied with learning, assessment methods and purposefully entered the NSOC, as they believe that this educational organization has good resources, image and international connections, at the same time, postgraduate doctors would like more independence in patient management, holding international events.

Students have free access to patients at clinical settings and all the conditions for improving their practical skills - 100% of teachers completely agree with this.

Teamwork of postgraduate doctors is ensured by full integration into the work environment, including the teams of clinical centers of the institute, participation and independent documentation in the composition of the MDT groups by postgraduate doctors, where the main basic and problematic issues of patient management are discussed according to the protocols for the diagnosis and treatment of malignant neoplasms.

Postgraduate doctors can conduct health education activities among patients and training activities among interns.

In the questionnaire, postgraduate doctors noted that they have free access to patients at clinical settings and all the conditions for improving their practical skills - 91.3% of teachers fully agree with this, 8.7% - partially agree, 0% found it difficult to answer.

6.3 Training postgraduate doctors at alternative clinical settings

A review of the resources of the "NSOC" showed that they correspond to the goals and objectives of educational activities, and the staff ensures collegial and ethical relationships with medical personnel, the management of the clinical setting to achieve the intended outcomes of postgraduate doctors of nuclear medicine. A sufficient number of issue-related patients with oncological pathology and modern equipment are provided and demonstrates accessibility to students, and the staff, who simultaneously act as teachers and clinical supervisors, provide high-quality learning in compliance with ethics and deontology. Before starting the relevant discipline of the educational programme, the postgraduate doctor receives a syllabus from the teacher and knows what skills he/she should acquire and develop during training.

During the visit to the "NSOC", where experts conducted a survey of resources, their compliance with the learning programme for nuclear medicine postgraduate doctors, accessibility for teachers and postgraduate doctors, how modern this equipment is and meets the needs of students and practical healthcare. The experts received evidence of compliance with Standard 6, as well as validation of the self-assessment report information.

Postgraduate doctors demonstrated their commitment to the Center, were active in answering questions from external experts, demonstrated their judgment on the organization of learning,

assessment of their skills, advisory support, the opportunity to participate in R&D, financing, demonstrated a broad outlook when answering questions from foreign expert Stanzhevsky Andrey Alekseyevich. The experts studied the documents of postgraduate doctors (portfolio, results of postgraduate doctor assessment-checklists, results of the postgraduate doctor survey).

The possibility of academic freedom is determined by the fact that the EP was developed on the basis of the National Qualifications Framework, corresponding to the qualification's framework for the European Higher Education Area.

To implement exchange programmes at the international level, NSOC has concluded Memorandums and agreements on cooperation with universities in Russia, Turkey, Uzbekistan, Kyrgyzstan, Belarus, etc. The clinical training settings for postgraduate doctors have been described earlier.

Academic mobility at the national level is also carried out on the basis of a memorandum concluded with other universities.

Experts have established that there is no jointly developed residency EP for the specialty 7R01115 "Radiation Oncology" with partner universities and no international cooperation in the form of visiting professors is carried out.

Teachers of the educational organization actively participate in national and international events.

6.4 Information sources, resources, and use

Experts assessed postgraduate doctor's and teachers' access to necessary web resources, including electronic libraries (e.g. eLIBRARY, National Electronic Library, Springer, PubMed), educational platforms (State services "Education", Moodle, Coursera, OpenEdu) and specialized medical resources (Clinical guidelines of the Ministry of Healthcare, UpToDate, Medelement, etc.), as well as access to electronic media (professional medical journals, electronic versions of scientific publications, healthcare and education news portals). Postgraduate doctors confirmed that they can use all information resources, including when preparing for classes.

Information and communication technologies are represented by the following: computer and multimedia equipment, interactive panels and projectors, educational online platforms, electronic library systems, simulation training devices, telemedicine and video conferencing systems. The educational programme uses the following technologies: distance and blended learning formats, webinars, simulation learning, electronic testing systems, digital learning modules and electronic journals for progress assessment. During independent learning, postgraduate doctors use: electronic educational resources (scientific databases, video lectures, online courses), mobile applications for preparation and self-monitoring, clinical reference books and medical calculators. Access to patient data and the healthcare information system is carried out through authorized access to the regional medical information system (MIS Damumed) and secure data transmission channels in compliance with the requirements for medical confidentiality and information security. The postgraduate doctor supervises 5-6 patients per day, including filling out the necessary documentation under the supervision of the teacher.

LLP "NSOC" provides conditions and encourages students to participate in R&D work. Postgraduate doctors will consolidate their theoretical knowledge, practical skills and use their creative potential to further solve urgent healthcare problems. The management of research activities is carried out by the entire teaching staff of LLP "NSOC" who have an academic degree and experience in conducting scientific research. Given the lack of nuclear medicine postgraduate doctors, there is no data on their involvement in scientific projects.

An interview with 30 teachers showed that there are no problems in education management, but there are some questions regarding postgraduate doctors' access to equipment at specific bases (it is not active and free everywhere), but there are no shortcomings regarding the sufficiency of the number of issue-related patients. Not all postgraduate doctors cope 100% with maintaining medical records and organizing their independent work.

Conclusions of the EEC by criteria. Compliance out of 14 standards: fully - 13, partially - 1, do not comply - 0

Recommendations for improvement:

- 1) Ensure the invitation of foreign visiting professors as part of the organization of learning of postgraduate doctors in the specialty "Radiation Oncology" to expand the knowledge and skills of students and exchange experience (Standard 6.3.)

Standard 7: QUALITY ASSURANCE AND IMPROVEMENT IN POSTGRADUATE EDUCATION

7.1 Quality assurance system

Monitoring of the educational programme is carried out at all levels, a multi-level approach is used, including the major/graduating and related specialties, EMC, AB, student government, the Center for Admission and Career Guidance of Students (general monitoring of the quality of educational programmes through a survey of stakeholders (employers, professional associations and students). The EP on 7R01115 "Radiation Oncology" created by a group of authors was reviewed and approved at a meeting of the education department. Subsequently, the residency programme was approved at a meeting of the Educational and Methodological Council (minutes No.2, 20.04.2023).

In accordance with the Law of the Republic of Kazakhstan dated July 27, 2007 No.319-III "On Education (as amended and supplemented as of July 7, 2020)", "Rules for the competitive replacement of vacant positions of teaching staff and research workers of the NSOC", the Center has a quality control system for educational and methodological documentation, including the content of educational programmes.

In order to monitor the implementation of the EP and as problems are identified, including those related to resource provision, the Center approves and updates the following documents (link: Regulation on monitoring and evaluation of the EP).

The educational organization regularly collects feedback from faculty, postgraduate doctors, employers. Feedback, including from consumers, is maintained in each structural division, where there is a box for complaints and suggestions, there is a log of improvement of activities, which records all discrepancies and the implementation of corrective actions. Feedback on the EP in specialty 7R01115 "Radiation Oncology" in the CPE is carried out once a year, the head of the CPE is responsible for collecting and processing the results of the discussion. A questionnaire has been developed to assess the effectiveness of the administrative structural divisions, heads of centers and structural divisions of the Center. The results of all surveys are discussed at meetings of the EMC.

The results of the assessment are heard at meetings of the EMC and the AB, published on the official website of the organization. When interviewing postgraduate doctors, it was possible to obtain information on the actual participation of postgraduate doctors' representatives at the EMC meeting in the discussion of issues related to the EP.

The educational organization has approaches to involving teachers and postgraduate doctors in the assessment of the educational programme and monitoring its implementation. All interested parties (teaching staff, postgraduate doctors, employers) are involved in the programme assessment process through representation in the relevant structures. The work of all structures ensuring the implementation and assessment of the educational programme is regulated by the Charter of the NSOC, the strategic development plan, annual plans and reports.

The analysis of the questionnaires is carried out by the CPE, the results of the questionnaires are posted on the website and discussed at meetings with the teaching staff and structural divisions, students.

The interview with three employers was conducted online and included questions such as: knowledge of the mission of the NSOC, 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 postgraduate doctors, participation in training postgraduate doctors through

mentoring, providing the department and postgraduate doctors with the necessary resources for practical training and the formation of clinical thinking, problems of interaction with the educational organization as a whole, 100% employment of residency graduates, etc.

7.2 Patient safety

The NSOC has implemented a quality assurance system aimed at improving patient safety and reducing the frequency of medical errors committed by postgraduate doctors during postgraduate learning. The system was developed taking into account international standards for the quality of medical care, as well as with a focus on creating a safe and learning environment in which errors are viewed as a source for learning, analysis and improvement, and not solely as a reason for punishment. Errors and clinical cases with risk to the patient are discussed in the format of analyses (morbidity and mortality conferences) and situational analysis, under the guidance of teachers and supervisors.

Patient safety in the clinical environment:

- Postgraduate doctors are allowed to independently perform medical procedures in stages, depending on the level of training, under the constant supervision of certified professionals.
- All clinical actions, especially in emergency or high-risk situations, are pre-trained in simulation centers or under direct supervision.
- Before each stage of practice, postgraduate doctors undergo briefings on patient safety, biosafety and prevention of medical errors.

Thus, the educational organization considers patient safety and error prevention as key components of the postgraduate training system. Creating an environment that promotes open discussion, support and analysis of errors forms a culture of responsibility, professional reflection and focus on continuous improvement of the quality of medical care in postgraduate doctors.

Conclusions of the EEC by criteria. Compliant out of 9 standards: fully - 8, partially - 1, do not comply - 0

Recommendation for improvement:

- 1) Identify a responsible person from the existing staff or provide a staff unit in the existing audit department to ensure quality control of the educational process in residency (Standard 7.1).

Standard 8: GOVERNANCE AND ADMINISTRATION

8.1 Governance

Residency training is carried out in accordance with the requirements of such regulatory rules regarding the admission of postgraduate doctors as the State Compulsory Educational Standard 2022. The assessment of knowledge and skills is carried out on the basis of uniform criteria and indicators included in the fund of assessment tools of the EP, using various forms of assessment: formative, midpoint and summative. To implement the educational programme, the educational organization has an organizational structure in which the educational sector is represented by the Postgraduate Education Center of the NSOC. The experts familiarized themselves with the documents on the completion of training of postgraduate doctors, including the transcript. Students who have mastered the residency EP in the specialty 7R01115 "Radiation Oncology" and successfully passed the final certification are issued a state-issued document on the assignment of the qualification of a radiologist.

The NSOC has developed and approved the main internal document defining the range of responsibilities and powers in relation to the residency EP, including the procedure for admitting citizens to the residency - "Academic Policy". Interested parties are informed about the programme through discussions at the EMC.

8.2 Shared governance

The responsibilities and duties of the management and staff for postgraduate medical education are defined and assigned to the Deputy Chairperson of the Board, O.V. Shatkovskaya, and are fixed in the organizational structure of the NSOC. Transparency of governance and decision-making in the

educational process is ensured through annual review and approval of the Academic Policy, which regulates in detail the rights, duties, and responsibilities of postgraduate doctors and the administration.

The educational organization evaluates the management of the educational process and staff in relation to the achievement of the residency programme mission, the expected intended learning outcomes by conducting feedback with postgraduate doctors and faculty (see Section 7.2 of the report). The heads of administrative divisions report at the operational meetings and at the Academic Board. The reports of the deputies are heard at meetings of the Academic Board. The Deputy Chairperson of the Board reports at an extended meeting of the Academic Board of the Center.

In response to the survey question “Do the organization’s management listen to your opinion regarding issues related to the educational process, R&D and clinical work?”, 52.17% of teachers responded that they do so systematically, while 34.78% responded “sometimes.” In response to the survey question “Do you think that this survey is useful for developing recommendations for improving the key areas of your organization’s activities?”, 69.57% of teachers responded that they agree, while 17.39% responded “sometimes.”

8.3 Postgraduate doctor and staff representation

The following consultative and advisory bodies operate in the educational organization: the Educational and Methodological Council and the Academic Board. Postgraduate doctors of the first year, representatives of employers and employees of the NSOC participating in the educational process take part in the work of the Educational and Methodological Council. Mechanisms for encouraging postgraduate doctors for social work include letters of gratitude and letters of recognition, publications about the successes of postgraduate doctors, taking into account social activity when forming an individual rating, recommendations and characteristics when applying for a job. When interviewing postgraduate doctors, experts received comprehensive answers about the role of postgraduate doctor representation in the advisory bodies of the Center. They took part in the discussion of the mission of the EP, as well as issues related to the educational process and the approval of educational materials for residency.

8.4 Administration

Assessment of the educational programme, aimed at special components of the educational programme, is carried out by the CPE and the EMC. One of the important strategic areas is to improve the efficiency of the governance system, which is defined in order to ensure the effective functioning of quality management. Target indicators, direct results indicators, activities to achieve results and ensure quality are detailed in the Strategic Development Plan of the NSOC. Internal assessment of the quality of education is implemented in the processes of self-certification within the framework of state certification, internal audit, self-assessment (accreditation), data collection and programme evaluation. However, there is no proper monitoring of educational activities in the context of quality management.

The Department of Strategic Development and Quality Management System is responsible for the implementation and monitoring of the QMS.

The teachers are aware of the QMS, which is confirmed during their interviews.

Assessment of the administration and governance of the educational process as a whole and the educational programme of residency in the specialty 7R01115 "Radiation Oncology" is carried out by questioning the teaching staff and employees of LLP “NSOC” in order to study the satisfaction of the needs and expectations of consumers on a regular basis by the educational center and departments, and the results demonstrate such achievements as high satisfaction of postgraduate doctors with the quality of educational programmes, the availability of educational materials and the effectiveness of interaction with teachers. The results also indicate a positive assessment of the organization of the educational process, including practical training and scientific activity, which was confirmed during a meeting with postgraduate doctors and teaching staff, that learners have a direct interest in the implementation of the educational programme. And they regularly participate in surveys, for example: the questionnaire "Teacher through the eyes of students" and other questionnaires, including questions about the expectations and actually obtained competencies of students, about the environment for

implementing the educational programme, the availability of information resources and conditions, which is subsequently taken into account when monitoring the educational programme.

Conclusions of the EEC by criteria. Comply out of 7 standards: fully - 6, partially - 1, do not comply - 0

Recommendation for improvement:

- 1) Include a representative office of postgraduate doctors and employers in the Academic Board of the NSOC (Standard 8.3).

CONCLUSION: during the external assessment of the educational programme, it was found that out of 109 standards, 106 accreditation standards demonstrate full compliance. 3 substandards are partially fulfilled. Non-compliance with standards was not found.

Considering that the primary accreditation of the educational programme in the specialty 7R01115 "Radiation Oncology" is being carried out and the admission of postgraduate doctors is planned for 2025, in compliance with the requirements of the Law on Education of the Republic of Kazakhstan, the educational organization initiated specialized (programme) accreditation without the presence of postgraduate doctors. Therefore, the tasks of the external expert commission included assessing the readiness of the NSOC to accept postgraduate doctors, studying the existing principles and approaches to training postgraduate doctors, mechanisms for ensuring the quality and governance of the residency educational programme using the example of other educational programmes, as well as the provision of the "Radiation Oncology" programme with resources (material, methodological, educational, clinical). Nevertheless, the EEC specifically studied the organization of learning in the specialty 7R01115 "Radiation Oncology", including documentation, teaching staff, educational resources and other important issues related to compliance with standards for accreditation.

The EEC came to the conclusion that, along with the achievements in the training of postgraduate doctors, including the expected effectiveness of learning in the accredited educational programme 7R01115 "Radiation Oncology", there are a number of comments that the NSOC must eliminate within the 3-4 quarter of 2025.

5. Recommendations for improvement of the educational programme 7R01115 "Radiation Oncology"

1. Ensure the invitation of foreign visiting professors within the framework of organizing the learning of postgraduate doctors in the specialty "Radiation Oncology" to expand the knowledge and skills of students and exchange experience (Standard 6.3.)
2. Determine the responsible person from the existing staff or provide a staff unit in the existing audit department to ensure quality control of the educational process in residency (Standard 7.1).
3. Include representation of postgraduate doctors and employers in the Academic Board of the NSOC (Standard 8.3).

6. Recommendation to the ECAQA Accreditation Council

The EEC members established the compliance of the residency educational programme in the specialty 7R01115 "Radiation Oncology" with the Standards for Accreditation and came to a unanimous opinion to recommend the ECAQA Accreditation Council to accredit this programme for a period of 5 years

	Full name
Chairperson	Kabildina Nailya Amirbekovna
International expert	Stanzhevsky Andrey Alekseyevich
Academic expert	Shabdarbayeva Darya Muratovna
Academic expert	Urazayev Olzhas Nurlanovich
Expert-employer	Bibekov Zharas Zhanuzakovich
Expert-student	Turarova Akbota Maratkyzy
ECAQA Observer	Umarova Makpal Aldibekovna

6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу **7R01115 «Онкология радиационная» ТОО «Национальный научный онкологический центр»** на период 5 лет.

Председатель
ВЭК

КАБИЛДИНА НАЙЛЯ АМИРБЕКОВНА

Международный
эксперт

СТАНЖЕВСКИЙ АНДРЕЙ АЛЕКСЕЕВИЧ

Академический
эксперт

ШАБДАРБАЕВА ДАРИЯ МУРАТОВНА

Академический
эксперт

УРАЗАЕВ ОЛЖАС НУРЛАНОВИЧ

Эксперт-
работодатель

БИБЕКОВ ЖАРАС ЖАНУЗАКОВИЧ

Эксперт- резидент

ТУРАРОВА АКБОТА МАРАТҚЫЗЫ

Приложение 1.

Профиль качества и критерии внешней оценки образовательной программы (обобщение)

2	Критерии оценки	Количество стандартов	Оценка		
			Полностью соответствует	Частично соответствует	Не соответствует
1.	МИССИЯ И ЦЕННОСТИ	6	6		
2.	ОБРАЗОВАТЕЛЬНАЯ ПРОГРАММА	28	28		
3.	ОЦЕНКА РЕЗИДЕНТОВ	15	15		
4.	РЕЗИДЕНТЫ	19	19		
5.	ПРЕПОДАВАТЕЛИ И КЛИНИЧЕСКИЕ НАСТАВНИКИ	8	8		
6.	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ	15	14	1	
7.	ОБЕСПЕЧЕНИЕ И УЛУЧШЕНИЯ КАЧЕСТВА ПОСЛЕДИПЛОМНОЙ ПОДГОТОВКИ	10	9	1	
8.	УПРАВЛЕНИЕ И АДМИНИСТРИРОВАНИЕ	8	7	1	
		109	109		

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

№	Наименования документов	Количество
1.	Устав	1
2.	Организационная структура центра	1
3.	Положение о Ученом Совете	1
4.	Положение об отделе науки и образования	1
5.	Протоколы утверждения основных методических материалов по НПП	6
6.	Протокол, который свидетельствует об утверждении миссии и образовательных программ	1
7.	Положение о проведении повышения квалификации, семинаров и обучающих модулей в дополнительном образовании	1
8.	Утверждение образовательной программы	3
9.	Утверждение миссии образовательной деятельности АО КазНИИОиР	3 (на казахском языке, на русском, на англ)
10.	Меморандумы с зарубежными организациями	5
11.	Портфолио резидентов	4
12.	Научная работа резидентов	1 папка
13.	Документы ППС (портфолио)	14
14.	контрольно-измерительные средства – тесты, ситуационные задачи, экзаменационные билеты, силлабусы	3 папки
15.	Рецензии на КИС	10
16.	Рецензии на ОП	9
17.	Каталог элективных дисциплин	на 2 специальности
18.	СОП ИГА, Перезачета кредитов, текущий контроль, промежуточная и итоговая аттестация	4
19.	Анкеты и результаты опроса работодателей и слушателей по вопросам модификации образовательных программ и удовлетворенности образовательным процессом	2 папки
20.	Кодекс чести ППС	1
21.	Кодекс чести обучающихся	1