To the Accreditation Council of the Eurasian Center for Accreditation and Quality Assurance of Education and Health Care May 12, 2025

REPORT OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE ASSESSMENT OF THE EDUCATIONAL PROGRAM OF THE SPECIALTY 7R01150 "PATHOLOGICAL ANATOMY" OF THE LLP "NATIONAL SCIENTIFIC ONCOLOGY CENTER" FOR COMPLIANCE WITH THE ACCREDITATION STANDARDS OF POSTGRADUATE EDUCATION PROGRAMS (SPECIALTIES OF RESIDENCY) OF MEDICAL EDUCATIONAL ORGANIZATIONS

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

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LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Explanation		
SCES	state compulsory educational standard		
Department	Center for Postgraduate Education of the LLP "National Scientific Oncology		
	Center"		
DLT	distance learning technologies		
FC	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		
MON RK	Ministry of Education and Science of the Republic of Kazakhstan		
NSCOT	National Scientific Center of Oncology and Transplantology		
RSCEMC	Republican Scientific Center of Emergency Medical Care		
PGE	postgraduate education		
AT	advanced training		
CC	certification course		
TS	teaching staff		
EP	educational programs		
WC	working curriculum		
NCIE	national center for independent examination		
QMS	quality management system		
IWRT	work of a resident physician under the supervision of a clinical mentor during		
	the period of clinical activity of a resident physician		
IWR	independent work of a resident physician		
EMC	educational and methodological council		
GPA	Grade Point Average - the arithmetic mean of the grades received for all		
	courses taken, taking into account the time spent on them		

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 program of residency in the specialty 7R01150 - Pathological anatomy in the period from April 28 to 29, 2025, in the following composition:

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". Oncosurgeon.
2	International Expert	Stanzhevsky Andrey Alexeyevich	Doctor of Medical Sciences, Deputy Director of the 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 Dariya 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 and Production Center of Transfusiology"
12	Student Expert	Turarova Akbota Maratkyzy	First-year resident 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 program 7R01150 - Pathological Anatomy for compliance with the Accreditation Standards for postgraduate education programs (residency specialties) of medical educational organizations (updated based on the Standards of the World Federation for Medical Education 2023) and conclusions (hereinafter referred to as the Accreditation Standards), EEC recommendations for further improvement of approaches and conditions for the implementation of the above-mentioned educational program 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 program in the specialty 7R01150 - Pathological Anatomy

Name of the organization, legal form	LLP "National Scientific Oncology Center"
of ownership, BIN	BIN 1807400003103
Management body	Chairperson of the Board
Full name of the first director	Burkitbayev Zhandos Konyssovich
Date of establishment	from May 11, 2018 under No.255
Location and contact details	The Republic of Kazakhstan, 010000
	"Nura" district, Astana
	Kerey st., Zhanibek khandar, 3
	Tel.: +7 (7172) 70 29 59
	E-mail: kense.777@mail.ru
State license for educational	License No.KZ59LAA00035999 dated 14.12.2023
activities in residency (date, number)	
Year of commencement of the	Start year - 2025 Total number of graduates since the
implementation of the accredited	beginning of the residency programs - none.
educational program (EP)	
Duration of study	2 years
Number of residents in the current	-
academic year	N. 1 C '1 (' 1 !! 22 !! 11 1
Quality indicators in residency	Number of residents in the "_23_" programs expelled over a
	period of 5 years - 0, including for poor academic performance - 0 people.
Evil time to all angle out time vyoulrang	Total number of teachers - 5, including full-time - 5, part-time
Full-time teachers/part-time workers involved in the implementation of	- 0, teacher-mentors (clinical) - 5.
the EP, including % of degrees	Proficiency, % - 20%
the Ei, including 70 of degrees	Categorization, % - 100
Website	Instagram account –
Instagram	https://www.instagram.com/astana.nroc/.
Facebook with active pages	Facebook account - https://
1 acces on with monve puges	https://www.facebook.com/astana.nroc
	Official website: http://cancercenter.kz
	1

2.2 Information on previous accreditation

To date, the residency educational program in the specialty 7R01150 – Pathological anatomy has not been accredited.

$2.3\,$ Brief description of the results of the analysis of the self-assessment report of the educational residency program in the specialty 7R01150 - Pathological anatomy and conclusions on completeness

The self-assessment report of the educational residency program in the specialty 7R01150 - Pathological anatomy is presented on 132 pages of the main text, annexes and tables on 26 pages, copies or electronic versions of 15 documents located at the link https://drive.google.com/drive/folders/1a4vIoc3nt7cSuX6csABODSns51qN4x p

The report is characterized by the completeness of answers to all 9 main accreditation standards and criteria, structuring taking into account the recommendations of the Guidelines for conducting self-assessment of the educational program provided to the educational organization by the

accreditation center - ECAQA, as well as the 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 accuracy 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 program - Zhukubayeva Almira Assetkyzy - Head of the Center for Postgraduate Education.

Self-assessment of the educational program 7R01150 - Pathological anatomy was carried out on the basis of the order of the Chairperson of the Board under No.111 dated 12.03.2025 "On preparation for specialized accreditation of residency educational programs".

All standards provide the actual practice of the Center for training residents in the specialty 7R01150 - Pathological Anatomy, taking into account the start of student admission in the 2025-2026 academic year, substantiated data, examples of the implementation of the educational program objectives, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is quite complete and updated in terms of the number of residents, teachers, administration, information on selection and admission, training results, knowledge and skills assessment results, the material and technical resource of the university and clinical sites, contractual obligations with partners (universities, associations, bases), financial information, development and improvement plans.

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, the tables contain links in the text and are numbered continuously.

3. Description of the external expert assessment

The external expert work within the framework of the assessment of the educational program 7R01150 – Pathological anatomy was organized in accordance with the Guidelines for the external assessment of educational organizations and educational programs of the ECAQA. 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 residents 38 people, including foreign (none);
- study of the website https://ksph.edu.kz/;
- interviews 25 employees, 29 teachers, 10 mentors;
- survey of teachers and residents __37__ and __37__, respectively (residents 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 residents with patients, resources for training, etc.);
 - review of resources in the context of fulfilling accreditation standards: structural and clinical divisions were visited practice/clinical training, including the proton center, the radionuclide division, where training 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 residents for this specialty. Considering that the admission of residents is planned for the new academic year, NSOC cannot accept full-time teachers, since it will be necessary to provide for the costs of paying 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 examined is in **Annex 2**).

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

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

No.	Position	Quantity
1	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	1
	Oncology Service	
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	1
	Nuclear Medicine	
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	1
	and Translational Oncology	
21	Pathologists	5
22	Head of the Center for Oncohematology and bone marrow transplant	1
23	Resident in the specialty of Gastroenterology for adults and children	7
24	Resident in the specialty of Angiosurgery for adults and children	13
25	Resident in the specialty of Anesthesiology and Resuscitation for adults	10
	and children	
26	Resident in the specialty of Hematology for adults	16
27	Resident in the specialty of General Surgery	17
28	Resident in the specialty of Oncology for adults	13
29	Resident in the specialty of Radiology	18
29	Resident in the specialty of Urology and Andrology for 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 UMC Kostanay Branch	1

33	Teacher, Head of the Simulation Center	1
34	Graduates of the NSOC residency	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. A final discussion of the results of the external assessment of the educational program, examination of documents, interview results, questionnaires was held. The EEC members began drafting the final report of the EEC. Generalizations of the external assessment results were made. The experts individually filled out the "Quality Profile and Criteria for External Assessment of the Educational Program 7R01150 - Pathological Anatomy for Compliance with the ECAQA Accreditation Standards". The EEC members did not make any comments. Recommendations for improving the educational program were discussed and the chairperson, Kabildina Nailya Amirbekovna, held a final open vote on the recommendations for the ECAQA Accreditation Council.

Comfortable conditions were created for the EEC work, access to all necessary information and material resources was 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 residents, 97.3% rated the work of the External Expert Commission for Accreditation as positive, 2.7% - as satisfactory. The majority of respondents (86.49%) believe that it is necessary to conduct accreditation of an educational organization or educational programs.

According to 83.78% of teachers, the survey conducted by the ECAQA is useful for developing recommendations for improving key areas of activity of the accredited educational organization.

At the end of the visit program, the EEC chairperson 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 accreditation standards based on the results of external assessment of the residency educational program in the specialty 7R01150 - Pathological Anatomy

Standard 1: MISSION AND VALUES

1.1 Mission statement

The mission of the residency educational program in the specialty 7R01150 "Pathological Anatomy" was developed taking into account the analysis of the current state of the healthcare system of the Republic of Kazakhstan, the requirements for specialists in the field of pathological anatomy, as well as the prospects for the development of medical education within the integrated academic healthcare system of the Republic of Kazakhstan. In the context of the growing importance of accurate morphological diagnostics for clinical medicine and science, the priority strategic direction of the program is the training of highly qualified specialists with advanced knowledge and practical skills in the field of pathological anatomy, which requires successful integration of research, educational and diagnostic activities. The mission of the program is clinical training of a specialist capable of conducting intravital and postmortem pathoanatomical examinations in order to establish a diagnosis of a disease and obtain data on the cause of death, examination and quality of medical services. Possessing practical skills in histological processing (cutting) and morphological analysis of biopsy material, including pathomorphological examination of oncological material.

During the implementation of the program activities, namely, following the results of an interview with the first head of the organization, members of the advisory body of the educational and methodological council, the Academic Council, in an interview with residents and teachers, compliance with the criteria of **Standard 1** was established. All participants in the educational process know the mission of the educational program, took part in the formation of proposals for formulating the mission, while the mission was communicated to potential residents through the website (http://cancercenter.edu/kz - Home page - About us), social networks, information letters to medical organizations. The strategic plan of the NSOC for 2024-2028, agreed with the Ministry of Healthcare

of the Republic of Kazakhstan and approved by the decision of the Supervisory Board of the NSOC dated August 16, 2024, was reviewed. It includes such areas as training competitive healthcare specialists in sought-after specialties and specializations, improving the quality of educational programs, agreed upon by the top management and employees of the Center directly involved in the process of their development, in the main areas of activity, development of the university as an integrated medical center operating on the basis of the trinity of education, science and practice, which confirms the fulfillment of the accreditation standard and demonstrates the goals, objectives and prospects of the organization. From interviews with residents, it was established that before the start of classes, teachers inform them about the mission of the EP, the work plans of the NSOC, and also indicate sources for obtaining the necessary information about the educational program, teachers and training bases.

During the visit to the divisions of the NSOC organization, experts noted the strengths of the educational organization in relation to the accredited educational program, such as: the historical reputation of the university, high qualification of the teaching staff and clinical mentors, continuity and complexity, a strong material and technical resources, financial stability, transparency of management and international quality standards.

The NSOC has divisions that are directly related to the educational program "Pathological Anatomy", which can be noted as the best practice in education, namely, the pathomorphology department, where immunohistochemical studies are carried out. This conclusion was made during a visit to this base, where the availability of all practical resources for the implementation of the educational program for residency "Pathological Anatomy" was noted. The NSOC has memorandums of cooperation with the Astana Pathological Anatomy Bureau, where students can master practical skills in autopsy of adults and children; with the Astana Institute of Forensic Expertise, where residents will master the module on "Forensic Histological Research".

The results of the documentation study demonstrate that the mission of the organization and the mission of the educational program "Pathological Anatomy" are built in accordance with the State Compulsory Educational Standard and current regulatory legal acts (RLA) in postgraduate education and healthcare. The mission of the educational program in the specialty 7R01150 - "Pathological Anatomy" is aimed at implementing the mission of the NSOC, through clinical training of a specialist capable of conducting intravital and postmortem pathological anatomical studies in order to establish a diagnosis of a disease and obtain data on the cause of death, examination and quality of medical services. Possessing practical skills in histological processing (incisure) and morphological analysis of biopsy material, including pathomorphological examination of oncological material. At the same time, during meetings with the management, administration, teachers, residents, the experts identified a number of problems related to the fact that the staffing level of the teaching staff in the specialty "Pathological Anatomy" with a scientific degree is small.

NSOC is a multidisciplinary clinic and has all clinical areas for training - inpatient care (surgical and therapeutic departments, operating unit, anesthesiology and intensive care department), outpatient clinic, diagnostic departments (radiation diagnostics, CT/MRI, X-ray department, endoscopy department, ultrasound diagnostics, functional diagnostics), pharmacy, rehabilitation and physiotherapy department, where it provides a patient-oriented approach through the integration of theoretical and practical components. The educational organization pays due attention to the safety and autonomy of patients by providing quality services.

Experts have established that residents have appropriate working conditions to support their own health, since the educational organization has created all the necessary working conditions for high-quality training, taking into account the residents' own needs, including health. The occupied area, temperature conditions, lighting, equipment of the residents' classrooms comply with sanitary and regulatory rules. There are also conditions for independent work of residents, work of residents under the guidance of teachers (mentors), rest during breaks and provision of first aid. At the clinical sites of the department, residents have the opportunity to receive hot meals, rest in their free time, work with specialized educational and scientific literature.

Such basic competencies of residents in the accredited specialty as the formation of knowledge and skills in conducting pathoanatomical examination, laboratory and instrumental studies, differential diagnostics and the choice of an effective pathomorphological study, as well as special competencies, including mastering practical skills in the specialty, help the educational organization to apply innovative forms of training. This will allow residents to develop professional qualities and achieve the final outcomes stated in the mission of the educational program in accordance with national and international requirements and needs of the healthcare sector.

NSOC encourages residents to strive to participate in research in their chosen specialty through participation in grant projects, and also ensures the participation of residents in such academic events as scientific and practical and clinical conferences. Students have the opportunity to participate in international Olympiads and conferences at the expense of the organization.

During the visit to the NSOC, experts noted compliance with the basic criteria of the accreditation Standard: the presence of a mission, strategic goals of the program, participation in the development of the mission of stakeholders (staff, teachers, residents), residents are informed of their final outcomes from the first day of classes, provided with resources and a practice-oriented educational program.

The experts determined that the formation of professionalism includes theoretical knowledge, stable practical skills, work with scientific literature. The organization of education promotes the professional autonomy of residents by providing them with academic freedom. Freedom is provided in drawing up an educational program, which is achieved through a university component and elective disciplines that are developed taking into account the specifics and focus, strengths of the teachers/mentors of the NSOC. The residency program in the specialty "Pathological Anatomy" at the NSOC is aimed at developing comprehensive professional competencies in future specialists, including deep theoretical knowledge, advanced diagnostic skills and practical experience in a multidisciplinary medical center.

The experts have established that the educational organization fully exercises autonomy in relation to the selection of residents for the accredited specialty "Pathological Anatomy", the development of the educational program, the determination of approaches to the assessment of residents, since the NSOC has autonomy in determining the content and form of the entrance examination in the specialty, the selection of persons included in the examination and appeal committee, while observing the requirements for the number of examiners and compliance with the profile of the residency specialty. This is regulated by the internal document Rules for Admission to Residency (link: Rules for Admission to Residency), which determine the procedure for admission to residency.

The responsible employees demonstrated to the experts a document defining the requirements for the residency program teachers (link: <u>Academic Policy of LLP NSOC</u>. Employment of residents is regulated.

To verify **Standard 1** a meeting was held with the heads of the organization: Deputy Chairperson of the Board for Medical Activities Mukazhanov A.K., the administration of NSOC - Shalekenov S.B., Shatkovskaya O.V. During the conversation, the experts asked the following questions: what is the vision of the implementation of the EP in the context of the scientific component, what is the resource provision of the EP, does the mission of the center and EP 7R01150 "Pathological Anatomy" meet the needs of practical healthcare in the regional aspect. During the answers, confirmation was received that the National Scientific Oncology Center has created the necessary conditions for the implementation of the program 7R01150 "Pathological Anatomy". Deputy Director of the organization Shatkovskaya O.V. confirmed that, based on the principle of the trinity of education, science and clinic Residents of the specialty "Pathological Anatomy", taking into account the patient-centered approach, will be trained under the guidance of clinical mentors professionally in the Center, where all the conditions for the educational process are available, as well as at clinical sites with which Memorandums of mutual cooperation have been concluded.

The academic freedom of residents is manifested in the choice of elective disciplines, the

introduction of proposals for updating the EP is ensured by the educational organization through such mechanisms as holding a round table with employers, on the basis of which an annual update of the catalog of elective disciplines is carried out, which is described in the document "Academic Policy" of the NSOC.

When conducting a survey of 15 residents (on the resource https://webanketa.com/), out of 22 questions, a number were devoted to the quality of the educational process and the educational program. It was found that 80% of residents will recommend studying in this educational organization to their acquaintances, friends, relatives. And 73.33% of respondents believe that the heads of the educational program and teachers are aware of the problems of students related to training. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", 80% of residents answered positively.

The 23 teachers surveyed (question 23 of the questionnaire) also answered that 86.96% are satisfied with the organization of work and the workplace in this educational organization and 8.7% partially agree with this statement. The experts determined that the organization has a healthy microclimate, since the head is quite accessible to both residents and employees, responds promptly to applications and suggestions. In the questionnaire, 86.96% of teachers are satisfied with the microclimate of the organization and 8.7% are partially satisfied. According to 86.96%, in the educational organization, the teacher has the opportunity to realize himself/herself as a professional in his/her specialty. For your information, a total of 23 people responded. At the same time, 52.17% had up to 5 years of teaching experience, 17.39% had up to 10 years, and 30.43% had over 10 years of teaching experience.

1.2. Participation in formulating the mission

The mission, vision and main strategic principles are reflected in the Strategic Plan of the NSOC for 2024-2028, agreed upon with the Ministry of Healthcare of the Republic of Kazakhstan and approved by the decision of the Supervisory Board of the NSOC dated August 16, 2024.

The mission and final learning outcomes of the residency EP in specialty 7R01150 "Pathological Anatomy" are formulated taking into account the analysis of the current state of the healthcare system of the Republic of Kazakhstan, the requirements for specialists in the field of pathological anatomy, as well as the prospects for the development of medical education within the framework of the integrated academic healthcare system of the Republic of Kazakhstan and are developed based on the Professional Standards in the Field of Healthcare (https://adilet.zan.kz/rus/docs/G24RR000046). The final learning outcomes are defined and included in the document - the Educational Program, which was developed on August 29, 2024 and approved by the EMC and the Academic Council. The EP is developed by the teaching staff and at meetings of collegial bodies, which include representatives of practical healthcare, the Employers' Council, the Educational and Methodological Council (Minutes of the Meeting of the Educational and Methodological Council dated 20.04.2023) and approved at a meeting of the Academic Council (Minutes of the Meeting of the Academic Council dated 27.01.2025 No.039). Informing interested parties about the final learning outcomes of residents in the specialty 7R01150 "Pathological Anatomy" is carried out by posting the educational program on the official website of the Center, by mailings, etc. All interested parties (university employees, residency graduates, healthcare and education authorities, healthcare organizations, employers, professional medical associations, the public) participate in the discussion of the final outcomes, taking into account their proposals.

When forming the organization's mission, the following state documents in the field of healthcare, as well as departmental regulatory legal acts (hereinafter referred to as RLA), were taken into account: Code of the Republic of Kazakhstan dated July 7, 2020 No.360-VI ZRK "On Public Health and the Healthcare System" https://adilet.zan.kz/rus/docs/K2000000360; Resolution of the Government of the Republic of Kazakhstan dated October 5, 2023 No.874 "On approval of the Comprehensive Plan to Combat Cancer in the Republic of Kazakhstan for 2023-2027" https://adilet.zan.kz/rus/docs/P2300000874 and others.

Teachers and residents are informed about the code of ethics. NSOC by the decision of the Supervisory Board of NSOC dated October 31, 2019 approved the Code of Business Ethics of NSOC, which serves as the basis for the formation of proper morality in the team, respectful attitude towards each other and towards patients.

The Code of Business Ethics was developed in accordance with the Code of Honor of Medical and Pharmaceutical Workers (Article 184 of the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System" dated September 18, 2009), the current legislation of the Republic of Kazakhstan, taking into account recognized international standards of business conduct, on the basis of the Charter and other internal documents in NSOC.

When determining the final learning outcomes, the employees of the education department 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 continuous professional development in the chosen specialty. The educational organization provides training in additional and non-formal education (continuous professional development), including programs in the specialty of the accredited educational program.

The surveyed teachers answered that 69.57% are fully satisfied with the level of previous training of residents and 30.43% are partially satisfied.

The experts established a clear continuity between the final outcomes of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 2 programs of additional education. Residents are informed about this.

83.78% of the respondent teachers believe that students of this educational organization have a high level of knowledge and practical skills after completing the training program, and 13.51% partially agree with this.

In the NSOC, all stakeholders (university employees, residency graduates, healthcare and education authorities, healthcare organizations, employers, professional medical associations, the public) participate in the formation of the mission and final training outcomes, taking into account their proposals.

The mission and final learning outcomes of the residency EP in the specialty 7R01150 "Pathological Anatomy" are formulated on the basis of the Standard for the organization of oncological care to the population in the Republic of Kazakhstan.

All stakeholders (Center employees, residency graduates, employers, professional medical associations) took part in developing the goals and objectives of the educational program, which is confirmed by the document Regulation: Educational program: development and updating, approved by the Chairperson of the Board dated August 29, 2024. Since the EP is focused on the expectations of the employer and the needs of the labor market, the elements of the EP and the CED are agreed upon with employers. Employers and members of professional associations are involved in reviewing the EP and participating in the discussion of the results at meetings of the commission to ensure the quality of the EP.

Such proposals were made as strengthening the final learning outcomes of residents in clinical skills, knowledge of legal aspects, the ability to work in an information system and the development of communication skills. When updated regulatory legal acts and orders in education and healthcare are released, the developers of the educational program take into account proposals from the Council of Employers and Residents and make appropriate changes. For example, based on suggestions from employers, the following elective disciplines were included in the EP: "Artificial Intelligence in Nuclear Medicine", At the same time, when talking with residents 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 program?", "What is the personal contribution of residents to improving the educational program?" Residents answered these questions by giving suggestions for the electives "Clinical Research in Nuclear Medicine", and employers responded as follows: in order to achieve the final learning outcomes, resident doctors have the opportunity to practice practical skills at the NSOC

with direct participation in diagnostic procedures and treatment of patients on modern equipment, under the supervision of a clinical mentor. The psycho-emotional status of residents is excellent, residents are satisfied with the clinical site and mentors.

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

Standard 2: EDUCATIONAL PROGRAM

2.1 Educational program and certification

The educational program for the specialty 7R01150 "Pathological Anatomy" is compiled in accordance with the State Compulsory Educational Standard and the Technical Regulations of the Ministry of Healthcare of the Republic of Kazakhstan. All procedures for approving educational program 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 Qualification Framework in the European Higher Education Area. Also, when developing the educational program for the residency in the specialty "Pathological Anatomy", the "Professional Standard of Healthcare Specialists" was used as a basis, in accordance with Annex 34 of Order No.46 of the Minister of Healthcare dated January 25, 2024.

The model of the educational program for the specialty 7R01150 "Pathological Anatomy" is determined on the basis of the final learning outcomes of residents, therefore it includes a mandatory component and an optional component. The content of the academic disciplines of the mandatory component is strictly regulated by the State Compulsory Educational Standard 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 program. The EP of the residency of the NSOC are freely available to interested parties in the Register of the Ministry of Science and Higher Education of the Republic of Kazakhstan https://epvo.kz/#/register/education_program and on the website of the NSOC (http://cancercenter.edu/kz), Instagram account — https://www.instagram.com/astana.nroc/, Facebook account - https://www.instagram.com/astana.nroc/,

The residency EP ensures the integration of practice and theory, includes the content, sequence of training of resident doctors with the definition of goals and learning outcomes based on the performance of tasks and the provision of medical care to the population. Integration of training and provision of medical services by providing medical care by resident physicians is envisaged throughout the training. The structure of the residency EP is formed from various types of educational and clinical work that determine the content of education, reflects their relationship, measurement and accounting. When forming the residency EP, the responsibility of both specialized and related disciplines for the formation of a competent graduate and the definition of competencies in each discipline are taken into account. The duration of the residency EP "Pathological Anatomy" is 2 years, 140 credits (1 year is 70 credits). The residency EP includes theoretical training (classroom work) in the amount of 20%, clinical training under the supervision of a mentor in the amount of 65%, independent training of the resident in the amount of 15% of the total curriculum.

The systematicity and transparency of training is guaranteed by the fact that the EP of the NSOC residency is freely available to interested parties in the Register of the Ministry of Science of Higher Education of the Republic of Kazakhstan https://epvo.kz/#/register/education_program and on the NSOC website (http://cancercenter.edu/kz), Instagram account – https://www.instagram.com/astana.nroc/, Facebook account - https://https://www.facebook.com/astana.nroc.

NSOC residents, starting from the first days of training, are actively involved in the practical part of the training, work under the guidance of a mentor, supervising doctors, are actively involved in the process of diagnosing pathological conditions and diseases. In addition, at the end of the discipline, an

assessment is filled out, where they indicate what skills, they have mastered and how often they performed them.

During independent work, the resident physician masters and consolidates knowledge of theoretical material in practice (watch, supervision of patients, mastering practical skills, work in various divisions of medical organizations, etc.); applies the acquired knowledge and practical skills to analyze the case and develop the right solution; application of the acquired knowledge and skills.

In residency in pathological anatomy, patient supervision has features that differ from clinical specialties, since the main attention is paid to morphological verification of the diagnosis. Although the anatomic pathologist does not treat the patient directly, he/she is actively involved in the diagnostic process. Supervision in this context is case management from the moment of receipt of biomaterial to the formulation of a morphological conclusion, taking into account clinical data and communication with the attending physicians.

To implement the educational program in the specialty 7R01150 "Pathological Anatomy", 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 curriculum and work programs of disciplines: contain a detailed description of the disciplines, their goals, objectives and expected learning outcomes. Practice of ensuring compliance of the residency program with the requirements of state educational standards and professional associations. The educational program is periodically analyzed and updated taking into account changes in the State Compulsory Educational Standards, professional standards and recommendations of professional associations. Residents are given the opportunity to choose for in-depth study of certain aspects of pathological anatomy, "Immunohistochemical studies" and "Digital pathology". Additional educational activities: organization of master classes, seminars and conferences with the participation of leading specialists in the field of pathological anatomy.

NSOC ensures compliance with ethical aspects in the implementation of the educational program, since experts have studied the code of ethics, which is spelled out in the document Code of Ethics. Analysis of educational activities showed that the scientific basis and all scientific achievements in the relevant disciplines are taken into account, but insufficient additions have been made to the bibliography of the teaching materials and syllabuses. At the same time, teachers use the latest scientific achievements and current clinical protocols of the Ministry of Healthcare of the Republic of Kazakhstan in their classes. Independent work involves independent search for information, analysis of information, writing a report on the work done and forming a report for discussion in a group. When compiling the topics of independent work of residents, the most pressing issues of healthcare and medical education, as well as the opinion of employers and residents, are taken into account. The practical part is the main link between classroom work and independent work of students at the NSOC. The practical part is conducted in accordance with the work programs.

Successful acquisition of practical skills at the Center is facilitated by their organization, management and methodological support. Practical classes are conducted under the supervision of a teacher/clinical mentor.

The mentoring system described in the document "Regulations on the Clinical Mentor" order No.262-OD dated 12.09.2022 and the "Rules for the assessment of academic achievements" approved by order under No.58-OD dated 05.03.2020 has been assessed. Upon admission, resident doctors are familiarized with the academic policy and IRD of the NSOC and are obliged to comply with all its rules. Mentors are assigned to a specific resident during the resident's rotation in a given division of the clinical site, which allows them to support the resident's practical training.

The procedure for informing residents about their rights and responsibilities is reflected in the document "Academic Policy" of the NSOC (approved on August 29, 2024). The qualification obtained as a result of mastering the educational program in the specialty "7R01150 "Pathological Anatomy" corresponds to level 8 of the national qualification framework (**ESG1.2**) and has the code 7R01150.

Teachers use such methods of teaching residents as seminars at the intersection of related disciplines, practical classes based on a clinical case (CBL), team-based learning (TBL), problem-based learning (PBL), the use of case problems in practical classes. The list of teaching methods is described in the syllabuses of disciplines. However, these methods are more acceptable for a bachelor's degree, and for residents, analysis through a clinical case is better. Residents can take part in pathoanatomical diagnostics, viewing microscopic specimens, participate in clinical and anatomical conferences, etc. 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 (approved on August 29, 2024). Academic honesty is applicable at such stages of resident training as practical training in hospitals and maternity institutions. And anti-plagiarism is applicable when residents are engaged in research work. Residents are trained to promptly collect informed consent from patients for any diagnostic and therapeutic procedures. Experts noted that the medical records contain a corresponding document signed by the patient.

Thus, by the end of 2 years of training, residents will acquire basic skills and abilities in the profession, which will allow them to work in such institutions as pathological anatomy bureaus, pathomorphological divisions of large medical centers, oncology centers, etc., where there are pathomorphological departments (ESG 1.2).

The experts did not find any violations regarding the principle of equality in postgraduate education and continuous 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, 169 people work in the educational organization, 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 A.A. Zhukubayeva. It is planned to train teachers and clinical mentors in modern teaching methods, assess the quality of the implementation of educational programs.

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

2.2 Final learning outcomes

The final learning outcomes are defined and included in the document of the educational program 7R01150 "Pathological Anatomy", which was developed and approved by the EMC and the Academic Council. The EP is developed by the teaching staff and at meetings of collegial bodies, which include representatives of practical healthcare, the Employers' Council, the Educational and Methodological Council and approved at a meeting of the Academic Council (Minutes of the Meeting of the Academic Council dated 27.01.2025 No.039). Informing interested parties about the final learning outcomes of residents in the specialty 7R01150 "Pathological Anatomy" is carried out by publishing on the official website of the center http://cancercenter.edu/kz. The experts were convinced that the professional behavior and communication skills of residents are formed through knowledge and compliance with the Code of Honor of Medical and Pharmaceutical Workers, developed and approved by the Ministry of Healthcare of the Republic of Kazakhstan in accordance with the implementation of paragraphs 1,2 of Article 274 of the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System" dated July 7, 2020.

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

The Code of Business Ethics was developed in accordance with the Code of Honor of Medical and Pharmaceutical Workers (Article 184 of the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System" dated September 18, 2009), the current legislation of the Republic

of Kazakhstan, taking into account recognized world standards of business conduct, on the basis of the Charter and other internal documents in NSOC.

When determining the final learning outcomes, the staff of the pathomorphology department take into account the previous learning outcomes in the bachelor's degree and internship, and also take into account the goals and objectives of subsequent continuous professional development in the chosen specialty. The educational organization conducts training in additional and non-formal education (continuous professional development), including programs in the specialty of the accredited educational program.

The surveyed teachers answered that 69.57% are fully satisfied with the level of previous training of residents, and 30.43% are partially satisfied.

The experts established a clear continuity between the final outcomes of previous training of residents (prerequisites) and training in residency, and subsequent continuous professional development programs. The organization has developed additional education programs, including for the specialty "Pathological Anatomy". Residents are informed about this.

100% of the respondent teachers believe that students of this educational organization have a high level of knowledge and practical skills after completing the training program.

2.3 Model and structure of the educational program

The content, volume and sequence of courses of the residency EP 7R01150 "Pathological Anatomy" strictly comply with the State Compulsory Educational Standard 2022. The basis for achieving the objectives of training in the specialty is the acquisition by residents of the necessary knowledge and key competencies, the core disciplines (CD) of the main component and the elective component. The Standard curriculum for the specialty 7R01150 "Pathological Anatomy" is compiled in accordance with the requirements of the State Compulsory Educational Standard (order of the of Minister Healthcare dated January 2023 under No.4. https://adilet.zan.kz/rus/docs/V2300031672), includes the core disciplines of the main component and the elective component. Changes have been made to comply with the requirements of the Order of the Minister of Healthcare of the Republic of Kazakhstan dated January 25, 2024 under No.31 "On approval of professional standards in the field of healthcare" (professional Standard "Pathological Anatomy", according to Annex 34 to this order).

Teachers provide residents 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 Almaty Oncology Center. And to the question of the questionnaire "Is there sufficient time for practical training (patient supervision, etc.)", 86.67% of residents answered with full agreement, 6.67% partially agree, 0% disagree. At the same time, 86.67% of residents 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 residents' representatives participate in the development of educational programs?", the experts received the following answer: yes, they participate in the formation of the catalog of elective disciplines. The residents surveyed are completely satisfied with the schedule of classes (97,3%).

2.4 Contents of the educational program

The educational program in the specialty "Pathological Anatomy" is compiled in accordance with the State Compulsory Educational Standards and the Technical Regulations of the Ministry of Healthcare of the Republic of Kazakhstan. All procedures for approving educational program 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 Qualification Framework in the European Higher Education Area.

The model of the educational program in the specialty 7R01150 "Pathological Anatomy" is determined on the basis of the final learning outcomes of residents, therefore it includes the following: The training consists of a main component and an elective component. The content of the academic

disciplines of the main component is strictly regulated by the State Compulsory Educational Standard and the Technical Regulations of the Ministry of Healthcare of the Republic of Kazakhstan and is reflected in the standard curricula of the disciplines of the educational program. The educational program of residency in the specialty "Pathological Anatomy" contains 8 disciplines (main component).

- 1. General and specific pathology
- 2. Forensic histological pathomorphology
- 3. Clinical pathomorphology in surgery with cytopathology
- 4. Clinical pathomorphology in therapy
- 5. Clinical pathomorphology in obstetrics-gynecology with cytopathology
- 6. Clinical pathomorphology in pediatrics
- 7. Clinical pathomorphology in oncology with cytopathology
- 8. Clinical pathomorphology in dentistry

Elective component (elective disciplines) in the specialty "Pathological anatomy":

- 1. Immunohistochemical studies in pathomorphology
- 2. Digital pathology

CED is a systematized annotated list of all disciplines of the elective component. CED provides students with an alternative choice of elective academic disciplines.

A resident physician chooses an elective discipline in the academic year to master the educational program of the corresponding level.

The elective component allows residents to create an individual trajectory. To implement the educational program in the specialty 7R01150 "Pathological Anatomy", the organization's documents contain teaching materials that 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 program, since 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, residents responded that they were informed about the content of this document.

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 Residency Department and a conversation with the head and employees. At the same time, verification of **Standard 2** showed that there are also specific features related to the specialty of "Pathological Anatomy", such as working with cadaveric material, surgical and biopsy material, etc. The Department is responsible for conducting final certification, drawing up employment contracts for graduates, etc. The Registrar's Office is responsible for registering all academic achievements of students.

The content of the EP conducted by the NSOC is compiled in accordance with the requests of learners based on the formation of their personal competencies and needs depending on their professional activities within the framework of available opportunities due to elective disciplines. Thus, continuous improvement of the EP is carried out based on applications from medical organizations. Learners are involved in the process of evaluating the EP by expressing their opinions and wishes at the end of the training course to identify opinions and take into account comments and suggestions from direct consumers. Comments and suggestions from course participants on the organization of the educational process (class schedule, etc.), training programs, the choice of topical topics and other issues directly related to the learning process can be taken into account.

The department maintains an electronic database of trained employees and specialists from other medical organizations in the country. Control and monitoring of the fulfillment of obligations to train employees is carried out, regardless of the form of training by concluding a Training Agreement. Thus, during a conversation with the management of the organization, experts received information that residents have access to patients, laboratories, work in the library, a conference room, have classrooms equipped with modern equipment, and teachers confirmed that residents are trained directly in clinical

divisions. In accordance with current agreements with clinical sites, "The Clinic undertakes to ensure access of trainees to patients and to all structural divisions of the Clinic, including basic departments, the intensive care unit and the intensive care unit. Residents 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 with residents of another specialty, due to the absence of residents in the EP "Pathological Anatomy". In a conversation with residents, experts saw that the organization promotes the development of practical competencies of residents, including on simulation equipment. At the same time, residents deepen their theoretical knowledge and develop communication skills.

Integration between training and the provision of medical care (on-the-job training) is carried out through the development of practical skills. Training is conducted in accordance with clinical protocols.

Out of the 15 residents surveyed, 80% responded that teachers use active and interactive teaching methods in classes quite often, 20% believe that they use rarely or sometimes.

The following employees took part in the planning, discussion, approval and review of the educational program in the specialty 7R01150 "Pathological Anatomy": the head of the residency program, curator, clinical mentors, employers.

2.5 Teaching methods and experience

The faculty uses such teaching methods for residents as cross-disciplinary seminars, clinical case-based learning (CBL), team-based learning (TBL), problem-based learning (PBL) and the use of case problems in practical classes. The list of teaching methods is described in the syllabuses of the disciplines. However, for teaching residents, methods such as TBL and PBL are acceptable in the bachelor's degree. In residency, a more successful method is analysis through a clinical case. 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, resident doctors are introduced to the academic policy and the internal regulatory document of the NSOC and are obliged to comply with all its rules. There are 3 mentors in total, whose tasks are: organizing and monitoring the practical activities of the resident on a clinical basis; teaching clinical thinking, decision-making and ethics of medical practice; ensuring compliance with quality standards for pathoanatomical activities; the ability to compare pathoanatomical and clinical diagnoses.

The experts found that the principles of academic honesty and anti-plagiarism are fully implemented in the educational organization. This is reflected in the document Regulations on Academic Honesty (approved on August 29, 2024). Academic honesty is applicable at such stages of training of residents as practical training in hospitals, maternity hospitals. Anti-plagiarism is applicable in the case when residents are engaged in research work. Thus, by the end of 2 years of training, residents will acquire basic skills and abilities in the profession, which will allow them to work in pathoanatomical departments of various institutions or pathoanatomical bureaus (ESG 1.2).

The experts did not establish any violations regarding the principle of equality in postgraduate education and continuous 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, 169 people work in the educational organization, of which 96% are women and 4% are men.

The educational organization has a mechanism for regular adaptation of 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 A.A. Zhukubayeva, a doctor of the highest category in public healthcare, an emergency medicine doctor, holder of a master's degree. It is planned to train teachers and clinical mentors in modern teaching methods and to assess the quality of the implementation of educational programs.

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

2.6 Implementation of the educational program and training bases

The experts familiarized themselves with the work of the divisions, including the resuscitation and intensive care department, the proton center, as well as the pathomorphology department, the library and the clinical laboratories of the Center. A total of 5 meetings were held and a cross-interview established that all residents have access to all patients, divisions of the laboratory and diagnostic service, including X-ray diagnostics, MRI and the library fund of the center.

Thus, clinical sites are selected for compliance with the residency programs by the education department, which draws up contracts with clinical sites. The lawyer of the NSOC is responsible for concluding and registering contracts with clinical sites. Clinical sites have been identified where a resident can get maximum access to pathoanatomical objects. Clinical sites are selected for compliance with the residency program by the education department, which draws up contracts with clinical sites. They are:

NJSC "Astana Medical University";

KB "University Medical Center";

RSE "Hospital of the Medical Center of the Presidential 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 Local Administration of Astana;

State-owned utility Enterprise based on the right of economic management "Multidisciplinary Regional Hospital No.3".

Center for Forensic Medical Examination

KB UMC National Medical Center for Maternal and Child Health.

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

Training of residents in the specialty "Pathological Anatomy" is aimed at meeting the needs of practical healthcare. This organization is specialized in the field of pathomorphological studies in oncopathology using immunohistochemical studies, and provides many opportunities and conditions for qualified training of specialists. Thus, during a conversation with the management of the organization, experts received information that residents have access to all pathological anatomical facilities, laboratories, work in the library, a conference room, have classrooms equipped with modern equipment, and teachers confirmed that residents are trained directly in clinical divisions. In accordance with the current agreements with clinical sites, the "Clinic" undertakes to provide access for students to all pathoanatomical facilities and all structural divisions of the Clinic. Residents of this specialty can conduct pathoanatomical studies, microscopic and immunohistochemical studies, comparison of pathoanatomical and clinical diagnoses, etc. This is facilitated by the mentoring that is carried out in the organization.

The practical lesson was provided with residents of another specialty, due to the absence of residents in the educational program "pathological anatomy". In a conversation with residents, the experts saw that the organization promotes the development of practical competencies of residents, including on simulation equipment. At the same time, residents deepen their theoretical knowledge, develop communication skills.

Integration between training and the provision of medical care (on-the-job training) is carried out through the development of practical skills. Training is conducted in accordance with clinical protocols.

Out of the 15 residents surveyed, 80% responded that teachers use active and interactive teaching methods in classes quite often, 20% believe that they use rarely or sometimes.

The following employees took part in planning, discussing, approving and reviewing the educational program in the specialty "Pathological Anatomy": the head of the residency program, curator, clinical mentors, employers.

2.7 Opportunities for scientific research and academic degrees

The educational program includes achievements of basic biomedical, clinical sciences that contribute to the formation of students' methodology of medical research, 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. Residents' research is a mandatory component of training. Young employees under 35 years of age, including residents, are members of the "Council of Young Scientists", where they are taught the skills of implementing research work. When talking to residents, the experts learned that they use scientific data in their training and know the basics of evidence-based medicine. The teachers said that they teach residents in methods of critically evaluating literature, articles and scientific data and the application of scientific developments.

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 classes.

Residents should engage in R&D and in response to the questionnaire, 46.67% wrote that they are already engaged in R&D, 13.33% are planning to start, 20% are looking for a topic for R&D, and 13.33% are not engaged.

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

Standard 3: ASSESSMENT OF RESIDENTS

3.1 Assessment policy and system

The NSOC has rules for assessing the academic achievements of students. The assessment of the academic achievements of students is carried out on the basis of the following accepted criteria. The assessment of the current academic performance of the student is carried out on a 100-point scale, of which:

Knowledge (20 points): test questions, tickets, assignments in test form, case problems, etc.

<u>Practical skills (30 points)</u>: filling out medical documentation (death certificate, autopsy protocol), performing manipulations in accordance with qualification requirements (collection and processing of various types of histological and cytological material, conducting pathoanatomical autopsies of corpses of patients of different categories (adults, children, infants), pathohistological examination of surgical and biopsy material of all categories of complexity, interpretation of additional research methods, etc.)

<u>Communication skills (20 points)</u>: communication with the patient and their relatives, employees of NSOC LLP, participation in consultations, etc.

<u>Work with medical documentation (10 points):</u> medical histories, reporting forms, journals, death certificates, autopsy protocols and other medical documentation.

<u>Self-development (20 points)</u>: use of modern sources of information (Medline Complete, Dynamed, WoS, Elsevier (Scopus), Ebsco) in medical practice, work with paper and electronic media, algorithms, SOPs of our country and other countries.

To monitor and evaluate the current academic performance of resident doctors, the SNOC uses evaluation, including an assessment, a list of practical skills. Practical skills are assessed using skill checklists.

List of practical skills (LPS) - an accounting of educational achievements aimed at mastering a minimum number of clinical skills over the entire period of study.

Summative knowledge assessment upon completion of each discipline is carried out in the form of an oral exam or in the form of testing/solving case problems.

There is an electronic database of standardized tests for all studied disciplines of the educational program. The content and number of tests cover the entire scope of the studied disciplines.

The certification policy, as well as the principles, goals, methods and practice of assessing students are described in the Academic Policy dated 10.07.2024, approved by order of the Chairperson of the Board of LLP "NSOC" under No.226.

During the interview, residents talked about the forms of assessment, for example, about assessing the performance of practical skills upon completion of the discipline, as well as assessing the quality of filling out the medical record, that they are satisfied with everything. And they also receive regular feedback from teachers. The system of appealing the assessment results is reflected in the documents "Academic Policy" and "Residency Regulation" (dated 10.07.2024). During the period of operation of the educational organization, there were no applicants for appeal. The assessment covers not only knowledge and practical skills, but also professional behavior and communication skills, which is confirmed by the following: at the end of the discipline "Pathological Anatomy", a 360-degree assessment is planned.

The criteria for admission to the final certification are the successful passing of the midterm assessment of the student, which is carried out in accordance with the academic calendar, the working curriculum and the educational program. Admission to the midterm assessment of students is carried out on the basis of the admission rating. The admission rating for the discipline must be at least 50%. The purpose of the final exam is to monitor the academic achievements of students. The main purpose of the final exam is to assess the level of mastery of the programs of academic disciplines by students. This is documented in the "Academic Policy" and the "Residency Regulations".

Admission to the independent examination of residents is the completion of the entire curriculum. Students who have no debts for the studied disciplines and for tuition fees are admitted to the FC. The final certification of residency graduates consists of 2 stages: Stage 1 - independent comprehensive testing organized by the National Center for Independent Examination; Stage 2 - minicular exam (Mini-CEX) at the clinical sites of the NSOC. Based on the results of the two stages, a final (arithmetic mean) grade is given according to the point-rating system for assessing the academic achievements of students. In the practice of the educational organization, residents (including other specialties) will take an independent examination for the first time.

Validation and reliability assessment of resident assessment methods (tests, tasks, cases) is carried out as follows: it is carried out in the form of studying and analyzing the control and measurement fund (examination questions, case problems).

The educational organization has a practice of involving external examiners in assessing residents, which is documented in the "Residency Regulations". This ensures the independence and objectivity of the assessment results.

Differentiated assessment methods are used to assess various learning outcomes, so theoretical knowledge is mainly assessed by testing, and practical skills are assessed using grade reports for each section of practical work.

When interviewing 29 teachers regarding assessment methods, experts received convincing information that tests, case problems and assessment of practical skills using checklists are used to assess knowledge. Residents in other specialties also shared their opinions on the timeliness of providing tests, conducting consultations before exams, the clarity of the entire assessment procedure and its fairness. During their visit to the clinical site, experts inspected the resources for organizing the assessment of knowledge and practical skills, namely, a sufficient number of patients, residents' access to all procedures and equipment, highly qualified teachers and clinical mentors.

The methods used to assess the competencies of residents in the specialty "Pathological Anatomy" are defined in the syllabuses for the disciplines, which are discussed and approved at meetings, EMC.

The assessment criteria are announced at the first lesson for each discipline, and are also presented in the syllabuses, the final goals or competencies that each resident of this EP must achieve and master are spelled out. The assessment criteria are directly related to the training objectives. Each stage of training allows you to assess the achievements of the final learning outcomes of the resident.

In the process of mastering the educational program, the resident is trained using the analysis of clinical cases, an archive of digital micro preparations, practical work directly with histological material of patients, etc.

The training process in residency is based on training while working with histological material of patients under the supervision of a clinical mentor, teacher, where 90% is devoted to clinical practice.

For example, such methods of current grades as the "clinical case" promote interprofessional learning. And such a method as "implementation of a practical skill" demonstrates the integration of training and an emphasis on clinical skills. Established assessment methods ensure that the resident has mastered all sections of the educational program and acquired the necessary practical skills.

Feedback from residents based on the results of their assessment is collected in the form of a questionnaire and published on the organization's website. In an interview, residents confirmed that they are provided with feedback after completing the training.

The 5 interviewed employer representatives also indicated that the training of residents corresponds to the modern development of medical practice and science, since there is high competition in the labor market and highly qualified specialists are required. Employers said that they themselves participate in the assessment of residents, since they are included in the examination committee.

The development of new control and measuring equipment is carried out by teachers through studying world experience in assessing knowledge in residency, and then implemented in the department. At the same time, no examples of test validation were provided to the experts.

Thus, to verify the *Standard 3* data, the experts asked questions to the head of the postgraduate education department, the head of the education center, Zhukubayeva Almira Asetkyzy, and checked the documents and methods for assessing residents. The following questions were asked: what assessment methods are used to monitor residents' knowledge and how are they objectively assessed?

The following grade reports have been developed at the NSOC: a mini-clinical exam, an assessment of the quality of medical records (Chart Evaluation Tool), an assessment of patient presentation skills (Patient Presentation Rating), direct observation of procedural skills (Direct Observation of Procedural Skills) and a grade report for the performance of practical skills (DOPS).

The head of the education department responded that additions and updates to the control and measuring equipment are planned to be made at the end of the academic year, given that residency training in this organization began only in the current academic year.

The results of the residents' assessment are documented as follows: the assessments are entered into the "PLATONUS" program, which creates an open system for assessing residents' knowledge. The assessment procedure is complete, accessible, and it facilitates the calculation of the resident's rating.

There is a document for appealing the assessment results - "Appeal Regulations", which was approved in 2024. To date, no appeal has been filed by residents.

During a visit to the NSOC and an interview with teacher Pak L.A., the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and staff, and includes such documents as annual operational plans, annual reports, regulations of divisions, agreements with teachers and residents, full educational and methodological documentation (EP, working curricula, syllabuses, journals), assessment tools (checklists, statements), certificates, evidences and verifications. A review of the website showed that its pages contain the necessary teaching materials for residents and that there is information that is updated regularly.

During a 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 a positive answer was received.

3.2 Assessment that promotes and supports learning (formative assessment)

During a visit to the NSOC, the EEC members confirmed that the resident assessment methods are comparable with the learning and teaching methods and cover the assessment of all student competencies both during practical classes and during exams.

Differentiated assessment methods are used to assess various learning outcomes, so theoretical knowledge is mainly assessed by testing, and practical skills are assessed using grade reports for each section of practical work.

When interviewing 29 teachers regarding assessment methods, the experts received convincing information that tests, case problems and assessment of practical skills using checklists are used to assess knowledge. Residents in other specialties also shared their opinions on the timeliness of testing, pre-exam counseling, clarity of the entire assessment procedure and its fairness. For example, residents said that the achievement of the learning outcomes stated in the educational program is achieved due to a significant number of issue-related patients in the dermatovenereology department of the regional dermatovenereology dispensary, as well as constant advisory assistance from a clinical mentor or teacher. Residents are provided with the necessary access to patient management, all types of medical documentation, participation in consultations and clinical discussions with colleagues of related specialties, work in a multidisciplinary team.

During their visit to the clinical site, experts examined the resources for organizing the assessment of knowledge and practical skills, namely, a sufficient number of patients, access of residents to all procedures and equipment, highly qualified teachers and clinical mentors.

The experts determined that the choice of resident assessment methods is based on daily supervision of patients, since the practical part of training is the main one. For example, such formative assessment methods as a "clinical case" contribute to interprofessional learning. And a method such as "implementation of a practical skill" demonstrates the integration of training and an emphasis on clinical skills. The established assessment methods guarantee that the resident has mastered all sections of the educational program and acquired the necessary practical skills.

Feedback from residents on the results of their assessment is collected in the form of a questionnaire and published on the organization's website. In an interview, residents confirmed that they receive feedback after completing their training.

The 5 interviewed employer representatives also indicated that resident training is in line with the modern development of medical practice and science, since there is high competition in the labor market and highly qualified specialists are required. Employers said that they themselves participate in the assessment of residents, since they are included in the examination committee.

The development of new control and measuring equipment is carried out by teachers through studying international experience in assessing knowledge in residency, and then implemented at the department. At the same time, no examples of test validation were presented to the experts.

3.3 Assessment that facilitates decision-making (summative assessment)

NSOC has implemented a comprehensive assessment system aimed at making informed decisions on the promotion of residents within the framework of the postgraduate clinical training program 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 resident's progress at all stages of training;
- making decisions on transfer to the next stage of training;
- 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 admission to state attestation and certification. The assessment is not limited to intermediary results, but is also aimed at developing long-term clinical competencies that meet certification requirements and real clinical practice. All assessment stages are documented. Residents receive feedback on the assessment results.

3.4 Assessment System Quality Assurance

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 certainty, validity, reliability and objectivity of the assessment results, including the active participation of qualified examiners with various professional backgrounds. The NSOC has approved local normative acts (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. Teachers, 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 the OSCE, state certification) is organized. Examiners undergo preliminary training 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 training 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 residents and increases confidence in the results of postgraduate education.

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

Standard 4: RESIDENTS

4.1 Admission policy and promotion

The procedure for admission and selection to the residency of the NSOC is carried out in accordance with the legislation of the Republic of Kazakhstan and the internal regulatory document: Constitution of the Republic of Kazakhstan https://adilet.zan.kz/rus/docs/K950001000/links; Law of the Republic of Kazakhstan dated July 27, 2007 under 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 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 No.600 "On approval of the Standard rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education" https://adilet.zan.kz/rus/docs/V1800017650; Order of the Ministry of Healthcare of the Republic of Kazakhstan 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. Persons who have mastered the EP of higher education and internship and have a document with the assignment of the qualification "Doctor" are admitted to the residency of the NSOC.

Applications for residency are accepted from July 3 to July 25 of the calendar year. Entrance examinations for residency are held from August 8 to August 16 of the calendar year, enrollment is before the start of the academic year. For the period of entrance examinations and enrollment in residency, by order of the Chairperson of the Board of the NSOC, an admissions committee, an examination committee for specialties and an appeals committee are created, which subsequently carry out their activities in accordance with regulatory documents.

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

The procedure for transferring residency learners is carried out in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 30, 2018 under No.595 "On approval of the Standard rules for the activities of higher and (or) postgraduate education organizations" https://adilet.zan.kz/rus/docs/V1800017657, as well as the Academic Policy of "NSOC" LLP).

An appeals committee is created along with the admissions and examination committees.

Representatives of students are not included in the process of developing the policy for admission and selection of residents.

Changes regarding admission to residency are reflected in the admission rules and approved at a meeting of the Academic Council of NSOC.

Thus, the experts validated the data according to *Standard 4*. In general, all criteria are met, there are no shortcomings. The experts reviewed the documentation on the admission of residents, including the "Academic Policy". The experts interviewed clinical mentors regarding the practice of academic counseling, personal support for residents and the development of not only professional skills. The organization has a resident development program, which includes residents in advisory bodies such as the EMC and the Council of Young Scientists.

4.2 Improving academic performance and expulsion from the program

The number of residents accepted is regulated by the State Order of the Ministry of Healthcare of the Republic of Kazakhstan for the training of medical personnel and takes into account the possibilities of clinical, practical training, the maximum permissible workload for the teaching staff, the availability of educational, educational-methodical and scientific literature, as well as the material and technical resources of the Center.

Since the 7R01150 "Pathological Anatomy" program is new, there have been no resident admissions yet. The total number of residents graduating on the dates of the start of admission to residency in all specialties was 11 people. The NSOC analyzed the practical healthcare need for anatomic pathologists and determined that the annual admission to the educational program in the specialty "Pathological Anatomy" will be 3 people. This indicator corresponds to resource capabilities. The sources of information on the need for pathological anatomy specialists are orders from healthcare authorities, the NSOC development strategies, as well as targeted training referrals.

The 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 resident can be excluded from the program. This information is reflected in the document "Academic Policy".

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

The educational organization has a resident development program, which includes the development of clinical skills, research activities, the formation of competencies, psychological and social support. Residents are included in such advisory bodies as the Educational and Methodological

Council.

For example, for the purpose of social support for residents, scholarships, financial assistance, psychological support and activities to improve the quality of life are organized. Financial support for residents is provided through the scholarship. Psychological support for residents is provided through the implementation of a set of activities 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 is carried out aimed at professional orientation and employment support, such as career guidance meetings, participation in job fairs and support for targeted training. The employment rate of graduates of all residency programs in 2022 was 100%.

4.3 International graduates of medical schools/faculties

The NSOC has an officially published policy for the recognition of qualifications, familiarization with the requirements for residents 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 training and academic performance of international residents, but also facilitates their more effective professional integration into the national healthcare system.

4.4 Work and postgraduate training of residents

The following advisory bodies operate in the NSOC: the Educational and Methodological Council and the Academic Council. Residents of the first year participate in the work of the Educational and Methodological Council. Mechanisms for rewarding residents for their community work include letters of gratitude and letters of recognition, publications on the successes of residents, consideration of community activity when forming an individual rating, recommendations and characteristics when applying for a job. When interviewing residents, the experts received comprehensive answers about the role of resident representation in the advisory bodies of the Center. They took part in the discussion of the EP mission, as well as issues related to the educational process and the approval of educational materials for residency.

Residents receive a monthly stipend in accordance with the established procedure of legislation. Residents are given the opportunity to work outside of class time, which is reflected in the document -"Academic Policy". There are currently no such residents in the accredited specialty. Various events are held at the clinical sites for training residents, in which residents participate. For example, supervision and participation in the management of patients, conducting clinical reviews and medical conferences, simulation classes, scientific and practical events. As a rule, residents supervise 5-6 patients per day and about 70 people per month. The NSOC has introduced elements of distance learning for residents, for example, the use of ZOOM educational platforms, webinars, online lectures, online testing and knowledge control, feedback in a remote format, virtual simulations and trainers.

Under special circumstances (for example, at the request of territorial healthcare authorities), an individual training program for residents is used, which includes an individual class schedule, a flexible schedule for mastering educational modules, the possibility of remote mastering of theoretical material and regular monitoring of the process. Experts have found that in this case the duration of training is observed and is 2 years.

The NSOC clearly defined the areas of responsibility of the resident when participating in the provision of medical care and informed all participants in the educational process about the acceptable conditions for such participation. In order to ensure the safety of patients, residents and mentors, the resident'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 resident. Mentoring is provided at all stages of pathological anatomical activity: autopsy, micro-macroscopic diagnostics of pathological processes, preparation of the autopsy protocol, diagnosis based on biopsy and surgical materials, comparison of pathoanatomical and clinical diagnoses, etc.

NSOC excludes excessive exploitation of the resident in medical activities and ensures that the clinical workload does not interfere with the development of the educational program. Participation in pathological anatomical work is considered an integral, but not dominant part of postgraduate training, ensuring the development of clinical skills in a controlled and safe environment.

4.5 Safety of residents

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

Legal status of a resident:

- stipulates that the primary responsibility for medical care of patients is assigned to the mentor and the medical organization where the training takes place;
- a resident has the right to participate in pathoanatomical diagnostics as part of a medical team, within the scope of own knowledge, skills and level of training, under the supervision of a certified specialist.

4.6 Remuneration of residents

In accordance with current legislation and regulations, a resident can be hired by the NSOC for 0.5 positions as a resident doctor and receive the corresponding salary.

4.7 Resident Health and Well-Being

The NSOC recognizes the importance of comprehensive support for residents at all stages of postgraduate training and provides access to support systems that are aimed at both professional development and maintaining the personal well-being of students. The approach to support is individualized, ethical and confidential, taking into account the wide range of possible difficulties that a resident may encounter during the training process.

Thus, the NSOC implements the following activities in order to improve the health and well-being of residents:

- Residents' health is constantly monitored, and 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 resident.
- Residents are provided with access to consultations on career planning, choice of specialization and development of a professional trajectory.
- Seminars to prepare for certification exams, conferences, career days, meetings with potential employers are organized.
- Individual career growth plans are developed with the participation of an academic mentor.

The organization consistently implements the principle of holistic support for the resident - both the future specialist and the individual, providing a safe, professionally oriented and humane educational environment. Thanks to the availability of support structures, residents can cope with difficulties, develop and build a career in medicine on a sustainable basis.

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

Standard 5: TEACHERS AND CLINICAL MENTORS

5.1 Teachers and clinical mentors

4 teachers will participate in the implementation of the educational program in the specialty 7R01150 "Pathological Anatomy", of which 1 has a doctorate in medical sciences, 1 - professor, 1 - master's degree and are anatomic pathologists of the highest qualification category. The requirements for teachers of the residency program take into account the availability of basic education in accordance with the planned teaching activities, the availability of scientific and pedagogical experience, an academic degree and an academic title. All teaching staff and clinical mentors are highly qualified specialists.

The percentage of people with a degree is 20%, 3 people have the highest category, 1 - the first category. The training of residents in the specialty "Pathological Anatomy" is carried out by the following employees: 1. Manekenova Kenzhekyz Boranbayevna - MD, professor, anatomic pathologist of the highest qualification category;

- 2. Bolsynbekova Saltanat Orazgaliyevna, master's degree, anatomic pathologist of the highest qualification category;
 - 3. Lyugay Yekaterina Anatolyevna, doctor of the first category;
 - 4. Dzhakipov Murat Abdrakhmanovich, master's degree, doctor of the highest category;

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

For teachers of clinical departments, a mandatory requirement 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.KP <code>JCM-304/2020</code> "On approval of the provisions on the clinical site, clinic of the educational organization in the field of healthcare, university hospital, residency base, integrated academic medical center and the requirements imposed on them", mentors involved in the training of students at clinical sites will have to meet the following criteria https://adilet.zan.kz/rus/docs/V2000021848

The ratio of teachers to residents should be - 1:3.

The motivation system for teachers and clinical mentors 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 to 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 stimulating their further increase.

The principles of ethics and academic integrity of teachers are reflected in the document - "Academic Policy". During a conversation with 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 mentors, stimulation and motivation of practical healthcare specialists. The interview with the head of the HR department of the NSOC included such questions as how specialists are attracted and motivated to educational activities and allowed the experts to learn about approaches to attracting employees of the clinical site for teaching (there are 11 such teachers in total), about the strategy and tactics of recruiting teachers, information support of the educational program 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 mentors for the successful implementation of the educational program for residency in the specialty 7R01152 "Pathological Anatomy"

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 do 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.

The specialists who meet the qualification requirements for personnel in accordance with the order of the Ministry of Science and Higher Education of the Republic of Kazakhstan dated January 5, 2024 under No.4 "On approval of the qualification requirements for the educational activities of organizations providing higher and (or) postgraduate education, and the list of documents confirming compliance with them" https://adilet.zan.kz/rus/docs/V2400033892, additional and non-formal education - by order of the Ministry of Healthcare of the Republic of Kazakhstan dated December 21, 2020 under No.KR DSM-303/2020 "On approval of the rules for additional and non-formal education of specialists in the field of healthcare, qualification requirements for organizations implementing educational programs of additional and non-formal education in the field of healthcare, as well as the rules for recognizing the learning outcomes obtained by specialists in the field of healthcare through additional and non-formal education" https://adilet.zan.kz/rus/docs/V2000021847 are involved in the implementation of postgraduate education programs. The experts familiarized themselves with the Regulation on the procedure for competitive replacement of positions of teaching staff and scientific workers of the NSOC, job descriptions for positions of teaching staff and scientific workers and other acts of the NSOC adopted in the prescribed manner.

For teachers of clinical departments, a mandatory requirement 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 site, clinic of the organization of education in the field of healthcare, university hospital, residency base, integrated academic medical center and the requirements imposed on them", mentors involved in the of students clinical sites will have to meet following criteria training at the https://adilet.zan.kz/rus/docs/V2000021848

The ratio of teachers to residents should be 1:3.

The motivation system for teachers and clinical mentors 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 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 stimulating their further increase. One of the good motivations is the opportunity for professional growth of the teaching staff at the expense of the NSOC. Thus, Bolsynbekova S.O.:

- 2024 "36th European Congress of Pathology" in the amount of 30 hours, Venice, Italy;
- 2025 advanced training in the cycle "Topical issues of cytopathomorphological diagnostics of tumor processes" in the amount of 120 hours at the NSOC, Astana, the Republic of Kazakhstan;
- 2025 seminar "Multidisciplinary approaches to the diagnosis and treatment of oncological diseases" in the amount of 120 hours at the NSOC, Astana, RK.

Gogolev A.B.:

- 2024 professional retraining in the specialty "Teacher of medical disciplines" at the AUTONOMOUS NON-PROFIT ORGANIZATION "NATIONAL RESEARCH INSTITUTE OF ADDITIONAL EDUCATION AND VOCATIONAL TRAINING", Moscow, Russian Federation;
- 2025 advanced training in the cycle "Topical issues of cytopathomorphological diagnostics of tumor processes" in the amount of 120 hours at the NSOC, Astana, RK;
- 2025 seminar "Multidisciplinary approaches to the diagnosis and treatment of oncological diseases" in the amount of 120 hours at the NSOC, Astana, RK. Urezkova M.M.:
- 2020 internship on the topic "Digitalization of the pathomorphological laboratory", Stockholm, Sweden;

- 2021 professional retraining in the specialty "Doctor of Clinical Laboratory Diagnostics" at the Federal State Budgetary Institution "N.N. Petrov National Medical Research Center of Oncology", St. Petersburg, Russian Federation;
- 2024 professional retraining in the specialty "Teacher of Medical Disciplines" at the AUTONOMOUS NON-PROFIT ORGANIZATION "NATIONAL RESEARCH INSTITUTE OF ADDITIONAL EDUCATION AND VOCATIONAL TRAINING", Moscow, Russian Federation;
- 2024 "36th European Congress of Pathology" (online participation) in the amount of 30 hours, Venice, Italy;
- 2025 advanced training in the cycle "Topical issues of cytopathomorphological diagnostics of tumor processes" in the amount of 120 hours at the NSOC, Astana, RK;
- 2025 seminar "Multidisciplinary approaches in the diagnosis and treatment of oncological diseases" in the amount of 120 hours at the NSOC, Astana, RK.

The principles of ethics and academic integrity 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 Standard 5 data, external experts received the opinion of teachers on the personnel policy, which includes the policy of recruiting and hiring teachers and clinical mentors, stimulation and motivation of practical healthcare specialists. The conversation with the head of the HR department of the NSOC included such questions as how specialists are attracted and motivated to educational activities and allowed the experts to learn about approaches to attracting employees of the clinical site for teaching (there are 11 such teachers in total), about the strategy and tactics of recruiting teachers, information support of the educational program and also to identify problems in the management and development of 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 mentors for the successful implementation of the educational program for residency in the specialty 7R01150 "Pathological Anatomy".

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 do scientific work and publish the results of research - 91.3% completely agree, 8.7% partially. Satisfied with the salary - 34.78% completely agree, 39.13% partially.

5.2 Ethics and behavior of teachers and clinical mentors

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

In order to verify the Standard 5 data, external experts obtained the opinion of teachers on the personnel policy, which includes the policy of recruiting and hiring teachers and clinical mentors, stimulation and motivation of practical healthcare specialists. The conversation with the head of the HR department of the NSOC included such questions as how specialists are attracted and motivated to educational activities and allowed the experts to learn about approaches to attracting employees of the clinical site for teaching (there are 11 such teachers in total), about the strategy and tactics of recruiting teachers, information support of the educational program, and also to identify problems in the management and development of 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 mentors for the successful implementation of the educational program for residency in the specialty 7R01150 "Pathological Anatomy"

5.3 Continuous professional development of teachers and clinical mentors

In order to verify the data of Standard 5, during a meeting with the head of the HR department and during interviews with teachers, experts received an opinion on approaches to the development of pedagogical competence of teachers, motivation to work with residents, mentoring, 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 mentors.

The experts determined that teachers and residents have enough time for teaching, mentoring and training. The work schedule of teachers is established 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 program for 2024 amounted to 80,321.8 thousand tenge, taxes and deductions are 8,974.9 thousand tenge.

Experts found that teachers initiate research topics for residents, stimulate the need for additional training and independent work with literature and 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 programs for improving professional qualifications - 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 programs for teachers - 30.43% answered that "yes, such programs exist", 4.35% "I have already used this", 0% of respondents answered that there are no such programs and 47.83% of respondents do not know about it.

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

Standard 6: EDUCATIONAL RESOURCES

6.1 Material and technical support and equipment

Residents are trained at the NSOC, which is a multidisciplinary clinic and includes all clinical areas for training - inpatient care (surgical and therapeutic divisions, operating unit, anesthesiology and intensive care division), outpatient clinic, diagnostic divisions (radiation diagnostics, CT/MRI, X-ray endoscopy diagnostics, functional department, department, ultrasound cytopathomorphology center, IHC and translational oncology), pharmacy, rehabilitation and physiotherapy department. 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 resident doctors and learners. The NSOC has the only Proton Center in Kazakhstan, as well as Nuclear Medicine divisions with their own production of radiopharmaceuticals. The hospital bed capacity is 283 beds in the 24-hour inpatient department and 60 beds in the day hospital, 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, oncourology sector, breast, skin and soft tissue tumors sector); Vascular and Reconstructive Surgery Center (vascular surgery sector, soft tissue, skin tumor and reconstructive surgery sector); 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 department No.1 with day hospital, oncohematology department No.2, oncohematology department No.3, bone marrow transplant department, oncohematological intensive care department); Multidisciplinary therapy center with rehabilitation with 18 beds (palliative care sector, medical rehabilitation sector, social and psychological rehabilitation sector); Orthopedics and osteo-oncology department with 30 beds, Chemotherapy department with day hospital with 20 beds of round-the-clock inpatient department and 20 beds of day hospital; Radiation therapy department with 15 beds; Multidisciplinary fee-based

department with 15 beds; Consultative and diagnostic center with 15 beds; Center of anesthesiology, resuscitation and intensive care with 12 beds (including inpatient beds); admission division, department of radiation diagnostics, department of ultrasound and functional diagnostics, department of expert endoscopy and interventional radiology, department of pathomorphology with cytology, clinical diagnostic laboratory, operating unit.

The experts visited the library, which provides residents 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 residents to effectively study materials. In total, there are 34 pieces of literature on the accredited specialty on paper, 39 pieces - on electronic media.

There is access to international databases data: Wiley Online Library https://onlinelibrary.wiley.com/, Cochrane library https://www.cochranelibrary.com/, to the "Webof Science" Platform https://apps.webofknowledge.com/, "Scopus DB" www.scopus.com, "Science direct" DB www.sciencedirect.com, Springer Link (Springer) https://link.springer.com/.

Residents are aware of this.

Before starting the relevant discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he/she must acquire and develop during studies.

Updating the material and technical resource, including the library background, 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 7R01150 "Pathological Anatomy", interviews were conducted with residents of other specialties, as there had been no interviews yet. The experts asked questions about satisfaction with training, sufficient time for patient supervision, work in Damumed with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents who need it, participation in "Journal Clubs" and availability of resources of international databases of professional literature. In general, residents are satisfied with the training, 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, residents would like more independence in managing patients, holding international events.

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

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

Residents can conduct health education activities among patients and training activities among interns.

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 91.3% of teachers fully agree with this, 8.7%

6.3 Training of residents at alternative clinical sites

Clinical sites are departments corresponding to the areas, equipped with computers with Internet access. Computers have access to the corporate data transmission network of the NSOC "Storage", "Public". The classrooms have modern equipment, such as computers, projectors and the necessary furniture. In addition, there are large and small conference rooms with multimedia equipment for holding training events. Residents can use a multi-head microscope for joint viewing of micro-preparations with a teacher, there is also access to open digital archives of micro-preparations. The Center strives to create the most comfortable conditions for training and the educational process. The departments have resident rooms for practical and theoretical research and self-training of resident

doctors. The 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 the medical staff, the management of the clinical site to achieve the final outcomes of residents of pathological anatomy. A sufficient number of pathological anatomical objects of oncological pathologies, surgical and biopsy materials are provided. Practical skills in autopsy of corpses of adults and children will be produced at the clinical sites of the pathological anatomy bureau of Astana according to the concluded memorandum, forensic histological objects at the Forensic Examination Center of Astana. Modern equipment of the NSOC allows future residents to master immunohistochemical studies. A large volume of pathological anatomical objects demonstrates accessibility to students, and employees who simultaneously act as teachers and clinical mentors provide high-quality training in compliance with ethics and deontology. Before the start of the relevant discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he/she should acquire and develop during training.

During a visit to the "NSOC" experts conducted a survey of resources, their compliance with the training program for residents of pathological anatomy, accessibility for teachers and residents, 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 information in the self-assessment report.

Since there is no admission of residents in the specialty "Pathological Anatomy", a meeting was held with residents of other specialties. Residents demonstrated their commitment to the Center, were active in answering questions from external experts, demonstrated their judgment on the organization of training, assessment of their skills, advisory support, the opportunity to participate in research, financing and demonstrated a broad outlook when answering questions from foreign expert Stanzhevsky Andrey Alexeyevich. The experts studied the documents of residents (portfolio, results of resident assessment-checklists, results of the resident survey).

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

In order to implement exchange programs at the international level, the NSOC has concluded Memorandums and cooperation agreements with universities in Russia, Turkey, Uzbekistan, Kyrgyzstan, Belarus, etc. The clinical training bases for residents have been described earlier.

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

The program for training medical residents in the specialty "Pathological Anatomy" includes the development of teamwork skills and effective interaction with other healthcare professionals through active participation in the activities of morphological and clinical diagnostic units. Residents are involved in joint work with anatomic pathologists, clinicians and laboratory specialists, participate in pathoanatomical conferences, clinical and anatomical reviews, meetings of educational and clinical commissions and scientific and practical conferences.

As part of their practical training, residents perform autopsies, macroscopic and microscopic examination of surgical and biopsy material, form and formalize pathoanatomical diagnoses under the guidance of mentors. They also participate in the formation of conclusions, discussion of complex diagnostic cases and interact with clinicians to correlate clinical and morphological data. Such forms of teamwork contribute to the development of professional communication, clinical thinking and data interpretation skills.

Team skills are actively developed in the process of discussing diagnostically complex cases, conducting pathoanatomical conferences and clinical-anatomical analyses, where doctors of various specialties participate. In such events, residents learn to coordinate work with clinical divisions, competently present the results of morphological analysis and substantiate their conclusions.

The skills of coordination of work with colleagues and other healthcare specialists are developed in learners and residents during examination, patient treatment, and, especially, when providing assistance to patients.

Experts have established that there is no jointly developed residency EP in the specialty 7R01150 "Pathological Anatomy" with partner universities and no international cooperation in the form of visiting professors is carried out.

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

6.4 Sources, resources and use of information

Experts assessed residents' 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. Residents 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 trainers, telemedicine and video conferencing systems. The educational program uses the following technologies: distance and blended learning formats, webinars, simulation training, electronic testing systems, digital learning modules and electronic journals for progress assessment. During independent learning, residents 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. A resident supervises 5-6 patients per day, including filling out the necessary documentation under the supervision of a teacher.

NSOC provides conditions and encourages students to participate in research work. Conducting research by residents will consolidate the acquired 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 NSOC, who have an academic degree and experience in conducting scientific research. Given the absence of residents of pathological anatomy - 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 the access of residents to equipment at specific bases (not everywhere it is active and free), but in the specialty "Pathological Anatomy" - at other clinical sites it is free. Not all residents cope 100% with maintaining medical records, organizing their independent work.

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

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

Recommendation for improvement:

1) To ensure the invitation of foreign visiting professors as part of the organization of training residents in the specialty "Pathological Anatomy" to expand the knowledge and skills of students and exchange experience (Standard 6.3.)

Standard 7: ENSURING AND IMPROVING THE QUALITY OF POSTGRADUATE

TRAINING

7.1 Quality Assurance System

The procedure and organization of training resident doctors in the divisions of the NSOC are determined by the Academic Policy of the NSOC, approved by the order of the Chairperson of the Board No.226 dated July 10, 2024.

The NSOC conducts monitoring and periodic review of the EP to achieve the goals and meet the needs of the healthcare system. Systematic collection of information on the activities of the educational program, its characteristics and results, compliance with general principles and goals is carried out on a regular basis. The educational program trains competitive, qualified specialists for the healthcare system, develops personal qualities in resident doctors and forms professional competencies, therefore it is so important to regularly assess not only theoretical but also practical skills and monitor the entire educational process.

The assessment of the EP involves monitoring the compliance of the working curriculum, individual curriculum and teaching materials with the requirements of national legislation; monitoring compliance with the qualification requirements of teachers/mentors; monitoring compliance of educational resources; monitoring learning outcomes, attendance, academic performance, quality of mastering practical skills; monitoring feedback from stakeholders.

Responsibility for organizing and coordinating the implementation of the educational program is assigned to the specialists of the Department. Specialists and the teaching staff prepare teaching materials; plan the educational process; draw up the academic calendar; monitor the improvement and development of the competencies of teachers/mentors, organize advanced training cycles; provide resident doctors with rotation in clinical sites for the period of certain discipline cycles; plans the educational process in the AIS "Platonus".

Monitoring of academic performance and attendance is carried out by teachers/mentors, regulated by recording data in an electronic journal and in a paper journal.

Monitoring of the assessment of knowledge and practical skills is carried out by an independent assessment of the NCIE during the FC period.

As one of the interested parties, resident doctors participate in the drawing up the individual curriculum, in the selection of elective disciplines of the EC, in the selection of a clinical site and a mentor, in the future, when updating the EP, it is planned to include resident doctors in the working group.

Also, as an interested party, practical healthcare specialists are involved in the review of the EP, they act as potential employers of graduates of the EP.

An 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 residents, participation in training residents through mentoring, providing the department and residents with the necessary resources for practical training and the development of clinical thinking, problems of interaction with the educational organization as a whole, 100% employment

7.2 Patient safety

Patient safety is a priority at the NSOC. The practical work of the resident is carried out under the guidance of a clinical mentor: joint attendance and consultations, filling out medical documentation. Monitoring by clinical mentors is carried out constantly.

Upon admission to the hospital, patients are informed about the admission of the resident/student to provide him/her with medical care. Thus, the wishes of patients regarding work with students are taken into account. Also, when carrying out outpatient appointments, patients have the right to refuse the presence of the student.

Safety in relation to patients and their health is observed based on the resident's ability to assess risks and use the most effective methods of diagnosis and treatment of patients of the therapeutic profile, to ensure a high level of quality of medical care for patients. As a result of training, the

resident receives a holistic vision of processes, the ability to treat not clinical and laboratory indicators, but the mechanisms of development of pathological processes (development and improvement of clinical thinking skills), select effective and safe treatment, which generally determines an individual approach to patients - autonomy of decisions in favor of the patient.

In order to create an effective safety culture, the NSOC develops a sense of personal responsibility for their own safety and the safety of patients and motivation for its development among employees and residents. In order to purposefully form and develop the necessary methods and practices for identifying and eliminating risks in the provision of medical services among the staff, to minimize the consequences of possible errors, conditions are created so that the staff is critical of their actions and is not afraid to report their own errors.

A favorable climate among the medical staff of the clinical departments, in which the learner is during the training period, largely determines the success of the doctor's professional activity.

To prevent professional crises, psychological support and psychosocial counseling, the NSOC has a social and psychological support sector with 2 full-time units - psychologists who provide psychological assistance if necessary.

In addition, the clinical mentor of resident doctors, employees of the NSOC education department also conduct individual conversations with resident doctors at any time at the request of the resident or when signs of psychological stress appear.

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

Recommendation for improvement:

1) To 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: MANAGEMENT AND ADMINISTRATION 8.1 Management

The guarantee of the implementation of the EP in the specialty 7R01150 "Pathological Anatomy" is its strict compliance with the requirements of regulatory rules regarding the admission of residents (selection criteria and number), the training process, assessment of knowledge and skills, established learning outcomes, program management, which are regulated in the Republic of Kazakhstan by regulatory legal acts of the Ministry of Healthcare of the Republic of Kazakhstan and the Ministry of Education and Science of the Republic of Kazakhstan.

Students who have mastered the residency EP in the specialty 7R01150 "Pathological Anatomy" and successfully passed the state certification will be issued a state-issued document on the assignment of the qualification of an anatomic pathologist. Based on the order of the Ministry of Education and Science of the Republic of Kazakhstan dated January 28, 2015 under No.39 "On approval of types and forms of state-issued educational documents and the Rules for their issuance", in accordance with subparagraph 6-3) of Article 5 of the Law of the Republic of Kazakhstan "On Education" dated July 27, 2007, a certificate of completion of residency will be issued, as well as after passing the FC, the NCIE will issue a specialist certificate without a category in the specialty.

The NSOC has developed, implemented and certified a quality management system. The quality policy has been communicated to all employees, all team members, including management, have committed themselves to participate in the development, maintenance and quality assurance (link: Quality Policy).

Transparency of the management and decision-making system is ensured by posting information on the NSOC website.

8.2 Management based on 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

enshrined in the organizational structure of the NSOC. Transparency of management and decision-making in the educational process is ensured by annual review and approval of the Academic Policy, which regulates in detail the rights, duties and responsibilities of residents and the administration.

The educational organization evaluates the management of the educational process and staff in relation to achieving the mission of the residency program, the expected final learning outcomes by providing feedback to residents and teachers (see Section 7.2 of the report). The heads of administrative divisions report at meetings of the staff meeting and at the Academic Council. The reports of the deputies are heard at meetings of the Academic Council. The Deputy Chairperson of the Board reports at an extended meeting of the Academic Council of the Center.

To the survey question "Do the organization's managers listen to your opinion regarding issues related to the educational process, research and clinical work?", 52.17% of the teachers answered that they do so systematically and 34.78% answered "sometimes." 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 the teachers answered that they agree and 17.39% answered "sometimes".

8.3 Representation of residents and employees

The following advisory bodies operate in the educational organization: the Educational and Methodological Council and the Academic Council. Residents 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. It is noted that residents are included in the advisory bodies, such as the EMC, the Council of Young Scientists, but they are not represented in the Academic Council.

Mechanisms for encouraging residents for social work include letters of gratitude and letters of recognition, publications about the successes of residents, taking into account social activity when forming an individual rating, recommendations and characteristics when applying for a job. When interviewing residents, experts received comprehensive answers about the role of resident 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

The assessment of the educational program, aimed at special components of the educational program, is carried out by the Center for Professional Education and the Educational and Methodological Council. One of the important strategic areas is to improve the efficiency of the management system, which is defined in order to ensure the effective functioning of quality management. Target indicators, direct result 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 program 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.

The assessment of the administration and management of the educational process as a whole and the educational program of the residency in the specialty 7R01150 "Pathological Anatomy" is carried out by questioning the teaching staff and employees of the 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 residents with the quality of educational programs, 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 residents and teaching staff, that students have a direct interest in the implementation of the

educational program. And they regularly participate in the survey, 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 program, availability of information resources and conditions, which is subsequently taken into account when monitoring the educational program.

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

Recommendations for improvement:

1) To include representation of residents and employers in the Academic Council of the NSOC (Standard 8.3).

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

Considering that the primary accreditation of the educational program in the specialty 7R01150 "Pathological Anatomy" is being carried out and the admission of residents is planned for 2025, in compliance with the requirements of the Law on Education of the Republic of Kazakhstan, the educational organization initiated specialized (program) accreditation without the presence of residents. Therefore, the tasks of the external expert commission included assessing the university's readiness to accept residents, studying the existing principles and approaches to resident training, quality assurance mechanisms and management of the residency educational program using other educational programs as an example. However, the EEC specifically examined the organization of training in the specialty 7R01150 "Pathological Anatomy", including documentation, teaching staff, educational resources and other important issues related to compliance with accreditation standards.

The EEC concluded that along with the achievements in the training of residents, including the expected results of training in the accredited educational program 7R01150 "Pathological Anatomy", there are a number of recommendations.

5. Recommendations for improving the educational program 7R01150 "Pathological Anatomy" of the NSOC:

- 1. To ensure the invitation of foreign visiting professors as part of the organization of training residents in the specialty "Pathological Anatomy" to expand the knowledge and skills of students and exchange experience (Standard 6.3.)
- 2. To 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. To include representation of residents and employers in the Academic Council of the NSOC (Standard 8.3).

6. Recommendation to the ECAQA Accreditation Council

The EEC members established the compliance of the educational program of the residency in the specialty 7R01150 "Pathological Anatomy" with the Accreditation Standards and came to a unanimous opinion to recommend that the ECAQA Accreditation Council accredit this program for a period of 5 years.

	Full name	Signature
Chairperson	Kabildina Nailya Amirbekovna	
International Expert	Stanzhevsky Andrey Alexeyevich	
Academic Expert	Shabdarbayeva Daria Muratovna	
Academic Expert	Urazayev Olzhas Nurlanovich	
Employer Expert	Bibekov Zharas Zhanuzakovich	
Student Expert	Turarova Akbota Maratkyzy	
ECAQA Observer	Umarova Makpal Aldibekovna	

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу 7R01150 «Патологическая анатомия» ТОО «Национальный научный онкологический центр» на период 5 лет.

КАБИЛДИНА НАЙЛЯ АМИРБЕКОВНА Председатель ВЭК СТАНЖЕВСКИЙ АНДРЕЙ АЛЕКСЕЕВИЧ Международный эксперт ШАБДАРБАЕВА ДАРИЯ МУРАТОВНА Академический эксперт УРАЗАЕВ ОЛЖАС НУРЛАНОВИЧ Академический эксперт БИБЕКОВ ЖАРАС ЖАНУЗАКОВИЧ Экспертработодатель ТУРАРОВА АКБОТА МАРАТҚЫЗЫ Эксперт- резидент

Профиль качества и критерии внешней оценки образовательной программы (обобщение)

			Оценка
7	Критерии оценки	Количество стандартов	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	8	8
	НАСТАВНИКИ		
6.	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ	15	14 1
7.	ОБЕСПЕЧЕНИЕ И УЛУЧШЕНИЯ	10	9 1
	КАЧЕСТВА ПОСЛЕДИПЛОМНОЙ		
	подготовки		
8.	УПРАВЛЕНИЕ И	8	7 1
	АДМИНИСТРИРОВАНИЕ		
		109	109

Приложение 1.

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

№	Наименование документов	Дата утверждения
1	Устав ННОЦ	№613 от 22.06.2018
2	Кадровая политика ННОЦ	№7 от 21.10.2021
3	Стратегический план ННОЦ на 2023-2028 гг	Протокол №4 от 16.08.2024
4	Кодекс деловой этики	от 31 октября 2019 года
5	Коллективный договор ННОЦ на 2023-2025 гг	24.03.2023
	Программа управления кадрами ННОЦ	№1 от 16.01.2023
6	Академическая политика ННОЦ	№226 от 10.07.2024
7	Положение по клиническом наставнике	приказ №262-ОД от 12.09.2022 года
8	Правилах оценки учебных достижений	№58-ОД от 05.03.2020 года.
9	СОП Образовательный процесс врачей-резидентов	№416-ОД от 30.12.2022
10	Положение о дисциплинарной комиссии ННОЦ	№127-ОДот 26 июля 2019 года
11	Приказ о составе дисциплинарной комиссии	№253 от 11.08.2023
12	Приказ об утверждении состава руководителей программ резидентуры ННОЦ	№76 от 18.02.2025
13	Приказ об утверждении положения УМС	№61 от 07.02.2025
14	Приказ об утверждении ППС	№63 от 07.02.2025
15	Организационная структура ННОЦ	№17 от 30.09.2024
16	Штатное расписание ННОЦ	№17 от 30.09.2024
17	Приказ о подготовке к специализированной аккредитации	№111 от 12.03.2025