Accreditation Council of the Eurasian Center for Accreditation and Quality Assurance in Education and Healthcare May 24, 2024

REPORT

OF THE EXTERNAL EXPERT COMMISSION
ACCORDING TO THE RESULTS OF EVALUATION OF EDUCATIONAL
PROGRAM 7R01152 "PATHOLOGICAL ANATOMY"
JSC "NATIONAL
RESEARCH CENTER OF SURGERY NAMED AFTER A.N. SYZGANOV"
FOR COMPLIANCE WITH THE ACCREDITATION STANDARDS OF
POSTGRADUATE EDUCATION PROGRAMS (RESIDENCE SPECIALTY) OF
MEDICAL EDUCATION ORGANIZATIONS

external expert evaluation period: May 21-23, 2024

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LIST OF SYMBOLS AND ABBREVIATIONS

	LIST OF STRIBOLS AND REDIKE VICTIONS			
Abbreviation	Designation			
ECAQA	Eurasian Center for Accreditation and Quality Assurance in			
	Education and Healthcare			
EEC	External Expert Commission			
MSHE RK	Ministry of Science and Higher Education of the Republic of			
	Kazakhstan			
AMP	Administrative and management personnel			
HEI	Higher education institution			
SCC	State Certification Commission			
SCSE	State compulsory Standard of Education			
DSHR	Department of Science and Human Resources			
End-of-course	End-of-course assessment			
assessment				
IEP	Individual educational plan			
CD	Clinical disciplines			
IMIS, AIS, Damu	Medical information systems			
СР	Clinical protocol			
CC	Component of choice			
CED	Catalog of elective disciplines			
MOH RK	Ministry of Health of the Republic of Kazakhstan			
RW	Research work			
NSCS	Joint Stock Company "National Scientific Center for Surgery			
	named after. A.N. Syzganov"			
NCIE	National Center for Independent Examinations			
EP	Educational program			
OSCE	Objective structural clinical examination			
MD	Major disciplines			
DPCE	Department of Postgraduate Continuing Education			
PHC	Primary health care			
Academic staff	Academic staff			
WC	Working curriculum			
RCHD	Republican Center for Health Development			
IWR, IWRT	Independent work of a resident, independent work			
ST RK ISO, QMS	Quality management system of the Republic of Kazakhstan			
TW	Typical curriculum			
EMCD	Educational and methodological complex of the discipline			
EMC	Educational and methodological council			
AC	Academic Council			
CBL	Case-based learning			
ESG	European Higher Education Area			
ESC	European Society of Cardiology			
MCQ	Multiple choice question			
RBL	Resource Based Learning			
TBL	Team-oriented training			
	0			

1. Composition of the External Expert Commission

In accordance with the ECAQA Order No. 16 dated May 2, 2024, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external evaluation of the residency educational program in the specialty 7R01152 "Pathological Anatomy" during the period May 21-23, 2024, with the following composition:

№	Status as part of	Full name	Academic degree/title, position, place of		
	the EEC		work/place of study, course, specialty		
1	Chairman	Shabdarbaeva	Doctor of Medical Sciences, Professor,		
		Daria Muratovna	Pathologist of the highest category, Forensic		
			Medical Examiner of the highest category, Head		
			of the Department of Pathological Anatomy and		
			Forensic Medicine named after Professor Yu. V.		
			Pruglo, NJSC "Semey Medical University"		
2	International	Sattarov	Doctor of Medical Sciences, Associate Professor		
	expert	Jamoliddin	of the Department of Hospital Pediatric Surgery,		
		Bakhronovich	Pediatric Oncology, Head of the Department of		
			Quality Control of Education, Tashkent Pediatric		
			Medical Institute, Republic of Uzbekistan,		
			pediatric surgeon of the highest category		
3	Academic expert	Kozhakhmetov	Candidate of Medical Sciences, Associate		
		Saken	Professor, Head of the Department of Surgical		
		Kairullinovich	Diseases named after Professor Tsoi G.V.,		
			"Astana Medical University" NJSC		
4	Expert employer	Nadueva Yelvira	President of the Private Institution "UZDIK		
		Sezhofeevna	DORIGER", Deputy Director of the Clinic		
			"NeuroLab" LLP		
5	Expert-learner	Guseva Kristina	Resident of the second year of study in the		
		Alexandrovna	specialty "General Surgery" of the National		
			Educational Institution "Kazakhstan-Russian		
			Medical University"		

The EEC report includes a description of the results and the conclusion of an external evaluation of the educational program "Pathological Anatomy" of the National Scientific Center for Surgery named after A.N. Syzganov (hereinafter referred to as NSCS) for compliance with the Accreditation Standards for postgraduate education programs (residency specialties) of medical educational institutions and conclusions (hereinafter referred to as Accreditation Standards), recommendations of the EEC for further improvement of approaches and conditions for the implementation of the abovementioned educational program and recommendations for accreditation for the ECAQA Accreditation Council.

2. General part of the final report

2.1 Presentation of the residency educational program in specialty 7R01152 "Pathological Anatomy"

Name	of organization,	legal	form	of	"National Scientific Center for Surgery
owners	hip, BIN				Named after A.N. Syzganov",
					Joint Stock Company,
					form of ownership – private
					990240008204
Govern	ing Body				Board of Directors,
					sole shareholder of NJSC "KazNMU named after

	S.D. Asfendiyarov"
Full name of the first manager	Baimakhanov Bolatbek Bimendeevich
Creation date	1945
Location and contact details	Almaty, st. Zheltoksan, 51
	+7 (727) 225 09 30, + 7 (727) 279 22 40,
State license for educational activities in	No. 12018231, 11/21/2012
residency (date, number)	Indefinite
Year of commencement of the accredited	2024
educational program (EP)	
Duration of training	"General surgery" - 3 years;
	"Pathological anatomy" - 2 years
Total number of graduates since the	Considering that the program was introduced in
beginning of the EP implementation	2024, there is no release yet.
Number of residents of the educational	Admission of residents is planned for August 2024.
program since the beginning of the current	
academic year	
Full-time teachers/part-time workers	"Pathological anatomy"
involved in the implementation of the	The total number of teachers is 3, including full-
educational program	time teachers - 3, part-time teachers - 0
	Degree, % - 66% masters
	Categorization, % - 100% highest category
Website	https://nnch.kz/
Instagram	syzganov_clinic
Facebook with active pages	https://www.facebook.com/nnch.kz/

Over the years of its development, the NSCS has become one of the leaders in the system of postgraduate medical education for training a new generation of competitive specialists in the field of healthcare, a leading scientific and clinical center of the Republic of Kazakhstan, operating in accordance with national and international standards of quality and safety based on the integration of education, science, practices and innovative approaches in the interests of the individual, society, and state. The management of educational activities was implemented through collegial bodies: the Academic Council, the Dissertation Council, the Council for Assigning Categories to Specialists, the Educational and Methodological Council and the Department of Postgraduate Continuing Education.

In 2010, for the first time in the history of the center, a postgraduate education department was organized.

In 2012, NSCS received a license for educational activities in 4 residency specialties, in accordance with the permanent State license for educational activities in the field of postgraduate education (without time limit) No. 12018231 dated November 21, 2012. Annex to the state license No. 001 (order of the Control Committee in the field of education and science of the Ministry of Education and Science of the Republic of Kazakhstan No. 1543 dated November 21, 2012); Certificate of institutional accreditation. State license of the Ministry of Education and Science of the Republic of Kazakhstan No. 12018231 dated November 21, 2012; Certificate of specialized accreditation. State license of the Ministry of Education and Science of the Republic of Kazakhstan No. 12018231 dated November 21, 2012.

To implement educational programs for additional professional education (advanced training and retraining of doctors) and residency training, in order to control the conduct of educational, methodological and organizational work in the field of education, an Educational and Methodological Council was opened in August 2014 to review and approve the educational methodological documentation of the postgraduate education sector (Order No. 262-p dated 08/09/2013).

In 2021, NSCS successfully passed state accreditation from the Ministry of Education and Science of the Republic of Kazakhstan for the right to conduct research work at the expense of the

state budget for a period of 5 years (No. 000047 dated February 25, 2021, MES RK). The first in the city of Almaty to successfully pass state accreditation from the Ministry of Education and Science of the Republic of Kazakhstan for the right to conduct clinical trials of medicines, medical devices and medical technologies for a period of 5 years.

For the period 2012-2022 at the NSCS, 168 specialists were trained in practical healthcare in the specialty "Anesthesiology and resuscitation, including children's", "Cardiac surgery, including children's", "Radiation diagnostics" and "General surgery"

Every year, the department of postgraduate education achieves 100% of the indicators according to the strategic plan of the NSCS for educational activities (employment and passing tests the first time).

The founding principles of the center include the integration of education, science, practice and innovative approaches, which allows it to maintain national and international standards of quality and safety in the medical field. The educational activities of the center are managed through collegial bodies, including the Educational and Methodological Council and the Department of Postgraduate Continuing Education.

National Scientific Center for Surgery named after A.N. Syzganova is one of the leaders in the system of postgraduate medical education and training of specialists in the field of healthcare. In 2021, the center successfully passed state accreditation for the right to conduct research work at the expense of the state budget for 5 years, as well as accreditation to conduct clinical trials of medicines. These achievements confirm the reputation of the center as a leading scientific and clinical institution in the Republic of Kazakhstan.

2.2 Information about previous accreditation

Specialty 7R01152 "Pathological Anatomy" is accredited for the first time.

2.3 Brief description of the results of the analysis of the self-assessment report of the residency educational program in the specialty "Pathological Anatomy" and conclusions about completion

The report on the self-assessment of the residency educational program in the specialty "Pathological Anatomy" (hereinafter referred to as the report) is presented on 97 pages of main text, appendices on 18 pages. The report is characterized by completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for self-assessment of the educational program provided to the educational organization by the accreditation center - ECAQA, as well as internal consistency of information. The report is accompanied by a covering letter signed by the Chairman of the Board of the "NSCS named after A.N.Syzganov" Professor B.B. Baimakhanov, who confirms the reliability of the quantitative information and information included in the self-assessment report.

The report contains a list of members of the internal self-assessment commission indicating the responsibilities of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational program - V.B. Grinberg, doctor of the department of pathomorphology with prosection, cytology and electron microscopy group.

Self-assessment of the residency educational program 7R01152 "Pathological Anatomy" JSC "National Scientific Center for Surgery named after A.N. Syzganov" was carried out on the basis of order No. 077-p dated 02/05/2024 "On the working group on preparation for accreditation"

All standards provide real information from the NSCS for the training of residents in the specialty "Pathological Anatomy", taking into account the start of admission of students in 2024, reasoned data, examples of the implementation of the objectives of the educational program, 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 regarding the number of residents, teachers, administration, information on selection and admission, training results, results of assessment of knowledge and skills, material and technical base of the

university and clinical sites, contractual obligations with partners (universities, associations, database), financial information, plans for development and improvement, etc.

The report is presented to ECAQA in complete form, with data adjusted according to the above recommendations, written in competent language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, tables and figures (diagrams, photographs) contain links in the text and are continuously numbered.

External expert work as part of the evaluation of the educational program in the specialty "Pathological Anatomy" was organized in accordance with the Guidelines for conducting external evaluation of educational organizations and educational programs of ECAQA / Dates of visit to the organization: May 21-23, 2024. The sequence of the visit over 3 days is presented in detail in Annex 3 to this report

To obtain objective information, members of the EEC used the following

- interviews with management and administrative employees 10 people;
- interviews with residents 12 people
- study of the website-https://nnch.kz/
- interviewing 10 employees, 3 teachers, 3 mentors;
- survey of teachers and residents 26 and 38, respectively;
- observation of the training of residents: attending theoretical classes in the department of thoracic surgery for residents of the 1st year of training. Teacher is Shirtaev Bakytzhan Kerimbekovich. Lesson topic: "Shapes of the chest"
- review of resources in the context of implementation of accreditation standards: 1 practice/clinical engagement base of JSC "NSCS named after A.N. Syzganov", where training is provided in 7 educational programs with the participation of 54 full-time/part-time teachers;
- study of educational and methodological documents in the amount of 32 units both before the visit to the organization and during the visit to the departments (the list of documents studied is in **Annex 2**).

The team of the accredited organization ensured the presence of all persons indicated in the visit program and according to the lists of interview sites (Table 1).

 $\label{thm:category} \begin{tabular}{ll} Table 1 - Information on the number and category of participants in meetings, interviews, talks with members of the EEC \\ \end{tabular}$

No	Position	Quantity
1	Chairman of the Board of JSC "NSCS named after A.N. Syzganov"	1
2	Deputy Chairman of the Board for Scientific, Clinical and Innovation	2
	Activities	
3	Research and Development Management Department	1
4	Head of Postgraduate Education Department	1
5	PhD, Associate Professor of the Department of Surgical Diseases No. 2-	1
6	Head of the Department of Thoracic and Pediatric Surgery	1
7	Candidate of Medical Sciences, Associate Professor of the Department of	1
	Surgical Diseases	
8	Residents	2
9	Head of HR and Legal Support Department	1
10	Head of Library	1
11	Head of organizational and methodological department and statistics	1
12	Doctor expert	1
13	QMS department	1
14	Deputy Chairman of the Board for Strategic, Financial and Economic	1
	Issues	
15	Head of Planning and Economic Analysis Department	1

On the last day of the visit to the organization, a meeting of EEC members was held based on the results of the external evaluation. A final discussion was held on the results of the external evaluation of the educational program, study of documents, results of interviews, talks, and questionnaires. Members of the EEC began drafting the final report of the EEC. Generalizations of the results of the external evaluation are made. The experts individually completed the "Quality Profile and Criteria for External Evaluation of Educational Programs in Residency Specialties of Medical Educational Organizations" according to the ECAQA Accreditation Standards. No comments were made by the EEC members. Recommendations for improvement of the educational program were discussed and chairman D.M. Shabdarbaeva held a final open vote on rthe ecommendations for the ECAQA Accreditation Council/

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

While conducting a survey of residents, 88.89% rated the work of the External Expert Commission on Accreditation as positive.

The majority of respondents (89.47%) believe that it is necessary to accredit educational organizations or educational programs.

According to 76.92% of teachers, the survey conducted by ECAQA is useful for developing recommendations for improving key areas of activity of an accredited educational organization.

At the end of the visit, the chairman of the EEC announced recommendations based on the results of the external evaluation as part of specialized accreditation to the management and employees of the educational organization.

3. Analysis of compliance with accreditation standards based on the results of an external evaluation of the residency educational program in the specialty "Pathological Anatomy"

Standard 1: MISSION AND OUTCOMES

1.1 Mission statement

While implementing program activities, namely, based on the results of an interview with the first head of the organization, members of the External Expert Commission of the Non-profit institution "Eurasian Center for Accreditation and Quality Assurance in Education and Healthcare" in interviews with residents and teachers, compliance with the criteria of standard 1 was established. All participants in the educational process know the mission educational program, took part in the formation of proposals for formulating the mission, while the mission was brought to the attention of potential residents through the website, social networks, personal meetings with the relevant contingent, information letters to medical organizations. Reviewed the strategic development plan of JSC "National Scientific Center for Surgery named after A.N. Syzganov" (NSCS) for 2019 - 2023, including such areas as "effective management of academic and production processes based on the unity of strategic goals and objectives; high-quality medical education based on the acquisition of modern theoretical knowledge and real practical skills in the specialty "Pathological Anatomy", 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 are required to inform about the mission and work plan of the educational organization; they tell you where to get the necessary information about the educational program, teachers, and training facilities.

During the visit to the departments of the NSCS, experts noted the strengths of the educational organization in relation to the accredited educational program, including: state-of-the-art equipment (electron microscope, immunohistainer), highly qualified Academic staff and mentors.

"NSCS" is a Surgery Center of the Republican level, there are departments that are the only ones of their kind in the Republic, directly related to the educational program "Department of Hepato-Pancreato-Biliary Surgery and Liver Transplantation", "Department of General Surgery", "Department of Thoracic and Pediatric Surgery" surgery", etc., "Pathology Laboratory" - which can be noted as the best practice in education, namely, the inextricable connection between theory and practice, the opportunity for residents from the first year of study to receive the maximum amount of practical and theoretical skills, to take direct part in the process of intravital diagnosis of diseases in patients, including complex patients who come to the "NSCS" from all over the republic and from abroad. Pathological studies are extremely important in verifying the diagnosis, and especially in oncology, because it is pathomorphological diagnostic methods that make it possible to reliably confirm the presence or absence of cancer in a patient. This conclusion was made because the "NSCS" has highly qualified Academic staff (hereinafter referred to as Academic staff) with extensive practical experience, modern high-precision equipment, and employees regularly improve their skills both within the Republic of Kazakhstan and abroad; participate in consultations at various levels, including the republican level, and provide consulting activities.

The results of studying the documentation demonstrate that the mission of the organization and the mission of the educational program in the specialty "Pathological Anatomy" are consistent, and the educational process is structured in accordance with the 2022 State Compulsory Educational Standard and the Laws and Statutory Instruments (LSI) in postgraduate education and healthcare. At the same time, during meetings with residents and Academic staff, experts determined that it was necessary to update the NSCS website.

The educational organization conducts training for residents in the following clinical bases and departments: the pathomorphological department of the NSCS, the Pathoanatomical Bureau (PAB) of the city of Almaty, the Institute of Forensic Medical Examination (FME) of the Ministry of Justice (MOJ) of the Republic of Kazakhstan of the city of Almaty and provides a patient-oriented approach through the introduction of modern methods pathological diagnosis, multidisciplinary teams and individualized treatment plans.

The educational organization pays due attention to the safety and autonomy of patients through strict adherence to clinical protocols, regular training of staff in safety principles, internal audit of the quality of medical services, and active involvement of patients in the decision-making process about their treatment.

Experts have found that residents have appropriate working conditions to support their own health, since the educational organization provides accessible and high-quality medical care for employees, equipped recreation areas and psychological support. The NSCS has specialized rooms for residents with iron lockers for each resident, an area for eating, resting, and also, during night shifts, a sleeping area.

Such basic competencies of residents in an accredited specialty, such as clinical thinking, making a pathological diagnosis, drawing up an autopsy report and the conclusion of a microscopic examination of surgical and biopsy material help educational organizations to apply innovative forms of training. This will allow residents to develop skills and qualities such as critical thinking, responsibility, leadership qualities and the ability to make decisions in stressful situations.

The educational organization encourages residents to become involved in research in their chosen specialty through the provision of grants for scientific projects, access to research databases and mentoring of experienced researchers, and also ensures the participation of residents in academic events such as scientific conferences, seminars, master classes and publications in professional journals.

At the same time, experts identified shortcomings in the organization of research work, such as insufficient incentives for residents to participate in scientific projects, poor integration of research work into the educational process.

1.2 Professionalism and professional autonomy

Experts have determined that the formation of professionalism includes systematic training, practical internship under the guidance of experienced teachers and mentors, as well as participation in clinical cases of varying complexity. The educational organization promotes the professional autonomy of residents by providing them with the opportunity to make independent decisions within the scope of their competence, and also supports their active participation in professional conferences and seminars.

Experts have established that the educational organization fully exercises autonomy in relation to the selection of residents for the accredited specialty (Rules for admission to training of medical personnel in residency, approved by order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. RK MOH-270/2020), developments educational program, determining approaches to evaluating residents (order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 "On approval of the Standard Rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education", as amended by order No. 237 dated June 8, 2020), since all these processes are transparent and based on legislative and regulatory acts.. Responsible employees showed the experts a document defining the requirements for residency program teachers (Regulations on residency teachers, approved by order of May 15, 2023). The employment of residents is regulated by current regulations (residents are employed in advance before entering the Residency in accordance with the Minutes of the meeting of the Commission of the Ministry of Health of the Republic of Kazakhstan on the placement of the State educational order for the training of medical personnel in residency No. 1 of May 17, 2022 and No. 2 of September 22, 2023) and agreements with employers in medical institutions, and the actual figure is 100% (using the example of other specialties).

To verify **standard 1**, a meeting was held with the Chairman of the NSCS, B.B. Baimakhanov. During the conversation, experts asked the following questions: *How does an organization define its mission and vision, and what management mechanisms are used to ensure their implementation? What practical steps are taken to integrate the mission and vision into the organization's daily operations and strategic planning? During the responses, the NSCS Chairman confirmed that the mission and vision of the organization are clearly defined and integrated into its strategic direction. They are regularly discussed and updated to reflect changing health needs and challenges. To ensure that the mission and vision are achieved, various management mechanisms are used, such as the development of strategic plans, regular monitoring and evaluation of the achievement of set goals, as well as stakeholder engagement and feedback from patients and trainees.*

The academic freedom of residents is manifested in the choice of scientific directions and research methods, and is ensured by the organization of education through mechanisms such as free access to scientific literature and resources, the ability to choose a research topic and supervisor, as well as participation in conferences and seminars. These mechanisms and principles of academic freedom are described in the document "Regulations on the research activities of residents", approved by the minutes of the meeting of the Academic Council of April 15, 2023.

While conducting a survey of 38 residents (on the resource https://webanketa.com/), out of 24 questions, a number were devoted to the quality of the educational process and educational program. It was found that 78.95% of residents would recommend studying at this educational organization to their acquaintances, friends, and relatives. And 81.58% of respondents believe that educational program leaders and teachers are aware of students' problems related to learning. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", 84.21% of residents answered positively, 5.26% were not sure about this, 5.26% could not answer this yet question and 2.63% would like to believe it.

The 26 teachers surveyed (21 survey questions) also answered that 84.62% were satisfied with the organization of work and workplace in this educational organization, and 15.38% partially agreed with this statement. Experts determined that the organization has a healthy microclimate, since the manager is quite accessible to both residents and employees and responds promptly to requests. In the questionnaire, 96.15% of teachers are satisfied with the microclimate of the organization, and 3.85%

are partially satisfied. According to 96.15%, in an educational organization, a teacher has the opportunity to realize himself as a professional in his specialty. For your information, a total of 26 people responded (54 in total), with 11.54% having up to 5 years of teaching experience, 19% having up to 10 years of experience, and 81% having more than 10 years of teaching experience.

1.3 Final learning outcomes

The final results of training are defined and included in the EP in the specialty "Pathological Anatomy" and in the Regulations on the final state certification, which was developed by the Department of Postgraduate Education and approved by the Chairman of the Board of the "NSCS", Doctor of Medical Sciences, Professor, Academician of the National Academy of Sciences of the Republic of Kazakhstan B.B. Baimakhanov. Informing stakeholders about the final results of training residents in the specialty "Pathological Anatomy" is carried out through discussion and posting on the official website. The experts were convinced that the professional behavior and communication skills of residents are formed through regular trainings and are reflected in the corresponding document - the Code of Honor for Residency Trainees dated 01/05/2021. Teachers and residents are informed about the code of honor. You can familiarize yourself with the contents of the code of honor on the NSCS website in the section "Main / Department of Postgraduate Continuing Education / Residency".

While determining the final learning outcomes, employees of the postgraduate continuing education department take into account previous learning outcomes in undergraduate and internship courses, and also take 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 an accredited educational program - histology, immunohistochemistry, cytology and others. A review of resources showed that the clinical base of the NSCS for the implementation of the accredited educational program 7R01152 - "Pathological Anatomy", available for review at the time of the external visit, corresponds to the goals and objectives, as it has a sufficient number of thematic pathological materials (cadavers, biopsies, surgical and cytological materials), modern equipment and demonstrates accessibility to students, and employees who simultaneously perform the roles of teachers and curators (mentors) provide quality training in compliance with ethics and deontology.

Before starting the corresponding discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he must acquire and develop during his training.

The surveyed teachers responded that 38.46% were completely satisfied with the level of previous training of residents, and 42.31% were partially satisfied.

Experts have established a clear continuity between the final results of previous resident training (prerequisites) and residency training, and subsequent continuing professional development programs. The organization has developed 9 continuing education programs, including for the specialty "Pathological Anatomy". Residents are informed about this.

1.4 Participation in the formulation of mission and final results

While developing the goals and objectives of the educational program "Pathological Anatomy", interested parties took part - Academic staff, mentors, who are confirmed by the document - EP "Pathological Anatomy". Proposals such as electives were made. While updated regulations and orders in education and healthcare are released, the developers of the educational program take them into account and make appropriate changes. The EP in the specialty "Pathological Anatomy" was developed for the first time in accordance with the 2022 State Compulsory Educational Standard and current LSI, so adjustments will be possible in September 2025.

While talking with residents and employers, experts, a clear answer was received to the question "Do you participate in the formulation of the mission and goals of the organization, educational program?", "What is the personal contribution of residents to improving the educational program?" To these questions, residents answered that they have the opportunity, independently or through the Resident Council, together with the department of PE, Methodological Council, Academic Council, Quality Council, to evaluate the management of the educational program, propose ideas for improvement and, if necessary, make adjustments, and employers responded that the staff of the NSCS

a survey is conducted annually, each division maintains a performance improvement log, which records all inconsistencies, claims, consumer complaints, their reasons, and the implementation of corrective actions.

Conclusions of the EEC on the criteria. Compliant out of 14 standards (including 9 basic, 5 improvement standards): fully - 7/4, partially - 2/1, do not comply - 0.

Recommendations for improvement:

- 1) To annually update information about the educational program on the official website of the NSCS.
- 2) To involve external stakeholders when planning, discussing, developing and approving the mission of the educational program in the specialty "Pathological Anatomy".
 - 3) To increase the motivation of residents to engage in scientific research

Standard 2: EDUCATIONAL PROGRAMMME

2.1 Framework parameters of the postgraduate medical education program

The model of the educational program in the specialty 7R01152 "Pathological Anatomy" is determined on the basis of the final learning outcomes of residents, therefore it includes the following: ensuring the training of qualified, competent specialists who are ready to carry out professional activities in the field of pathological anatomy, and are able to apply clinical and expert approaches in practice. Duration of training are 2 years. The consistency and transparency of training is guaranteed by the fact that residents and teachers are informed about the necessary competencies that both students and teachers acquire. This happens in conditions of transparency and awareness of the successes of residents.

To implement the educational program in the specialty 7R01152 "Pathological Anatomy", the organization's documents contain EMCD, which defines the goal, takes into account the integration of practical and theoretical components, and independent work. Compliance with the State Compulsory Standards of Education and standard requirements has been established, including Instruction Letter No. 8 "On the development of educational and methodological documentation in educational organizations of the Republic of Kazakhstan providing residency training" (2010), Regulations on residency, approved by order of the Minister of Health of the Republic of Kazakhstan No. 28 dated 30.01 .2008; approved by the authorized body in the field of healthcare. The Bologna education system has been adopted as the basis for the educational process in the NSCS.

There are currently no residents in the specialty "Pathological Anatomy", and therefore it was impossible to attend a practical lesson. The organization ensures compliance with ethical aspects in the implementation of the educational program, since the experts have studied the code of honor (Code of Honor for Teachers approved by the Chairman of the Board of the NSCS dated 01/05/2021, Code of Honor for Residency Students approved by the Chairman of the Board of the NSCS dated 01/05/2021) and during the interview residents responded that they were informed about the contents of this document.

An analysis of educational activities showed that the scientific basis and all the achievements of science in the advising disciplines were taken into account, additions were made to the bibliography of EMCD and syllabuses, and teachers use them in the classroom.

The mentoring system, which is described in the document "Regulations on the Clinical Mentor," was evaluated. The procedure for informing residents about their rights and responsibilities is reflected in the Resident's Guidebook (approved by the minutes of the meeting of the postgraduate education sector for 03/09/2021).

The qualification obtained as a result of mastering the educational program in the specialty "Pathological Anatomy" corresponds to level 7 of the national qualification framework (**ESG1.2**) and has code 7R01152.

Teachers use such methods of teaching residents as CBd, CBL, RBL, etc. The list of teaching methods is described in the EP in the specialty "Pathological Anatomy". Thanks to these methods,

residents can participate in the provision of pathological diagnostics. Teachers can provide a resident with reviewing glass slides of surgical or biopsy materials in 150-200 cases per month. For example, residents of an educational program in the specialty "Pathological Anatomy" upon completion of training can carry out such manipulations as autopsy of a corpse, drawing up an autopsy report, making a pathological diagnosis, comparing clinical and pathological diagnoses, drawing up a death certificate, making a conclusion on surgical or biopsy materials, etc.

Experts have found that the principles of academic honesty and anti-plagiarism are fully implemented in educational organizations. In order to ensure the principles of academic integrity, in accordance with paragraph 37 of Annex 5 of the order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 30, 2018 "On approval of the Model Rules for the activities of educational organizations of relevant types," the NSCS conducts an inspection of theses, master's theses, articles, monographs, methodological recommendations, textbooks, etc. for elements of plagiarism and to determine the level of originality using the Anti-Plagiarism software. Checking is carried out by employees of the department of scientific management and innovative technologies. This is reflected in the Code of Academic Honesty and Integrity. Academic integrity applies to such phases of resident training as research work and testing. And anti-plagiarism is applicable in the case when residents and teachers are engaged in writing master's theses, articles, monographs, methodological recommendations, textbooks, etc. on elements of plagiarism and to determine the level of originality using Anti-Plagiarism software. Residents are trained to promptly collect informed consent from patients for any diagnostic and therapeutic procedures. The experts noted that the medical records contain a corresponding document signed by the patient.

Thus, by the end of the 2-year training, residents will acquire basic skills in the profession of "Pathological Anatomy", which will allow them to work in institutions such as medical institutions of regional health departments of the Republic, scientific research centers, and pathology departments at the republican and regional level (ESG 1.2).

The experts did not establish any violations with respect to 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, an educational organization employs_54_teaching staff, of which 3.3_% are women and 66.7% are men.

In the educational organization, there is 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 regular seminars on innovation, testing, training in the cascade method - by teachers who have been trained in new educational technologies in the Republic of Kazakhstan and abroad. In this regard, the teachers of the NSCS will carry out a lot of work to introduce into the educational process new forms and methods of teaching, means of enhancing cognitive activity: multimedia lectures; role-playing, business games; creative tasks (videos, crosswords, quizzes, etc.); use of problematic and situational tasks in practical classes. This demonstrates compliance with Standard 2 in terms of tailoring training to the needs of residents.

2.2 Scientific method

The educational program does not include the scientific foundations and methodologies of medical research. When talking with residents, experts learned that they use scientific evidence in their training and know the basics of evidence-based medicine. The teachers said that they teach residents methods of critical evaluation of literature, articles and scientific data, and the application of scientific developments. The NSCS has introduced the "Training through Research" program, which is aimed at increasing the level of training of a future specialist at the Center, as a single educational, research and production complex, by developing in students the basic research competencies necessary for future professional activities. The resident training program involves performing various forms of educational and research work (preparing communications, reports, conducting research, publishing scientific

articles, poster presentations, working in scientific circles, participating in scientific and practical conferences, etc.).

All program competencies and learning outcomes require students to apply knowledge and skills based on evidence-based practice at all levels of health care. All clinical sites operate in accordance with the clinical protocols of the Ministry of Health of the Republic of Kazakhstan (MOH RK), which are based on evidence-based medicine. Residents participate in telemedicine conferences of the Republican Center for Health Development (RCHD) of the Ministry of Health of the Republic of Kazakhstan, where the implementation of clinical protocols (CP) for practical healthcare is discussed. These conferences are conducted by center staff that has developed CPs for the diagnosis and treatment of vascular diseases. The Research Management Department (R&D) organizes training seminars and lectures for residents and Academic staff (Academic staff). Council of Young Scientists of the National Scientific Center for Surgery named after A.N. Syzganov helps in the publication and implementation of scientific research results into practice, in participation in international and interuniversity scientific conferences, as well as in the preparation of scientific works to receive grants, scholarships, awards and other forms of encouragement.

While surveying residents, it was found that the educational organization has access to the participation of students in research work and 73.68% of people are completely satisfied with this, ___% are partially satisfied, and ___% are not satisfied. Residents should engage in research and in response to the questionnaire, 21.05% wrote that they are already engaged in research, X% are planning to start, 2.63% are looking for a research topic, 0% are not engaged.

2.3 Structure, content and duration of the residency program

Educational services for postgraduate education programs at the NSCS named after A.N. Syzganov are compiled in accordance with the requirements of ST RK ISO 9001:2009 (ISO 9001:2009) "Quality management system. Requirements". The processes of design, regulation, and management of educational programs are supported by a quality management system. The structure and content of the work curricula correspond to the State Educational Standard for specialties; the discipline programs are developed at the proper scientific and methodological level. The sequence of studying disciplines is built using a system of pre- and post-requisites. Responsibility for the selection and implementation of innovations in the educational process lies with the management of the center, and directly with the department of postgraduate education.

Training in the residency program "Pathological Anatomy" is carried out full-time, the duration of training is 2 years. According to the State Compulsory Educational Standard of the Republic of Kazakhstan 2022. The educational program for the training of resident pathologists is designed for 140 credits: major disciplines (mandatory component) - 134 credits, elective component - 4 credits, final certification - 2 credits. The major disciplines are presented as follows: General and private pathology - 30 credits; Forensic histological pathomorphology-1, - 4 credits; Forensic histological pathomorphology in surgery with cytopathology - 16 credits; Clinical pathomorphology in obstetrics and gynecology with cytopathology - 14 credits; Clinical pathomorphology in pediatrics - 13 credits; Clinical pathomorphology in oncology with cytopathology - 20 credits; Clinical pathomorphology in dentistry - 10 credits.

For the successful implementation of the educational program in the specialty 7R01152 "Pathological Anatomy", there are sufficient resources to organize the evaluation of the practical skills of residents

Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, with which 81.58% are completely satisfied, 7.89% are partially satisfied, 2.63% are not satisfied.

NSCS has its own clinical base with 210 beds and 1,500 outpatient visits, and has also entered into 6 agreements with medical organizations from 2019-2023. NSCS has about 30 memorandums with medical organizations located in Almaty, Almaty region and regions of the Republic of Kazakhstan, including 23 foreign ones:

- -Nagasaki National Medical Center (Nagasaki, Japan);
- Sunchonghyang University Hospital (Bucheon, South Korea);
- Budan Hospital of Seoul National University (Seoul, South Korea);
- Medical Corporation Sejong Hospital (Bucheon, South Korea);
- Inha International Hospital (Incheon, South Korea);
- John Radcliffe Hospital, Nuffield Department of Surgical Sciences, University of Oxford (Oxford, UK);
- Erasmus University (Rotterdam, the Netherlands);
- Acibadem International Hospital (Istanbul, Türkiye);
- Scientific Center for Cardiovascular Surgery named after. A.N. Bakulev RAMS (Moscow, Russian Federation);
- Russian Scientific Center for Surgery named after Academician B.V. Petrovsky (Moscow, Russian Federation);
 - Institute of Surgery A.V. Vishevsky (Moscow, Russian Federation);
- Research Institute of Transplantology and Artificial Organs named after V.I. Shumakova (Moscow, Russian Federation);
 - Faculty of Medicine of St. Petersburg State University (St. Petersburg, Russian Federation);
 - Republican Center for Organ and Tissue Transplantation (Minsk, Belarus);
 - Republican Research Center for Cardiology (Minsk, Belarus);
 - Bashkir State Medical University (Ufa, Russian Federation);
 - National Oncology Center named after. V. Fanarjyan (Yerevan, Armenia);
- National Center of Cardiology and Therapy named after. MM. Mirakhimova at the Ministry of Health of the Kyrgyz Republic (Bishkek,

Republic of Kypgyzstan);

- Republican Specialized Center for Surgery named after. V.V. Vakhidova (Tashkent, Republic of Uzbekistan);
- National Cancer Institute (Ukraine);
- Russian Oncology Research Center named after. A.N. Blokhina (Moscow, Russian Federation);
- State Institution "Republican Center of Oncology and Medical Oncology named after A.N. Alexandrova"

(Minsk, Belarus);

- Scientific Center for Surgery named after. Academician A.A. Topchibasheva (Baku, Azerbaijan).

And to the question of the questionnaire "Is there enough time for practical training (supervision of patients, etc.)", 89.47% of residents responded with complete agreement, 5.26% partially agreed. At the same time, 84.21% of residents claim that after completing classes the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, works on mistakes.

At the same time, to the question "Do resident representatives participate in the development of educational programs?", the experts received the answer that resident representatives are actively involved in the process of developing educational programs, providing feedback and suggestions for improving the educational process. The surveyed residents are fully satisfied with the schedule of training sessions (94.74%).

2.4 Organization of training and the relationship between postgraduate medical education and medical care

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 PSE department and conversations with the head of the department and employees. 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 Center for Postgraduate Education and conversations with the head and employees. At the same time, verification of standard 2 showed that there is all the necessary

documentation for the implementation of the residency educational program in specialty 7R01152 "Pathological Anatomy".

A total of 3 meetings were held and during the cross-interview it was established that there is constant communication between residents and their supervisors, and the relationship between supervisors and clinical mentors and stakeholders is monitored. This is facilitated by the mentoring that is carried out in the organization.

The experts analyzed the information on the availability of accreditation of clinical sites and concluded that the review and approval of the educational program is carried out by the Department of Medical Sciences of the National Scientific Center of Surgery named after A.N. Syzganov, whose composition is approved by the Chairman of the Board.

The main clinical bases are the pathoanatomical and pathomorphological laboratories of the NSCS, the Almaty Public Hospital and the Institute of Medical Examinations of the Ministry of Justice of the Republic of Kazakhstan and has a sufficient amount of materials, modern equipment, and is a center for the formation and development of practical skills among residents in accordance with the goals and objectives of the educational program in the specialty 7R01152 - "Pathological anatomy".

The training of residents in the specialty "Pathological Anatomy" is aimed at meeting the needs of practical healthcare. Therefore, this organization is specialized in the field of training qualified specialists in the specialty "Pathological Anatomy". Thus, during a conversation with the management of the organization, experts received information that the training of residents will be carried out directly on the job in the pathology and pathology laboratories, there is also a training room for the analysis of theoretical material, the use of telemedicine instruments, and the teachers confirmed that the training of residents is carried out directly on the spot.

This is facilitated by the mentoring that is carried out in the organization.

Attending the practical lesson was impossible due to the lack of residents in the specialty "Pathological Anatomy". Integration between training and the provision of pathological diagnostics (on-the-job training) is carried out through clinical internships and rotations at clinical sites. Training is conducted in accordance with clinical protocols.

Of the 38 residents surveyed, 81.58% responded that teachers in the classroom use active and interactive teaching methods quite often, 7.89% believed that they rarely or sometimes.

The following employees from all structural divisions of the National Research Center of Surgery took part in the planning, discussion, approval and review of the educational program in the specialty "General Surgery".

Conclusions of the EEC on the criteria. Compliant out of 22 standards (including 19 basic, 3 improvement standards): fully - 17/3, partially - 2/0, do not comply - 0.

Recommendations for improvement:

- 1) To provide the educational program with modern electronic resources and relevant literature.
- 2) To actively involve employers in planning, discussing, approving and reviewing the educational program.
- 3) To annually update information about the educational program on the official website of the NSCS.

Standard 3: RESIDENT ASSESSMENT

3.1 Assessment methods

The policy and procedure for assessing learning outcomes within the EP is carried out using criteria developed in accordance with the set goals and objectives for the implementation of the EP and assigned qualifications within the framework of the current point-rating system for assessing knowledge and monitoring the educational process in accordance with directive, regulatory and internal documents:

- Law of the Republic of Kazakhstan "On Education" dated July 27, 2007 No. 319-III (as amended and supplemented as of December 4, 2015);

- Acting Order Ministry of Health of the Republic of Kazakhstan dated July 31, 2015 No. 647 "On approval of state mandatory standards and standard professional programs for medical and pharmaceutical specialties" as amended in 2020;

Policies and methods for assessing residents are reviewed and approved at a meeting of the PE department. The list of mandatory disciplines for final control during the intermediate certification period is regulated by the passed disciplines, which are reflected in the WC, and a technical specification is drawn up - a matrix of test tasks, the number of test questions in accordance with the number of credits passed in the disciplines. Responsibility for the implementation of the policy for assessing the educational achievements of residents lies with the department of educational training, teaching staff and the curator of the specialty.

The study of control and measurement tools (control questions, tasks in test form, tasks for laboratory work, practical and communication skills) showed that the organization has implemented an appropriate assessment policy that allows for a comprehensive assessment of the educational achievements of residents. While interviewed, residents spoke about forms of assessment, such as formative and summative assessment, and that they were satisfied with everything. They also receive regular feedback from teachers. The system for appealing assessment results is reflected in the document "Regulations on intermediate and final certifications" and during the period of the work of the NSCS for Education there were no precedents for appeal. The assessment covers not only knowledge and skills, but also professional behaviour and communication skills, which is confirmed by the following: the resident, throughout the entire period of training, forms a portfolio that corresponds to the final goals of the program and contains uniform reliable and valid criteria for assessing the student's performance. A resident's portfolio consists of the resident's report; checklists with assessment of practical activities, seminars, duties, etc.; characteristics of the curator; information about achievements during residency training, if any (awards, certificates, conference programs, abstracts of publications, videos, letters of gratitude, patient reviews, etc.).

Residents who have completed the educational process in accordance with the requirements of the IEP are admitted to annual and end-of-course assessment. A resident is considered admitted to the exam in the discipline if his admission rating (semester grade) is greater than or equal to 50 points. In the practice of educational organizations, residents (including other specialties) pass an independent examination in 100% of cases.

Validation and assessment of the reliability of resident evaluation methods (tests, tasks, cases) is carried out as follows: review of control and measurement tools is carried out at several levels - within the NSCS - from an employee of the NSCS and external review, when employees of external organizations, associations or employers act as reviewers. However, the NSCS does not have an electronic system for validating and assessing the reliability of resident assessment methods, although they use the Platonus electronic platform. Reviews are recorded at meetings of the PE department. The NSCS has a practice of involving external examiners in assessing residents, which is documented in the reports of the chairmen of the State Certification Commission (hereinafter referred to as the SCC). The SCC is carried out at the National Centre for Independent Examination (hereinafter referred to as NCIE), where representatives of NCIE experts are present at both stages. This ensures the independence and objectivity of the assessment results.

Thus, to verify the data of **standard 3**, the experts asked questions to the head of the department of postgraduate continuing education Amal Zhumagazievna Smailova and checked the documents and methods for assessing residents.

The Director of Graduate Continuing Education responded that there are plans to implement mechanisms to examine and document the reliability, validity, and fairness of assessment methods.

The number of exams in each course is regulated by the standard curriculum for the specialty. The forms of conducting are determined by the decision of the EMC and the Academic Council. The content of the exams is regulated by the Department of Postgraduate Education to maintain an optimal balance and carry out an integrated assessment of the development of competencies among residents.

The end-of-course assessment of residency graduates is carried out in accordance with the Rules for evaluating the professional preparedness of graduates of educational programs in the field of healthcare, approved by order of the Minister of Health of the Republic of Kazakhstan dated December 11, 2020 No RK MOH-249/2020. Control and measurement tools for the End-of-course assessment of graduates are developed by teaching staff in training residents, discussed and approved at the meeting of the EMC.

The results of resident assessments are documented only in the examination sheets for the disciplines.

There is a document on appealing the assessment results. To date, there have been no resident appeals.

During a visit to the organization and during an interview with the head of the organizational and methodological department and statistics, Kadirova Zhazira Adilbaevna, the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and staff, and includes documents such as annual operational plans, annual reports, regulations of departments, agreements with teachers and residents, and educational and methodological documentation (work program, working curricula, syllabuses, journals), assessment tools (checklists, statements), evidence, certificates and certificates. A review of the website showed that its pages contain documents necessary for residents, such as questions of entrance exams to residency, questions of the entrance exam for specialty 7R01152 - "Pathological Anatomy", an order approving standard rules for admission to training in an educational organization, a code of honor teacher and residency student, areas of competence of a residency graduate, NSCS quality policy, regulations on intermediate and final state certification, regulations on the organization of the educational process and the PD, reference guide 2021, license for educational activities, certificates of special accreditation, regulations on clinical preceptor, and resident council regulations. There is also information about licenses and accreditation of the NSCS, which is regularly updated.

During the visit to the organization, management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" And the answer was received that during the final state certification, leading specialists from practical healthcare are involved..

3.2 Relationship between assessment and learning

While conducting interviews with 2 teachers regarding assessment methods, the experts received convincing information that the results of student assessment in dynamics influence the organization of training, the choice of new teaching methods and the improvement of educational resources. Teachers noted that, based on analyses of academic performance and exam results, they regularly make changes to curricula and teaching methods, introducing new technologies and interactive approaches. Residents also shared their opinions on the timeliness of test delivery, pre-exam counselling, the clarity of the entire assessment procedure and its fairness. For example, residents reported that detailed counselling and study materials are provided before each exam to help them better prepare and understand the assessment criteria.

The experts examined the resources for organizing the assessment of knowledge and practical skills, namely, specialized laboratories, simulation centres and training rooms equipped with the necessary equipment for practical training and testing. Experts determined that the choice of methods for assessing residents is based on the principle of objectivity and practical orientation, since the practical part of training is the main one. For example, assessment methods such as objective structured clinical examinations promote inter-professional learning. And a method such as case methodology (analysis of clinical cases) demonstrates the integration of learning 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. Since the clinical bases of the specialty "Pathological Anatomy" have a large number of pathological objects, free access for residents to these objects and highly qualified mentors, state-of-the-art equipment, the development of practical skills by pathological residents should be at a high level.

Deficiencies in the implementation of this section of the accreditation standard, discovered during the analysis of the self-assessment report of the educational program and during a visit to the educational organization, include insufficient systematization of feedback from residents regarding assessment methods and insufficient integration of modern educational technologies into the assessment process. It is necessary to introduce an electronic system for questioning residents and electronic document management to facilitate the learning process.

Feedback from residents based on the results of their assessment is collected in the form of anonymous questionnaires or surveys and published on the educational organization's web portal. In interviews, residents confirmed that they receive feedback after completing their training.

The interviewed 5 representatives of employers of other specialties also indicated that the training of graduates corresponds to the modern development of medical practice and science, since residents acquire up-to-date knowledge and skills that meet modern requirements and standards. Employers said that they themselves participate in the assessment of residents, as they are included in the internal audit and feedback processes. However, the educational organization did not provide systematic feedback to them. Employers believe that they wanted to see the strongest skills in residency graduates, such as communication with patients and colleagues, as well as knowledge of modern diagnostic and treatment methods.

At the same time, there are difficulties in developing control and measurement tools, including the lack of structure and standardization of methods for assessing practical skills, as well as limited opportunities for monitoring and analysing assessment results.

Conclusions of the EEC on the criteria comply with 9 standards (including 6 basic, 3 improvement standards): fully -3/3, partially -3/0, do not comply -0.

Recommendations for improvement:

- 1) To combine all documents regulating the educational process into one document "Regulations on Residency".
- 2) To implement mechanisms to examine and document the reliability, validity, and fairness of assessment methods, and use a complementary set of assessment methods.

Standard 4: RESIDENTS

4.1 Admissions policy and selection

The NSCS has a policy for the admission of residents, which is called "Rules for Admission to Residency." Approaches to the admission of residents are based on the requirements of the country and internal regulations, namely, in accordance with the order of the Minister 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 higher educational programs and postgraduate education", with the order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. RK MOH-270/2020 "On approval of the rules for placing a state order, admission to training and training of medical personnel in residency", State Compulsory Standards of Education and the Rules for admission to residency.

Transparency of the selection procedure and equal access to residency programs is achieved through an examination where the examination is videotaped, with observers and commission members present in the hall. Enrolment of citizens into residency is carried out on a competitive basis, which is held separately among persons applying for target places.

Admission to residency, indicating a specialty, is carried out in accordance with the Standard Rules for Admission to Training in Educational Organizations Implementing Professional Study Programs of Postgraduate Education Order No. 600 "On Approval of the Model Rules for Admission to Training in Educational Organizations Implementing Educational Programs of Higher and Postgraduate Education (as amended 06.2020) and does not limit the rights of low-income families and national minorities. The admission of residents with disabilities is regulated by the Decree of the Government of the Republic of Kazakhstan dated August 31, 2012. No. 1119 "On approval of

standards of public services provided by the Ministry of Education and Science of the Republic of Kazakhstan, local executive bodies in the field of education and science."

The document takes into account the requirements for residency applicants in terms of their previous achievements in undergraduate and internship (for example, the average GPA for the internship period (15%) and the average GPA for undergraduate (15%) or GPA for all 7 years of study (in the case absence in the GPA transcript, the average score for the application is calculated (converted to a 4-point scale) and the assessment of the 1st stage of the End-of-course assessment 7th year (independent testing conducted by NCIE)), and the safety requirements are also described (for example, before starting work, residents undergo safety training and access from an epidemiologist, and sign a safety information sheet).

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

According to the order of the Ministry of Education and Science of the Republic of Kazakhstan No. 595 dated October 30, 2018, a student can be transferred or reinstated after expulsion at the end of the first academic period. While transferring under a government order from one organization to another, the head of the receiving organization submits a copy of the enrolment order to adjust funding. Transfer from one specialty or form of study to another is carried out only on a paid basis. The course of further education is determined taking into account prerequisites, and the transfer of credits is based on a comparison of programs and learning outcomes, without taking into account differences in the forms of end-of-course assmessment.

The appeal procedure based on the results of admission to residency is prescribed in the Model Rules for Admission to Study in Educational Organizations Implementing Professional Postgraduate Study Programs, Order No. 600 with additions and changes in June 2020. To date, there are no precedents for appeal.

The process of developing a policy for the admission and selection of residents includes representatives of students, namely residents identified by the Council of Residency Elders. Feedback is provided to residents on this issue, and recently the following changes have occurred in approaches to the admission of residents: for example, during a pandemic, due to the impossibility of passing exams in infectious diseases hospitals, the admission conditions were changed: instead of an interview, individual achievement scores and a certificate of work in medical institutions of the Republic of Kazakhstan related to the fight against COVID-19.

The review of the admission and selection policy and the number of residents is carried out annually, and the department of postgraduate continuing education is responsible for this.

Thus, experts validated the data according to **standard 4.** In general, all criteria are met, but at the same time some shortcomings are identified. The experts familiarized themselves with the documentation for the admission of residents, including the "Rules for admission to residency" and other regulations. Many of the documents are well-written, but there are comments regarding the completeness and relevance of the information presented on the official website. It is necessary to pay attention to regular updating of data, as well as to improve the systematicity of feedback from employers to further improve the educational program.

4.2 Number of residents

For the period 2019-2023 127 residents were admitted to all educational programs; the first residency admission to the program in the specialty "Pathological Anatomy" will be in 2024. The total graduation rate of residents on the dates of commencement of admission to residency in all specialties was 82 people. Every year, taking into account the needs for medical personnel at the National Scientific Centre for Surgery named after A.N. Syzganov, a request is sent about the needs of scientific and pedagogical personnel and clinical specialties of residency in the DSHR of the Ministry of Health of the Republic of Kazakhstan. In accordance with the submitted request, the DSHR is allocated a State order for the training of medical personnel in residency. The number of residency students is determined based on the capabilities of clinical training, as well as the needs of practical healthcare.

4.3 Support and counseling for residents

NSCS named after A.N. Syzganov has implemented a comprehensive system of support and counselling for students, covering academic, personal, psychological and social aspects.

• Academic support and counseling

To implement a competency-based model of medical education, there is a system of academic counselling for residents:

An academic mentor is assigned to each resident by order of the Chairman of the Board. The mentor helps in the formation and implementation of an individual curriculum, manages educational and scientific activities, and assists in employment.

A clinical preceptor is assigned to the medical organization where the resident is training. Its function is to guide the resident to master practical skills and competencies.

• Personal and psychological support

The support system covers personal and psychological aspects:

Psychological support: provided through specialized counselling and programs. Academic staff is always ready to help residents in case of personal or professional problems.

Social support: includes sports and recreational work, participation in charity events, volunteerism and other events.

Confidentiality: is respected during consultation and provision of any support, which guarantees trust and openness in communication between residents and mentors.

• Vocational guidance and career planning

Vocational guidance: NSCS Academic staff provides support for vocational guidance, career planning and increasing the mobility and competitiveness of graduates.

Personal distribution of graduates: held annually with the participation of representatives of health departments, pharmaceutical companies and public health departments of the Republic of Kazakhstan. The employment rate of graduates of all residency programs is 100%.

• Tools for support in case of a professional crisis

To provide support to residents in the event of a professional crisis, the following tools are used:

Consultations: Regular meetings with academic and clinical mentors to discuss problems and find solutions.

Monitoring: The PE department monitors the progress and career growth of graduates, which allows timely identification and resolution of professional crises.

- Feedback: Residents can contact the PE department for immediate resolution of any problematic situations, as well as participate in surveys to assess satisfaction with support.
- Frequency, regularity and funding

Frequency and regularity: Consultation and support are provided on a regular basis, with a flexible schedule agreed with residents. Consultation schedules are drawn up by curators and approved by management.

Financing: provided from the NSCS budget allocated for educational programs and support for residents.

• Responsibility and implementation

Responsible persons: the postgraduate continuing education department, academic and clinical mentors are responsible for the implementation of the support and counselling system.

During the visit to the NSCS, evidence was obtained of the effectiveness of the support system through interviews with residents and mentors, as well as a review of documentation and student surveys, which confirmed a high level of satisfaction with the support.

4.4 Representation of residents

The following consultative and advisory body functions in the educational organization: Council of Residency Elders, in the work of which residents - elders, activists and all interested residents take part. Mechanisms for rewarding residents for public work have not been fully developed. All of the resident's achievements are added to his portfolio and are rewarded when reviewing portfolio materials. While surveying residents, experts found that residents have a real opportunity to participate in the organization of the specialty EP during direct discussion and approval of work programs. For

example, based on the results of a survey of residents, plans for corrective and preventive measures were developed; for the EP, a proposal was made on the need to provide greater independence and require greater activity during duty and during everyday activities at the clinical site.

4.5 Working conditions

According to the order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. RK MOH-270/2020 "On approval of the rules for placing a state order, admission to training and training of medical personnel in residency," resident doctors studying under the state educational order are paid a scholarship, according to Rules for the appointment, payment and amount of state scholarships for students studying in educational organizations, approved by Decree of the Government of the Republic of Kazakhstan dated February 7, 2008 No. 116. Residents are given the opportunity to work during extracurricular hours (no more than 0.5 rate), with the consent of the curator, head of department and PE department. If they have a specialist certificate, residents of the 2nd year of study are allowed to conduct independent medical activities in public and private medical institutions, during extracurricular time. Residents participate in all events held by the NSCS. For example, "Open Day", organizing training for nurses, consultations, organizing and conducting events for scientific and information exchange in the form of conferences, seminars, symposia, forums and other forms aimed at exchanging experience, scientific and practical information, on strengthening mutually beneficial ties, participating in joint scientific and research projects.

During a visit to the clinical base by EEC experts, it was established that residents have unlimited access to pathological materials and objects, all types of medical equipment and to all departments of the clinical bases. Every year, residents undergo training according to the established schedule of classes and mastery of disciplines. According to the profile of the discipline, patients are independently examined under the supervision of mentors. According to the profile of the discipline, medical procedures are performed independently or under the supervision of teachers according to the list of mandatory acquisition of practical skills. Residents maintain medical documentation; draw up plans for examination and management of patients, control and signature are carried out by a clinical mentor (full-time employee or part-time employee). All work performed is reflected directly in the resident's clinical diary, and the results of achievements in the portfolio. Residents, according to the prepared training schedule, are part of the duty team, and upon completion they report at morning conferences.

The teaching load of residents is planned in accordance with the Law of the Republic of Kazakhstan "On Education". The class schedule from 08.00 to 17.00 is regulated by educational programs developed on the basis of State Compulsory Educational Standards 2022, sanitary and epidemiological rules and regulations, curricula and recommendations of health and education authorities. Residency work is the primary and dominant responsibility of the resident. The EP maintains a balance of all types of activities: autopsy of corpses, cutting out cadaveric, biopsy and surgical materials, description of glass preparations, drawing up a protocol for the pathological examination of the corpse, etc., participation in clinical and anatomical conferences, etc. A schedule of the resident's stay in a specific pathological department is drawn up clinical base, according to the discipline. Residents with work experience may have an individual learning path (during rotation among departments), and the choice of elective discipline also influences the learning path.

The NSCS does not consider the use of a platform for distance learning for residents within the framework of the EP.

In special circumstances (for example, if students transferred from other universities, reinstated, remaining for a second year of study, returning from academic leave), an individual training program for residents is used, which includes disciplines of the compulsory component, types of educational activities and disciplines of the component chosen from the CED.

Conclusions of the EEC on the criteria. Complies with 20 standards (including 14 basic, 6 improvement standards): fully -14/6.

Recommendations for improvement:

1) To develop mechanisms to reward residents for their social activity.

Standard 5: TEACHERS

5.1 Admission and selection policy

The total number of employees is 54, of which 0 are full-time teachers, 54 are part-time teachers. The requirements for teachers of the residency program take into account the "Regulations on the Clinical Mentor" 09/01/2023; "Regulations on mentoring of JSC "NSCS" 09/01/2021.

Sedateness is 31.5%, 100% having the highest category. The training of residents in the specialty "Pathological Anatomy" is carried out by the following employees: Yenin Ye.A.; on the basis of the pathoanatomical and pathomorphological laboratories of the National Scientific Centre for Surgery.

The experts familiarized themselves with the job descriptions of Academic staff and the regulations on mentoring.

The experts are familiar with the personnel policy of the National Scientific Centre for Surgery, "Regulations on the clinical mentor" 09/01/2023; "Regulations on mentoring of JSC "NSCS" 09/01/2021. The faculty to resident ratio is 1:3

The motivation system for teachers and clinical mentors includes the following events, such as awards at the city and republican level; support for participation in master classes, conferences and other scientific and practical events of republican significance and abroad. Bonuses are paid for some holidays. The principles of ethics and academic integrity of teachers are reflected in the document - Code of Business Ethics of JSC "NSCS" 04/18/2019.

During a conversation with teachers, they confirmed their awareness of this issue - all teachers are familiar with the Code of Business Ethics of JSC "NSCS" 04/18/2019.

In order to verify the data of standard 5, external experts obtained the opinion of teachers on 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 included questions such as how specialists from the NSCS are attracted and motivated for educational activities and allowed the experts to learn about approaches to attracting clinical staff to teach, about the strategy and tactics of recruiting teachers, the information security of the educational program, and also to identify management problems and human resource development, since most part-time workers do not know teaching methods.

While surveying teachers, it was found that the majority (84.62%) were completely satisfied with the organization of work and the workplace in this educational organization, but 15.38% were partially satisfied. In this educational organization, teachers have the opportunity to engage in scientific work and publish the results of research work - 92.31% completely agree, 7.69% partially agree. Satisfied with the work of the HR (personnel) service - 96.15% completely agree, 3.85% partially agree. They are satisfied with the salary – 69.23% completely agree, 15.38% partially agree.

5.2 Faculty Commitment and Development

The clinical base for pathological anatomy of the NSCS has a sufficient number of teachers for the successful implementation of the educational program for residency in the specialty 7R01152 "Pathological Anatomy". To work with residents, in the 2024-2025 academic year it is planned to attract 3 employees who are qualified pathologists with extensive experience, 3 mentors with the highest qualification category in their specialty. The experience of clinical and research work of teaching staff is over 5 years. The main indicators characterizing specialists recruited as teaching staff for residents are the following characteristics: the presence of an academic degree and title, scientific and pedagogical experience and experience in the position held, activity in scientific, methodological and research work, etc. Selection of Academic staff in accordance with established requirements, analysis of the quantitative and qualitative composition of Academic staff, control and evaluation of teaching activities are objects of constant attention from the centre's management.

The staff of the residency Academic staff is determined in accordance with the basic provisions of the order of the Minister of Health of the Republic of Kazakhstan dated June 14, 2004 No. 474 "On approval of standards for calculating the cost of training for one student, residency student, master's

student, doctoral student (PhD) in educational organizations and scientific organizations in the field of health care within the country according to state educational order."

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 developing the pedagogical competence of teachers, motivation to work with residents, mentoring, which consists of planning, development of incentive and encouragement measures for achievements in work. Types of incentives and the procedure for their application are determined by the legislation of the Republic of Kazakhstan.

Experts determined that faculty and residents have adequate time for teaching, mentoring, and learning. The work schedule of teachers is set in accordance with their workload. Working hours: according to the hourly load.

The experts received answers about the teacher training program, which is conducted annually and 18 teachers participating in the implementation of the educational program were trained in 2022-2023, including teachers of the accredited educational program in the specialty "Pathological Anatomy" - 2 people.

However, given the level of the program - residency, experts identified limited opportunities for international professional internships for Academic staff.

The salary fund of teachers consists of budgetary and extra-budgetary funds, depending on the type of resident grant.

Financing of mentors is carried out in accordance with the legislation of the Republic of Kazakhstan.

Experts have found that teachers initiate research topics for residents stimulate the need for additional training and independent work with literature and medical documentation.

In an educational organization, there is an opportunity for career growth and development of teacher competencies - 92.31% of surveyed teachers responded, and 7.69% partially agreed with this. Studied in professional development programs - 65.38% during a given year, 30.77% from 1-5 years ago, 0% over 5 years ago and 0% answered "I don't remember when it was."

The organization implements social support programs for teachers - 46.15% answered that "yes, such programs exist", 0% "I have already taken advantage of this", 7.69% of respondents answered that there are no such programs, and 46.15% of respondents don't know about it.

Conclusions of the EEC on the criteria. Complies with 8 standards (including 7 basic, 1 Standard improvement): fully - 8.

Standard 6: EDUCATIONAL RESOURCES

6.1 Logistics and equipment

Training of residents is carried out on the basis of JSC "NSCS", as well as at clinical bases - the Pathological Bureau of the city of Almaty and the Institute of Forensic Medical Examination of the Ministry of Justice of the Republic of Kazakhstan, including residents of an accredited educational program in the specialty "Pathological Anatomy" on the basis of pathological and pathological laboratories. There is 1 auditorium, 1 conference room for seminars and journal clubs, 2 laboratories (pathoanatomical and pathological), a library with 10 seats, a computer class with 5 seats, a test centre with 5 seats.

The experts visited the library, which provides residents and staff with access to professional literature and some electronic resources. The total amount of literature on the accredited specialty on paper is 16 pieces, including some literature located on the clinical base, and on electronic ones - 5 pieces.

There is access to international databases: Web of Science – webofknowledge.com, Elsevier – Sciencedirect – sciencedirect.com, Scopus – scopus.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 must acquire and develop during his residency training. The strengths of the

accredited specialty are students' free access to vast pathoanatomical material - cadavers, operating room, biopsy materials, state-of-the-art equipment, access to IMIS through a mentor, the opportunity to participate in pathoanatomical conferences, etc. But along with its strengths, not all divisions of the NSCS have free access to Internet resources. There is stationary access only. No Wi-Fi. As a result of the visit, the experts held meetings with teaching staff in the specialty "Pathological Anatomy", the head of the library of the NSCS, and identified the insufficiency of professional literature for training residents. In connection with the above, it was recommended to update the annual application for updating the library collection, taking into account the purchase of current professional literature.

The material and technical base, including the library background, is updated once a year.

6.2 Clinical sites

A review of the resources showed that they correspond to the goals and objectives of educational activities, for example, the clinical bases of the pathological and pathological laboratories of the NSCS were visited, and a conversation was held with representatives of the clinic base of the Almaty Public Hospital. Employees of the educational organization ensure collegial and ethical relationships with medical staff and management of the clinical site to achieve the final results of residents. A sufficient amount of thematic pathological materials (cadaver, biopsy, operating, cytological and other materials), modern equipment is provided and demonstrates accessibility to students, and employees who simultaneously perform the roles of teachers and clinical mentors provide quality training in compliance with ethics and deontology. Before starting the corresponding discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he must acquire and develop during his training. During a visit to clinical sites, where experts examined the resources, their compliance with the training program for resident pathologists, accessibility for teachers and residents, how modern this equipment is and meets the needs of students and practical healthcare. The experts obtained evidence of compliance with standard 6, as well as validation of the self-assessment report information.

In order to validate the implementation of the self-assessment report data and obtain evidence of the quality of the programs, interviews were conducted with residents. The experts asked questions about satisfaction with training, sufficient time for supervising patients, working with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents in need, participation in "Journal Clubs," and the availability of international databases of professional literature. In general, residents are satisfied with the training, assessment methods, and purposefully entered this organization, because they believe that the educational organization has good resources, image and international connections, at the same time, residents would like more independence in managing patients and conducting international events.

Residents showed their commitment to the NSCS, were active in answering questions from external experts, and demonstrated their judgment in organizing training, assessing their skills, advisory support, and the opportunity to participate in research. Experts examined residents' documents (portfolios, resident assessment results, checklists, residents' survey results).

6.3 Information technology

Experts assessed the access of residents and teachers to the necessary web resources, including Platonus, as well as access to electronic media (_Web of Science - webofknowledge.com, Elsevier - Sciencedirect - sciencedirect.com, Scopus - scopus.com). Residents confirmed that they can use Web of Science - webofknowledge.com, Elsevier - Sciencedirect - sciencedirect.com, Scopus - scopus.com., including in preparation for classes.

Information support for the work of residents in the specialty 7R01152 "Pathological Anatomy" is planned to be carried out through: the media (Facebook, Telegram, etc.), the website of the NSCS and the clinical base; as well as the official information board of the Nat NSCS, the Department of Postgraduate Continuing Education of the NSCS. When preparing educational and methodological literature, teachers use educational resources of the library (electronic textbooks, electronic manuals, and scanned educational literature), the Internet, as well as the results of their own scientific and research activities.

6.4 Clinical teams

The program for training residents to work in a team and effectively interact with other healthcare professionals includes direct work of residents together with employees of clinical sites in all areas of their activities, participation in national and city conference calls, in scientific and practical conferences, and work in multidisciplinary teams. To work in multidisciplinary teams while choosing tactics for managing the most complex patients increases the responsibility of residents when they see that effectiveness depends on the correct organization of teamwork. In such situations, the resident performs all work within the limits of his competence.

In the department of pathomorphology with prosection, cytology and electron microscopy group, there are all conditions for acquiring the skills of coordinated work in a multidisciplinary team in providing surgical and therapeutic care to patients, continuity at stages (prehospital - hospital), sequence of actions. The resident is present during consultations and carries out instructions from senior colleagues within the scope of his competence. The results of the resident's activities are checked by the teacher and documented in a portfolio.

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 84.21% of teachers completely agree with this, 10.53% partially agree, 0% found it difficult to answer.

6.5 Medical research and advances

The NSCS implements the "Training through Research" program, the goal of which is to increase the level of training of a future specialist, as a single educational, research and production complex, by developing in the student the basic research competencies necessary for future professional activities.

The resident training program provides for the implementation of various forms of educational and research work (preparation of communications, reports, conducting research, publication of scientific articles, poster presentations, participation in scientific and practical conferences, etc.). Residents are involved in the implementation of scientific and technical projects carried out by Academic staff. Participation of residents in scientific research with the presentation of results at conferences, congresses, and in medical publications is encouraged by additional points to the portfolio.

An interview with teachers showed that there are no problems in managing education, depending on the specific base (admission of residents to equipment, a sufficient amount of thematic pathological materials, time for maintaining medical records, independent work).

6.6 Educational expertise

Expertise as a stage of educational monitoring technology allows us to draw conclusions about the quality of innovative changes in postgraduate education, as well as the processes and phenomena that led to these innovative changes.

The examination of the quality of the implemented EP for residency in the NSCS is systematic and is carried out by the following structures: the educational and methodological council (EMC) (approval of the EP), the residency department (implementation of the EP, planning, development and evaluation of the EP, monitoring of the EP), the Quality Management System Department. The EMC includes teachers, representatives of professional associations, employers, and students. The PSE department monitors various aspects of educational activities to obtain independent information aimed at improving the quality of the organization of the educational process. In the process of each study, recommendations were formed for making changes in order to improve the organization of the educational process of the centre.

Employees of the PSE department conduct annual monitoring of the quality of educational programs and the results are included in the specialty EP.

Sociological surveys, including questions of the quality of education, could become one of the mechanisms for examining education. However, in educational organizations it is necessary to introduce a survey of employers through electronic resources, for the convenience of processing the results and wide publicity of the results.

The examination is carried out in the form of an analysis of the needs for specialists, an analysis of resident training methods, and the results allow us to draw conclusions about the quality of innovative changes in postgraduate education.

Experts have established that there is no jointly developed EP residency in specialty 7R01152 "Pathological Anatomy" with partner universities.

6.7 Training in other institutions

The academic policy for resident training includes the possibility of training at alternative organizations if existing clinical sites do not cover all topics of the educational program. At the same time, the training of residents in the specialty "Pathological Anatomy" is carried out on the basis of the PAH of the city of Almaty, where there are pathomorphological departments - therapeutic, surgical, oncological, gynaecological profiles. Residents study such disciplines of the educational program as "General and private pathology", "Pathomorphology of surgical material" in the pathomorphology department of the National Research Centre for Surgery. And other disciplines are on the bases of the PAH of the city of Almaty and the Institute of SME of the Ministry of Justice of the Republic of Kazakhstan in the city of Almaty. The preparation of scientific publications is carried out under the guidance of a teacher and does not require additional training bases. However, residents can participate in academic mobility within the country; for example, an agreement has been concluded with the Medical Universities of Karaganda, Astana and Semey and abroad, as there is an agreement with Nagasaki University, Nagasaga, Japan.

There is a document on the transfer and offset of learning results between educational organizations: NJSC "AMU", NJSC "SMU", and NJSC "KMU". 34 agreements and 12 memoranda were concluded with organizations, universities, associations, including foreign ones. Such cooperation makes it possible to introduce the following teaching methods and technologies into residency programs: immunohistochemically studies, electron microscopy, specialized stains to identify certain pathologies, etc. For example, in the specialty of an accredited educational program, international cooperation is carried out with Nagasaki University, Department of Pathology.

Teachers of educational organizations actively participate in republican and international events. Thus, 5 teachers took part in international conferences. Such participation allows you to apply the information received in the educational process. For example, in the specialty of the educational program "Pathological Anatomy", scientific and practical activities are carried out in accordance with the strategic plan of the National Scientific Centre for Surgery. Over the period of 5 years, Academic staff have not been trained abroad.

Conclusions of the EEC on the criteria. Comply with 18 standards (including 11 basic, 7 improvement standards): fully - 17, partially - 1, do not comply - 0

Recommendations for improvement:

1) Updating of professional literature and electronic resources in the specialties "Pathological anatomy" is required

Standard 7: ROGRAMME EVALUATION

7.1 Monitoring and evaluation mechanisms

Monitoring of the educational program includes assessment of the management of the educational program (level of Academic staff, organization of the educational process, regular assessment of the level of achievement of program goals, demand for graduates), implementation of the educational program (curriculum, standard discipline programs, methodological and information support, infrastructure, educational technologies, research work), results EP (interim certification, end-of-course assessment). Monitoring and evaluation of EP is carried out at all levels, a multi-level approach is used, including major/graduating and related specialties (clinical and paraclinical units, department of PSE, EMC, AC, general monitoring of the quality of educational programs through a survey of stakeholders (employers, students), which ensures transparency of the process and results. The annual analysis of the educational program will allow the educational organization to make

adjustments and improve the content. Initially, the educational program was reviewed by external reviewers from among employers and colleagues from other universities, and it was noted that the EP in the specialty "Pathological Anatomy" complies with the State Compulsory Educational Standard 2022. Subsequently, the residency program was approved at a meeting of the Board of Directors (minutes No. 7, dated June 14, 2023). Regular assessment of the quality of the educational program is carried out by the PSE NSCS through surveys, audits and questionnaires.

While evaluating the program, the goals and objectives of training and the final results of training are taken into account (through evaluation of residents, independent examination). The process of implementing the educational program is assessed through feedback from residents and teachers and the achievements of graduates. For example, a survey of residents in 2023 in the specialties of general surgery and radiology demonstrated the following: residents are satisfied with the training process in the residency program at the NSCS, free access to operations, qualified teachers and mentors. A survey of 12 teachers conducted in 2023 showed that they were satisfied with working conditions, the quality of the material used for the educational process, motivation and encouragement from the administration.

Evaluation of approaches to the admission of residents is carried out through questionnaires, oral interviews, and discussions in collegial bodies.

The selection and compliance of teachers and teaching methods is also carried out through feedback from residents. For example, the results of a survey of 24 residents in 2022 and 2023 showed that teachers provide good theoretical knowledge and practical skills.

Evaluation of methods for assessing residents' knowledge and skills is carried out using checklists and demonstrates the level of proficiency in skills.

An evaluation of the sufficiency and quality of educational resources is carried out by the Department of PSE of the NSCS and shows that there is a need to replenish specialized literature in the specialty "Pathological Anatomy" and expand electronic databases.

In the process of evaluating the quality of residency educational programs, it was found that along with the achievements (state-of-the-art equipment, the availability of unique materials for pathological studies, etc.), there are a number of problems and shortcomings, including the introduction of electronic document management, the introduction of electronic questionnaires for residents, validation and reliability assessment test tasks.

7.2 Feedback from faculty and residents

Educational organizations regularly collect feedback from teachers, residents, and employers. Every year at the end of the year, questionnaires are sent to employers. The questionnaire contains 15-20 questions and they are devoted to the EP specialty. The results of feedback are analysed, discussed at meetings of the PSE department, and published on the NSCS website (www.nnch.kz). In general, the use of feedback contributes to a better understanding of the current needs of students and teachers and is systematic when making changes to the educational program.

To survey teachers, a questionnaire was developed, including 10-12 questions, including in the specialty "Pathological Anatomy".

The survey of residents is conducted 2 times a year and is devoted to such topics as assessment methods, teaching methods, conditions for clinical training at bases, accessibility of pathological facilities, etc._.

The EP "Pathological Anatomy" is accredited for the first time and there is no recruitment of residents, so it is not possible to describe the results of the survey.

7.3 Resident and Graduate Outcomes

The results of residents and graduates are indicators of the quality of educational programs. The final results of the assessment of residents in various specialties in 2022 show the following: <u>all 100% showed positive assessments according to the results of the independent examination of the NCNE.</u>

The highest rate among residents in all specialties

Faculty evaluated the level of clinical training of residents in 2021 and 2022, where they noted a high level. Experts noted the following successes in the clinical training of residents: theoretical and practical preparedness.

Monitoring of residency program graduates is carried out through employer surveys. Residents of the class of 2022 (2 people in total) found employment at the NSCS. Employers appreciated such qualities of graduates as excellent practical skills, good theoretical preparedness, good communication skills, and the ability to work in a team. The graduates' weaknesses were not noted. The employment rate over 5 years was 100%

Since the entire process of training and monitoring of residents is concentrated in the PSE department, the results of evaluating the clinical practice of residents and graduates immediately go to the responsible persons. Responsible for residency programs is the person responsible for the specialty. To improve the educational process, the following has been done in the last 2-3 years: since September 2023, they have been using the Platonus electronic platform, expanding the library collection, and improving the learning conditions for residents.

7.4 Stakeholder engagement

Educational organizations have approaches to involving teachers and residents in evaluating the educational program and monitoring its implementation. Thus, residents of the specialty are included in the advisory body of the EMC, AC and participate in the discussion of all issues of the educational process. The results of the evaluation of the educational program are announced at the meeting of the Board of Directors and posted on the NSCS website.

No interviews were conducted with employers. Based on the results of interviews with Academic staff and mentors, it was found that there is 100% employment in the NNSC. Graduates of the NSCS are leading specialists in the Republic of Kazakhstan and currently occupy various positions. NSCS graduates have high practical and theoretical skills, which makes NSCS a leading institute.

7.5 Procedure for approval of educational programs

Evaluation of programs at the stages of planning, implementation, analysis of results and implementation of changes, which allows monitoring the process of implementation of the EP and the progress of residents, and ensures the identification and timely resolution of emerging problems.

The educational program is approved at meetings of the PE, EMC department based on criteria such as systematic study and comprehensive assessment of EP in order to improve and guarantee quality (determining the value of the program, achieving goals, implementing tasks, the degree of compliance with the needs of society, the requirements of employers, the effectiveness of training methods), as well as assessment of educational and methodological support and support of the educational process, assessment of the quality of educational programs in areas of specialization. The interested parties involved in the approval of the educational program are the National Scientific Centre for Surgery named after A.N. Syzganova.

A system for monitoring the quality and compliance of clinical bases, material and technical equipment and educational resources has been developed and implemented, which includes the following: visits to Academic staff at training bases during the academic year; availability of an accreditation certificate in a medical organization.

Conclusions of the EEC on the criteria. Compliant out of 10 standards (including 7 basic, 3 improvement standards): fully - 4/3, partially - 3/0, do not comply - 0

Recommendations for improvement:

1) To establish and maintain feedback with employers by conducting surveys, interviews, etc.

Standard 8: MANAGEMENT AND ADMINISTRATION 8.1 Management

Residency training is conducted in accordance with the requirements of regulatory rules regarding the admission of residents, such as:

- 1. Law of the Republic of Kazakhstan "On Education", subparagraph 2-1 of Article 5 in order to implement the Decree of the Government of the Republic of Kazakhstan dated May 20, 2013 No. 500 "On approval of the state educational order for the training of specialists with higher and postgraduate education", which regulates the number of state educational order for the training of residents in the field of healthcare.
- 2. Model rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education, Subparagraph 11) of Article 5 of the Law of the Republic of Kazakhstan dated July 27, 2007 "On Education" and Model rules for admission to training in educational organizations implementing professional training programs postgraduate education, approved by Order No. 600 of October 31, 2018 (with additions and changes in June 2020), which determine the procedure for admitting citizens to residency. Procedures for admission and selection of residents are described in detail in Standard 4.1.
- 3. SCES for residency in medical specialties and a standard professional curriculum for medical specialties in residency, approved by the order of the acting Ministry of Health and Social Development of the Republic of Kazakhstan dated July 31, 2015 No. 647, which determines the content of the educational program. Assessment of knowledge and skills is carried out on the basis of intermediate certification, end-of-course assessment; supervision of patients, participation in surgical operations, visiting patients at home, duty planning, participation in conferences, etc. To implement the educational program, the educational organization has an organizational structure in which the educational sector is represented by the Deputy Chairman of the Board for Scientific, Clinical and Innovation Activities and the Chief Doctor. The quality assurance program for postgraduate education was developed in accordance with the current management system of the organization and policy in the field of ensuring the quality of education and was approved at meetings of the PSE and EMC departments. Practical healthcare specialists and representatives of professional associations took part in the development of the program.

8.2 Academic leadership

The responsibilities and duties of the management and employees for postgraduate medical education are determined, which are assigned to the Chairman of the Board for Scientific, Clinical and Innovation Activities and are enshrined in the documents: Charter of the centre, management structure, departments and job descriptions. Transparency of management and decision-making in the educational process is ensured by holding a scientific and methodological council, an academic council, to which participants from among residents and employers are invited, which is reflected in the Centre's Charter, Regulations on departments and job descriptions."

The educational organization evaluates the management of the educational process and employees in relation to the achievement of the mission of the residency program, the expected final results of training by providing feedback to residents and teachers (see section 7.2 of the report), conducting certification based on the document, audits on issues of effectiveness and efficiency of implementation goals and objectives.

To the survey question "Do the heads of the organization listen to your opinion regarding issues related to the educational process, research work, clinical work," 73.08% of teachers answered that systematically, 26.92% answered "sometimes", 0% "quite rarely", 0% "never".

8.3 Training budget and resource allocation

The department responsible for planning and distribution of finances in residency programs is the financial and economic department, which considers the results of the formation and use of financial resources.

A financial plan is drawn up annually, including a target budget for training, which is: 2,572,000 (budget 006); 12,684,502.37 (paid 006) tenge. The financial plan is in line with the strategic plan for the period 2023. The share of funding for residency programs, taking into account the expansion of

residency specialties, increased from 4.7% in 2021 to 100% in 2023. The most funds are spent on the acquisition of the Platonus program - 2,572,000 (budget 006)

During a meeting with employees of the financial sector, experts found out that the distribution of resources in the NSCS named after A.N. Syzganov is carried out in all areas of the surgical service affecting work in practical, scientific, educational, research activities of all clinical and paraclinical departments. The salary fund is 20,531,000 tenge, the scholarship fund is 6,025,266 tenge.

A financial report is provided annually, which is approved by the order of the Minister of Health of the Republic of Kazakhstan "On approval of standards for calculating the cost of education for one student, residency student, master's student, doctoral student (PhD) dated June 14, 2004 No. 474 and demonstrates, among other things, the distribution of educational resources in accordance with needs and covering all types of expenses (salaries of residency teachers, providing students with educational resources (educational and scientific literature, access to the Internet and international information databases of literature, information and communication technologies), strengthening the program through invited foreign teachers, academic mobility programs and the opportunity for residents to participate in international and national conferences, seminars) for the implementation and development of the residency program.

8.4 Administration and management

There is an appropriate administrative (5 people) and teaching (10 people) staff, including management: sole shareholder, chairman of the board, deputy chairman of the board for scientific, clinical and innovative activities, deputy chairman of the board for strategic and financial and economic issues, head of the strategic and commercial block. To effectively manage the educational process, employees of the Education Department have undergone advanced training.

Experts found that the quality management system (QMS) was implemented in 2020 and includes regular internal and external audits, including those supporting the process residency program. For example, there is an audit of the effective management of the structure, volume, technology and quality of surgical care. The R&D management department and the quality control department are responsible for the implementation and monitoring of the QMS. Teachers are aware of the QMS, which is confirmed during their interviews. The main documents of the QMS are:

Evaluation of the administration and management of the educational process in general and the residency educational program in the specialty 7R01136 - "General Surgery" is carried out by monitoring the quality of the educational process by the department of PE, EMC together with members of the educational programs committee (employers, students) and the results demonstrate such achievements as continuous improvement approaches to the implementation of educational residency programs with the active participation of stakeholders (primarily representatives of employers) in the formation of an educational strategy that reflects the social responsibility of the university for the development of advanced innovative technologies in practical medicine and science, the use of advances in information and communication technologies, as well as the strengthening public health.

8.5 Requirements and regulations

The educational organization complies with the recommendations of national authorized bodies, including the Ministry of Science and Higher Education of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan. Thus, in accordance with the classifier of residency specialties (On approval of the Classifier of areas of training for personnel with higher and postgraduate education; Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569), in the organization of education at the beginning of the 2023-2024 academic year. During the year, training is provided in 8 specialties and training in 9 specialties is planned. All educational programs are provided with relevant educational and methodological documents and teachers.

Conclusions of the EEC on the criteria. Complies with 11 standards (including 8 basic, 3 improvement standards): fully -8/3.

Standard 9: CONTINUOUS RENEWAL

The procedure for updating the organizational structure is carried out by the personnel of the NSCS and in 2023 such changes were made as there were no changes.

Updates have been made to the resident training process such that teachers will conduct classes using new innovative educational technologies.

Updates are made by introducing into the educational process new forms and methods of teaching, means of enhancing cognitive activity:

- multimedia lectures;
- role-playing, business games;
- creative tasks (videos, crosswords, quizzes, etc.);
- use of problematic and situational tasks in practical classes.

The use of innovative technologies in the educational process will be based on a strong material and technical base, the improvement of which, in accordance with the requirements of the time, is carried out constantly and is accompanied by the development of educational programs, taking into account the requirements of the labour market and modern advances in science.

The educational organization annually allocates resources for continuous improvement in the amount of 26843075. For example, in 2022-2023 11971200 in 2024 is planned.

To purposefully improve the educational process, sociological research is carried out, including the development of new technologies, methods, and work methods; studying the experience of other countries; studying regulatory documents in all specialties, and also studying literature on medical postgraduate education (updated publications by domestic and foreign authors). In the process of this analysis, approaches to teaching in residency were revised, and such methods were introduced as: research methods in teaching; project-based teaching methods; gaming methods (role-playing, business games); learning in collaboration (team, group work).

Of the authentic types of student assessment, assessment methods that are as close as possible to clinical practice will be actively used: mini-clinical examination; direct observation of the performance of practical skills; expert assessment of filling out medical documentation; portfolio evaluation.

Conclusions of the EEC on the criteria. Match from 2 standards (including 1 basic, 1 improvement standard): completely -1/1.

CONCLUSION: while conducting an external evaluation of the educational program, it was found that out of 114 standards (including 82 basic standards and 32 improvement standards), 102 accreditation standards demonstrate full compliance, including 71 basic standards and 31 improvement standards. 11 basic standards and 1 improvement standard were partially met. No non-compliance with standards has been identified.

5. Recommendations for improving the educational program in specialty 7R01136 "Pathological Anatomy" of the JSC "National Scientific Centre of Surgery named after A.N. Syzganov":

- 1)To annually update information about the educational program on the official website of the NSCS (1.1.2);
- 2) To involve external stakeholders when planning, discussing, developing and approving the mission of the educational program in the specialty "Pathological Anatomy" (1.4.1, 7.1.2,7.1.4);
- 3) To provide the educational program with modern electronic resources and relevant literature (2.2.2, 6.3);
- 4) To actively involve employers in planning, discussing, approving and reviewing the educational program (2.4.4, 7.1.2, 7.4.1);

- 5) To combine all documents regulating the educational process into one document "Regulations on residency" (3.1.1);
- 6) To implement mechanisms to examine and document the reliability, validity, and fairness of assessment methods, and use an additional set of assessment methods (3.1.2., 3.1.4);
- 7) To increase the motivation of residents to engage in scientific research (4.4);
- 8) To develop mechanisms to reward residents for their social activity (4.3);
- 9)To establish and maintain feedback with employers by conducting questionnaires, interviews, etc. (7.2.1).

6. Recommendation to the ECAQA Accreditation Council

Members of the EEC established the compliance of the residency educational program in the specialty "Pathological Anatomy" of the JSC "National Scientific Centre of Surgery named after A.N. Syzganov" with the Accreditation Standards and came to a unanimous decision to recommend that the ECAQA Accreditation Council to accredit this program for a period of 5 years.

Chairman	Shabdarbaeva Daria Muratovna	Decent
Foreign expert	Sattarov Jamoliddin Bakhronovich	5 +
Academic expert	Kozhakhmetov Saken Kairullinovich	Kg
Expert employer	Nadueva Yelvira Sezhofeevna	Sufn
Expert student	Guseva Kristina Alexandrovna	

Приложение 1.

Профиль качества и критерии внешней оценки образовательной программы по специальности 7R01136 «Патологическая анатомия» (обобщение)

				Оценка		
Standard	Критерии оценки	Количество стандартов	БС*/СУ	Полностью соответствует	Частично соответствует	Не соответствует
1.	миссия и конечные	14	9/5	7/4	2/1	
	РЕЗУЛЬТАТЫ					
2.	ОБРАЗОВАТЕЛЬНАЯ	22	19/3	17/3	2/0	
	ПРОГРАММА					
3.	ОЦЕНКА РЕЗИДЕНТОВ	9	6/3	3/3	3/0	
4.	РЕЗИДЕНТЫ	20	14/6	14/6	-	
5.	АКАДЕМИЧЕСКИЙ	8	7/1	7/1	-	
	ШТАТ/ПРЕПОДАВАТЕЛИ					
6.	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ	18	11/7	10/7	1/0	
7.	ОЦЕНКА ОБРАЗОВАТЕЛЬНОЙ	10	7/3	4/3	3/0	
	ПРОГРАММЫ					
8.	УПРАВЛЕНИЕ И	11	8/3	8/3	-	
	АДМИНИСТРИРОВАНИЕ					
9.	НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ	2	1/1	1/1	-	
		114	82/32		114	

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

№	Наименования документов/дата утверждения	Количество
1.	Академическая политика (Положение об организации учебного процесса) 05.01.2021г.	1
2.	Положение академической мобильности АО ННЦХ 01.06.2021г.	1
3.	Положение о промежуточной аттестации резидентов 05.01.2021г.	1
4.	Положение об итоговой государственной аттестации 05.01.2021г.	1
5.	Политика АО ННЦХ им.А,Н.Сызганова в области качества 05.01.2021г.	1
6.	Кодекс деловой этики АО ННЦХ 18.04.2019г.	1
7.	Антикоррупционный Standard AO ННЦХ31.12.2020г.	1
8.	Правила деонтологии и соблюдения прав пациента, правила обучения пациента 23.10.2023г.	1
9.	Положение о клиническом наставнике 01.09.2023г.	1
10.	Положение о наставничестве АО ННЦХ 01.09.2021г.	1
11.	Кодекс чести слушателя АО ННЦХ 05.01.2021г.	1
12.	Положение о совете резидентов 01.09.2023г.	1
13.	Справочник-путеводитель слушателя резидентуры 09.03.2021г.	1
14.	Положение об отделе постдипломного образования 05.01.2021г.	1
15.	Номенклатура дел отдела постдипломного образования 2021г.	1
16.	Лицензия АО ННЦХ	1
17.	Протокол заседания комиссии МЗ РК по размещению государственного заказа на подготовку медицинских кадров в резидентуре на 2023-2024г. 22.01.2023г.	1
18.	Протокол заседания комиссии МЗ РК по размещению государственного заказа на подготовку медицинских кадров в резидентуре на 2022-2023г. 17.05.2022г.	1
19.	Устав АО ННЦХ 11.06.2014г.	1
20.	Международная институциональная аккредитация ЕЦА. Свидетельство Аккредитации АО ННЦХ 17.06.2021г.	1
21.	ОО «Экспертов и консультантов по внешней комплексной оценке в сфере здравоохранения» Свидетельство об аккредитации 30.11.2021г.	1
22.	Профессорско-преподавательский состав АО ННЦХ 06.11.2023г.	1
23.	Чек-лист «Годовая аттестация резидентов»	1
24.	Чек-лист «Промежуточная аттестация резидентов»	1
25.	Рабочий учебный план Резидентуры по специальности общая хирургия на 2022-2023 уч.год 01.09.2022г.	1
26.	Расписание резидентуры по специальности общая хирургия на 2022-2023г. 01.09.2022г.	1
27.	Академический календарь резидентуры на 2022-2023 учебный год (ГОСО2022) 01.09.2022г.	1
28.	Размещение государственного образовательного заказа на подготовку медицинских кадров в резидентуре на 2022-2023 учебный год	1
29.	Правила приема в резидентуру АО ННЦХ на 2022-2023 г 01.09.2022 г.	1
30.	Журнал учета посещаемости и успеваемости слушателей резидентуры АО ННЦХ по специальности общая хирургия	1
31.	Протокол заседания конкурсной комиссии для отбора претендентов на участие в конкурсе Лучший преподаватель. Лучший ученый.	1
32.	Протокола заседания отдела постдипломного образования	19
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