

For presentation to the Accreditation Council  
of the Eurasian Centre for Accreditation and Quality Assurance  
in Higher Education and Health Care  
May 10, 2023

**REPORT  
OF THE EXTERNAL EXPERT COMMISSION  
ON FINDINGS OF EVALUATION OF THE EDUCATIONAL PROGRAMME  
7R09115 “PAEDIATRIC AND ADULT NEPHROLOGY”  
OF A.N. SYZGANOV NATIONAL SCIENTIFIC CENTRE FOR SURGERY JSC  
FOR COMPLIANCE WITH THE STANDARDS FOR ACCREDITATION OF  
POSTGRADUATE MEDICAL EDUCATION ORGANISATIONS (RESIDENCY  
SPECIALTIES)**

**conducted between: May 3-4, 2023**

**Almaty, 2023**

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## LIST OF ABBREVIATIONS AND DEFINITIONS

<b>Abbreviation</b>	<b>Definition</b>
EP	Educational Programme
NSCS or Centre	A.N. Syzganov National Scientific Centre for Surgery Joint Stock Company
PGE	Postgraduate Education
SR	Scientific Research
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Health Care

ECAQA

## 1. Members of the External Expert Commission

In accordance with the ECAQA Order No. 9 dated April 10, 2023, the External Expert Commission (the “EEC”) was formed to conduct between May 3-4, 2023 external evaluation of the residency educational programme in specialty 7R09115 “PAEDIATRIC AND ADULT NEPHROLOGY” in the following membership:

S No.	Function within the EEC	Full name	Academic degree/title, position, job site/place of study, course, specialty
1	Chairperson	GAUKHAR TLEUBEKYZY IGIMBAYEVA	Candidate of Medical Sciences, Professor, MBA, Cardiologist of Superior Category, First Category Health Services Manager, Director of the Karaganda Branch of the Association of Cardiologists of Kazakhstan, Director of Clinic Miras LLP in Karaganda
2	International expert	ZHILDYZ TURDUBAYEVNA KONURBAYEVA	Associate Professor of the Department of Faculty Surgery named after Academician K.R. Ryskulova of I.K. Akhunbayev Kyrgyz State Medical Academy
3	Collegiate expert	BIBIGUL AMANGELDIYEVNA ABEUOVA	Doctor of Medical Sciences, Professor of the Department of Family Medicine No. 3 of Astana Medical University NJSC, High Level Certificate Nephrologist
4	Representative of employers	ALFIYA GUMAROVNA SHAMSUTDINOVA	MD, MSc, BA, Fogarty Fellow, Head of the Centre for Innovation and Education of Central Clinical Hospital JSC, President of the Association of Bioethics and Medical Law, Doctor in Public Health of Superior Category
5	Representative of residents	MADI SERIKULY AZIMKHANOV	Second Year Resident in Specialty “Adult and Paediatric Cardiology, Kazakh-Russian Medical University NJSC

The Observer of ECAQA is M.A. Umarova, Head of Accreditation and Monitoring Department.

The work of the EEC was carried out in accordance with the Regulations “On the EEC” (Order of the ECAQA Director General No. 4 dated February 13, 2017).

The EEC report contains evaluation of the educational programme in specialty 7R09115 - “Adult and Paediatric Nephrology” for compliance with the Standards for Accreditation of Postgraduate Education Programmes (Residency Specialties) of Medical Educational Organizations and conclusions (the “Accreditation Standards”), recommendations of the EEC for further improvement of approaches and conditions for implementation the above educational programme and recommendations for the ECAQA Accreditation Council.

## 2. General part of the Final Report

### 2.1 Presentation of the educational programme 7R01101 “Paediatric and Adult Nephrology”

Name of organization, legal form, BIN	A.N. Syzganov National Scientific Centre for Surgery JSC
Governing body	Board of Directors
Top executive officer’s full name	Bolatbek Bimendeyevich Baimakhanov
Date of establishment	April 1945
Location area and contact details	62, Zheltoksan Street Almaty, 050004, Kazakhstan Phone/Fax: 8(727) 279-95-05 E-mail: info@nnch.kz Official website: <a href="http://nnch.kz">http://nnch.kz</a>
State license for educational activities in residency (date, number)	Certificate of Institutional Accreditation. License of the MoEDSc No. 12018231 dated Nov 21, .2012
Starting year of the accredited educational programme (EP)	2023
Duration of training	2 years
Total number of graduates since the EP start	<i>Admission of residents is planned in 2023</i>
Number of residents at the EP since the beginning of the current academic year	<i>No</i>
Website	Official web-site: <a href="http://nnch.kz">http://nnch.kz</a>

### 2.3 Conclusion based on the findings of review of the self-assessment report of the educational programme in specialty 7R09115 “Adult and Paediatric Nephrology” for compliance with the Standards for Accreditation of Postgraduate Education Programs (Residency Specialties) of Medical Education Organisations and Conclusions

The self-assessment report on the residency educational programme in specialty 7R09115 “Adult and Paediatric Nephrology” (the “Report”) is presented on 100 pages of the main text, 2 appendices on 2 pages, copies or electronic versions of one document submitted in paper form.

The report is characterized by the completeness of answers to all 9 basic accreditation standards and criteria, as well as the internal unity of information and it is structured taking into account the recommendations contained in the Guidelines for the Organization and Conduct of the Self-Assessment of Educational Programme provided to the educational organization by the accreditation body ECAQA. The report is accompanied by a cover letter signed by the Chairman of Board of Directors, Academician of the National Academy of Sciences of the Republic of Kazakhstan B.B. Baimakhanov, which confirms that the quantitative information and data included in the self-assessment report is reliable and accurate.

The report contains a list of 2 members of the internal commission for primary self-assessment indicating the responsibility of each employee, information about the representative of the organization responsible for conducting self-assessment of the educational programme, Head of the Department of Renal Transplantation, Urology and Extracorporeal Detoxification Kurbanovich Madadov Islam.

The self-assessment of residency educational programme 7R09115 “Adult and Paediatric Nephrology” was carried out on the basis of the Order No. 55-p dated February 21, 2023 “On the Working Group for the Preparation to Accreditation”.

The report was reviewed by the accreditation expert, Professor B.A. Abeuova. In her review she noted strengths and areas for improvement, as well as recommendations on making alterations and

amendments that were taken into account during feedback from the representative of the Scientific Centre and appropriate alterations and amendments and additions were made to the self-assessment report.

All standards present the real practice of the Scientific Centre for training of residents in specialty 7R09115 “Adult and Paediatric Nephrology”, 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 self-assessment report contains sufficiently complete and up-to-date description in terms of admission and selection, learning outcomes, results of assessment of knowledge and skills, material and technical base of the Scientific Centre and clinical facilities, contractual obligations with partners (universities, associations, and facilities), financial information, plans on development and improvement, etc.

The report is submitted to the ECAQA in its final and complete form with the adjustment of data according to the expert recommendations, written in a competent language, the wording for each standard is clear, understandable and described in accordance with the criteria of standards, the tables are referenced in the text and have continuous numbering.

The quality of the self-assessment report served as the basis for the transition to the next step in the primary accreditation process - external evaluation. The experts plan to validate the report data, compare the information from the report with the information that will be obtained during a visit to the educational organization, i.e. verification of quantitative and qualitative indicators

### 3. Description of external expert evaluation

The external experts evaluation of the educational programme 7R09115 “Adult and Paediatric Nephrology” was organized in accordance with the EQACA Guidelines for the External Evaluation of Educational Organizations and Educational Programmes and according to the program approved on April 10, 2023 by the EQACA Director General S.S. Sarsenbayeva and agreed with the Chairman of the A.N. Syzganov NSCS JSC Board of Directors B.B. Baimakhanov. Date of the visit to the organization: May 3-4, 2023.

The external evaluation is aimed at validating the data contained the self-assessment report and verifying indicators showing the degree of compliance with the criteria of accreditation standards.

The sequence of the visit within 2 days is detailed in the Visit Program (the ‘Program’), which is held by the accreditation organization. The program is proof that all planned activities were implemented within the framework of external expert evaluation.

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

- Interviews with management and administrative staff - 2 people;
- Interviews with residents - 6 people (who receive training in other specialties);
- Exploring the website at <https://nnch.kz/>;
- Interviewing two employees, two teachers;
- Review of resources in the context of fulfilling accreditation standards: the NSCS departments were visited, where it is planned to conduct training of residents”;
- 15 educational and methodological documents were studied both before the visit to the organization and during the visit to the departments (the list of documents reviewed is presented in **Appendix 2**).

The staff of the accredited organization established the presence of all persons indicated in the Visit Program and according to the lists of interviewees (Table 1).

**Table 1 - Information on the number and categories of participants to the meeting, interviews, talks with the EEC members**

No.	Position	Number
1	Deputy Chairman of the Board for Scientific, Clinical and Innovative	1

	Work, Cand. Sc. in Medicine A.T. Chormanov	
2	Deputy Chairman of the Board for Financial, Economic and Operating Activities K.Kh.Tungatov	1
3	Science and Education Manager A.T. Chormanov	1
4	Scientific Secretary A.T. Aubakirova	1
5	Head of the Department of Postgraduate Education A. Zh. Smailova	1
6	Head of the Cardiology Unit A.K. Baimbetov	1
7	Department Physician K.A.Bizhanov	1
8	Head of the Nephrological Unit I.K. Madadov	1
9	Nephrologist K.I. Dabyltayeva	1
10	Head of the Anaesthesiology and Resuscitation Unit T.K. Kuandykov	1
11	Residency graduate students - A. Kudaibergen, M. Berikkyzy, K. Dosymbetov, B. Rakhmanberdi, Ye. Kudaibergenov, Ye. Kalshabay	6
12	Residency students - A. Akshikeshov, A. Kozhamkul, Ye. Sharbek, M. Asan, M. Zagainova, A. Mukanova	6
13	<b>HR Department</b> – B.B. Nikbayev	
14	<b>Interviews with employers of residency graduate students (online):</b> Central City Clinical Hospital - Deputy Director for Surgery Zh.B. Baimakhanov City Clinical Hospital No. 7 - Chief Physician M.Ye. Ramazanov City Clinical Hospital No. 7 - Head of the Department of Anaesthesiology and Intensive Care Ye.B. Yespenbetov City Cardiology Centre - Head of the Department of Interventional Cardiology O.S. Sakhov Research Institute of Cardiology and Internal Medicine - Head of the Department of Cardiac Surgery R.M. Tuleutayev	4
15	City Clinical Hospital named after I.V. Davydovsky of the Department of Healthcare of Moscow, Head of the Department of Arrhythmology - online	1

On the last day of the visit to the organization, the meeting of the EEC members on the findings of external assessment was held. The final discussion of the findings of external evaluation of the educational programme, the review of documents, the results of talks, interviews, questionnaires was conducted. The EEC members proceeded to preparing the final report. The findings of external evaluation were summarized. The expert independently filled out the “Quality profile and Criteria for External Evaluation of the Educational Programme 7R09115 “Adult and Paediatric Nephrology” for Compliance with the EQACA Standards of Accreditation”. There were no significant comments by the EEC members. All recommendations on improving the quality of educational programme were discussed and the Chairman G.T. Igimbayeva held the final open vote on recommendations to the EQACA Accreditation Council for the accreditation period of five years.

There were created comfortable conditions for the EEC work and ensured access to all necessary information and material resources. The Commission notes the high level of the NSCS corporate culture, the high degree of openness of the staffing team in providing information to the EEC members. The Commission highlights the high satisfaction of residents of various specialties with acquiring practical skills in the NSCS and the lack of worthy competitors in comparison with other medical organizations and research centres.

At the end of the Visit Program, the Chairman of the EEC announced recommendations for the management and employees of the educational organization based on the findings of external evaluation within the framework of specialized accreditation.

#### **4. Analysis for compliance with accreditation standards based on the findings of external evaluation of the residency educational programme in specialty 7R09115 “Adult and Paediatric Nephrology”**

##### **Standard 1: MISSION AND OUTCOMES**

###### **Proof of compliance:**

###### **1.1 Mission**

The mission of the NSCS is to serve the community or society, while improving and preserving the health of the people of Kazakhstan through the application of advanced traditions in surgery, science and education.

The vision is to create a flexible model of a competitive organization for training of specialists with postgraduate education; to introduce innovative technologies that contribute to updating the national education system; a scientific and innovative centre for the development of research potential in the field of health and social security; a centre for integration with partner universities and medical educational organizations of the country and neighbouring countries.

The mission is reflected in the Strategic Plan of the A.N. Syzganov NSCS (the “NSCS”) for 2019-2023, approved by the Minutes of Meeting of the Board of Directors No. 3 dated May 29, 2019, and it was twice revised. The Strategic Plan was supplemented and amended (the Minutes of the Meeting of the Board of Directors No. 4 dated July 2, 2020; No. 7 dated October 12, 2020).

The educational programme in specialty 7R09115 “Adult and Paediatric Nephrology” was developed on a collegiate basis and approved at the Meeting of the Educational and Methodological Board (the “EMB”) (Minutes of the Meeting No. 2 dated February 21, 2023) and the NSCS Scientific Council (Minutes No. 1 dated March 29, 2023). At the time of external evaluation, the residency educational programme in specialty “Adult and Paediatric Nephrology” was not submitted for the USMHE (Unified System on Management in Higher Education) (<http://esuvo.platonus.kz/#/>).

In implementation of measures of the programme, namely, according to interviews with the deputy chairmen of the NSCS Board of Directors, the Science and Education Manager, the Head of the Department of Postgraduate Education, heads of departments, interviews with residents and the department physicians, are found to comply with the criteria of **Standard 1**. All participants of the educational process know the mission of the educational programme, took part in the formation of proposals for formulating the mission, while the mission was brought to the attention of prospective residents through the website, social networks, and informational letters to medical organizations. The NSCS Strategic Plan for a 5-year period 2019 to 2023 was reviewed. It involves one of the most relevant areas as “Academism”, which contributes to the formation of a new community of medical personnel and ensuring the process of continuing education at all levels of professional activity. This direction confirms the implementation of the accreditation standard and demonstrates the goals, objectives and prospects of the organization. The concept for the development of integrated academic medical centres (university clinics) has been developed, which is based on the unification of scientific organizations, medical universities, medical organizations on the principle of a full cycle of medical services and training. The concept is aimed at the effective management of academic processes and work activity based on the unity of strategic goals and objectives; - quality medical education based on obtaining modern theoretical knowledge and real practical skills in university clinics; - sustainable improvement of the quality of medical care based on access to advanced technologies and scientific developments; - wide clinical and laboratory facilities for conducting relevant scientific research with immediate transfer of their results to practical healthcare; - improving the financial stability and efficiency of systems based on integration and sharing of resources.

During the visit to the NSCS departments, experts noted the strengths of the educational organization in relation to the accredited educational programme, especially in the practical training of residents, the acquisition and development of clinical skills and professional competencies. The NSCS has Department of Nephro-Urology related to the residency educational program in specialty “Adult and Paediatric Nephrology” that includes 4 renal beds, and 4 haemodialysis machines. The Department performs renal biopsy on a regular basis, has a good laboratory for pathomorphology, and performs



renal transplantation (first started in Kazakhstan). All this can be noted as the best practice of a number of subject or disciplines and topics of the training program for resident nephrologists. But it should be noted that there was no assigned potential head of the residency program in specialty 7R09115 “Adult and Paediatric Nephrology” at the time of accreditation. Currently, the Head of the Department of Renal Transplantation, Urology and Extracorporeal Detoxification I.K. Madadov is responsible for conducting the educational program in nephrology. He is an urologist by profession. All educational and methodological documentation was provided by the nephrologist K.S. Dabyltayeva. However, no clear answer - who will be the head of potential resident nephrologists – no one received.

The results of documentation review demonstrate that the mission of the organization and the mission of the educational programme 7R01101 “Adult and Paediatric Nephrology”, namely the educational process, is based on the State Compulsory Educational Standard and the current regulatory legal acts (RLA) in postgraduate education and healthcare system.

### **1.2 Professionalism and professional autonomy**

To verify **Standard 1**, the meeting was held with Deputy Chairman of the Board for Scientific, Clinical and Innovative Work A.T. Chormanov and Deputy Chairman of the Board for Financial, Economic and Operational Activities K.H. Tungatov. During the conversation, the experts asked the following questions: - Which regions are needed for nephrologists; - Do residents work part-time in the Centre; - What are the functional responsibilities of clinical tutors. During the responses, representatives of the NSCS administration noted that they constantly keep in touch with the regions of the republic where there is an acute shortage of specialized specialties, and that patients are forced to come to Almaty for correction of therapy and/or treatment of post-transplant complications. Residents of the Centre cannot work part-time in their future specialties, because this contradicts the Code “On Health and the Healthcare System”, but residents can earn extra money in any other places. The functional responsibilities of clinical tutors are prescribed in the Regulations “On Clinical Tutors”, with which all interested persons are familiar.

### **1.3 Learning outcomes**

Experts have established a clear continuity between the outcomes of the previous training of residents (prerequisites) and training in residency, and subsequent programmes of continuous professional development. The organization has developed 7 programmes in residency specialties, including for the residency specialty “Adult and Paediatric Nephrology”. The NSCS has practices of informing residents about the learning outcomes, which can be extrapolated to a new educational programme. However, there is no analytical report on the results of a survey of teachers on the quality of previous training of residents. According to the NSCS staff, there was no need for this, since residents are selected according to their prerequisites and achievements at bachelor level and internship.

During online meeting with potential employers of residency graduates (see Table 1 above) they noted the high level of training of residents, emphasizing good clinical training and demonstration of acquired skills, as well as their readiness to work independently. The employers highlighted that graduates apply in practice not only the skills acquired during the residency training period, but also constantly mastering and improving new clinical practices in their individual professional activity. In addition, the NSCS graduates and residents noted that during their studies at the university they had mostly “theory and only theory”, but at the NSCS they are developing precisely clinical skills that they lacked in bachelor level and internship.

When talking to the residency graduates, some of them noted the lack of necessary skills when working with children. They attributed this to the fact that during the quarantine period for COVID-19, they did not have the opportunity to work at paediatric facilities, and also wished for future graduates to rotate through various clinical facilities so that there would be no gaps in their training. Unfortunately, it is worth noting that only a small part of residents are ready to work in the regions, the majority of them, after completing their residency, prefer to stay in medical organizations in Almaty.

The main volume of special skills and knowledge corresponding to various roles of a healthcare specialist is mastered by residents on the basis of the NSCS and clinical facilities with which there is a contract concluded. Residents acquire new and practice previously acquired skills of collecting

anamnesis, examining patients, clinical thinking, skills of interpreting laboratory and instrumental studies, drawing up a plan of therapeutic and diagnostic, preventive and anti-epidemic measures, performing medical manipulations, communication skills, skills of making diagnostic and therapeutic decisions, especially while on duty shifts. The outcomes of residents are presented on the NSCS website and in syllabuses of disciplines.

#### **1.4 Participation in formulation of mission and outcomes**

During forming the programme, its goals and outcomes, discussions were held at several levels: at the Academic Council (all employees of the centre, students, members of various associations, employers) and the Board of Directors. The mission, strategic goal and vision of the NSCS are focused on training healthcare professionals who are in demand and competitive in the labour market, with the joint responsibility of the government and the NSCS standing guard over the health of the country's population.

To improve all areas of the NSCS, including the mission, reports of the chief surgeons of the regions of Kazakhstan on all indicators of the surgical service is conducted once a year, as well as an internal analysis of the NSCS is carried out. All departments of the NSCS participate in the implementation of monitoring. The self-report states that external evaluation of the educational programme mission is carried out through the involvement of members of independent professional associations, the administration of universities to review educational programmes; when questioning residents; while collecting feedback on graduates from employers. However, there are no results of the survey of residents and graduates on this issue.

**The EEC conclusions by criteria.** Compliance with 14 standards (including 9 basic standards, 5 quality development standards): fully complied - 9/4, partially complied – 0/1.

**Standard 1:** fulfilled

**Recommendations for improvement identified during the external visit:**

1) To conduct regularly surveys of residents and teachers on the mission and composition of the educational programme, and analyze the results in order to improve the quality of educational programme.

## **Standard 2: EDUCATIONAL PROGRAMME**

### **Proof of compliance:**

#### **2.1 Framework of the postgraduate medical education programme**

To implement the educational programme in specialty 7R01101 “Adult and Paediatric Nephrology” in the organization documentation there are available TP, which defines the goal and reflects the integration of practical and theoretical components, as well as independent work. It is found to correspond to the SCES and standard requirements. There were not conducted visits to practical sessions, because this accreditation is primary, and admission of residents-nephrologists is planned in 2023. The Centre ensures compliance with ethical aspects in the implementation of educational programmes, as the Code of Ethics (January 5, 2021) was submitted for review and study to experts, and during the interview, residents replied that they read the contents of this document.

The analysis of educational activities showed that the scientific basis and all the achievements of science in the corresponding disciplines have been taken into account, necessary additions have been made to the bibliography of the TP and syllabuses, which teachers apply in the classroom.

The tutoring system, which is described in the document “Functional Responsibilities of Clinical Tutors was evaluated. At the time of accreditation, it has not been determined who will be the curator/clinical tutor to nephrologists.

The procedure for informing residents about their rights and responsibilities is described in the Residents” Guide, but access to such information needs to be improved for students on the NSCS website. This indicates compliance with Standard 2 in terms of adapting training to the needs of residents.

The qualification obtained as a result of mastering the educational programme corresponds to level 7 of the National Qualifications Framework (cipher code 7R09115) and corresponds to the 7th

level of the European Qualifications Framework. Residents are informed about such fact upon admission to the NSCS, but there is no such information on the organization website. (*ESG 1.2*)

The NSCS provides residents with the necessary academic knowledge (everything is included in the composition of the programme), the necessary skills and abilities (in the reviews of residents, they noted among them a strength, the availability of patients and resources of the departments of the scientific center). However, there are no methods and tools for the personal development of residents in the NSCS yet, more is carried out in the practical classes themselves through the example of a teacher (*ESG G 1.2*).

## **2.2 Scientific method**

The educational programme includes the scientific foundations and methodology of medical research, including clinical research and clinical epidemiology. During the conversation with the residents, the experts learned that they use scientific data in training process and know the basics of evidence-based medicine. The teachers said that they teach residents methods of critical review of literature, articles and scientific data, as well as the use of scientific developments. This form of training is organized in the form of a “journal club”, which is held every week on Mondays, that is, residents are constantly engaged in scientific work. In 2017-2019, the NSCS residents participated in 9 fragments of scientific research. Based on the results of their participation in scientific research, poster reports were prepared at the conference in Turkey (2022). Residents also take part in a 3-year research project (since 2021) within the framework of programme-targeted financing (PTF) in the personalized medicine programme in the section “Liver Cirrhosis”.

In 2022, the NSCS staff published 12 papers in journals included in the Web of Science database, in 2023 - 6 publications. Among them, 50% are from Q2, the rest are from Q3-Q4.

The NSCS has its own journal “Bulletin of Surgery of Kazakhstan”, which is included in the list of publications recommended by the Committee for Quality Assurance in the Field of Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan. Over the past year, 10 articles were published in this journal by the NSCS staff. In 2022, 20 implementation acts, 3 patents, 4 intellectual property items were approved. A significant part of these publications were attended by residents of various specialties studying at the NSCS.

During the survey of residents, it was found that the educational organization ensures access of students to the participation in research work.

## **2.3 The residency program structure, composition and duration**

There are documents containing requirements for the structure and composition of educational programs, including current methodological documentation. The responsible teacher / curator of the residency specialty bears responsibility for the selection and implementation of innovations in the educational process.

The composition of work programs and the catalogue of elective subjects reflect the needs of the healthcare system, including the components of choice “Differential Diagnosis of Kidney Pathology in Pregnant Women”, “Kidneys and Arterial Hypertension”, as well as the specifics of research and scientific achievements of teachers. For the successful implementation of the educational program in specialty of residency 7R09115 “Adult and Paediatric Nephrology”, the organization has resources to organize the assessment of practical skills of residents (from September it is planned to introduce the Platonus electronic log-book). However, there are difficulties in planning, developing and approving educational programs, including the absence of a curator/clinical mentor/responsible teacher for resident nephrologists.

All future residents-nephrologists are 100% provided with methodological and didactic materials, additional literature for preparing for classes. The EEC members are provided with exams papers for applicants to the residency in specialty 7R09115 “Adult and Paediatric Nephrology”, syllabuses in all subjects corresponding to the SCES credits, including elective subjects; test tasks for each discipline, electronic textbooks, links to video lectures by leading nephrologists.

The organization has its own clinical facility for 20 urological beds, 4 renal beds, and beds for patients with chronic CRI and an office for outpatient visits in the NSCS advisory department, as well as has access to the clinics of S.D. Asfendiyarov KazNMU, in particular the Aksai Children's Hospital,

where there is the Paediatric Nephrology Department and Haemodialysis Department. It is planned to conclude an agreement with city hospitals which have nephrological departments (city hospital #7).

On December 5, 2022, 27 residents of different specialties passed a questionnaire on satisfaction with learning outcomes". Residents answered 15 questions. Residents of plastic surgery - 6 (22%), anaesthesiology and intensive care – 4 (15%), cardiac surgery – 2 (7%), radiology - 10 (37%), general surgery – 1 (4%), angiosurgery – 4 (15%) participated. To the question **Are you satisfied with your specialty?** The answer was yes – 22 (81%), rather yes than no - 4 (15%), rather no than yes 0, No – 1 (4%). To the question, **which of the learning problems are you particularly concerned about now?** There were 5 possible answers to this question: the quality of scheduling classes was answered by 5 residents (19%), the quality of organizing and conducting the GRW – 0, the quality of conducting classes – 4 (14%), the quality of knowledge assessment – 0, other problems (work with patients) – 1 (4%), no - 17 (63%). Question: **How do you assess the professional level of the organization's teachers?** There were 4 possible answers to this question: 1) High – 24 (89%); 2) Medium – 1 (4%); 3) Low – 0; 4) I find it difficult to answer – 2 (7%). Question: **How do you evaluate the lecture materials?** There were 4 possible answers to this question: 1) High – 10 (37%); 2) Medium – 5 (19%); 3) Low – 0; 4) I find it difficult to answer – 5 (19%); No – 7 (25%) answered. Question: **Are you satisfied with the practical skills?** There were 4 possible answers to this question: 1) Yes – 18 (67%); 2) Yes rather than no – 6 (22%); 3) Rather no than yes – 3 (11%); 4) No – answered 0. Question: **How do you attitude to the quality of the organization of the educational process?** There were 7 possible answers to this question: Answer options: 1) There are no special claims – 23 residents (85%); 2) Inconsistency of subjects studied with the specialty received – 0; 3) Inconsistency of the number of hours allocated to the importance of the subject – 3 (11%); 4) Congestion with classroom classes – 0; 5) Dissatisfied with the quality of classes – 0; 6) Dissatisfied with the organization of credits and exams – 0; 7) Other (dissatisfied with practice) – 1 (4%). Question: **To what extent are you satisfied with the availability of the necessary scientific and educational literature in the library?** There were 3 possible answers to this question: 1) completely satisfied – 19 residents (70%) answered, 2) partially satisfied – 6 (22%), 3) not satisfied – 2 (8%). **Are electronic textbooks and electronic scientific databases available to you?** Question: Available during the day, 17 (63%) residents answered for free, no more than 3 hours a day - 0, according to the schedule – 3 (11%), available only in computer classes – 0, no – 7 (26%). Question: **Your suggestions for improving the quality of educational process in the organization in general?** Only 6 residents answered this question, 3 residents in specialty "Radiology" answered that there was not enough work with devices and patients, poor Internet in the computer classroom; 2 residents in specialty "Plastic Surgery" – there is no Internet in the department; 1 resident in specialty "General Surgery" – wish to purchase simulators for practical skills. *Thus, the results of the survey showed that 21 (77.7%) residents are fully satisfied with the learning outcomes, 6 (22.2%) are partially dissatisfied.*

#### **2.4 Organization of educational process and the relation between postgraduate medical education and delivery health care**

The educational process management reflected in the self-assessment report (**Standard 2**) and general approaches to management were confirmed by the views expressed in the interview with the Head of the Department of Postgraduate Education A.Zh. Smailova. In addition, the verification of **Standard 2** showed that there is no constant monitoring and periodic evaluation of residency programmes of different areas, there is also no periodic external quality assurance assessment scheme

The experts got acquainted with the work of departments, including the work of specialized departments (urology and cardiac surgery). In total, 8 offline meetings and 2 online meetings were held, and during a cross-interview it was found that there is a constant contact of residency graduates with their curators, the relationship of curators and clinical tutors with stakeholders is monitored. This is facilitated by mentoring (supervision), which is carried out in the organization.

During the conversation with residents, the experts found that the organization promotes the development of practical competencies of residents, but residents noted the absence of a simulation centre (Sub-clause 2.4.2). In addition, representatives of the management agreed with the experts'

recommendation on the need to conclude an agreement with S.D. Asfendiyarov Kazakh National Medical University to learn and enhance some practical skills in the University Simulation Centre.

**The EEC conclusions by criteria.** Compliance with 22 standards (including 19 basic, 3 quality development standards): fully complied – 17/3, partially complied – 2/0.

**Standard 2: fulfilled**

**Recommendations for improvement identified during the external visit:**

1) To create a separate, well-visualized section on residency in the NSCS website, where to place basic information on the residency educational programmes, including the mission and learning outcomes, requirements for admission to the residency, issues of academic integrity, ethics, rights and responsibilities of residents, training requirements, etc.);

2) To provide the programme 7R09115 “Adult and Paediatric Nephrology”, with a sufficient number of teachers in accordance with the qualification requirements and academic experience.

### **Standard 3: ASSESSMENT OF RESIDENTS**

#### **Proof of compliance:**

##### **3.1 Assessment methods**

The NSCS has no system for assessment of students. There are only examination grades in paper record lists. Exams are conducted by the method of a mini-clinical evaluation exercise. There is no constant formative assessment, only the attendance of residents is recorded in paper log-books. At the final assessment, the Chairman and members of the examination commission are selected from among full-time employees of the NSCS. Additional methods of assessing residents have not been developed and, accordingly, have not been implemented, such as portfolios, evaluation of scientific activities, there are no checklists with evaluation of practical activities, seminars, duty shifts, etc.; there are no characteristics from a curator - although these data are present in the self-assessment report. There is no individual resident plan and there are no resident reports for the academic period.

For resident nephrologists, test tasks have been prepared for each subject or discipline, but there is no review for them. Reviews will be received when recruiting resident nephrologists and will probably be approved by the EMB.

During the interview, residents told about the forms of assessment, for example, if they are not ready and do not complete the task, then residents are given time to prepare for the next time, and the Satisfactory or Fail grade is not entered the records, although in words it is done. The examination scores varying 92-98% are also assigned to a module/subject. Thus, there is no assessment of the present level of academic performance, midterm examination, a portfolio assessment, including the evaluation of the IRW. Such assessment procedure is appreciated positively and fully supported by residents (5 students are studying free with a government scholarship, 1 student - on a fee-paying basis). It should be noted that residents are satisfied with their studies in the NSCS, and in their opinion there is no worthy competitor among the clinics available in the country (including in scientific centres in Astana). The system of appeal of assessment results is reflected in syllabuses for subjects and there was no appeal during the period of work in the NSCS.

To verify the data of **Standard 3**, the experts asked questions to the Head of the Department of Postgraduate Education A.Zh. Smailova, and she agreed with the lack of proper performance assessment of residents. A.Zh. Smailova also noted the lack of teaching and pedagogical experience among the NSCS staff responsible for resident mentoring. Some of the employees have certificates of pedagogical competency (2 certificates were presented) that were obtained at the Kazakh National Women’s Pedagogical University. The EEC members recommended undergoing training to improve pedagogical competencies, including the assessment of students' knowledge at S.D. Asfendiyarov KazNMU, because the assessment of students’ competencies in medical organizations has a significant difference from the assessment of schoolchildren or students of non-medical organizations.

After the visit to the organization and the interview with Smailova A.Zh., the Commission 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, regulations of departments, contracts

with residents, and educational and methodological documentation (work program, working curricula, syllabuses, training log books), evaluation tools (statements), records, certificates and passports.

### **3.2 Relation between assessment and learning**

When conducting interviews with potential clinical tutors (2) regarding assessment methods, the experts were convinced that with excellent work on developing clinical skills of residents, the NSCS staff needs to undergo training on the assessment of students. Residents also shared their opinion about the lack of evaluation of students, with the exception of attending a scientific journal club and working with patients. For example, according to residents they had a lot of time on studying theories at the university, but now they are happy to work with patients and the ability to “work with their hands”. During the visit to the organization, the Head of the Department of Postgraduate Education A. Zh. Smailova to the question “Are external examiners involved in order to make assessment process more fair, qualitative and transparent?” answered “No”.

The interviewed representatives of employers (5) also indicated that the level of graduates’ competence corresponds to the modern development of medical practice and science, as they have excellent clinical skills, and are able to work independently, and are constantly improving in their practical activities. Employers are fully satisfied with the quality of training of NSCS residents.

**The EEC conclusions by criteria.** Compliance with 9 standards (including 6 basic standards, 3 quality development standards): fully complied – 0/1, partially complied 6/2.

**Standard 3: fulfilled**

**Recommendations for improvement identified during the external visit:**

- 1) To provide a system of assessment of residents with objective methods and tools (formative assessment and summative assessment), to introduce the GPA calculation for midterm assessment and as proof in admission to the final academic assessment (Platonus). To develop and implement assessment sheets for assessing the independent work of residents;
- 2) To involve external examiners (independent examiners, stakeholders) in the assessment process of residents and document it.

## **Standard 4: RESIDENTS**

### **Proof of compliance:**

#### **4.1 Admission policy and selection**

The admission of residents in specialty 7R09115 “Adult and Paediatric Nephrology” is carried out 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 Standard Rules for Admission to Study in Educational Institutions Implementing Training Programs of Higher and Postgraduate Education; the Order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. KR DSM-270/2020 “On Approval of the Rules for Placing a State Order, Admission to Study and Training of Medical Personnel in Residency”; the SCES; and the Rules for Admission to the Residency for the Current Academic Year. The requirements for admission of residents, as well as the rules for transferring residents from other educational institutions, are described in more detail in the “Rules for Admission to the Residency” for the corresponding academic year, based on regulatory legal acts.

The information about admission to the residency with an indication of specialty is announced through the mass media, and by placement of ads on the NSCS website [www.nnch.kz](http://www.nnch.kz)

Every year, the NSCS convenes an admissions committee. The Centre has procedure for conducting examinations, during which an examination board is formed, which is composed of the most experienced, qualified NSCS teachers with an academic degree.

Applications for the residency are accepted on July 5-25.

Entrance exams to the residency are held on August 9-16, the enrolment runs until 27 August. Residency classes begin on September 1.

#### **4.2 Number of residents**

The NSCS plans to carry out active career guidance counselling on admission of residents in accordance with the needs of practical healthcare system and taking into account its resource capabilities (teachers, clinical facilities).

### **4.3 Resident counselling and support**

The main tasks of the NSCS teachers and mentors are to provide support for professional orientation and career planning of residents, increase mobility, competitiveness of the centre graduates in the labour market, expand the framework of social partnership and improve the “resident-centre-employer” system.

In order to facilitate the employment of NSCS graduates, the Department of Postgraduate Education (PGE) annually conducts a personal distribution of graduates with the participation of representatives of health departments, pharmaceutical companies and public health departments of the Republic of Kazakhstan. The NSCS graduates are in demand in the labour market. The Department of PGE also monitors the movement and career growth of A.N. Syzganov National Research Centre graduate, establishing business ties with employers, studying the needs of the labour market for specialists produced by the centre. A.N. Syzganov NSCS graduates are employed in medical organizations in various regions of the Republic of Kazakhstan.

### **4.4 Resident representation**

The Council of Residency Leaders, along with supervisors and teachers, includes residents to participate in the consideration of issues related to the educational process and the approval of training materials on residency.

### **4.5 Working conditions**

Resident doctors are granted vacations between academic periods. The duration of vacations during the academic year is not less than seven weeks, with the exception of the final year, in accordance with the state mandatory standard of residency in medical specialties and the educational programme for residency specialties.

To combine training with work (no more than 0.5 rates) in areas of activity close to the future specialty in a free time the residents obtain the consent of the curator, department head and the department for PGE.

If residents have a certificate of specialist, they are allowed during extracurricular time to conduct independently treating activity in public and private medical institutions.

The heads of the residency clinical bases ensure the inclusion of resident doctors’ positions in the staffing structure of units engaged in medical services, and the provision of jobs to resident doctors for the period of training at the clinical facility.

***The EEC conclusions by criteria.*** Compliance with 20 standards (including 14 basic standards, 6 quality development standards): fully complied – 14/6.

***Standard 4: fulfilled***

***Recommendations for improvement identified during the external visit:*** No.

## **Standard 5: TEACHERS**

### **Proof of compliance:**

#### **5.1 Recruitment and selection policy**

The NSCS has a personnel policy and HR Department. First of all, professional specialists are recruited, and second of all, academic skill is taken into account. To implement the educational program in nephrology, there are 2 people, including the Head of the Department of Renal Transplantation, Urology and Extracorporeal Detoxification I.K. Madadov, and Nephrologist K.S. Dabyltayeva. Experts are familiar with the “Regulations on Mentors” (as of Jan 5, 2022). Thus, the NSCS can simultaneously train no more than 6-7 residents at different training courses.

#### **5.2 Teacher obligations and teacher development**

According to the course for developing pedagogical mastery the mission was defined as follows: “To achieve the ATS professionalism with leadership, to ensure the effective teaching and learning at all levels of medical and pharmaceutical education based on the introduction of a Teacher Competence Model”.

The professional development program implemented in the NSCS through retraining and advanced training courses is determined by the contingent of students at the rate of 20% of the total

number of ATS. Thus, each employee fully undergoes training with a total duration of at least less than (4 credits) with interruptions at main work once every five years. For employees who want to take on-the-job training, it is carried out in the amount of at least 40 academic hours per week, or according to a specially established schedule. The participation of teachers in professional development programs is reflected in the TS personal reports and plans, and subjected to control. Upon completion of advanced, an official report or certification document that confirms that the training has been completed is issued.

During an interview with the Deputy Chairman of the Board for Financial, Economic and Operational Activities K.Kh. Tungatov it turned out that it is planned to allocate 25 million tenge on teacher training at the international level, and 14 million tenge - at the republican level. The most important thing to be done is to get an application from the Department of PGE.

**The EEC conclusions by criteria.** Compliance with 8 standards (including 7 basic standards, 1 quality development standard): fully complied – 7/1.

**Standard 5: fulfilled**

**Recommendations for improvement identified during the external visit:** No.

## **Standard 6: EDUCATIONAL RESOURCES**

### **Proof of compliance:**

#### **6.1 Physical facilities**

The Department of PGE, the R&D Management Department, together with the center scientific, conduct an analysis of needs and satisfaction in educational and methodological literature on specialties, levels and languages of instruction twice a year. Taking into account the needs of ATS and the analysis carried out the Department of PGE forms applications for the purchase and publication of books and textbooks for the new academic year. However, residents mark the priority for some monographs/ textbooks.

The Centre regularly improves IT technologies and updates its physical facilities. By September 2023, it is planned to introduce the ESUVO.Platonus.KZ automated platform for the entry of educational residency programs into the Bologna System. The Centre ensures all the conditions to uninterrupted access both to the Internet and the local computer system. In recent years, the NSCS has updated own computer equipment park, modernized computer classes, and improved its official website performance.

Every year, the Department of PGE studies and analyzes the needs and satisfaction of departments with medical equipment available and forms a general clinical application for its purchase.

#### **6.2 Learning settings**

A review of the resources showed that they correspond to the goals and objectives of educational activities. The NSCS Department of Urology and Transplantology was visited, which has only 4 renal beds, including for patients receiving haemodialysis. Therefore, the NSCS management and the Head of the Department of PGE voiced a recommendation on the need for resident nephrologists to ensure the availability of more nephrological patients in urban hospitals.

Before starting the relevant subject of the educational programme, every resident receives a syllabus from a teacher and knows what skills should be acquired and developed during the training.

During a visit to the Department of Urology and Transplantology, where experts conducted a survey of resources, their compliance with training programmes, accessibility for teachers and residents, to what extent this equipment is modern and meets the needs of students and practical healthcare system. Experts have obtained evidence of compliance with Standard 6, as well as validation of the self-assessment report information.

In general, the NSCS residents are satisfied with the training, and purposefully enrolled in this organization, as they believe that the educational organization has good resources, image and international connections, at the same time, some residents would like to study within the framework of academic mobility.



Residents showed their commitment to the educational institution, were active in answering questions from external experts, demonstrated their point of view on the organization of training, assessment of their skills, advisory support, opportunities to participate in research, financing. Experts have studied the residents' documents (portfolios).

### **6.3 Information technology**

Every year, the fund of the NSCS Scientific Library is updated by about 5-10%, according to requests for the purchase of literature by employees. Now the library's fund has more than 12356 copies of literature (books, dissertations, abstracts, periodicals in Kazakh, Russian and foreign languages. When reviewing the library, experts drew attention to the presence of outdated medical literature in large quantities, although there are also modern textbooks, monographs, clinical guidelines. There is only one computer in the reading hall.

### **6.4 Clinical teams**

The NSCS students have the opportunity to learn the skills of working in a team with colleagues and other healthcare professionals, while working in clinical and diagnostic units equipped with the necessary equipment in sufficient quantity to carry out the required manipulations.

The residency students participate as listeners during the consultations, and perform assignments of senior colleagues within their competence. Students have free access to patients at clinical bases and all conditions for improving their practical skills.

### **6.5 Medical research and scholarship**

The possibility of training residents in other medical organizations is provided by contracts that the NSCS concluded with other organizations. In total, the NSCS has signed more than 30 Memorandums of Cooperation with leading clinics in Kazakhstan and abroad.

In 2017-2019, the NSCS residents participated in 9 fragments of scientific research. Based on the results of their participation in scientific research, poster reports were prepared at the conference in Turkey (2022).

Residents also take part in a 3-year research project (since 2021) within the framework of programme-targeted financing (PTF) in the personalized medicine programme in the section "Liver Cirrhosis".

### **6.6 Educational expertise**

The expertise is carried out in the form of an analysis of the needs for specialists, an analysis of teaching methods to train residents, and the results allow us to draw conclusions about the quality of innovative changes in postgraduate education (Sub-clause 6.6.1). For example, all graduates of the NSCS residency are 100% employed and have positive recommendations in their capacity as specialists.

Every year, leading specialists, based on the results of their clinical, scientific and pedagogical work, are encouraged by diplomas, cash prizes, and various awards from the MoH, the government

### **6.7 Learning in alternative settings**

The NSCS has signed more than 30 Memorandums of Cooperation with leading clinics in Kazakhstan and abroad, including

- Nagasaki National Medical Center (Nagasaki, Japan);
- Suncheonhyang University Hospital (Puchon, South Korea);
- Budan Hospital of Seoul National University (Seoul, South Korea);
- Sejong Hospital Medical Corporation (Puchong, South Korea);
- Inha International Hospital (Incheon, South Korea);
- John Radcliffe Hospital, Nuffield Department of Surgical Sciences, University of Oxford (Oxford, UK);
- Erasmus University (Rotterdam, Netherlands);
- Ajibadem International Hospital (Istanbul, Turkey);
- A.N. Bakulev Scientific Center for Cardiovascular Surgery of the Russian Academy of Medical Sciences (Moscow, Russia);

And many others

*The EEC conclusions by criteria.* Compliance with 18 standards (including 11 basic standards, 7 quality development standard): fully complied – 10/7, partially complied – 1/0.

*Standard 6: fulfilled*

*Recommendations for improvement identified during the external visit:*

1) To provide training for residents of the programme “Adult and Paediatric Nephrology” in accordance with the list of subjects or disciplines of the SCES 2022.

## **Standard 7: EDUCATIONAL PROGRAMME EVALUATION**

### **Proof of compliance:**

#### **7.1 Mechanism for programme monitoring and evaluation**

The planning of the educational process is represented by the structure of logically related documents (typical curricula, SC, ESC, individual curricula of students, working curricula, and TP).

The absence of an electronic grade book indicates the lack of fairness in conducting the educational process, there is no formative assessment, result scores of midterm examination, and as a result there is the assessment of residents without reliability and validity.

When interviewing residents, studying the grade books and documentation on the PGE, the absence of assessment sheets of residents was revealed (duty shifts, assessment of clinical skills, maintenance of medical documentation, a 360-degree assessment, etc.).

#### **7.2 Resident and teacher feedback**

Teachers and residents have the opportunity to participate in evaluation and subsequent improvement of the educational programme on a regular basis through various feedback channels.

Customer feedback is maintained in every structural unit. According to the requirements of the QMS, each structural subdivision and department of the educational institution maintains a journal on quality improvement, in which all inconsistencies, claims, consumer complaints (patients), their causes, and the implementation of corrective actions are recorded.

The blog of the Chairman of the Management Board is used to collect feedback from teachers and residents, where NSCS students and employees may receive answers to their questions about the conditions for implementing the educational programme.

#### **7.3 Performance of residents and graduates**

After mastering the educational programme, successfully passing the final academic assessment, upon completion of the residency programme in the NSCS, 100% of graduates receive a specialist certificate, % of graduates are awarded a second qualification category, and 100% of graduates are employed.

There was no release of resident nephrologists.

#### **7.4 Involvement of stakeholders**

Online interviews with five employers were conducted included such questions as: knowledge of the university’s mission, participation in the development of the mission and proposals to the strategic plan, involvement in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through mentoring, providing the department and residents with the necessary resources for practical training and formation clinical thinking, problems of interaction with departments and universities in general, 100% employment of residency graduates. However, there is no questionnaire survey of stakeholders.

#### **7.5 Approval of educational programmes**

The NSCS has developed mechanisms for approving educational programmes which provide for the evaluation of programs at the stages of planning, implementation, analysis of results and implementation of changes, which allows monitoring the process of implementing the EP and the progress of residents, and ensures the identification and timely resolution of emerging problems.

The expertise is carried out according to the approved SOP “Development and Discussion of Educational Programmes (EP)”, Order No. 600 as of Aug 2, 2018.

***The EEC conclusions by criteria.*** Compliance with 10 standards (including 7 basic standards, 3 quality development standards): fully complied – 3/3, partially complied – 4/0.

***Standard 7: fulfilled***

***Recommendations for improvement identified during the external visit:***

1) To involve external examiners (independent examiners, stakeholders) in the assessment of residents;

2) To introduce an electronic database on assessment of residents (for example, on the Platonus platform) in order to ensure the transparent implementation of the educational programme and the learning outcomes of residents, as well as the convenience of monitoring the educational programme;

3) To develop and implement assessment sheets for evaluating of residents.

## **Standard 8: GOVERNANCE AND ADMINISTRATION**

### **Proof of compliance:**

#### **8.1 Governance**

The residency programme was established in accordance with the Law “On Education” of the Republic of Kazakhstan (Government Decree No. 319-III ZRK dated July 27, 2007). The residency program is implemented under License No. 12018231 dated Nov 21, 2012; Appendix to License No. 001 (Order of the Committee for Control in the Field of Education and Science under the MEDSc dated Nov 21, 2012 No. 1543); License of the MEDSc No. 12018231 dated Nov 21, 2012 and the Certificate of Institutional Accreditation, as well as it is expected to obtain the Certificate of Primary Accreditation on the Educational Programme: 7R09115 “Adult and Paediatric Nephrology”.

The NSCS ensures that postgraduate education programme is conducted in accordance with the following documents:

1. The Law of the Republic of Kazakhstan “On Education”, Article 5, Subparagraph 2-1 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 Training of Specialists with Higher and Postgraduate Education”, which regulates the number of state educational orders for training of residents in the field of healthcare system.

2. Model Regulations on Admission to Training in Educational Institutions Implementing Educational programmes of Higher and Postgraduate Education, Article 5, Subparagraph 11) of the Law of the Republic of Kazakhstan “On Education” dated July 27, 2007 and Model Regulations on Admission to Training in Educational Institutions Implementing Professional Training Programs of Postgraduate Education, approved by Order No. 600 dated October 31, 2018 (as supplemented and amended in June 2020), which determine the procedure for selection of citizens to residency. The procedures for admission and selection of residents are described in detail in Standard 4.1.

3. The State Educational Standard on Residency Programme for Medical Specialties and the Model Professional Training Program for Medical Residency Specialties, approved by Order No. 647 of the Acting Minister of Health and Social Development of the Republic of Kazakhstan dated July 31, 2015, which determines the composition of the educational programme.

The NSCS *has developed and approved the main internal document* that defines the scope of responsibilities and powers of the NSCS in relation to the residency EP, including the obligation to ensure the educational process in full with all necessary information sources and access to online educational resources. This document is guided by the Department of PGE when implementing management of the residency educational programme. In accordance with the Law of the Republic of Kazakhstan “On Education” and other regulatory legal acts governing the activities of medical higher educational institutions, the NSCS has developed and approved documents defining the scope of responsibilities and powers of the NSCS in relation to the residency EP, including obligations to ensure the educational process in full with all necessary information sources: textbooks, teaching guides, teaching aids and guidance papers in subjects or disciplines, handout materials and instructions for independent work, electronic textbooks, and access to online educational resources:

- Academic Policy (Regulation on Organization of the Educational Process as of Jan 5, 2021) All documents have been updated in accordance with the terms of their validity. The QMS Department is responsible for timely updating.

The procedure for admission of citizens to training in the residency is established by the Model Regulations on Admission to Training in Educational Institutions Implementing Professional Training Programs of Postgraduate Education, approved by Order No. 600 dated October 31, 2018 (as supplemented and amended in June 2020), the State Compulsory Educational Standard on Residency in Medical Specialties. All students who have mastered the residency program in specialty 7R09115 “Adult and Paediatric Nephrology” and those who have successfully passed the final academic assessment will get a national document on conferring a doctor qualification in specialty 7R09115 “Adult and Paediatric Nephrology”.

On the basis of the Order of the MEDSc “On Approval of the Types and Forms of National Education Documents and the Regulations for their Issue” dated January 28, 2015 No. 39, in accordance with Article, Subparagraph 6-3) of 5 of the Law of the Republic of Kazakhstan “On Education” dated July 27, 2007, a certificate of completion of residency is issued, in addition, the NSCS after the FCE, issues a certificate of a specialist without awarding a category in specialty 7R01101 – “Adult and Paediatric Cardiology of the new professional training program in medical residency specialties, approved by the Order of the Acting Ministry of Health and the Social Development of the Republic of Kazakhstan dated July 31, 2015. No. 647, Model Regulations on Admission to Training in Educational Institutions Implementing Educational programmes of Higher and Postgraduate Education, Article 5, Subparagraph 11) of the Law of the Republic of Kazakhstan “On Education” dated July 27, 2007.

The procedures for the admission and selection of residents are described in detail in Standard 4.

The programme is implemented in accordance with the requirements of regulations regarding the admission of residents (selection criteria and number), the learning process, assessment of knowledge and skills, established learning outcomes, and programme management.

The principles and approaches of periodic assessment of management and employees regarding the achievement of the mission have been implemented.

The Department of PGE under the supervision of the Deputy Chairman of the Board for Clinical, Scientific and Innovative Activities coordinates the implementation, control and monitoring of the implementation of residency programmes in all licensed specialties.

### **8.2 Academic leadership**

The Centre has the management system provided for (by the Charter, the management structure, the Regulations on Divisions and job descriptions). There have been identified persons responsible for the development strategy of postgraduate education.

The Deputy Chairman of the Board for Scientific, Clinical and Innovative Activities is responsible for the strategy of postgraduate education development. The Department of Postgraduate Education together with the Department of Research and Development Management and other departments ensure the learning process through the development and approval of all educational learning materials, monitoring the performance of activities.

The Department of PGE is an administrative structural subdivision of the NSCS, which organizes the training of specialists of higher professional postgraduate education. The purpose of the department is to train and coordinate the activities of highly qualified scientific and teaching staff of various profiles in the form of residency. The Department of PGE interacts and regulates its relations with educational and non-medical units in accordance with the NSCS structure. General direction and guidance on the work of the Department is provided by the Head. The Head reports directly to the Deputy Chairman of the Centre Board of Scientific, Clinical and Innovative Activities.

The heads of departments are directly responsible for the organization and effectiveness of the formative and summative assessment and midterm assessment in disciplines, consult and take exams on a subject in accordance with the academic calendar, working program, syllabus and exam schedule.

### **8.3 Educational budget and resource allocation**

The resources in the A.N. Syzganov NSCS are allocated in all areas of the surgical service affecting the work in practical, scientific, educational, research activities of all clinical and paraclinical units (Sub-clause 8.3.1).

In the light of the implementation of the Strategic Plan principal directions, the budget of the A.N. Syzganov NSCS is formed from several sources at their own expense (according to the programme - Residency Training, according to the programme – Advanced Training of Personnel, the according to the programme – Statutory Free Medical Assistance and High-Tech Medical Services, the program – Basic Financing and Compulsory Social Health Insurance) (Sub-clause 8.3.1).

The financing of the residency program depends on the formation of an annual state order. Every year, the Government of the Republic of Kazakhstan approves the state educational order for the training of specialists with higher and postgraduate education, according to which the budgets of the residency program is determined. In accordance with the Order of the Minister of Health of the Republic of Kazakhstan dated June 14, 2004 No. 474 “On Approval of Rules for Calculating the Cost of Training per One Student, a Resident, a Master’s Student, a Doctoral Student (PhD) in Educational Institutions and Scientific Organizations in the Field of Healthcare Inside the Country by State Educational Order” (as supplemented and amended on August 8, 2011) the financial and economic calculations of the cost of training in a residency is carried out within the framework of the state educational order, rational use of funds, allocated from the republican budget for the training of specialists with medical and pharmaceutical education (Sub-clause 8.3.2).

The implementation of residency programmes is supported by the salary fund of residency teachers, providing students with educational resources (educational and scientific literature, access to the Internet and to international information databases of literature, information and communication technologies), strengthening the program through invitation of foreign teachers, academic mobility programs and the opportunity for residents to participate in international and republican conferences, seminars Sub-clause 8.3.2).

In order to ensure the efficient use of financial resources (including distribution), Department of Economics and Finance has been established to review the results of the formation and use of financial resources (Sub-clause 8.3.2).

The NSCS pays great attention to:

- strengthening the individual contribution of each teacher to the results of their work;
- orientation to the final results of all activities of the structural unit and teachers;
- - variability of key indicators taking into account the specifics of the structural unit;
- the possibility of using the wage savings fund for the self-development of teaching staff;
- specification of the work plan of the structural unit and each teacher;
- transparency of ranking through the development of unified criteria;
- timely execution of control orders;
- differentiated remuneration of teaching staff;
- increase the level of motivation of teaching staff;
- strengthening of labour discipline in the team.

Teachers are provided with financial assistance (according to the trade union system), the scientific activity of teaching staff is stimulated (payment for articles with a high impact factor, participation in R&D), which affects the introduction of innovations in the educational process in the residency (Sub-clause 8.3.2).

The NSCS’s financial activities are also reviewed quarterly at a meeting of the Board of Directors. In addition, financial activity is evaluated using specific financial indicators. The following indicators characterize the stable financial condition of the NSCS. According to the accounting report, all indicators are maintained, and the financial condition of the NSCS is considered stable.

#### **8.4 Administration and management**

The Centre TS and employees carry out their work and activities o in accordance with the internal labour regulations and job descriptions approved by the director of the educational institution.

The NSCS conducts purposeful work on the training and retraining of academic staff. The procedure for recruitment and appointment of academic staff is carried out by concluding employment

contracts, as well as competitive replacement of vacant positions in accordance with the requirements of the current legislation (Sub-clause 8.4.1).

The total number of the NSCS academic staff in specialty 7R09115 “Adult and Paediatric Nephrology” includes 5 (100%) qualified doctors, of them 0 have a PhD degree; .1 (20%) has a candidate of sciences degree..

On April 5, 2018, in accordance with the Decree of the Government of the Republic of Kazakhstan, the state-owned stake (100%) of A.N. Syzganov National Scientific Centre of Surgery JSC was transferred to the possession and use of the S.D. Asfendiyarov Kazakh National Medical University NJSC, which made certain adjustments to the quality management system, including regular internal and external reviews and audits, including those providing the residency program processes (Sub-clause 8.4.2).

The Centre defines the overall strategy, main directions, priorities and objectives of the policy in the field of improving the quality of education in accordance with the mission, vision and strategic plan for the development of the NSCS. Ensuring the quality of the educational process in the residency is determined by the fulfilment of mandatory requirements for the level of training (SCES 2022, educational programmes) and the creation of a system for monitoring the effectiveness of the ATS work and the implementation of the IEP by residents (open classes, monitoring attendance and obtaining practical skills). The Department of PGE, the EMB together with members of the Educational programmes Committee (employers, students) are responsible for monitoring the quality of the educational process (Sub-clause 8.4.3).

The effectiveness of the acquired education is also confirmed by the results of annual employer and student of feedback survey to assess the level of satisfaction with educational programmes. The educational programme of the residency in specialty “Adult and Paediatric Nephrology” is accredited for the first time, so there are no survey data at the moment (Sub-clause 8.4.3).

### **8.5 Requirements and regulations**

The Regulations “On Residency” was developed in accordance with the Law of the Republic of Kazakhstan “On Education”, the Concept of Development of Medical Education and defines the procedure for training medical personnel in residency in organizations of medical education and science of the Republic of Kazakhstan, regardless of ownership, licensed for this type of educational activity and clinical bases.

A.N. Syzganov NSCS actively interacts with the MEDSc and MoH on the organization of the educational process in residency through the development and implementation of SCES 2022 and coordinating with the priority areas of national legislative and program documents: the Law of the Republic of Kazakhstan “On Education” dated June 27, 2007 No. 319-III (as supplemented and amended on May 30, 2020).

***The EEC conclusions by criteria.*** Compliance with 11 standards (including 8 basic standards, 3 quality development standards): fully complied – 8/3.

***Standard 8:*** fulfilled

***Recommendations for improvement identified during the external visit:*** No.

## **Standard 9: CONTINUOUS RENEWAL**

### **Proof of compliance:**

The systematic work of teachers to improve their qualifications and their professional level will be the responsibility of the ATS and can be expressed in the study of scientific literature according to the specifics of the activity; the development of new technologies, methods, working practices; the study of the experience of other countries; the study of regulatory documents in all specialties. Priority areas of professional development for the academic teaching staff will be: deepening of theoretical knowledge; formation and improvement of methodological culture; improvement of pedagogical skills; mastering of various methods of educational work; formation and improvement of skills in the use of modern technical means of teaching; formation and improvement of skills in the development of educational and methodological support of the educational process.

The NSCS maintains its reputation and image by preserving and developing traditions that have a decisive impact not only on the image, but also on the effectiveness of its activities in the educational market. Internal audits of the activities of the institution and its divisions are carried out in accordance with internal regulatory documents and are routine. In accordance with the schedule of internal audits approved by the Chairman of the Management Board, the Centre carries out internal quality checks (audits). Based on the results of audit, the head of the unit audited develops corrective actions aimed at preventing the possibility of the identified inconsistencies in the future. The effectiveness of corrective actions is checked by the same head, the control is carried out by an auditor (Sub-clause 9.1).

The NSCS improves mechanisms for periodic review, study and evaluation of implemented educational programmes and ensures the quality of the program management process. Educational programmes are regularly studied and evaluated through collecting feedback from interested parties, as well as an analysis of students' academic performance. The Centre is also constantly improving the procedures for evaluating programs at the level of the PGE sector, with the inclusion of all aspects (context, resources, performance indicators, customer satisfaction, employment, etc.) and a wider range of stakeholders. Thus, analytical work is carried out at the level of the clinical unit in order to evaluate the program in the form of an annual report on PGE. The improvement of the program evaluation procedure at the Centre level is carried out through the discussion of the program composition and special subjects or disciplines at the meetings of the PGE sector and at the meeting of the NSCS Academic Council (Sub-clause 9.1).

The NSCS applies innovative technologies in the educational process based on a powerful material and technical base, the improvement of which is carried out in accordance with the demands of time, prospective research, analysis of results, own experience and the study of literature on medical postgraduate education. Accordingly, in a comparative aspect with past experience, current activities, it becomes possible to improve the procedures for updating postgraduate medical education programmes (Sub-clause 9.2).

The appropriate conditions will be ensured for the full-fledged professional development of teachers in specialty 7R09115 – “Adult and Paediatric Nephrology”, namely:

- rating system of remuneration, financial incentives;
- providing an opportunity to improve their skills at the expense of the funds of A.N.Syzganov NSCS;
- creating conditions for the use of computer and office equipment, technical training tools, and other equipment in the work;
- providing assistance in participation in Kazakhstan and international competitions of scientific papers and competitions for individual grants; publication of methodological developments of employees.

**The EEC conclusions by criteria.** Compliance with 2 standards (including 1 basic standard, 1 quality development standard): fully complied – 1/1.

**Standard 9:** fulfilled

**Recommendations for improvement identified during the external visit:** No.

## **CONCLUSION:**




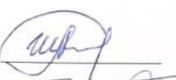

After conducting external evaluation of the educational programme, it was found that out of **114 standards** (including 82 basic standards and 32 quality improvement standards), 98 accreditation standards, including 69 basic standards and 29 quality improvement standards, demonstrate full compliance; 13 basic standards (81.1%) and 3 quality improvement standards (9,4%) are partially fulfilled. Non-compliance with the standards has not been established.

## 5. Recommendations for improving the educational programme 7R09115 – “Adult and Paediatric Nephrology”:

- 1) To create a separate, well-visualized section on residency in the NSCS website, where to place all necessary information for the resident (rights, obligations, ethics, etc.). (2.1.8);
- 2) To provide the programme 7R09115 “Adult and Paediatric Nephrology”, with a sufficient number of teachers in accordance with the qualification requirements and academic experience. (2.4.4)
- 3) To provide a system of assessment of residents with objective methods and tools (formative assessment and summative assessment), to introduce the GPA calculation for midterm assessment and as proof in admission to the final academic assessment (Platonus). To develop and implement assessment sheets for assessing the independent work of residents (3.1, 3.2);
- 4) To involve external examiners (independent examiners, stakeholders) in the assessment process of residents and document it
- 5) To provide training for residents of the programme “Adult and Paediatric Nephrology” in accordance with the list of subjects or disciplines of the SCES 2022 (6.2.1);
- 6) To involve stakeholders in the survey. (7.2.1, 7.4.1);
- 7) To introduce an electronic database on assessment of residents (for example, on the Platonus platform) in order to ensure the transparent implementation of the educational programme and the learning outcomes of residents, as well as the convenience of monitoring the educational programme (7.1.1);
- 8) To develop and implement assessment sheets for evaluating of residents (7.1.2).

## 6. Recommendation to the ECAQA Accreditation Council

The EEC members have established that the educational programme 7R09115 “Adult and Paediatric Nephrology” comply with Accreditation Standards and came to a unanimous decision to recommend that the ECAQA Accreditation Council accredit this programme for period of 3 years.

	Full name	Signature
Chairperson	GAUKHAR TLEUBEK KYZY IGIMBAYEVA	
International expert	ZHILDYZ TURDUBAYEVNA KONURBAYEVA	
Collegiate expert	BIBIGUL AMANGELDIYEVNA ABEUOVA	
Representative of employers	ALFIYA GUMAROVNA SHAMSUTDINOVA	
Representative of residents	MADI SERIKULY AZIMKHANOV	



**Quality profile and criteria for external evaluation of the educational programme  
(generalization)**

Standard	Criteria for evaluation	Number of standards	BS*/QIS	Evaluation		
				Fully complied Largely complied	Partially complied	Not complied
1.	MISSION AND OUTCOMES	14	9/5	9/4	0/1	
2.	EDUCATIONAL PROGRAMMES	22	19/3	17/3	2/0	
3.	ASSESSMENT OF RESIDENTS	9	6/3	0/1	6/2	
4.	RESIENTS	20	14/6	14/6		
5.	TEACHERS	8	7/1	7/1		
6.	EDUCATIONAL RESOURCES	18	11/7	10/7	1/0	
7.	PROGRAMME EVALUATION	10	7/3	3/3	4/0	
8.	GOVERNANCE AND ADMINISTRATION	11	8/3	8/3		
9.	CONTINUOUS RENEWAL	2	1/1	1/1		
				69/29	13/3	
				98	16	
		114	82/32	114		

**List of documents reviewed as part of external expert evaluation of the residency educational programme**

<b>No.</b>	<b>Document</b>	<b>Quantity</b>
1.	Teacher's Code of Honour	1
2.	Academic Calendar of Residency	1
3.	The Code of Honour of the Residency Student	1
4.	Areas of Competence of the Residency Graduate	1
5.	List of Documents for Admission to the Residency	1
6.	NSCS Quality Policy	1
7.	Regulations on Midterm Assessment	1
8.	Regulations on Final Academic Assessment	1
9.	Portfolio of Residents	2
10.	Resident Attendance Logs by Subject	5
11.	Examination Sheets	5
12.	Certificates of Pedagogical Qualification Improvement	2
13.	Regulations on the Organization of the Educational Process	1
14.	Regulations on the Department of PGE	1
15.	Guide 2021	1