

To Accreditation Council
Of Eurasian Center
For Accreditation and Quality Assurance
In Higher Education and Health Care
12/20/2021

**REPORT
OF THE EXTERNAL EXPERT COMMISSION
ON THE RESULTS OF THE EVALUATION OF THE EDUCATIONAL
PROGRAMME 7R01120 NEUROSURGERY, ADULT, PEDIATRIC
OF JSC "NATIONAL CENTER FOR NEUROSURGERY" OF THE
MINISTRY OF HEALTH CARE OF THE
REPUBLIC OF KAZAKHSTAN
FOR COMPLIANCE WITH THE STANDARDS OF ACCREDITATION OF
EDUCATIONAL PROGRAMMES OF POSTGRADUATE EDUCATION
(SPECIALTY OF RESIDENCE) IN MEDICAL EDUCATIONAL
ORGANIZATIONS**

external expert evaluation period: December 6 – 8, 2021

Nur-Sultan city, 2021

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LIST OF SYMBOLS AND ABBREVIATIONS

SCES - State Compulsory Education Standard
Department - Department of Education
ECAQA - Non-profit institution "Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health"
DET - Distance Educational Technologies
FSA - final state attestation
IEP - individual educational plan
RW - research work
QED - catalog of elective disciplines
MoH RK - Ministry of Health of the Republic of Kazakhstan
MES RK - Ministry of Education and Science of the Republic of Kazakhstan
PGE - postgraduate education
PD - professional development
RT - retraining
PPP - faculty
EP - educational programmes
WC - working curriculum
NCIE - National Center for Independent Examinations
NCN - National Center for Neurosurgery
QMS - quality management system
RIWT – resident’s independent work with a teacher
RIW - resident’s independent work
EMC - educational and methodological council
EMCD - educational and methodological complexes of disciplines
GPA - Grade Point Average - the arithmetic mean of the grades received for all completed courses, taking into account the time spent on them
JCI – Joint Commission International

1. Composition of the External Expert Commission

In accordance with ECAQA Order No. 31 dated November 23, 2021, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external assessment during the period December 06-08, 2021 as part of the accreditation of the educational programme in the specialty 7R01120 Neurosurgery, adult, pediatric, with the following composition :

No. p / p	Status in the EEC	Full name	Regalia, position, place of work / place of study, course, specialty
1	Chairperson	Madyarov Valentin Manarbekovich	Doctor of Medical Sciences, Head of the Department of Surgery with the course of anesthesiology and resuscitation of the National Educational Institution "Kazakhstan-Russian Medical University"
2	foreign expert	Urmanbetov Kubatbek Samoybekovich	MD, senior researcher Research Institute of Cardiac Surgery and Organ Transplantation of the Ministry of Health of the Kyrgyz Republic
3	Kazakh academic expert	Nurmukhambetova Baktygul Rakhimbekovna	Candidate of Medical Sciences, Assistant of the Department of Nervous Diseases, NJSC "Asfendiyarov Kazakh National Medical University"
4	Employers' representative	Dautov Tayrkhan Bekpolatovich	Doctor of Medical Sciences, Head of the Department of Radiology and Nuclear medicine JSC "National Scientific Cardiac Surgery Center
5	Listener representative	Askanbekov Maksat Bakytuly	Resident of NJSC "Astana Medical University"

ECAQA Observer - Umarova Makpal Aldibekovna, Head of Accreditation and Monitoring Department.

The work of the EEC was conducted in accordance with the regulations of the EEC (Order of the General Director of the ECAQA No. 4 from "13" February, 2017).

The EEC report provides an assessment of the educational programme 7R01120 Neurosurgery, adult, pediatric Standards of accreditation of programmes of postgraduate education (residency specialty) medical educational organizations and conclusions (hereinafter the accreditation Standards), recommendations of the EEC to further improve the approaches and conditions for the implementation of the above educational programmes and recommendations to the Accreditation Council ECAQA.

2. General part of the final report

2.1 Presentation of JSC "National Center of Neurosurgery" and the educational programme 7R01120 Neurosurgery adult, pediatric

Organization name, legal form of ownership, BIN	JSC "National Center for Neurosurgery" (hereinafter referred to as the "Company")
Full name of the first head	Akshulakov Serik Kuandykovich
Location and contact details	Republic of Kazakhstan, 010000, Yesil district, Nur-Sultan. Turan Ave. 34/1.

Information about branches, subsidiaries (if any)	-
The total number of educational programmes, separately for additional and non-formal education	2 residency programmes (7R01120 Neurosurgery, adult, pediatric ; 7R01137 Neurology, adult, pediatric). 10 programmes of additional and non-formal education
The total number of trained residents in the specialty of the educational programme since the beginning of activity	40 neurosurgeons
Total number of residents in the 2020-2021 academic year	28
Full-time teachers/ part-time workers	Full-time teachers - 7, part-time teachers - 4. Clinical mentors in neurosurgery - 6, in neurology - 5,

The training of residents in the "Company" is carried out in accordance with the State License of the Committee for Control in the Sphere of Education and Science of the Republic of Kazakhstan dated August 25, 2017 No. KZ61LAA00010064 (date of initial issue "01" July 2009) for postgraduate education. The implementation of residency programmes is carried out in 2 clinical specialties.

From 2008 to 2020 based on the "Society" trained 40 neurosurgeon specialists (see table below). The quality and demand for residency graduates is determined by a fairly high level of their employment (100%).

years of education	Quantity
2008-2010	2
2009-2013	4
2010-2014	4
2011-2015	5
2012-2016	4
2013-2017	4
2014-2018	4
2015-2019	7
2016-2020	6
2017-2021	-
Total	40

The total number of students in the specialty "Adult and Pediatric Neurosurgery" in the 2020-2021 academic year was 26 residents, including by year of study, see the table below:

years of education	Quantity
2018-2022	7
2019-2023	3
2020-2024	8
2021-2025	8
Total	26

The lecturers are highly qualified specialists, doctors and candidates of medical sciences, doctors of the highest category with experience in clinical work and teaching, who have been trained in the best centers and clinics in the world.

The teaching staff (hereinafter - the teaching staff) of the "Society" is represented by 1 academician of the National Academy of Sciences of the Republic of Kazakhstan, 1 academician of the National Academy of Natural Sciences of the Republic of Kazakhstan, 3 doctors of medical sciences, 18 candidates of medical sciences, 4 PhD, 5 masters, 18 specialists of the highest category. Employees of the "Society" are members of the following international associations: World Federation of Neurosurgical Societies (WFNS), European Association of Neurosurgical Societies (EANS), Asian Association of Neurosurgical Societies (AANS), European Association of Pediatric Neurosurgeons, Eurasian Association of Pediatric Neurosurgeons, Russian Society of Pathologists, as well as republican associations: the Kazakh Association of Neurosurgeons, the Federation of Anesthesiologists-Resuscitators of Kazakhstan, the Association of Pediatric Neurologists of Kazakhstan, the Association of Physicians of Neurophysiologists and Neuroimaging Specialists of Kazakhstan.

In 2012, the Scientific and Information Center named after A.N. Konovalov, which is a modern library format. Its tasks are to promote the activation of the intellectual potential of medical workers and the multiplication of information resources, as well as the formation of a qualitatively new, adequate to the expectations of users of the library service system.

On the basis of the Society, since 2004, the scientific and practical journal "Neurosurgery and Neurology of Kazakhstan" has been quarterly published, which is a scientific and informational and analytical publication that publishes materials on neurosurgery, neurology and other areas of neuroscience and related disciplines. All articles published in the journal are posted on the journal's own information portal www.neurojournal.kz.

Since December 2014, the Journal has been included in the List of publications approved by the Committee for Control in the Sphere of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan for the publication of the main results of scientific activity (the list of HAC). The journal is also indexed in such international scientific information databases as [Russian Science Citation Index](#), [Cyberleninka](#) and [OpenAcademicJournalIndex](#).

In 2019, the Society passed a three-year JCI re-accreditation.

The Society maintains friendly and partnership relations with the largest neurosurgical clinics in the world - the USA, Germany, Israel, France, Turkey, CIS countries, etc.

2.2 Information about previous accreditation

Until now, the educational programme "7R01120 Neurosurgery for adults and children" has not been accredited.

2.3 Conclusion based on the results of reviewing the report on self-evaluation of the educational programme 7R01120 Neurosurgery, adult, pediatric for compliance with the Standards of educational programmes for postgraduate education (specialty residency) and conclusions

Report on self-esteem educational program 7R01120 Neurosurgery, adult, pediatric (hereinafter referred to as the report) presented on 131 pages of the main text, annexes on 143 pages of copies and electronic versions of documents located at the link <http://www.neuroclinic.kz>, https://www.neuroclinic.kz/for_specialists/science/s_publications/.

The report is characterized by the completeness of answers to all 9 basic accreditation standards and criteria, structuredness taking into account the recommendations of the Guidelines for the self-assessment of the educational programme provided to the educational organization by the accreditation center - ECAQA, as well as the internal unity of information.

Preparation for specialized accreditation of JSC "National Center of Neurosurgery" was carried out on the basis of Order No. 08-2/3 dated March 10, 2021 "On the establishment of a working group to prepare for specialized accreditation".

The composition of the working group on preparation for accreditation of the educational residency programme in the specialty "Adult Neurosurgery, children's" of JSC "National Center of Neurosurgery includes employees: chairman - Doskaliev Aidos Zhaksylykovich – Acting Director of Strategy and Science, Chairman of the working group, as well as 25 members, including 2 residents (Baymukhanov Dauren, resident in the specialty "Neurosurgery, including children's" 4th year of study; Valieva Kamila, resident in the specialty "Neurology, including children's" 2nd year of study).

The report is accompanied by a cover letter signed by the Chairman of the Board of the National Center of Neurosurgery, Academician S.K. Akshulakov, which confirms the reliability of 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 responsibility of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational programme: Serikpaeva Altyngul Abylayevna, head of the education Department.

The report was reviewed by the accreditation expert V.M. Magyarov, and the reviews noted strengths and areas for improvement, as well as recommendations for additions and changes, including the following:

Standards	Reviewer recommendations
1	Standard 1 does not provide information about the mission of the educational programme in the specialty "7R01120 Neurosurgery for adults, children" in the context of medical care and other aspects of social responsibility. (1.1.2), In 1.3.4 there is no specific description of how the "Society" guarantees continuity between the final learning outcomes of basic medical education programmes and the residency programme in 7R01120 Neurosurgery, Adult Children In the self-report, the old cipher of the specialty 6R113000 Neurosurgery, adult children's is marked. According to Order No. 647 of July 31, 2015 "On approval of state general education standards and standard professional training programmes in medical and pharmaceutical specialties".
2	Paragraph 2.1.4 is not filled in. This section presents old data - Working curricula have been approved by the Educational and Methodological Council (Protocol No. 1 of 01.10.2019), and IEP must be approved annually. There is no specific data in section 2.4.3
3	There is a discrepancy in the number of students in this section (Tables 3 and 5).
4	-
5	Provide clear information on the quantitative and qualitative indicators of teachers, part-timers and clinical mentors.
6	This standard provides more data on the "Company" as a whole. There is no data on the availability of literature in the specialty "Neurosurgery". There is no information about the scientific literature on the disciplines of the accredited specialty.
7	-
8	Clause 8.1.5 does not provide specific data on the needs of neurosurgical specialists. As can be seen from the table, 21 the general budget of the "Society" is steadily increasing. At the same time, the development of educational services from the implementation of research programmes is steadily declining.
9	The procedures for improving the educational activities of the "Society" are not reflected, strengths and areas for improvement are not identified.

Thus, in the process of feedback from the representative of the educational organization, the experts received answers to the questions that arose and made appropriate changes and additions to the self-assessment report based on the recommendations of the reviewers.

All standards provide real-world practice of JSC " National Center of Neurosurgery for training residents in the specialty **7R01120 Neurosurgery, adult, pediatric**, taking into account the start of admission of students in 2017., reasoned data, examples of implementation of educational programme tasks, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. Description of the self-assessment report comprehensive and up to date on the number of residents, faculty, administration, information on the selection and appointment, the results of the study, the results of the assessment of knowledge and skills, material and technical base of the University and clinical bases of contractual obligations with our partners (universities, associations, base), financial information, plans for development and improvement .

The report is submitted to the ECAQA in a complete form, with data corrected for the above recommendations, written in a competent language, the wording for each standard is clear and understandable and described in accordance with the criterion of standards, tables and figures (diagrams, photos) they contain links in the text and are numbered end-to-end.

The quality of the self-assessment report served as the basis for moving to the next stage of the accreditation procedure – external evaluation. Experts plan to validate the report data, compare the information from the report with the information that will be received during the visit to the educational organization, i.e., verify quantitative and qualitative indicators.

3. Description of external expert evaluation

External expert work in the framework of the evaluation of the educational programme of postgraduate education (specialty residency) was organized in accordance with the Guidelines for the external evaluation of educational institutions and educational programmes of ECAQA (approved by order of the Director General of the Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health Care No. 5 dated February 17, 2017) and according to the programme approved on November 8, 2020 by ECAQA Director General Sarsenbayeva S.S. and agreed with the chairperson of the board of the "Society" acad. Akshulakov S.K. Dates of the visit to the organization: December 6-7, 2021

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

The sequence of the visit within 2 days is detailed in the Visit Programme (hereinafter referred to as the programme), which is located in the documentation of the accreditation center and in Attachment 3 to this report. The programme is proof of the implementation of all planned activities within the framework of an external expert evaluation.

A foreign expert, MD, prof. Urmanbetov Kubatbek Samoybekovich, Kyrgyz Republic.

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

- interviews with management and administrative staff - only 11 people;
- interviews with residents – 32 people
- website exploration <http://www.neuroclinic.kz>,
https://www.neuroclinic.kz/for_specialists/science/s_publications/.
- interviewing 21 employee 4 teachers;
- questioning of teachers and residents - 11 and 27, respectively;
- monitoring the training of residents:
 - visit of practical lesson on the topic "Brain Tumors" for residents of the 1st-2nd year of study in the specialty "Neurosurgery", teacher Mustafin Khalit Abdimazhitovich;
 - attending a seminar on the topic: “The choice of the first (main) method of treating AH in large extrasellar adenomas. Combined treatment of hypertension. Methods for evaluating the

effectiveness of treatment of pituitary adenomas. Residents of the 3rd year in the specialty "Neurosurgeons, adult, pediatric"

- **visit of** Journal club on the topic: "Microvascular decompression in hemifacial spasm."
- Assessment of the availability of relevant metal materials, documentation visit.
- review of resources in the context of fulfilling accreditation standards: visited the main base of training and practice - the departments of the National Center for Neurosurgery.
- study of educational and methodological documents in quantity 34 units both before the visit to the organization and during the visit to the departments (the list of documents examined is in Attachment 2).

On the part of the staff of the accredited organization, the presence of all persons indicated in the visit programme and according to the lists of interview sites and interviews was ensured (Table 1).

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

No.	FULL NAME.	Position
1.	Akshulakov Serik Kuandykovich	Chairperson of the Board
2.	Pazyzbekov Talgat Turarovich	Medical Director
3.	Doskaliev Aidos Zhaksylykovich	Acting Director for Strategy and Science
4.	Baizhumanova Aiman Takenovna	CFO
5.	Kistaubaev Bakhytzhan Aitpaevich	Head of planning and economic department
6.	Akhmetova Asiya Sagidollaevna	Head of Human Resources Management and Human Resources Department
7.	Zverinsky Dmitry Bronislavovich	Chief specialist of the service and economic department
8.	Serikpaeva Altyngul Abylaevna	Acting deputy head of education department
9.	Kamalova Zulfiya Khasinovna	Chief Specialist of the Education Department
10.	Sadykov Askar Murzakhanovich	Head of the Scientific and Educational Simulation Center
11.	Solodovnikov Makar Petrovich	Head of Research Management Department
12.	Kaztaeva Raushan Mazhitovna	Head of the Sector of International Cooperation and Public Relations
13.	Nurmanova Saule Amangaleevna	Chief Specialist of the Department and Strategic Development
14.	Mustafin Khalit Abdimazhitovich	Candidate of Medical Sciences, Associate Professor (Associate Professor), PhD Acting deputy Head of the Department of Neurosurgery and Neurology
15.	Mustafaev Baglan Satylkhanovich	Candidate of Medical Sciences, PhD. Doctor of the highest category Lecturer, Department of Neurosurgery and Neurology
16.	Eszhanova Laura Erkenovna	Lecturer, Department of Neurosurgery and Neurology
17.	Olenbai Gabit Ilyasuly	Physician, Head of the Department of Pediatric Neurosurgery
18.	Ryskeldiev Nurzhan Amirbekovich	Candidate of Medical Sciences, Professor Head of the Department of Neurosurgery
19.	Kaliev Asylbek Baktybekovich	PhD, Head of Hospital Management Department
20.	Mustafayeva Alina Sabitovna	Candidate of Medical Sciences, PhD, Head of the Department of Neurorehabilitation

21.	Kerimbaev Talgat Tynyshpaevich	Head Department of Spinal Neurosurgery, PNS Pathology
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Thus, when implementing the programme activities, namely, based on the results of an interview with the first head of the organization, members "Working groups for the preparation for the passage of specialized accreditation", in interviews with residents and teachers, compliance with the criteria of standard 1 was established. All participants in the educational process know the mission of the organization, took part in the formation of proposals for formulating the mission, while the mission was brought to the attention potential residents through the website, social networks, newsletters to medical organizations. The strategic plan of the organization for a period of 5 years was reviewed, including the development of educational and professional work in such areas as "neurosurgery" and "neurology", which confirms fulfillment of the accreditation standard and demonstrates the goals, objectives and prospects of the organization. From interviews with residents, it was found that before the start of classes, teachers inform about the mission, work plans of the educational organization, they say where to get the necessary information about the educational programme, teachers, and training facilities. This indicates compliance **with Standard 2** in terms of adapting training to the needs of residents.

The documents of the organization contain work programmes, EMCD, where the goal is defined, the integration of practical and theoretical components, independent work is taken into account. Compliance with SCES and standard requirements was established. Attending a practical session on the topic "Tumors of the brain", the experts received convincing data that training is carried out according to the plan, before the start of the lesson, residents answer tests, receive feedback from the teacher. "Society" enforces ethical aspects in the implementation of the educational programme, as the experts studied the code of ethics of employees, and during interviews, residents responded that they were aware of the contents of this document.

When attending a practical lesson, the experts saw that the "Society" contributes to the development of practical competencies of residents, including on simulation equipment. At the same time, residents deepen their theoretical knowledge and develop communication skills.

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

The study of control and measuring tools (300 tests, 100 tasks) showed that the "Society" has implemented an appropriate assessment policy that allows for a comprehensive assessment of the educational achievements of residents. During the interview, the residents spoke about the assessment forms and that they are satisfied with them, and also receive regular feedback from teachers. The procedure for the work of the appeal commission is approved in the Rules for organizing the educational process in residency "Societies" dated July 14, 2020 No. 19. For 2017-2021, during the final state attestation (FSA), residency graduates did not file any appeals. Thus, compliance with standard 3 is established.

During the visit "Societies" and during an interview with the head of the education department Serikpayeva A.A., the commission was convinced that there is a documentation system that transparent and accessible to all faculty and staff, and includes documents such as annual operating plans, annual reports, division regulations, contracts with faculty and residents, and educational and methodological documentation (work programme, working curricula, syllabuses, journals), evaluation means (check-lists, statements), certificates, certificates and certificates. A review of the website showed that its pages contain documents necessary for residents and have information that is regularly updated. This information was obtained from an interview with Doskaliyev A.Zh., acting director of strategy and science. Conversation with him allowed experts to learn about approaches to attracting staff of clinical sites for teaching (total of such teachers 4 of a person and at present they are included in the department's sheet), on the strategy and tactics of recruiting residents, information support of the educational programme, as well as identify problems in the management and development of human resources, since most part-time workers do not know the teaching methods.

An interview with 4 teachers showed that there are both successes and problems in the management of education, depending on the specific clinical department and the activity of the resident (the admission of residents to the equipment, a sufficient number of subject patients, time to maintain medical records, independent work). The experts received answers about the programme for advanced training of teachers, the financing of this training, the lack of certification for teachers in teaching methods for this period.

On the same day, the experts studied the materials on the admission of residents and the selection of teachers and found compliance with standard 4.

For the purpose of data verification **standard 5**, external experts received information on the personnel policy and approaches to the development of the pedagogical competence of teachers, motivation to work with residents, and mentoring. Experts found that teachers initiate research topics for residents, stimulate the need for additional training and independent work with literature and medical records. During the visiting departments of the Society, where experts were convinced of the modernity and availability of equipment, assisting residents in operations, working with a large amount of documentation, prescribing examinations and treatment, interpreting examination results (reading x-rays, tomograms), holding conversations with patients, availability of rooms for work of residents. That resources are sufficient and correspond to the disciplines of the educational programme. Experts received evidence of implementation of **standard 6**.

In order to validate the implementation of the data of the self-assessment report and obtain evidence of the quality of the programmes, interviews were conducted with residents in the specialty "neurosurgery". The experts asked questions about satisfaction with training, enough time to supervise patients, work at DAMUMED with medical records, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents who need it, participation in the Journal Club, availability of resources from international databases of professional literature. In general, residents are satisfied with the training, assessment methods, and purposefully entered this organization, as they believe that the "Society" has excellent resources, a lot of modern equipment, well-known specialists in the country and the world, image and international relations, at the same time, residents would like more independence in managing patients and participating in operations, examining patients, and also expect help from the management of the "Society" in organizing participation residents in international conferences.

The experts studied the documents of the residents (portfolio, the results of the assessment of residents-check-lists, the results of the survey of residents).

Interview with 7 employers carried out in the mode online and included such issues as: knowledge of the mission of the "Society", participation in the development of the mission and proposals for the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through mentoring, providing the department and residents with the necessary resources for practical training and the formation of clinical thinking, about the problems of interaction with departments and universities in general, 100 % employment of graduates.

There is a sufficient number of thematic patients, modern equipment and accessibility to students, and employees who simultaneously perform the roles of teachers and curators (mentors) provide high-quality training in compliance with ethics and deontology. Before starting the relevant discipline of the educational programme, the resident receives a syllabus from the teacher and knows what skills they should acquire and develop during their training.

For better assimilation of the programme, it is necessary to develop elective programmes for residents in the specialty "Neurosurgery". Also, to motivate the work of mentors to the "Society", a mentoring regulation should be developed and implemented. To improve the educational process, teachers of the department need to undergo regular professional development in Pedagogy, Psychology, Communication skills, as well as involve settled employees in teaching activities and take into account the ratio of teachers to students -1:3 when forming groups.

On the last day of the visit to the organization, a meeting of the EEC members was held on the results of an external assessment. The final discussion of the results of the external evaluation of the educational programme, the study of documents, the results of interviews, interviews, questionnaires was conducted. EEC members have started drafting the final EEC report. Generalizations of the results of external evaluation are made. Experts individually filled out the "Quality profile and external evaluation criteria of the educational programme **7R01120 Neurosurgery, adult , pediatric** for compliance with Standards of ECAQA Accreditation". Recommendations for improving the educational programme and the programme were discussed. V. M. Magyarov held a final open vote on recommendations for the ECAQA Accreditation Council.

Comfortable conditions were created for the work of the EEC, access to all necessary information and material resources was organized. The Commission notes the high level of corporate culture of JSC "National Center of Neurosurgery" of the Higher Economic Commission.

At the end of the programme of the visit, the Chairman of the EEC announced recommendations for the management and employees of the educational organization based on the results of an external assessment within the framework of specialized accreditation.

4. Survey results

During the period from 06 to 08 December 2021, the ECAQA observer conducted an online survey on the resource <https://webanketa.com/>.

The survey of residents includes 22 questions. 27 people responded. 92% of respondents fully agree that they will recommend studying at this educational organization to their acquaintances, friends, and relatives, while 7.41% (2 residents) partially agree. 96.3% fully agree with the statement that teachers are aware of the problems of residents related to training, and 3.7% partially agree.

100% of respondents believe that programme managers and teachers involve students in independent work. 88.89% of respondents are fully satisfied with the conditions and equipment of educational rooms and classrooms of this organization, and 11.11% (3 residents) are partially satisfied. 96.3% of respondents said that they have access to equipment for mastering practical skills, while 3.7% did not fully answer. 100% of respondents are provided with educational literature, and 70.37% confirmed that they are engaged in scientific work under the guidance of their teacher or mentor, 22.22% are planning research, and 7.41% are still undecided.

96.3% of respondents confirmed that they have enough time for practical training, and 3.7% agreed partially. Satisfied with the schedule of training sessions in the disciplines of the educational programme of 96.3% of residents. 92.59% of respondents answered that teachers in the classroom regularly use active and interactive teaching methods, sometimes 7.41% answered.

96.3% of respondents confirmed that they have enough time for practical training, while 3.7% partially agreed. 96.3% of residents are satisfied with the schedule of training sessions in the disciplines of the educational programme. 92.59% of respondents said that teachers regularly use active and interactive teaching methods in the classroom, sometimes 7.41% answered.

According to the survey results, 100% said that after completing classes, the teacher constantly conducts feedback with them. When asked about the number of seminars that are held during the month as part of the residency programme, 29.63% said that seminars are held once a week, 22.22% said that two or three times a week, 7.41% - are held daily, 3.7% believe that it is very rare.

100% of residents are confident that this educational organization allows them to acquire the necessary knowledge and skills in their specialty. Of all respondents, 92.59% have an excellent assessment of the organization of clinical training, and 7.41% have a good impression. We fully agree that the teacher (mentor, curator) of this educational organization is an example for them as a professional doctor, a person, 100% of residents.

100% of respondents are completely satisfied with the number of patients to be supervised.

The majority (88.89%) of respondents believe that accreditation of an educational institution and educational programmes is an important and necessary mechanism for ensuring the quality of education in residency, 7.41% doubt the answer, 3.7% do not know what it is.

74.07% of residents believe that the interview with the management of the University is the most important tool of foreign expert assessment, 33.33, % chose the option "interviews with teachers", 25,93% believe that interviews with residents, 18.52% said that interviews with mentors residents 18.52% – interviews with graduates of the University of 11.11% – review resource base for the training of residents, 3,7% – visit workshops and seminars. **Conclusions:** In their responses, residents generally expressed satisfaction with the organization of education, as well as with the conditions of training, access to equipment, time for practical training, the number of patients to be supervised, and the organization of teaching.

The survey of teachers included 21 questions of the questionnaire. 11 people responded, including 4 full-time teachers. Teaching experience up to 5 years - 18.18%, up to 10 years - 63.64%, over 10 years - 18.18%.

Fully satisfied with the organization of the educational process 90.91%, partially - 9.09%. According to the survey, 81.82% of teachers fully agree that ethics and subordination are respected, the remaining 18.18% believe that it is partially.

90.91% of respondents are completely satisfied with the organization of labor and the workplace, 9.09% are partially satisfied. There is an opportunity for career growth and competence development for teachers in the organization: they fully agree - 100%, 100% of respondents fully agree that teachers in this educational organization have the opportunity to engage in scientific work and publish research results.

According to the results of the survey, 81.82% of respondents are completely satisfied with the salary. 27.27% confirmed that they personally participate in the development of methodological materials for the residency programme, 72.73% participate partially.

90.91% of respondents studied at professional development courses from 1 to 5 years ago, 27.27% are engaged with residents on a daily basis, only clinical training -72.73%.

00% of teachers fully agree that they can be realized as professionals in their specialty in this educational organization.

90.91% of respondents fully agree that the organization has enough equipment and resources to conduct training for residents under accredited programmes, 9.09% agree partially.

90.91% of the respondents are completely satisfied with the work of the department of postgraduate education, 9.09% - partially.

Regarding participation in conferences (international, republican), 9.09% did not contact the management about this, 81.82% answered that the organization supported their participation by paying for travel, travel, registration fees, 9.09% found sponsors.

The majority of respondents (100%) fully agree that residents have free access to patients at clinical sites and all conditions for improving practical skills.

The teachers answered that during the classes, they have a syllabus and EMCD (90.91%), control and measuring tools (72.73%), cases (80.81%), an educational journal (81.82%), monographs (27.27%), a journal registration of workings (63.64%).

The level of previous training of residents upon admission to training programmes fully satisfies 46.45% of respondents, partially - 45.45%, 9.09% did not give an answer.

72.73% know about the implementation of social programmes to support teachers, 27.27% do not know about it. Of all 11 respondents, 72.72% note that the management of the organization systematically listens to the opinion of teachers regarding questions on the educational process, research, clinical work, 18.18% believe that sometimes, 9.09% did not give an answer.

In the process of training residents, a variety of teaching methods are used, but more often analysis of situational problems (72.73%), compiling and solving cases (54.55%), work in small groups (54.55%), problem-based learning (63.64%), interactive learning (54.55%). (%), oral questioning of students (54.55%), oral discussion of the topic (27.27%), test solving (36.36%), practical training in clinical skills in the training and clinical center (81.82%).

72.73% of respondents fully agree that this survey is useful for developing recommendations for improving the key areas of activity of this organization, while 27.27% partially agree with this.

Of all respondents, 81.82% believe that accreditation of educational programmes is an important and effective mechanism for ensuring the quality of postgraduate education, 9.09 % still do not understand what accreditation is, 9.09% expressed the opinion that yes, it is, but in combination with other mechanisms (certification, audits, independent assessment of students ' knowledge).

Conclusions: The survey showed that the majority of teachers surveyed are satisfied with the organization of the educational process, compliance with ethics and subordination, organization of work and workplace, the opportunity for career growth, the opportunity to engage in scientific work and publish research results. The results of the survey are presented in the appendix and generally demonstrate satisfaction with the educational process, the resources of the clinical base, the competencies of teachers, and also indicate the presence of centralized management of educational programmes.

5. Analysis for compliance with the accreditation standards of the educational programme 7R01120 Neurosurgery, adult, pediatric

Standard 1: MISSION AND END OUTCOMES

Evidence of Compliance:

1.1 Mission and deliverables statement

The mission of the "Society" is reflected in the development plan of JSC "National Center of Neurosurgery". As a leading neurosurgical clinic not only in Kazakhstan, but also in Central Asia, it is the creation of an effective system of specialized care in order to improve the quality of life of the population. The main goal is to comply with the programme of the National Education System of the Republic of Kazakhstan, namely, the training of highly qualified neurosurgeons who possess an extensive amount of theoretical and practical knowledge through the residency of the "Society". For the implementation of the educational programme, the "Society" has the appropriate material and technical base, the appropriate human resources, which are fully used in the training of residents. When preparing residents, the Company adheres to the recommendations of the State Budget of the Ministry of Health of the Republic of Kazakhstan from 2020. To ensure a patient-oriented approach, a List of privileges has been compiled. The resident must comply with all the points of the Rules of the organization of the educational process in the residency (Decision of the Board of 14.07.2020, No. 19). To analyze the level of training of residents, an appropriate assessment form has been introduced (summative, a minimum list of practical skills). With the help of these tools, the dynamics of educational achievements of residents are assessed. Residents participate in the implementation of research conscientiously with curators and mentors. The Educational and Methodological Council (EMC) approved the requirements for the content, design and protection of research work under the residency programme. Residents actively participate in republican scientific and practical forums, make presentations and there are prize-winners of scientific forums.

1.2 Professionalism and professional autonomy

Residents take compulsory courses in evidence-based medicine, research management, public health and health care. Support for professional autonomy lies in the fact that the independence and independence of residents in the performance of their duties is ensured. The training of personnel in residency is carried out in accordance with the regulatory documents of the Republic of Kazakhstan and the internal Rules for organizing the educational process in residency, approved by the decision of the Management Board of the Company on July 14, 2020 No. 19.

1.3 Learning Outcomes

Competencies and outcomes to be mastered resident after completion of training, are defined in the WC and syllabuses. The entire educational programme is aimed at achieving competencies. The WC

defines the learning outcomes, i.e. what resident should know, be able, what skills to possess by the end of training.

"The Society informs the public about the established end results of the training of residents by posting information and a syllabus on its official website.

In structure "Society" as part of the Sector for International Cooperation and Public Relations has a Press Service, which provides information not only through the official website, but also through social networks about all the news, including educational events. Constant work is underway to improve IT technologies and infrastructure "Society». Uninterrupted operation of the Internet network is ensured. Security access to the Internet - 100%. Was created personal information manager Microsoft Outlook, there is a video broadcasting system in conference rooms.

1.4 Participation in the formulation of the mission and deliverables

In its activity "Society", when formulating the mission and goals, is necessarily based on the opinions and suggestions of employees, residents, resident employers, which are received through a systematic survey, meetings, events (round tables, meetings, reporting conferences) and information in the form of official letters, placement of the mission on information leaflets, booklets.

All employees took part in the development of the mission "Society». Administrative and clinical staff note the need for interaction between research, educational and clinical activities in order to achieve the Mission.

To study the opinions of consumers, a number of activities are carried out: a survey of residents, employers, and teachers. Based on the analysis of the above activities, measures are formed to improve activities and meet the needs, as a result of which the goals and objectives of the "Society" are updated, including in the field of educational activities.

Representatives of key stakeholders are involved in the formulation of the mission and goals "Society" by participating in extended discussions and discussions. The results of discussions, questionnaires are analyzed, strengths and weaknesses of all types of activities, risks, ways to overcome them are identified, which is taken into account when revising the mission and strategic goals.

Conclusions of the EEC according to the criteria. Out of 17 standards conform: completely -17, partially - 0, do not correspond - 0.

Standard 1: completed

Recommendations for improvement identified during the external visit:

1. When updating the mission of the educational programme, take into account the needs of the "Society" in the provision of medical care and issues of social responsibility of the organization implementing postgraduate education.

Standard 2: EDUCATIONAL PROGRAMME

Evidence of Compliance:

2.1 Framework parameters for the postgraduate medical education programme

The "Society" has defined a model for training residents, which includes:

Изучение Study of the needs of the labor market (relevance of the educational programme)

- Formation of goals

- Defining tasks

Methodological support – the formation of EMCD (RUPs, Syllabuses, Methodological guidelines, manuals, Control and measuring tools (tasks, test questions, etc.)

- Organization of the educational process (Organization and conduct of seminars, practical classes using innovative teaching methods)

Organization of independent work of residents (Determining the subject of independent work taking into account the wishes of residents, employers, providing support when working with Internet resources)

Assessment of the assimilation of the material

Evaluation of the educational programme and pedagogical activity (Feedback from residents, study of employers' opinions).

Educational activities in the residency are carried out using credit technology.

The educational programme of the residency is aimed at mastering theoretical and practical skills according to the established final results of training in the context of graduates' qualifications.

To regulate the activities of postgraduate education, Rules for the organization of the educational process in the residency were developed, approved by Board Decision No. 19 of July 14, 2020. The above-mentioned document prescribes the main functions, planning, organization and structure of the educational process in the residency, the requirements and functions of the curator, the teacher, the system of monitoring and evaluation of educational achievements of the resident, etc. The rules of residency training guarantee objectivity, transparency and equality for all students.

The main objectives of the educational programme for training residents are:

1) achieving high quality education by deepening the theoretical and practical individual training of residents in the field of medicine, public health, mastering the most important and sustainable knowledge by residents;

2) development of students' ability to self-improvement and self-development, the need for independent mastery of clinical skills;

3) training of specialists with a high level of professional culture, including the culture of professional communication, capable of successfully carrying out research activities.

2.2 Scientific method

The basics of scientific methodology are instilled in residents from the standpoint of evidence-based medicine, as well as during analytical reviews. The principles of the scientific approach are reflected in the independent work of residents, the implementation of which involves the search for sources of information, study and analysis.

On the basis of the "Society" there is a scientific and information center named after A.N. Konovalov (library), which has scientific, practical and educational literature, is provided for access to electronic information resources, to new achievements of science and practice, new legislative acts, clinical protocols, through the indicated addresses, websites, links of necessary sources.

Employees of the "Society" participate in the implementation of scientific and technical projects, involving residents in scientific activities. During the existence of JSC "National Center for Neurosurgery", 7 scientific projects have been completed, there are 10 patents, about two to three methodological recommendations, monographs, 10 - 14 articles are published annually, included in the authoritative peer-reviewed databases Web of Science, Scopus, employees of the "Society" and regularly participate in international conferences.

Currently, the Society is conducting several scientific and scientific-experimental studies such as:

1. The study of the immunological response and pathomorphological changes in the application of the xenoperitoneal extracellular matrix in the plastic of the dura mater in rabbits;

2. Clinical research in cooperation with the international research and production holding "Phytochemistry" to develop a new neurotropic drug;

In 2018, the Society was certified for compliance with the requirements of good pharmaceutical practices in the field of drug circulation (GCP) and received the corresponding certificate on October 25, 2018.

On February 15, 2019, the Ministry of Education and Science of the Republic of Kazakhstan, in accordance with Article 23 of the Law of the Republic of Kazakhstan "On Science", JSC "National Center for Neurosurgery" was accredited as a subject of scientific and (or) scientific technical activities.

Since 2019, the Society has been actively cooperating in the field of science, education and innovation with the National Medical Research Center for Neurosurgery named after Academician N.N. Burdenko, with which a Strategic Partnership Agreement has been concluded.

The list of publications of the Company's employees for 2017-2021 is available on the website: https://www.neuroclinic.kz/for_specialists/science/s_publications/.

In the "Society" the achievements of medical science are being introduced into the practice of health care and into the educational process on modern methods of prevention, diagnosis and treatment of diseases. The Society is one of the leaders in the ranking of medical research institutes and scientific

centers of clinical profile in terms of scientific and innovative activities, which is reflected in the national rating of scientific clinical organizations of the Republic of Kazakhstan.

2.3 Content of the residency programme

The resident training programme includes: theoretical training, clinical training and intermediate and final certifications. IEP in the specialty "Neurosurgery, including children's" is compiled in accordance with the requirements of the State Educational Standards (2020) and includes major disciplines of the mandatory component and the optional component.

The educational residency programme in the specialty "Adult and Pediatric Neurosurgery", combined into modules, contains 8 major disciplines lasting from 29 to 33 credits, and also includes elective components. Each resident choose selective academic disciplines.

The Company has implemented international accreditation standards for JCI hospitals. This issue is dealt with by the Department of Quality Management and Patient Safety, the Sector for Epidemiological Control, the Sector for Internal Control and Risk Management, and the Sector for Hospital Services. A Programme has been developed to improve the quality and safety of patients, which is annually reviewed and approved by the Board of Directors of the Company. This Programme defines the main resources and activities in the field of quality improvement, as well as risk management.

The Company has implemented an incident management system, within which each employee and student has the right to report errors, adverse events and incidents without fear of being punished. Thus, every employee and student take part in the quality improvement process.

Good theoretical and practical training of the student in the "Society" and their demand for practical health care made it possible to find employment in the specialty of all residents (100%). Curators of residents provide advisory assistance in resolving issues of professional orientation and career planning. A survey among employers allows you to adjust and change the content of the training programme in accordance with the changing conditions and needs of the health care system of the Republic of Kazakhstan and the provision of medical care. Communication with employers and residency graduates has been established, career growth of residency graduates is being monitored.

2.4 Programme structure, content and duration

The educational programme is developed on the basis of mutual cooperation between teachers, students and employers. Working training programmes for residents were approved by the Educational and Methodological Council (Minutes No. 1 of 01.10.2019). The educational programme "Neurosurgery, Children's, Adults" includes the following disciplines: "Fundamentals of Neurosurgery", "Neurosurgery of traumatic brain injury", "Spinal neurosurgery", "Neurosurgery of peripheral nerves", "Neuroncology, parasitic diseases and malformations of the brain", "Pediatric neurosurgery", "Vascular, incl. interventional angioneurosurgery", "Functional and stereotaxic neurosurgery".

Thus, the educational programme consists from the mandatory component (256 credits) and a component of choice (16 credits). Mandatory component includes profile disciplines (264 credits). Educational programmes are designed in such a way that theoretical training is integrated with practice vertically (from teacher to student, from senior resident to junior year resident) and horizontally. To assess the quality of teaching, study needs and collect wishes after training, a questionnaire (feedback) is conducted based on the results of the courses, all reviews, wishes and criticisms are taken into account.

The discipline syllabus is developed by the employees of the Department in accordance with the standard curriculum and educational programme of the residency specialty and is approved by the head of the Department.

The term of residency training in the specialty "Neurosurgery, Pediatric, Adult" is four years. Residency training is carried out only on a full-time basis.

The organization of the educational process is carried out on the basis of the academic calendar, the schedule of training sessions and the WC. The academic year begins and ends according to the academic calendar. Each student is provided with a guidebook for the entire period of study, an educational programme in the specialty, a syllabus for the discipline. The IEP in the specialty of residency is discussed at a meeting of the collegial body and approved by the Chairperson of the Board or a person authorized by him.

2.5 Organization of training

Residency training is carried out on the basis of our own clinic. To ensure the educational process for thematic patients, whose profile is not available in the "Society", contracts are concluded with third-party clinical bases. The principle of selecting the bases for clinical training and practice of the residency programme is the availability of beds in the neurosurgical profile. Within the framework of the internship agreement with the Multidisciplinary City Hospital No. 1 of the Akimat of Nur-Sultan and LLP "Central Road Hospital of Nur-Sultan", residents of the 1st year are trained in the Department of Neurosurgery in the disciplines "Fundamentals of Neurosurgery" and "Neurosurgery of the Cranio- brain injury." In the Multidisciplinary City Children's Hospital No. 2 of Nur-Sultan, residents of the 3rd year are trained in [Department of Neurosurgery and Rehabilitation](#) in the discipline "Pediatric neurosurgery".

2.6 Relationship between postgraduate medical education and health care delivery

Each resident is assigned a clinical mentor from among the experienced specialists of the "Society" in accordance with the requirements for them established in the SCES, and the candidates are discussed at a meeting of the EMC and approved by order of the Chairperson of the "Society". In addition, as part of rotations in specialized departments, residents have a supervising doctor-mentor who conducts training in clinical disciplines and instills a love for the specialty. The appointment of mentors and curators is approved by the internal order of the "Society", which is reflected in the Rules of organization of the educational process in residency.

Relationships between residents and physicians are built on the basis of mutual support, when an approach is adopted that involves careful discussion of specific cases from practice and free communication between medical by workers of different levels and different profiles, the likelihood that the needs of the patient will be perceived and satisfied is greatly increased.

Conclusions of the EEC according to the criteria. Out of 30 standards conform: completely - 22, partially - 8, do not correspond - 0.

Standard 2: completed

Recommendations for improvement identified during the external visit:

1. Provide documentation of the process of development, approval and regular updating of programmes of elective disciplines, taking into account the current needs of practical health care. When developing programmes for elective disciplines, take into account the opinion of residents based on regular feedback.

2. Разработать положение о наставничестве и обеспечить соблюдение его требований.

Standard 3: ASSESSMENT OF STUDENTS

Evidence of conformity:

3.1 Assessment methods

Assessment of educational achievements of residents is carried out using criteria, regulations and procedures developed in accordance with external and internal regulatory documents in the field of education and healthcare.

To monitor and evaluate the current academic performance of residents, a criterion assessment is used, including a formative assessment, a summative assessment, a list of practical skills that are focused on the final result – the acquisition of competencies. Accounting and monitoring of evaluation forms is carried out by the education department. The verified evaluation forms are stored in the portfolio of the resident doctor. The assessment for the portfolio is issued at the end of the academic year and is taken into account when calculating the student's academic rating.

Intermediate certification is carried out at the end of each academic period in the form of testing, and the final control of knowledge at the end of each discipline is carried out in the form of an oral exam or in the form of testing and solving situational problems. Educational achievements (knowledge, skills, skills and competencies) of residents are evaluated in points on a 100-point scale corresponding to the point-rating letter system of assessment of educational achievements of residents adopted in international practice. The final control of the discipline is determined by the evaluation of the final learning outcomes and is reflected in the syllabus.

Validity, reliability, impact on learning, acceptability and effectiveness in relation to the expected end results of learning is carried out by analyzing the control and measurement tools (tickets, test questions, situational tasks, etc.), which are updated and replenished annually. The "Society" uses additional assessment methods such as assessment forms, portfolio management, participation in educational events (magazine club, KILI), which are valid, affect learning, and are effective in relation to the established final learning outcomes.

3.2 Relationship between assessment and learning

The "Society" has a system for reviewing and approving educational and methodological documentation and educational materials. One of the methods for an objective assessment of knowledge, abilities, students is testing, which are compiled taking into account the final competencies. In the classroom, residents independently prepare reports or messages, voice them to the audience, and then discuss them together with the teacher in the form of a discussion.

The final competencies, teaching methods and assessment methods are detailed in the discipline syllabus, which is provided to the resident on the first day of training.

The main principle of assessing the educational achievements of residents is continuous monitoring of the learning process, consolidating the acquired skills and regular assessment of the achievement of the final learning outcomes in the disciplines.

The Department of Education constantly monitors the progress of residents in order to further improve the educational and methodological work, which reduces the overload of the educational programme and promotes integrated learning.

To monitor and evaluate the quality of educational activities, feedback is provided, for which questionnaires are developed for an anonymous survey of resident doctors of the residency programme for satisfaction with the programme, methods of conducting classes and evaluation. In order to constantly monitor teaching methods, improve methods for assessing the educational achievements of residents, it annually conducts a "360 Degree Questionnaire", which were approved at the meeting of the EMC dated January 22, 2020 and March 19, 2020 No. 2.

"360 Degree Analysis" allows you to make an integrated assessment of the various elements of the residency programme and provide feedback to all interested participants in the educational process, conducted once a year in the form of a survey on paper.

EEC conclusions by criteria. Correspond from 11 standards: fully -7, partially -4, do not correspond - 0.

Recommendations for improvement identified during the external visit:

1. The Department of Postgraduate Education will update the Resident Evaluation Rules, which will clearly define the evaluation criteria, and educate faculty, mentors, and residents on the application of the rules.

Standard 4: STUDENTS

Evidence of Compliance:

4.1 Admission policy and selection

The procedure for admission, selection of applicants and admission to residency are 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 the Model rules for admission to study in educational organizations that implement educational programmes of higher and postgraduate education."

To receive documents and organize entrance examinations, a selection committee is created. The chairperson of the selection committee is the Chairperson of the Board of the "Society" or a person acting as his/her duties.

4.2 Number of residents

The number of applicants accepted for residency is regulated by the state educational order of the Ministry of Health of the Republic of Kazakhstan for the training of medical personnel and the material, technical and educational and methodological capabilities of the "Society".

In 2015-2021, 31 residents were accepted for residency training in the specialty "Neurosurgery, including children's", of which 19 were accepted as part of the state educational order. On a paid basis,

12 residents were accepted for training. During the specified period, 31 residents graduated in the specialty "Neurosurgery, children. adult", employment is 100%. When determining the number of accepted residents, the Company is guided by the Order of the Prime Minister of the Republic of Kazakhstan dated December 20, 2013 No. 190-r "On approval of a Comprehensive action plan for the development of human resources of healthcare of the Republic of Kazakhstan for 2013 - 2016.

4.3 Support and consultation of residents

In the context of the implementation of the competence-oriented model of medical education, the "Society" operates a system of consulting on professional activities and academic work. Leading doctors and teachers of the department are involved in this work. Information about teachers is available on the website <http://neuroclinic.kz> and in syllabuses. Each resident is assigned an academic mentor (curator), who can provide advisory assistance in resolving issues about a future career, determining the basis for industrial practice.

4.4 Representation of residents

Residents participate in the discussion of the mission of the "Society" and the educational programme, access to which is open by posting on the website <http://neuroclinic.kz>. Participation in the evaluation of the educational programme is achieved by questioning residents at the end of the cycle or academic year. According to the order of the Chairperson of the Board dated October 01, 2019 No. 08-2-332one resident included in the EMC.

4.5 Working conditions

Residents studying under the state educational order are provided with state scholarships in the prescribed manner (Order of the Ministry of Health of the Republic of Kazakhstan No. 28 dated January 30, 2008 "On approval of the Regulations on residency", Decree of the Government of the Republic of Kazakhstan dated February 7, 2008 No. 116 "On approval of the Rules for the appointment, payment and the amount of state scholarships for students in educational institutions").

Residents are provided with vacations with stipends. Residents participate in all events held in the "Company" as listeners and organizers.

Conclusions of the EEC according to the criteria. Out 30 standards conform: fully -30, partially - 0, do not meet - 0

Standard 4: completed

Recommendations for improvement identified during the external visit: none

Standard 5: FACULTY

Evidence of compliance:

5.1 Recruitment and selection policy

The Department of Neurosurgery is staffed with full-time and freelance staff in accordance with the needs of the Residency Educational Programme (the Law of the Republic of Kazakhstan "On Education" allows persons with special pedagogical or professional education in the appropriate profile to teach), missions for the successful implementation of the programme and meet the qualification requirements.

The staff of the department have the degree of doctors of medical sciences; candidates of medical sciences; PhD; specialist certificate - doctors of the highest and first category with experience of clinical or research work in the specialty for more than 5 years. The composition of teachers and curators is coordinated by the Director of Strategy and Science, reviewed by the Academic Council, and approved by the Chairperson of the Board annually, taking into account the new admission for the corresponding academic year. When selecting teaching staff, the mission of the educational programme, the needs of the postgraduate education system and practical healthcare are taken into account (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated June 17, 2015 No. 391 "On approval of qualification requirements for educational activities and a list of documents confirming compliance with them" (with amendments and additions as of 07/14/2021). As of 2021, there are only 43 employees, including 3 doctors of sciences.

5.2 Teacher commitment and development

In the "Society", the planning of teaching and curatorial work of teaching staff is carried out in accordance with standard curricula. Teachers of the department conduct the theoretical part of the lesson, mentors control the practical part of the work. The resident's curator devotes 3 hours a week to one resident, one curator leads no more than 3 residents at a time. Employees annually undergo advanced training (Order of the Chairperson of the Board of the Company No. 08-4/422 of 2019). In 2015-2020, in order to improve the professional level of personnel in the countries of the near and far abroad, 200 employees were trained, which is 33.3% of the total number of all employees, including doctors - 131. In 2017-2019, within the framework of the budget programme 005 "Professional development and retraining of personnel of healthcare organizations", the "Society" trained 689 specialists in advanced training cycles, 55 specialists in master classes with the involvement of foreign specialists, 125 healthcare specialists with the invitation of mentors. The activity of teaching staff in neurosurgery and neurology is planned in accordance with the individual plan of the teacher.

Conclusions of the EEC according to the criteria. Out of 7 standards conform: fully - 5, partially - 2, do not correspond - 0.

Standard 5: completed

Recommendations for improvement identified during the external visit:

1. Expand the range of innovative teaching and learning methods used in the educational process, and provide teachers and mentors with regular improvement in teaching methods with documented results (certificates).

2. Update the plan for improving the professional and pedagogical competencies of teachers of the Department of Neurosurgery and Neurology and include training to improve communication skills and psychology.

3. To increase the degree level of the teaching staff involved in the training of residents by attracting employees with a scientific degree and an academic PhD degree to teaching.

4. Ensure the ratio of the number of teachers and mentors to the number of residents as 1:3 (Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 606; Order of the Minister of Health of the Republic of Kazakhstan dated February 21, 2020 No. ҚР DSM-12/2020, paragraphs 10, 21).

Standard 6: EDUCATIONAL RESOURCES

Evidence of Compliance:

6.1 Logistics and equipment

The "Society" has all the conditions for the implementation of an educational programme for the training of residents, i.e. it has a modern material and technical base, educational and methodological resources, teaching staff and highly qualified medical staff. In the Scientific and Information Center named after A.N. Konovalov, residents have the opportunity to access international databases. The book fund of the center is 1934 copies. Up to 2 million rubles are allocated annually by the Management Board of the Company. тенге for the purchase of literature on Neurosurgery and Neurology, the emphasis is on advanced foreign literature. The "Society" has a website <http://www.uro.neuroclinic.kz> , where there is a list of e-books.

6.2 Clinical bases

There are additional clinical bases in 4 medical organizations in Nur-Sultan. Foreign centers and medical centers of the Republic of Kazakhstan participate in the training of residents.

Contracts with clinics are drawn up taking into account the needs of the "Society" in the profile of patients, the level of medical care provided by medical institutions, the availability of classrooms, laboratories. When signing contracts, special attention is paid to the availability of an accreditation certificate from medical organizations, certifying that the activities of the clinical base comply with the accreditation standards in the field of healthcare of the Republic of Kazakhstan. Cooperation agreements are updated annually.

For example, "Dorozhnaya Central Hospital" LLP is equipped with modern educational and diagnostic equipment and equipment that ensure the conduct of the educational process at a high professional level and the provision of highly qualified and highly specialized medical care to the population of the Republic of Kazakhstan.

SPE on REM "Multidisciplinary City Hospital No. 1" is a modern multidisciplinary clinical center equipped with unique equipment and provides highly specialized medical care in an emergency and planned manner

SPE on the REM "Multidisciplinary City Children's Hospital No. 2" is represented by the profiles: neurological, gastroenterological, endocrinological, pulmonological, pediatric, toxicological, rheumatological.

6.3 Information technology

When determining the effectiveness of the use and evaluation of information and communication technologies, time costs, resources and money are taken into account per unit of all necessary and expected beneficial effects of the products, technical systems, structures being created. The evaluation criteria are manufacturability, novelty, reliability, simplicity, flexibility, increased labor productivity, etc.

Information on the implementation of postgraduate and additional education programmes is available on the official website of the "Society": http://www.neuroclinic.kz/for_specialists/Education/online/ fully accessible to all interested parties. Informational educational content is constantly updated.

In order to implement programmes using distance learning technologies, multimedia technologies and the capabilities of the scientific and educational simulation center are used. Such an organization of the educational process makes it possible to more fully use the material, technical and human resources of the "Society" for the formation of professional skills and abilities among residents in conditions close to real ones.

6.4 Clinical teams

The programme of training students in teamwork skills and effective interaction with other healthcare professionals includes direct work together with clinical staff of the centers of the "Society" in all areas of their activities, discussion of management tactics, treatment of patients in the conditions of the department, outpatient visits and participation in clinical conferences, various educational events, magazine clubs, scientific and practical conferences.

In the departments, residents conduct patients under the guidance of a clinical mentor / head of the department, participate in operations, dressings, perform various manipulations according to the list of privileges, practice their skills on simulation equipment.

The development of teamwork skills is formed during the provision of assistance to patients in emergency situations (cerebral edema, electrolyte disorders, etc.), when the effectiveness depends on the correct organization of teamwork. In such situations, the work is carried out within the limits of their competence. In addition, senior year residents participate in coordinating the work of junior year residents.

6.5 Medical scientific research and achievements

Over the past 5 years, the policy in choosing the directions of research work in the "Society" has developed in the following directions:

- improving the efficiency of scientific work by performing fundamental and applied research; strengthening the unity of educational and scientific processes, active participation of teaching staff in scientific research and broad involvement of students in the activities of research teams;
- continuous improvement of the professional level of the teaching staff based on the active use of the results of scientific activity in the educational process;
- expansion of international scientific cooperation and participation in international scientific organizations, foundations, programmes and projects;
- development of innovative technologies and new products;
- improvement of the postgraduate training process.

The main directions of scientific research correspond to the priority areas of neurosurgery, the Development Plan of the "Society".

The direct executors of the research work are employees, including teaching staff, doctors, heads of departments, specialists of departments.

Over the years of functioning of the "Society", more than 69 new medical technologies of modern and safe neurosurgical treatment have been introduced that were not previously used in the country, including in 2019:

1) Selective dorsal rhizotomy for spastic syndrome with the use of interoperative neurophysiological neuromonitoring, to the department of pediatric neurosurgery from October 2019.

2) The use of phototherapy with narrow-band LED radiation with a wavelength of $540 \pm 20\text{nm}$ in the early rehabilitation of patients who have suffered severe traumatic brain injury in the department of neurorehabilitation since December 2019.

Being a republican institution, the "Society" carries out 58 transfers of medical technologies to the regions of the republic on an ongoing basis. These are innovative technologies in spine and spinal cord surgery, microneurosurgery in neuro-oncology, minimally invasive methods of treating hemorrhagic strokes, endoscopic operations on the brain and spine.

6.6 Expertise in the field of education

In order to ensure the quality of educational programmes, an educational and methodological council has been created, which includes teachers from among the leading clinical workers, administrative and managerial personnel, and management.

The development of expertise in education is one of the areas of improvement.

6.7 Training in other institutions

The policy of the Ministry of Health of the Republic of Kazakhstan and the "Society" is aimed at creating conditions for academic mobility of teachers, students, as well as invited mentors. The implementation of these programmes, the purpose of which is the internationalization of education and integration into the world educational space, is accompanied by the use of modern pedagogical technologies. The main areas of activity are the reform of residency programmes and the introduction of international educational standards.

Within the framework of the 005 RBP "Professional development and retraining of personnel of healthcare organizations" in the period from October 22 to 27, 2018, a mentor programme on the topic "Management and organization of customer service" was implemented on the basis of the "Society" with the involvement of a foreign expert Felix Levy. 30 specialists of medical organizations have been trained. From October 22 to October 30, 2018, a mentor programme on the topic "Nursing care for stroke" was implemented with the involvement of a foreign expert Kamaeva O.V. About 30 medical organizations were trained.

Within the framework of maintaining international cooperation, exchange of residents; exchange of experience in the field of medical education, including training, seminars for specialists and residents, memoranda and agreements have been signed by the National Center for Maternal and Child Health under the Ministry of Health of the Kyrgyz Republic, the National Hospital under the Ministry of Health of the Kyrgyz Republic, the Tashkent Medical Academy, the Tashkent Pediatric Medical Institute, the Tajik State Medical University named after Abuali ibn Sina.

In order to provide educational services in the core disciplines according to the SCES, which are not available on the basis of the "Society", contracts have been concluded with third-party organizations to provide a clinical base for training residents, as well as with individuals to provide educational services on a reimbursable basis.

The conclusions of the EEC according to the criteria. Out of 21 standards conform: fully -18, partially - 3, do not correspond - 0

Standard 6: completed

Recommendations for improvement identified during the external visit:

1. Introduce digitalization processes into the educational process (Platonus, Sirius, etc.)

2. Develop a mechanism for motivating and attracting residents to research activities in the specialty being taught.

Standard 7: EDUCATIONAL PROGRAMME

Evidence of compliance:

7.1 Monitoring and evaluation mechanisms

In order to analyze the positive or negative dynamics of the assimilation of the educational programme in the process of training by residents, assess the complexity of the educational material, the presence of prerequisites for improving the work of teachers, continuous monitoring of the educational programme is carried out, which consists of two stages: collection of reports at the end of the academic year from residents, through a survey of students on the degree of satisfaction with the educational services received. In the "Society" the work of systematic analysis, comprehensive evaluation of educational programmes and educational and methodological support and support of the educational process, assessment of the quality of educational programmes in areas of specialization is carried out by the Department of Education.

All educational programmes are developed on the basis of the current NLA in the field of health and education, taking into account the mission and policy of "Society" in the field of education and a full set of educational and methodological documentation is being prepared, including IEP, syllabus, control and measuring tools and questionnaires for receiving feedback from residents and employers, is carried out on the basis of a competence-oriented model of medical education, focused on the final result of training, taking into account the mission. Residents are involved in the process of evaluating educational programmes by expressing their opinions and wishes (providing "feedback") at the end of the course of study or by anonymous questionnaires to identify opinions and take into account comments, suggestions of direct consumers. This approach is an impetus for making changes, additions and improving the quality of educational services, which ultimately improves the acquisition of knowledge and skills in neurosurgery and neurology.

7.2 Feedback from teachers and residents

The assessment of the residency programme for the 2020-2021 academic year showed that residents highly appreciate the training programme, teachers, curators, the work of the education department, logistics. The survey was conducted on the basis of a questionnaire approved by the EMC Protocol No. 1 dated January 22, 2020.

To analyze the security and effective organization of the educational process in the residency "Society", a survey of residents is conducted, including questions about the quality of awareness in terms of the structure and organization of the educational process.

The development of educational programmes in the "Society" is carried out strictly in accordance with the current NLA in the field of health and education. The opinion of residents is studied based on the results of a questionnaire, which is conducted after completion of training. The opinion of consumers of services - employers is studied when conducting surveys and coordinating regulatory documents, and studying their opinions on reforms in the health care system and medical education.

The results of the survey are necessarily analyzed and taken into account when conducting subsequent educational activities. The analysis of the survey results makes it possible to expand the training programmes on the most relevant topics, taking into account the reforms and changes being made, and additions to current regulatory legal acts.

Every year, when planning and forming the annual budget, a request is sent to the departments, teachers involved in the training of residents to provide for the purchase of a list of necessary training equipment, educational literature in the context of specialties.

The "Society" conducts feedback activities on the quality of programmes from teachers and students through anonymous questionnaires on paper. The data obtained are used to analyze the quality of the "Society" residency programmes for further improvement and adaptation of new educational activities.

7.3 Results of residents and graduates

Monitoring of graduates of the residency programme is carried out by questioning employers about the practical training of graduates.

In 2020, a survey was conducted among employers of 6 medical organizations - regional hospitals, as well as cities of republican significance, Nur-Sultan and Shymkent with neurological and neurosurgical departments. The graduates of the residency in the specialty "Neurosurgery adult, children", "Neurology, adult, children" from 2016 to 2019 were evaluated. A total of 20 residency graduates were evaluated. Below is an analysis of 20 questionnaires. 92% of employers are satisfied with the level of practical training of residency graduates. 90.5% of respondents are satisfied with the communicative qualities of graduates of the residency. 91.5% of respondents are satisfied with the ability of residency graduates to self-education. 95% are satisfied with the discipline and performance of graduates. According to 94% of respondents, the level of training of graduates meets the requirements of the clinic. A third of respondents (30%) believe that the level of theoretical knowledge of graduates should be improved, 35% suggest improving the level of practical training and 50% of respondents recommend improving the skills of self-development and self-education of graduates of the "Society". To the questions "Do you intend to employ our graduates now and in the future?" and "Do you intend to advertise our graduates to other employers?" 100% of employers answered "Yes".

7.4 Stakeholder engagement

The "Society" engages the main stakeholders in the programme to monitor and evaluate the educational programme, including:

1. Until 2018, the Republican Center for Knowledge and Skills Assessment conducted an independent assessment of residents' knowledge. Since 2018, this procedure has been transferred to the National Center for Independent Examination.

2. Employers (medical organizations of regional health departments of the Republic) participate in the creation of an effective system to promote employment and adaptation of graduates to the labor market. Residents are sent to an industrial practice, at the end of which reviews of doctors about the results of the practice are collected.

Cooperation with all groups of stakeholders helps to achieve the goal of forming and implementing standards of corporate ethics, the formation of a scientific, socio-cultural, healthy corporate environment, and trust in the healthcare system.

7.5 Procedure for approving educational programmes

The EMC meeting developed mechanisms for approving educational programmes based on the state mandatory standards of the Republic of Kazakhstan with a unified system of coding disciplines in symbols and digital expressions, which includes standard curricula, working curricula and individual curricula.

Conclusions of the EEC according to the criteria. Out of 15 standards conform: fully -14, partially - 1, do not meet - 0

Standard 7: completed

Recommendations for improvement identified during the external visit:

1. To carry out regular monitoring of the educational process and activities of the Department of Neurology and Neurosurgery by developing and implementing an annual intra-departmental control plan, including open classes, mutual visits to classes and examination of educational and methodological documentation. Document the results of all activities.

2. Optimize the conduct, processing and analysis of the results of feedback from residents, teachers, mentors and employers through the introduction of electronic questionnaires, followed by informing all participants of the educational process about the results and making improvements to the educational programme.

Standard 8: GOVERNANCE AND ADMINISTRATION

Evidence of Compliance:

8.1 Management

In accordance with the Law of the Republic of Kazakhstan "On Education" and other regulatory legal acts regulating the activities of medical higher educational institutions, the "Company" has developed and approved internal documents regulating educational activities, defining the scope of duties and powers in relation to the residency educational programme:

- Rules for the organization of the educational process in the residency of the "Society", approved decision of the Board No. 19 dated July 14, 2020;
- Regulations on the educational and methodological council, approved by the decision of the Board of the "Society" dated September 30, 2019 No. 40.
- Guidelines on compiling teaching materials for postgraduate studies education, approved by the EMC from October 01, 2019 #1.
- Regulations on the teaching staff "Societies", approved decision of the Management Board of the "Company" dated February 19, 2020 No. 5.

"Society" fully complies with the qualification requirements for educational activities, approved by the order of the Minister of Education and Science of the Republic of Kazakhstan dated June 17, 2015 No. 391 (with [changes and additions](#) as of 07/14/2021).

The procedure for admitting citizens to residency is established according to the order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 (with [changes and additions](#) as of August 12, 2019) "On Approval of the Model Rules for Admission to Education in Educational Organizations Implementing Educational Programmes of Higher and Postgraduate Education".

8.2 Academic leadership

The governing body is the Board and its Chairperson - Akshulakov Serik Kuandykovich, professor, doctor of medical sciences, academician of the National Academy of Sciences of the Republic of Kazakhstan, Laureate of the State Prize of the Republic of Kazakhstan in the field of science and technology, "Kazakhstannyn Yenbek Yeri".

The Board of Directors is functioning.

Issues of residency and additional education are supervised by the acting director for strategy and science - Doskaliyev Aidos Zhaksylykovich.

Direct management of postgraduate and additional education programmes is carried out by the department of education.

8.3 Training budget and resource allocation

The Company's development strategy includes adequate resources, the balance of costs has been assessed, risks have been identified, and critical points have been identified. There is a clear correspondence between the tasks of the "Society" and the planned activities at all levels of the organizational structure of management. The development strategy is based on an analysis of the main problems identified as a result of monitoring the scientific and educational process and assessing external and internal factors.

Sources of material resources are budget financing and extra-budgetary funds. To implement the strategy for the development of PGE and SPD programmes, the "Society" has sufficient information, telecommunications and library resources. The implementation of the strategic plan at the expense of these resources is aimed at improving the quality of educational services and creating favorable conditions for the activities of teachers, residents and students of additional education.

Financial and economic activity is aimed at ensuring financial stability and solvency for its obligations, at increasing income, wage stability, strengthening the material and technical base and is carried out in accordance with the legislation of the Republic of Kazakhstan.

Determining the financial and economic policy and management structure of the "Company" is the responsibility of the first head - the Chairperson of the Board. Financial matters are handled by the planning and economic department under the leadership of the financial director. The distribution of financial resources is carried out in accordance with the approved development plan for the current year. The development plan takes into account all activities, including the contingent residents. Every year, financial resources are provided for the provision of educational activities.

8.4 Administration and management

There is an appropriate administrative, managerial and teaching staff for the implementation of the educational programme, effective management and resource allocation. They participate in the preparation and holding of international conferences, round tables, debates and debates on the education of students. All issues related to the comprehensive development of residents are reflected in the Development Strategy and included in the work plans of structural units.

The participation of employees, teachers and students in the discussion of the mission and goals takes place in accordance with the existing procedure, ensuring the involvement of all stakeholders, both at the planning stage and the execution of decisions taken. The Department of Education is responsible for the effectiveness of the events held.

The number of full-time units of clinical staff is 46, of which 3 are foreign specialists, 73.9% have the highest category, 15.2% - the first. Staffing of doctors is 81.8%. The number of doctors involved in the educational process is 43%.

The staff of the Department of Neurosurgery and Neurology is represented by 7 employees: the head of the department, 6 teachers of the department.

According to the requirements of international accreditation (JCI), the "Society" has a quality management system service for monitoring clinical performance and minimizing medical errors, including students, which in turn improves the quality of training of residents. Since December 19, 2014, the Company has developed, approved and implemented a quality management system in accordance with the requirements of ST RK ISO 9001-2009 "Quality management system. Requirements" (certificate of conformity KZ.O.02.0207 KCCNo.0028309), which is coordinated by the Department of Quality Management and Patient Safety (OMK and BP).

8.5 Requirements and regulations

The mechanism of interaction of the "Company" with the authorized bodies (Ministry of Health of the Republic of Kazakhstan, Ministry of Education and Science of the Republic of Kazakhstan) and the healthcare sector is regulated by: the legislation of the Republic of Kazakhstan; implementation of State programmes, Decrees and orders; contracts and agreements with healthcare management bodies; contracts and agreements with healthcare organizations.

The interaction of the "Society" with the Ministry of Education and the Ministry of Health of the Republic of Kazakhstan on the organization of the educational process in residency is carried out through the implementation of the SES 2015, 2020 and is consistent with the priorities of the following national legislative and programme documents. "The Company carries out its activities in accordance with the regulatory documents of the Ministry of Education and Science of the Republic of Kazakhstan.

The Company continuously monitors and monitors regulatory and legal acts in the field of medical education, applying a policy of continuous improvement of the quality of services provided, which allows to eliminate inconsistencies in educational activities. Annual updating of internal documents is carried out. In case of changes in the staffing table, adjustments are made to the professional development plan of employees of the Department of Education.

Conclusions of the EEC according to the criteria. Out of 15 standards conform: fully - 14, partially - 1, do not meet - 0

Standard 8: completed

Recommendations for improvement identified during the external visit:

1. To provide funding in the programme for the development of education in residency:
 - training of residents at alternative bases, where it is justified;
 - teacher mobility;
 - participation of residents and teachers in national and international professional events.

Standard 9: CONTINUOUS RENEWAL

Evidence of Compliance:

The basis for making changes and additions to the educational programme are the measures taken in the industry to reform the health care system and medical education, the introduction of changes and additions to regulatory legal acts, standards and instructional documents.

“The “Society” periodically updates the organizational structure, the staff of the education department and the department, taking into account changes in the needs of practical health care, new legal documentation, and changes in the “Society”.

Every year, a plan is developed and approved to improve the skills of employees, including those abroad.

A consultative and advisory body has been created on issues of educational, methodological and organizational support of the educational process and continuous professional development of specialists – Educational and Methodological Council, approved by the decision of the Board of the "Company" dated September 30, 2019 No. 40.

"Society" seeks to respond in a timely manner to changing internal and external conditions. So, in connection with the epidemiological situation of COVID-19 in the past and current year, with the active use of distance technologies in the educational process, the professional ZOOM platform was used. Many educational events that are possible in a remote format have been transferred to this format: magazine clubs, lectures, project defenses, consultations, meetings on educational and methodological issues, etc. Residents were promptly provided with all necessary personal protective equipment.

Also, in connection with changes in the State Educational Standard of the Ministry of Health of the Republic of Kazakhstan in 2020, curricula and syllabuses for residents were revised, internal regulatory documents are being revised to bring them into line with the new established requirements.

The main tool for assessing the quality of education and monitoring the educational process is “360-degree survey”.

Conclusions of the EEC according to the criteria. Out of 4 standards conform: fully - 4, partially - 0, do not correspond - 0.

Standard 9: completed

Recommendations for improvement identified during the external visit: No

6. Recommendations for improving the educational programme 7R01120 Neurosurgery, adult, pediatric:

1 Standard "Mission and end outcomes"

1. When updating the mission of the educational programme, take into account the needs of the "Society" in providing medical care and issues of social responsibility of the organization implementing postgraduate education.

2 Standard "Educational Programme"

2. Provide documentation of the process of development, approval and regular updating of elective discipline programmes taking into account the current needs of practical healthcare. When developing elective discipline programmes, take into account the opinion of residents based on regular feedback.

3. Develop a regulation on mentoring and ensure compliance with its requirements.

3 Standard "Assessment of students"

4. The Department of Postgraduate Education should update the rules for evaluating residents, which will clearly define the evaluation criteria and conduct explanatory work on the application of the rules among teachers, mentors and residents.

5 Standard "Faculty"

5. Expand the range of innovative teaching and learning methods used in the educational process, and provide teachers and mentors with regular improvement in teaching methods with documentary evidence of results (certificates).
6. Update the plan for improving the professional and pedagogical competencies of teachers of the Department of Neurosurgery and Neurology and include training on improving communication skills and psychology.
7. To increase the level of stability of the teaching staff participating in the training of residents by involving employees with an academic degree and an academic PhD degree in teaching.
8. Ensure the ratio of the number of teachers and mentors to the number of residents as 1:3 (Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 606; Order of the Minister of Health of the Republic of Kazakhstan dated February 21, 2020 No. KR DSM-12/2020, paragraphs 10, 21).

6 Standard "Educational resources"

9. Introduce digitalization processes into the educational process (Platonus, Sirius, etc.)
10. Develop a mechanism for motivating and attracting residents to research activities in the specialty being taught.

7 Standard "Educational programme"

11. To carry out regular monitoring of the educational process and activities of the Department of Neurology and Neurosurgery by developing and implementing an annual plan of intra-departmental control, including conducting open classes, mutual attendance of classes and examination of educational and methodological documentation. Document the results of all events.
12. Optimize the conduct, processing and analysis of feedback results from residents, teachers, mentors and employers through the introduction of an electronic questionnaire, followed by informing all participants of the educational process about the results and making improvements to the educational programme.

8 standard - Governance and administration

13. To provide in the programme for the development of education in residency financing
 - training of residents on alternative bases, where it is justified;
 - teacher mobility;
 - participation of residents and teachers in national and international professional events.

Standards 4, 9 – there are no recommendations.

7. Recommendation to the ECAQA Accreditation Council

The members of the EEC established the compliance of the educational programme in the specialty "Neurosurgery, adult, pediatric" of JSC "National Center of Neurosurgery" with the accreditation Standards and came to a unanimous opinion to recommend to the ECAQA Accreditation Council to accredit this programme for a period of 5 years.

	Full name
Chairperson	Magyarov Valentin Manarbekovich
Foreign expert	Urmanbetov Kubatbek Samoibekovich
Kazakh academic expert	Nurmukhambetova Baktygul Rakhimbekovna
Representative of employers	Dautov Tairkhan Bekpulatovich
Resident Representative	Askanbekov Maksat Bakytuly

The observer of ECAQA Umarova M.A.

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

Standard	Criteria for evaluation	Number of standards	Grade		
			Totally coincides	Частично соответствует	Does not comply
1.	MISSION AND END OUTCOMES	17	17		
2.	EDUCATIONAL PROGRAMME	30	22	8	
3.	ASSESSMENT OF STUDENTS	11	7	4	
4.	STUDENTS	30	30	0	
5.	FACULTY	7	5	2	
6.	EDUCATIONAL RESOURCES	21	18	3	
7.	EDUCATIONAL PROGRAMME	15	14	1	
8.	GOVERNANCE AND ADMINISTRATION	15	14	1	
9.	CONTINUOUS RENEWAL	4	4	0	
	Total:	150	131	19	