REPORT
OF THE EXTERNAL EXPERT COMMISSIONS ON THE EVALUATION OF
THE EDUCATIONAL PROGRAMME 7R09170 "PULMONOLOGY,
INCLUDING CHILDREN" OF ASFENDIYAROV KAZNMU FOR
COMPLIANCE WITH THE ACCREDITATION STANDARDS FOR
PROGRAMMES OF POSTGRADUATE EDUCATION (RESIDENCY
SPECIALTY) MEDICAL ORGANIZATIONS OF EDUCATION

period of external expert evaluation: 18.11.-20.11.2020

1. Composition of the External Expert Commission
In accordance with ECAQA Order No. 18 of 23.10.2020, an External Expert Commission was formed to conduct accreditation of educational programmes of residency specialties of Asfendiyarov KazNMU in the period 18-20.11.2020 in the following composition:

Chairman of the External Expert Commission
TURGUNOV ERMEK MEYRAMOVICH,
Doctor of Medical Sciences, Professor of the Department of Surgical Diseases of the NJSC "Medical University of Karaganda", President of the NGO "Surgical Association of the Karaganda Region", a member of the International Surgery Society, a member of the "Association of Independent Experts of Astana" and the "Union of Independent experts of KSMU"

Foreign expert
KASHIRSKAYA NATALIA YURIEVNA,
Doctor of Medical Sciences, Professor, Chief Researcher, Laboratory of Genetic Epidemiology, Federal State Budgetary Scientific Institution "Medical Genetic Research Centre named after Academician N.P. Bochkov",
Moscow, Russian Federation

National academic expert
JUMALINA AKMARAL KANASHEVNA,
Doctor of Medical Sciences, Professor, Head of the Department of Pediatric Diseases with Neonatology
NJSC "West Kazakhstan State Medical University named after Marat Ospanov"
National academic expert
RAMAZANOVA RAYGUL
MUKHANBETOVNA,
MD, Head of the Hematology Course
JSC "Kazakh Medical University of Continuing Education"

National academic expert
ESENGARAYEVA SAULE DAMIROVNA,
Ph.D., Head of the Department of Medical Rehabilitation with the Course of Sports Medicine
JSC "Kazakh Medical University of Continuing Education"

National academic expert
BEKETOVA BAYAN BEISENGALIEVNA,
Candidate of Medical Sciences, Assistant of the Department of Clinical and Radiation Oncology
NJSC "Semey Medical University"

National academic expert
AKHMETOVA ALMIRA KALIKAPASOVNA,
Candidate of Medical Sciences, Associate Professor, Head of the Department of Dermatovenereology and Cosmetology
NJSC "Semey Medical University"

National academic expert
URAZOVA SALTANAT NURGOZHAEVNA,
Doctor of Medical Sciences, Associate Professor of the Department of General Medical Practice with a course of evidence-based medicine
NJSC "Astana Medical University"
National academic expert
KALIEVA SHOLPAN SABATAEVA, Candidate of Medical Sciences, Associate Professor, Head of the Department of Clinical Pharmacology and Evidence-Based Medicine NJSC "Medical University of Karaganda"

National academic expert
ZHANTELIEVA LAZZAT ASANOVA, Doctor of Medical Sciences, Deputy Chairman of the Board for Research Work of JSC "Scientific Centre of Urology named after B.U.Dzharbusynova"

National academic expert
MADYAROV VALENTIN MANARBEKOVICH, Doctor of Medical Sciences, Head of the Department of Surgery with a course of anaesthesiology and resuscitation, Non-Profit Organization "Kazakhstan-Russian Medical University"

National academic expert
SADIEVA ZHANAR ZAMANKHANOVA, anaesthesiologist-resuscitator, head of the postgraduate education department of the South Kazakhstan Medical Academy JSC

National academic expert
LOVINSKAYA ANNA VLADIMIROVNA, Senior Lecturer of the Department of Molecular Biology and Genetics, Al-Farabi Kazakh National University, Senior Researcher of the Research Institute of Biology and Biotechnology Problems of the RSE “Al -Farabi Kazakh National University"
Expert Representative of Practical Health
ZHOLDASBAYEVA Kyrmyzy Zhumabekovna,
Deputy Chief Physician for Childhood
PSE on REM "City polyclinic No. 1", Almaty

Expert Representative of Practical Health
Nartpaeva Asel Tarasovna,
acting Deputy Chief Medical Officer
PSE on REM "City polyclinic No. 30", Almaty

Expert - resident representative
Bayashov Erdos Nuridinuly,
resident physician for 3 years of training in the
specialty "Anaesthesiology and Resuscitation,
including children's"
JSC "Kazakh Medical University of Continuing
Education".

Expert - resident representative
Tarasyukov Alexander Andreevich,
resident physician for 3 years of training in the
specialty "Anaesthesiology and resuscitation, including
children's"
Non-Profit Organization "Kazakhstan-Russian
Medical University"

ECAQA Observer
Umarova Makpal Aldibekovna
Head of Accreditation and Monitoring
Department
The work of the EEC was carried out in accordance with the Regulations on the EEC (Order of the ECAQA Director General No. 4 dated February 13, 2017).

The EEC report contains an assessment of the educational programme of residency in the specialty 7R09170 "Pulmonology, including children’s of KazNMU for compliance with the Accreditation Standards programmes of postgraduate education (specialty residency) of medical educational institutions of ECAQA, recommendations of the EEC on the further improvement of the educational activities of the university in the field of postgraduate education.

2. General part of the final report of the EEC

2.1 Presentation of Asfendiayarov KazNMU and the educational programme of residency in the specialty 7R09170 "Pulmonology, including children’s"

In 2020, KazNMU turns 90 and in 2018 the university was reorganized into a non-profit joint-stock company (hereinafter - NJSC) by the Resolution of the Government of the Republic of Kazakhstan dated April 5, 2018 No. 166 and received the status of a research university (resolution of the Ministry of Health of the Republic of Kazakhstan dated 12.11.2018).

In accordance with the Strategy of KazNMU for 2019-2023, the basis of KazNMU's activities is the trinity - the integration of academic, scientific and clinical activities in order to provide high-quality and modern medical care to the population and training of professional personnel. In this regard, by 2018, the university included 5 republican state enterprises, including: JSC Scientific Center for Obstetrics, Gynecology and Perinatology, JSC Scientific Center for Pediatrics and Pediatric Surgery, JSC Scientific Research Institute of Cardiology and Internal Medicine, JSC "Kazakh Research Institute of Oncology and Radiology", JSC "Scientific Center of Surgery named after A.N. Syzganov".

KazNMU is one of the founders of the Academic Demanding League, which aims to improve the quality of education by implementing and promoting the principles of academic honesty. The international information and analytical platform Web of Science in November 2019 awarded KazNMU an independent award "Leader in publication activity in the Web of Science Core Collection over the past 5 years among medical universities of the Republic of Kazakhstan." KazNMU cooperates with 102 universities, medical and scientific organizations of the near and far abroad, including with TOP-500 universities, implementing joint scientific, research and educational projects.

KazNMU is a full member of international Associations: International Association for Medical Education in Europe (AMEE), European Association of Dental Education (ADEE), World Federation of Dentists (FDI), European Federation of Dentists (EROFDI), European Association of Universities (EAU), International Association of Universities (IUA), the Association of Higher Schools of Management (GSM Barcelona), the World Federation of Pharmacists, the Association for Distance Education "Siberian Open University", the Association of Schools of Public Health in Europe (ASPHER). In 2015, KazNMU became a member of the Association of European Medical Schools (AMSE) and the Organization of PhD Education in Biomedicine and Health Sciences in the European System (ORPHEUS).

Residency was introduced in accordance with the Law "On Education". The first admission to residency was held in 2008. The first issue of residents was carried out in 2010.

For 2020, residency is being implemented in 44 specialties, including 19 educational programmes being accredited for the first time. 605 residents studied at KazNMU from 2017 to 2020. The University trains residents on the basis of 104 clinics, polyclinics, research institutes, and scientific centers. University clinics are: clinic "Aksai", clinic of internal diseases of KazNMU, professorial clinic of KazNMU, dental clinic.

Thus, KazNMU is an innovation-oriented and socially responsible university, a leader in the Republic of Kazakhstan and Central Asia in multi-level training of competitive healthcare and pharmacy specialists through the implementation of a competence-based model of medical and
pharmaceutical education with the wide involvement of domestic and foreign scientists and a constant increase in scientific research potential.

The main educational, scientific and clinical structural unit of the University, which coordinates training at the second stage of medical education in one or more related specialties, is the Dean's Office of Internship and Residency, renamed from August 3, 2020 to the Faculty of Postgraduate Education. The dean's office unites all the departments related to the specialties included in the internship and residency, as well as those general scientific and fundamental departments that, in terms of the content of their work, are closest to the profile of the second level of higher medical education.

In the specialty 7R09170 "Pulmonology, including children's", the first set was made in the 2019-2020 academic year, the first graduation of residents is planned in 2021.

2.2 Information on previous accreditation

Accreditation of the educational programme of residency in the specialty 7R09170 "Pulmonology, including children" has not yet been carried out.

2.3 Analysis of the self-assessment report of the educational programme of residency in the specialty 7R09170 "Pulmonology, including children’s"

Study Programme Self-Assessment Report presented on 123 pages of the main text, annexes on pages 124-139 and copies or electronic versions of documents located in Google disk at the link akr.rezidentura@gmail.com.

The report is characterized by the completeness of answers to all 9 accreditation standards, structuredness, taking into account the recommendations of the ECAQA Self-Assessment Guidelines, as well as the internal unity of the information provided to the accredited educational programme. The report is accompanied by an accompanying letter signed by the rector prof. T.S. Nurgozhin confirming the accuracy of the information and data contained in the report.

The report contains information about the representative of KazNMU, responsible for the self-assessment of educational programmes, Ph.D. Zhankalova Zulfiya Meirkhanovna, Dean of the Faculty of Postgraduate Education.

Self-assessment of educational residency programmes carried out on the basis of the order on the basis of the order dated 04.08.2020 No. 337 "On approval of the composition of the working group for preparation for accreditation educational programmes of specialties of residency ".

The working group on the preparation of the self-assessment report has done a certain amount of work: the content of the accredited educational programme, the conditions for its implementation, staffing, educational resources have been analysed, the necessary information has been collected in accordance with Accreditation standards for postgraduate education programmes (residency specialties) of medical educational organizations (hereinafter referred to as accreditation standards); a thorough analysis, updating and addition of methodological and educational materials was carried out, their content is reflected in the report. The content of the Self-Assessment Report is structured in accordance with the ECAQA Accreditation Standards and includes a description of strengths, areas for improvement for each of the 9 standards.

The database, appendices on 16 pages, are presented in full, sequentially and there are links to them in the text of the report. The report is written in a competent language, the wording for each standard is clear and understandable, the tables contain references in the text and are consecutively numbered.

2.4 General assessment of the educational programme of residency in the specialty 7R09170 "Pulmonology, including children’s" for compliance with the Standards of accreditation of postgraduate education programmes (specialty residency) of medical educational organizations.

Based on the analysis of the self-assessment report by external experts, it was found that the
content of the self-assessment report is structured in accordance with the ECAQA accreditation standards and the recommendations of the Self-Assessment Guidelines, at the same time, following the peer review recommendations were made for adjustments, which were taken into account by the working group.

The report is written sequentially in compliance with the logic in the description of the standards, the wording for each standard is clear and understandable, the tables contain references in the text and are consecutively numbered. There are links to regulations, model rules, regulations, teaching documents, website pages https://kaznmu.kz/rus/postupajushhim/postdiplomnoe-obrazovanie/rezidentura/

The report recommended making changes and additions to some standards (standard 1, standard 3, standard 4, standard 5)

The self-assessment and description were carried out in accordance with the criteria of the ECAQA accreditation standards and the questions formulated in the Self-Assessment Guidelines were answered. All standards show actual practice of KazNMU for training residents in the specialty 7R09170 "Pulmonology, including children’s" taking into account the beginning of admission of students in 2018, 2019, well-reasoned data, examples of the implementation of the tasks of the educational programme, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. Self-assessment report description fairly complete and updated software the number of residents, teachers, administration, information on the selection and admission, the results of training, the results of the assessment of knowledge and skills, the material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, bases), financial information, development plans and improvement, etc.

Conclusion on each of the 8 accreditation standards includes a description of the strengths and areas for improvement identified in the course of introspection and development prospects for the specialty.

Thus, the self-assessment report of the accredited educational residency programme of KazNMU contains objective, detailed, structured information on all types of activities in accordance with the ECAQA accreditation standards, and the university made the appropriate corrections in the report at the peer review stage.

3. Description of external expert evaluation

External expert work on the assessment of the educational programme of residency 7R09170 "Pulmonology, including children’s" of KazNMU was organized in accordance with the Guidelines for the external assessment of educational organizations and educational programmes of ECAQA (approved by order of the Director General of the "Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Healthcare" No. 5 2017) and according to the programme and schedule approved on 08.11.2020 by the Director General of ECAQA Sarsenbayeva S.S. and agreed with the rector T.S. Nurgozhin.

To obtain objective information on the expert assessment of the accredited educational programme, the members of the EEC used the following methods: interviews with management and administrative staff, interviews with residents, observation, study of the website, interviewing employees of various structural units, teachers, questionnaires of teachers and residents, review of resources in the context of the implementation of accreditation standards, the study of 21 educational and methodological documents both before the visit to the university and during the visit.

The sequence of the visit within 3 days is detailed in the Visit Programme, which is in the documentation of the accreditation centre and in the annex to this report.

The KazNMU staff ensured the presence of all persons indicated in the visit programme and according to the lists of interview sites (Table 1).
<table>
<thead>
<tr>
<th>No.</th>
<th>FULL NAME</th>
<th>Position</th>
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<tbody>
<tr>
<td>1.</td>
<td>Bayldinova Clara Zhenisovna</td>
<td>Vice-rector for academic affairs</td>
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<td>2.</td>
<td>Zhankalova Zulfiya Meirkhanovna</td>
<td>Dean of the Faculty of Postgraduate Education</td>
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<td>3.</td>
<td>Tashetova Aigul Balabekovna</td>
<td>And about. Director of the Department of Academic Affairs</td>
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<td>4.</td>
<td>Nagasbekova Bayan Serikkanovna</td>
<td>Head of Human Development Department resources</td>
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<td>5.</td>
<td>Kulzhakhanova Samal Sagatovna</td>
<td>Head of the Alumni Career Centre</td>
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<td>6.</td>
<td>Tulepbaeva Gulzhan Sovetovna</td>
<td>Head of Clinical Department</td>
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<td>7.</td>
<td>Tuleyev Bakhyt Izidinovich</td>
<td>And about. director of the university clinic</td>
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<td>8.</td>
<td>Saliev Timur Muydinovich</td>
<td>Head of the B.A. Atchabarova</td>
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<td>Syzydkova Aigul Temirbullatovna</td>
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<td>Modovov Nurbol Alimbaevich</td>
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<td>12.</td>
<td>Nurmakhanova Zhanna Makhmutovna</td>
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<td>13.</td>
<td>Israilova Venera Karypbekovna</td>
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<td>Akhmetova Gulsim Zhumagalievna</td>
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<td>Nersesov Alexander Vitalievich</td>
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<td>17.</td>
<td>Talkimbaeva Naylya Anuarovna</td>
<td>Head of the simulation centre</td>
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<td>18.</td>
<td>Nurmakhanova Zhanat Makhmutovna</td>
<td>Committee of educational programmes</td>
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<td>Kalieva Meruert</td>
<td>Secretary Academician committee</td>
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<td>21.</td>
<td>Sugraliev Akhmetzhan Begalievich</td>
<td>Associate Professor of the Department of Internal Medicine</td>
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<td>22.</td>
<td>Mominkulov Aydar Ordabekovich</td>
<td>Associate Professor of Pediatric Surgery</td>
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<td>23.</td>
<td>Mezubekov Ulugbek Shalkharovich</td>
<td>Head of the Department of General Surgery</td>
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<td>Israilova Venera Karypbekovna</td>
<td>Head of the Department of Resuscitation</td>
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<td>25.</td>
<td>Habizhanov Askar Bolatovich</td>
<td>Associate Professor at the Department of Dermat venerology</td>
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<td>26.</td>
<td>Salimbaeva Damilya Nurgazyevna</td>
<td>Associate Professor of the Department of Medical Genetics</td>
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<td>27.</td>
<td>Nadyrov Momunzhan Talgatovich</td>
<td>Head of the Department of Plastic Surgery</td>
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<td>28.</td>
<td>Kalmanova Ayman</td>
<td>Resident</td>
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<td>29.</td>
<td>Ali Sultan</td>
<td>Resident</td>
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**The first day of the visit is 11/18/2020.**

An interview with the management and key employees of KazNMU made it possible to determine the fulfillment of most of the criteria of accreditation standards 1, 2, 5, 7, 8, 9, namely, to identify approaches in developing the mission of the educational programme and its compliance with the strategic goals of the university, the role and place of postgraduate education in clinical direction in the strategy of the university (plan), mechanisms in determining the appropriate specialty of residency of clinical sites and qualified teachers, guaranteeing the adequacy of educational resources through planning public procurements and concluding agreements with country and international partners (more than 100 contracts). Realizing that the accredited residency programme is relatively
new, since the first enrollment of the student took place in 2019-2020, the experts studied the
documentation in detail,

The experts found that KazNMU strictly adheres to the requirements of regulatory legal acts
and SCES in the implementation of educational programmes, and the management systematically
monitors this process during internal audits (QMS, mutual control, control of the vice-rector for
academic work, reporting, etc.).

The basis for effective management is the Quality Assurance Policy of KazNMU and the
"Policies of the Chairs" developed at the departments of residency, as well as adherence to the
Quality Guidelines when documenting the educational process (QMS has been constantly supported
and certified since 2012).

Conversation with the Dean of the Faculty of Postgraduate Education Zhankalova Z.M.
allowed experts to learn about approaches to attracting employees of clinical bases for teaching
residents, about the strategy and tactics of recruiting residents for different specialties, information
security of postgraduate education, as well as identifying problems in the management and
development of human resources, since most practicing doctors do not know the teaching
methodology.

The conversation with the head of the Pulmonology Department made it possible to find out
about the teaching staff involved in the preparation of residents of the accredited educational
programme, about the clinical bases where residents are trained, about the appointment of clinical
mentors, the development and implementation of the accredited educational programme, methods of
its assessment.

The experts asked questions about the preparation of individual plans, the length of the
working day, the requirements for mentors, etc. It turned out, for example, that plans are drawn up for
1 year, although it was suggested that residents should have an idea - a strategic plan for the entire
duration of their studies in residency and see the perspective and the ultimate goal of the training. The
dean acquainted with the main clinical bases where residents are trained in Almaty. In addition, the
list of clinics in the regions is expanding, in particular, a Memorandum was signed with the clinics in
the city, Uralsk, Taraz, Almaty, South Kazakhstan and Kyzylorda regions. About 30 teachers of the
university traveled to the regions and provided assistance to practical health care. This mutually
beneficial collaboration allows local clinical mentors to be recruited to train residents. On educational
programmes, questions were asked about the participation of residents in the discussion of the EP and
what questions they are interested in approximately. It turned out that mostly students offer specific
electives, they are invited to discuss with employers at the department meetings. Many questions
were asked in relation to feedback from residents, employers, about the evaluation of educational
programmes, about the scientific activities of residents, etc.

The second day of the visit is 11/19/2020.

This day was devoted to visiting clinical bases for the implementation of residency programmes,
including scientific centres and research institutes affiliated with KazNMU (Research Institute of
Internal Diseases, Scientific Centre of Obstetrics, Gynecology and Perinatology, Scientific Centre of Oncology). At clinical bases, experts surveyed the resources of the accredited educational
programme, their compliance with the training courses in residency, accessibility for teachers and
residents, how modern this equipment is and meets the needs of students and practical health care.

On accreditation of the educational programme in the specialty "Pulmonology" the experts
visited one of the clinical bases of the Department of Pulmonology - the Clinical Medical Centre
"Mediterra". The chief physician of the "Institute of Surgery" LLP Egizekov AE acquainted with the
structure of this medical institution, which is multidisciplinary. There are the following specialized
departments: thoracic surgery and pulmonology, cardiac surgery and cardiology, vascular surgery,
hepatobiliary surgery with gastroenterology, neurology department, ENT, endocrinology, plastic
surgery, urology, traumatology, microsurgery. The total bed capacity is 153 beds, of which 25 are
pulmonary beds. The clinical base also has diagnostic departments - radiation diagnostics (computed
tomography, magnetic resonance imaging, ultrasound), an endoscopy room (bronchoscopy,
gastroduodenoscopy, colonoscopy), a functional diagnostics room (spirography, ECG with bicycle ergometry).

Head of the Department of Pulmonology, Candidate of Medical Sciences, Associate Professor Eshmuratov T.Sh. at the same time is a full-time employee of the department, as well as a clinical mentor, familiarized with the structure of the pulmonary department and diagnostic structures, opportunities for training residents at the clinical base.

A review of resources showed that the clinical base of the Department of Pulmonology LLP "Mediterra" corresponds to the goals and objectives of the accredited educational programme in the profile of beds, the number of thematic patients, modern equipment and its availability to all students, and the staff of the department ensure collegial and ethical relations with the medical staff, the management of the clinical base to achieve the final results of the educational programme. The clinical base has 2 training rooms, despite the fact that most of the time residents spend at the patient's bedside and in the diagnostic departments. Before the start of the corresponding discipline of the educational programme, the resident receives a syllabus from the teacher and knows what skills he must acquire and develop during training.

Conducted a conversation with residents - pulmonologists of 2 years of study, Arystanaliev A.E., Bayalieva Z.A., Shubatkalieva N.K., Kaldybek A.K., who are currently practicing in this medical institution. In the presence of a syllabus, assessment sheets, a resident's diary.

In the department of radiation diagnostics (X-ray room), residents of the second year of study (Arystanaliev A.E, Kaldybek A.K) demonstrated practical skills in interpreting chest radiographs. The experts conducted a separate conversation with the residents of second-year pulmonologists for 15 minutes, where the residents freely expressed their views on training in the specialty of pulmonology at this clinical base.

The experts obtained evidence of compliance with accreditation standards 2 and 6, as well as validation of the information in the self-assessment report of the educational programme.

Also on the same day, interviews with teachers, residents and employers (representatives of practical health care) were held. It is necessary to take into account the fact that there was no graduation from the accredited educational programme, so it was not possible to interview graduates, however, the experience and authority of KazNMU in teaching residents (since 2007) show a high percentage of employment (> 90%) of graduates of other programmes and their demand on medical organizations in all regions of Kazakhstan.

In the interviews with the teachers of the departments, questions were asked about almost all standards - the mission and goals of the university, the introduction of innovative teaching methods in the educational process, advanced training, the implementation of research, academic mobility of teachers and residents, clinical bases, mentoring, assessment of the work of residents, etc.

Interviews with teachers, as providers of the residency programme, showed that there are both successes and problems in the management of the educational programme, depending on the specific clinical base (access of residents to equipment, a sufficient number of thematic patients, time for maintaining medical records, independent work of residents) ... The experts received answers about the teacher training programme, the financing of this training, the availability of certification in teaching methods for teachers.

On the same day, experts studied materials on the admission of residents and the selection of teachers.

Residents were interviewed to validate the performance of the self-assessment report data and to obtain evidence of the quality of the programmes. 11 residents attended. The experts asked questions about satisfaction with studying at the university, sufficient time for practical training, supervision of patients and work with medical records, as well as satisfaction with teaching methods and qualifications of teachers. In general, residents are satisfied with the training, assessment methods, and purposefully entered this university, since they believe that KazNMU has excellent clinical bases and experience in teaching residents, at the same time, residents would like more
independent work with patients, especially prompt help using interactive teaching methods when dealing with complex cases.

Residents showed their commitment to the organization of education, were active in answering questions from external experts, demonstrated their judgments on the organization of training, assessment of their skills, advisory support, opportunities to participate in research and development, funding, etc.). The experts studied the documents of residents (portfolio, results of the assessment of residents - checklists, results of a questionnaire survey of residents).

Interview with 8 employers for all the educational programmes of residency of KazNMU declared for accreditation conducted on-line and included such issues as: knowledge of the mission of the university, participation in the development of the mission and proposals in the strategic plan, participation in the deliberative bodies of KazNMU, satisfaction with the basic knowledge and skills of residents, participation in teaching 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, employment of graduates of residency, etc. In general, employers positively characterize mutual work with the university, are satisfied with the level of training of residents and believe that such work is beneficial to both the university and hospitals.

The third day of the visit November 20, 2020

Experts studied documentation of the Pulmonology Department, which confirmed the compliance with accreditation standards (nomenclature of the department's affairs, plan for 5 years, annual plan for the 2019-2020 academic year and report for 2019, journal of residents' progress, EMCD, feedback questionnaires with residents, teachers, reports on the results of the questionnaire and the measures taken, the code of ethics, etc., control and measuring instruments), including documentation (staff of the teaching staff, individual plans of teaching staff, IEP and portfolio of residents, evaluation of the educational programme by external reviewers, distribution of scientific directions and scientific advisers of residents) at the request of EEC members.

Then a meeting of the EEC members took place following the results of the external evaluation. A final discussion of the results of external assessment, study of documents, results of interviews, questionnaires was held. The members of the EEC began to design the final report of the EEC.

A meeting of the EEC members took place. EEC members made generalizations of the results of the external evaluation. The experts individually completed the “Quality profile and the criteria for external assessment of the NIC for compliance with the Accreditation Standards for the residency programme 7R09170 “Pulmonology, including children’s”. No comments were made by the EEC members on the accredited EP. Recommendations for improving the postgraduate education sector in general and the department implementing the accredited educational programme were discussed. A draft report with recommendations was prepared.

Chairperson of the EEC prof. Turgunov E.M. a final open vote on recommendations for KazNMU and a final vote on recommendations for the ECAQA Accreditation Council were held. Then the Chairperson of the EEC for the management and employees of the educational organisation announced recommendations based on the results of an external assessment in the framework of accreditation of educational programmes for residency specialties.

Questioning. An observer from ECAQA in November 16-18, 2020 conducted an online survey of KazNMU residents and teachers on the resource https://webanketa.com/.

Residents survey results:

The total number of responding residents - 154... Of the total number of respondents, residents of the specialty "family medicine" prevailed - 40%, further on the list: pulmonology - 12%, clinical pharmacology - 12%, therapy - 11%, pediatric oncology and hematology - 6%, general surgery 4%, pediatric surgery - 3%, medical genetics - 2%, other specialties - 1% each.
Will recommend this university as an educational organization - 69% fully agree, partially - 26%. 71% of the respondents fully agree and 23% partially agree that programme managers and teaching staff are aware of their learning problems. Fully (64%) and partially (29%) are satisfied with the conditions and equipment of classrooms and classrooms of the university. According to 62% (in full) and 26% (in part) office equipment is available for residents in practice bases. Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes - 73% fully agree, partially - 22%. Fully (72%) and partially (25%) are satisfied with the library fund and resources. 76% of respondents have access to electronic educational resources, and 20% believe that it is partially.

The organization of clinical training for residents in the opinion of 81% fully satisfies them, and 15% partially. Fully (74%) and partially (22%) are satisfied with the teaching methods. There is enough time for practical training (supervision of patients, etc.) - 82% fully agree, partly 13%. Satisfied with the methods of assessing my knowledge and skills - 78% fully agree, partially 21%. According to 73% of teachers in the classroom, they use active and interactive teaching methods regularly, and according to 23% - rarely.

According to 81% of the respondents, teachers constantly provide feedback after the end of classes, but according to 16% - sometimes and 2% - rarely. 81% of respondents are fully satisfied that they are studying at a university, partially 16%, disappointed - 1% of respondents. The university allows you to improve or acquire the necessary knowledge and skills in the chosen specialty of residency 82% are sure, 7% are not sure, 9% cannot give an answer, 1% would like to believe it, 1% began to doubt it. Fully (76%) and partially (23%) are satisfied with the organization of teaching at KazNNU.

According to 71% of respondents, accreditation is a necessary mechanism to improve educational programmes, but 12% believe that it is not necessary to carry out and 14% doubt the answer. The work of the EEC was assessed as positive - 74%, satisfactory - 14%, i.e. most.

Results of the survey of teachers of residency programmes:

The total number of teachers on the list is 40. The total number of respondents is 39, including those with up to 5 years of experience - 18%, up to 10 years - 21%, over 10 years - 62%. 59% are fully satisfied with the organization of the educational process, partially - 33%. At the university, ethics is observed and subordination is fully agreed by 72%, partially - 26%. 67% of respondents are completely satisfied with the organization of work and workplace, partially 26%. In the organization there is an opportunity for career growth and development of competence for teachers - 67% fully agree, partially - 26%.

In this educational organization, teachers have the opportunity to engage in scientific work and publish research results - 72% fully agree, 23% partially. 59% of respondents are fully satisfied with the work of the personnel department, 28% are partially satisfied. The majority of those surveyed have undergone advanced training for the last 5 years. Only 69% fully agree that they can realize themselves as professionals, and 29% partially. Unfortunately, 33% did not answer the question of whether the university supports the teacher in participating in international and national events, and 21% did not address this to the management or the relevant administrative staff of the university. The majority of respondents (74%) fully agree, and 23% partially agree that residents have free access to patients and clinic resources. In a practical lesson, teachers provide residents primarily with syllables (87%), control and measuring instruments (90%), case studies (72%). The level of prior training of residents upon admission to training programmes is fully satisfied by 28% of respondents, partially - 62%. 58% of respondents do not know about the implementation of social programmes to support teachers and 8% of respondents doubt about their existence. Management and administration systematically listen to the opinion of teachers - 28%, sometimes - 28% of respondents. When teaching residents, a variety of teaching methods are used, but more often work in small groups (74%), analysis of situational tasks (90%), oral questioning and analysis of a topic (74% and 87%),
respectively), also problem-oriented training (62%), solving tests (64%), less often cases are compiled and solved (56%). Completely according to 59%.

The results of the questionnaire are presented in the appendix and, in general, demonstrate the positive aspects of training in residency programmes, at the same time, they identify areas for improvement (social support programmes for teachers, availability of leadership and administration for teachers and residents, pedagogical competencies and professional development of teachers).

**Conclusion from the external evaluation:**

Members of the EEC have carefully studied and assessed the main indicators of the accredited educational programme. The information received by external experts during the study of the self-assessment report, preparation of a written review with recommendations for improvement, implementation of the activities of the visit programme of KazNMU was analysed. All the information received was compared with the data of the self-assessment report, which made it possible to make sure of the accuracy of the information provided to KazNMU and supporting documents for compliance with the ECAQA Accreditation Standards.

Despite the fact that in the self-assessment report of the educational programme, KazNMU described its best practice in observing accreditation standards, during the external expert evaluation, the EEC members studied the main documents (mission, strategic plan until 2023, teaching materials of disciplines, syllables, control and measuring instruments, checklists, portfolio of residents, individual plans of residents for the 2019-2020 academic year, publications of teachers, rules for admission to residency, personnel policy, internal quality assurance system programme, resources for training were viewed directly at the clinical bases of departments (classrooms, office equipment available for residents to work with literature, patient documentation, educational and methodological literature), which made it possible to identify the compliance of the educational organization with the basic accreditation standards.

When conducting an external examination, the Rules for the training of medical personnel in residency were taken into account (order of the Minister of Health of the Republic of Kazakhstan dated September 18, 2018 No. KR DSM-16), paragraph 13. It was established that the clinical bases of all residency programmes are 106, which provide training for all levels of medical care (from primary health care to highly specialized). The accredited educational programme has 1 clinical base, of which 1 was visited by experts. 1. The volume of study load and treatment and prophylactic work in specialties is determined by the individual work plan of the student of residency (item 14) for one year and is monitored by monthly reports of the resident in any form. The accounting of completed tasks is drawn up in the form of a portfolio according to the recommendations in the syllabus.

In connection with the new edition of order No. 647 On the approval of state compulsory standards and standard professional training programmes for medical and pharmaceutical specialties dated July 31, 2015 (as amended by the order of the Ministry of Health of the Republic of Kazakhstan dated 02.21. No. KR DSM-12/2020 Chapter 2. Requirements for the content of residency educational programmes with a focus on learning outcomes), the educational programme has undergone changes and additions in relation to the development of the research competence of residents, which must participate in the work of the research team.

In this regard, the experts assessed the involvement of residents in research and development. There is no general provision or requirements for the implementation of scientific work at the university, at the same time, the departments conduct proactive research in which residents participate through writing reviews, collecting patient data, analysing the literature and patient examination results, preparing reports and presentations at conferences. Also, in accordance with Article 222 of the Residency of Clause 4 of the Code of the Republic of Kazakhstan On People's Health and the Healthcare System No. 360-VI ZRK dated July 7, 2020, external experts studied the activities and held conversations with mentors of residents, and it was established that each resident was provided with a mentor.
The experts took into account the fact that the accredited educational programme for the current state educational standard is being implemented for 2 academic years, therefore, at this time there is no graduation of students, nevertheless, the entire educational, methodological, personnel and resource base has been assessed for compliance with accreditation standards. Through interviews with teachers and interviews with students, it was possible to determine their direct participation in the development (CEPs, meetings of departments), the assessment of educational programmes (CEP), decision-making on a number of key issues in the choice of clinical sites, topics of electives, participation in the appeal commissions for admission and assessment of residents, development of the content of individual plans of residents and selection of mentors.

At the same time, this substantiated the need for inclusion in post-accreditation monitoring, along with the implementation of the EEC recommendations, an analysis of the implementation of the criteria of Standard 9, an annual report on the contingent of students.

Recommendations for improving activities in the implementation of the educational residency programme in the specialty 7R09170 "Pulmonology, including children's" on compliance with the Accreditation Standards, developed by the EEC based on the results of the expert assessment, were presented at a meeting with the management on November 20, 2020.

The programme of the 3-day visit of the external expert evaluation of the EEC has been fully completed. On the part of the KazNMU team, the participation of all persons indicated in the programme is ensured.

Thus, the external assessment and the visit of the EEC members made it possible to verify and validate the data of the self-assessment report of the residency programme in full in accordance with the Regulation on the External Expert Commission, the Guidelines for the external assessment of the medical organization ECAQA education.

For the work of the EEC, comfortable conditions were created, access to all necessary information and material resources of the accredited educational programme was organized. Experts note the high level of corporate culture and discipline of those responsible for postgraduate education of KazNMU employees, departments, employees of clinical bases, a high degree of openness of the team in providing information to members of the EEC.

The clinical base where the residents are trained - the largest scientific centre in the country with specialized departments, highly qualified personnel, allows creating conditions for high quality training for residents under the educational programme 7R09170 "Pulmonology, including children's".

4. Analysis for compliance with accreditation standards based on the results of an external assessment of the educational programme of residency in the specialty 7R09170 "Pulmonology, including children's" KazNMU and an overview of the strengths for each standard

Standard 1: MISSION AND END OUTCOMES

The mission of the educational programme defines the position of the university on “training highly qualified competitive health care professionals”, reflecting the educational strategy and the concept of reforming medical and pharmaceutical education in the Republic of Kazakhstan.

The mission of the educational programme in the specialty 7R09170 "Pulmonology, including children" is aimed at implementing the mission of the University by training a qualified doctor - a specialist in pulmonology with a system of universal knowledge and professional competencies, capable and ready for independent professional activity in the treatment of bronchopulmonary diseases.

The mission of the educational programme was brought to the attention of all employees of departments, residents and the public by posting on the university website (www.kaznmu.kz, website "Residency").
To improve all areas of the university's activities, including the mission, KazNMU has introduced a system for collecting and analyzing feedback from consumers through internal and external monitoring.

The materials of the report adequately describe the process of developing a mission, vision and strategy based on an analysis of the real positioning of the university and their focus on meeting the needs of the state, society, students and employers.

Pulmonology is taught on the basis of the largest and most advanced multidisciplinary clinics, research centres, which allows residents to get a holistic vision of a patient with respiratory pathology, to guide patients with a polymorphic background. This contributes to the acquisition of good clinical practice by residents, the ability to think independently and after graduation to be able to work independently at a high professional level.

Proof of achievement of the mission's goals is the release of competitive university graduates in demand in the republic. This was confirmed by interviews with employers (selection of graduates of KazNMU), residents (motivation for entering the university).

In addition, when studying in residency, the goal is to attract students to conduct scientific and clinical research. However, during interviews and visits to clinical sites, it turned out that residents have a scattered understanding of the conduct of research. Although all students are involved in research and scientific research.

In addition, during interviews with employers, there was no clear answer about the awareness of the mission, goals and final results of the EP in residency. Although upon a more detailed questioning, it turned out that everyone has sufficient information.

**Strengths:**
1) Highly qualified staff of the Department of Pulmonology.
2) Training at the largest, multidisciplinary clinical bases in the city with a strong staff.
3) Almost all academic teachers are also mentors, since they combine work at the department and in medical institutions.

**Conclusions of the EEC on the criteria.** Out of 17 standards conform: completely - basic standard (BS) - 9, improvement standard (IS) - 1, significantly - BS -1, IS-5, partially -0, do not correspond - 0.

**Standard 1: completed**

**Recommendations for improvement identified during the external visit:**
1) In teaching, more widely use innovative teaching methods, in particular distance learning.
2) It is recommended to introduce the scientific basis of research into teaching as a component of choice.
3) To improve the awareness of employers and other stakeholders with the mission, goals and end results of the EP on residency.

**Standard 2: EDUCATIONAL PROGRAMMES**

According to this standard, materials were provided at the link akr.rezidentura@gmail.com. In addition, upon additional request, additional documents were provided that are at the department - reports, department plans, EMCD and others. Information was also obtained during interviews and visits to clinical sites.

For the effective implementation of the educational programme, internal regulatory documents have been developed that regulate the organization of the educational process at the University. All of them are based on the guidance documents of the Ministry of Education and Science of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan on the organization of the educational process.

In accordance with the state educational standard of the specialty, standard curricula, the planning and control department of the educational process (DP&CEP) develops working curricula (working curriculum) for the entire period of study. Every year, taking into account the permissible change due to the university component, RUPs are reviewed and approved by the Methodological
and Academic Council of the University. There is a standard curriculum for the discipline published by the authorized bodies of the Ministry of Education and Science of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan in accordance with the State Educational Standard of Education of the specialty "Pulmonology". An educational programme has been developed for the discipline on the basis of standard curricula. The educational programme is adapted to the Model of Medical Education of KazNMU and the credit education system. The educational programme is discussed at a meeting of the department, considered at a meeting of the CEP.

For the discipline "Pulmonology", educational and methodological complexes of disciplines (EMCD) have been developed, which include: syllabus; control and measuring equipment; a map of the educational and methodological provision of the discipline; forms of reporting documentation on duty. Paper and electronic versions of the EMCD are available at the department. To ensure wide access for students, electronic versions of the EMCD are available in the electronic hall of the KazNMU library and are located in the AIS-KazNMU.

At KazNMU, the "Learning through Research" programme is compulsory. The training programme for residents provides for the implementation of various forms of educational and research work (preparation of messages, reports, research, publication of scientific articles, poster reports, work in scientific circles, participation in scientific and practical conferences, etc.). A detailed examination of the issue did not reveal standards for assessing and indicators of R&D progress.

**Strengths:**

1) Availability of the ISO 9001: 2015 accreditation certificate “Educational activities in the field of higher and postgraduate education; medical services, basic and applied scientific research in the field of medicine”, valid until 06/18/2023.

2) Implementation of the competence-oriented model of KazNMU graduate.

3) Application of a credit-modular system and an integrated learning approach in the preparation of residents.

4) Updating and updating the catalog of elective disciplines

5) Residents work with real patients in various clinical settings - research institutes, highly specialized hospitals, municipal hospitals, clinics, ambulance stations, skills improvement in simulation centres.

6) Offsite training for residents.

7) Participation of representatives of practical health care in the preparation of work programmes.

**Conclusions of the EEC on the criteria.** Out of 31 standards conform, they correspond: completely - basic standard (BS) - 21, improvement standard (IS) - 1, significantly - BS-6, IS-3, partially -0, do not correspond - 0.

**Standard 2: completed**

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

1) Provide in educational programmes for training residents in the management of scientific research, medical statistics, health care organization as a component of their choice.

2) Develop quantitative indicators for the implementation and assessment of the scientific work of residents.

3) The scientific component should be prescribed in thematic plans in the form of the implementation and defense of scientific projects.

4) Provide training of clinical mentors from among doctors of practical health care in pedagogy and psychology.

5) Introduce an assessment of the educational activities of clinical mentors through the eyes of residency graduates.
Standard 3: ASSESSMENT OF TRAINEES

Confirmation of the implementation of this standard is presented at akr.rezidentura@gmail.com,... where the relevant documents are presented and reasoned in interviews conducted and when visiting the clinical bases of the department.

Resident assessment policies and methods are reviewed and approved at a meeting of the Internship and Residency Education Programmes Committee (CEP).

The system of monitoring the educational achievements of residents in KazNMU includes: current and midterm monitoring of progress, intermediate certification of residents and final state certification. The organization of the system for monitoring the educational achievements of residents is carried out by the Office of the Registrar.

Ongoing supervision is carried out by the teacher / clinical mentor. The forms and content of current control are determined by the syllabus for the discipline and are evaluated on a 100-point scale. Midterm control evaluates the learning outcomes upon completion of the discipline sections on a 100-point scale. Based on the results of midterm controls, a rating of admission to the final control by discipline is calculated. The final control in the discipline is determined by the assessment of the final learning outcomes and is reflected in the syllabus.

Intermediate certification of residents is carried out in accordance with the academic calendar, working curriculum and educational programmes developed on the basis of the State Educational Standard of Education and standard curricula of residency specialties. The final certification of residents is carried out according to the forms established by the State Educational Standard of Education and the EP of residency...

The University uses additional methods for assessing residents, such as portfolio, assessment of scientific activities.

The number of examinations in each course is regulated by the Model Curriculum. The final control includes 2 stages: integrated computer testing, assessment of the level of mastering practical skills. The assessment is carried out according to the developed checklists. To carry out the final certification of residents, a state certification commission is created. In case of disagreement with the results of the rating of the final control, final certification in discipline, a resident has the right to submit an appeal to the Chairperson of the appeal commission.

Strengths:
1) Qualitative formation and examination of control and measuring instruments.
2) Development of unified checklists for assessing residents.
3) Using digitalization at every stage of working with residents.
4) Portfolio filling by each resident.

Conclusions of the EEC on the criteria. Out of 11 standards conform: completely - basic standard (BS) - 5, improvement standard (IS) - 4, significantly - BS -2, IS- 0, partially -0, do not correspond - 0.

Recommendations for improvement identified during the external visit:
1) Document the assessment of the validity and reliability of the corporate information system with a view to continual improvement
2) Improve the efficiency of the CEP in terms of assessing and unifying syllabuses
3) It is recommended that individual plans reflect research activities (research topic, programme, publications, conferences, etc.)

Standard 4: TRAINEES

During the Accreditation of the university, the documentation was studied, interviews were conducted with residents, teaching staff and employers.

In line with the university's mission of “training competitive health care professionals,” the admission policy is focused on selecting the best residents. The national status, the competitiveness of the university in the educational services market, the leading places in the ranking of universities,
medical universities of the Republic of Kazakhstan and the educational programme in medicine according to the national independent rating agencies undoubtedly affect the university's election among residents.

The main method for selecting residents for admission is the results of the competition for the award of State educational grants from the Ministry of Education and Science of the Republic of Kazakhstan, the holding of entrance examinations. When admitting to residency, personal achievements of the applicant, the results of research work, etc. are also taken into account. The duration of the development of the educational residency programme in the specialty depends on the previous level of education or work experience and is 2 or 3 years, depending on the specialty. By specialty7R09170 -Pulmonology, including children's, duration of study is 2 years.

According to the residency regulation, the number of residents per teacher is 1: 3. To implement the competence-oriented Model of medical education in KazNMU, the university operates a system of academic consulting for residents in departments. Also, all the main directions, forms and methods of organizing social and financial support adopted in universities are used.

In order to optimize employment and monitor the career of university graduates, by the order of the rector, a career centre for graduates was organized (order dated 03.08. The Alumni Career Centre also monitors the movement and career growth of university graduates, establishing business ties with employers, and studying the labor market needs for specialists.

**Strengths:**
1) A comprehensive and uniform policy of admission and support of students is applied.
2) The model of personal growth of residents has been implemented.
3) Availability of a career centre for graduates.

**Conclusions of the EEC on the criteria.** Out of 30 standards conform: completely - basic standard (BS) - 18, improvement standard (IS) - 12, significantly - BS -0, IS-0, partially -0, do not correspond -0.

**Standard 4: completed**

**Recommendations for improvement identified during the external visit:**
1) When admitting to residency, provide for combined methods for evaluating applicants in order to increase the objectivity of the results
2) Document the representation of residents to participate in the development and implementation of a residency programme (for example, a council of residents or other advisory body)
3) Raise awareness of residents about the possibilities of material and social assistance from the university

**Standard 5: TRAINERS**

The personnel policy of KazNMU is guided by the normative legal acts prescribed by the “Personnel policy of KazNMU”. There are 7 staff members of the pulmonology department, 5 of whom have an academic degree and the highest category.

All employees of the department combine the main work at the department with medical work at the bases. In this regard, the burden of clinical mentors is also carried out. In addition, employees - representatives of practical health care - are mentors.

A teacher who carries out training under the residency programme has an individual plan for working with a resident. The teachers of the department conduct the theoretical part of the lesson (contact hours - 3 hours for a loan), mentors control the practical part of the resident's work (22 hours for a loan).

The system of professional and pedagogical improvement of the teaching staff of KazNMU includes the following subdivisions: H.S. Nasybullina, School of Public Health named after H. Dosmukhamedova, Institute of Postgraduate Education, Centre for Communication Skills. Julie Draper, Human Resource Development Department, DAR-sponsored winter and summer schools that contribute to the formation and development of the competence and potential of teaching staff.
**Strengths:**
1) High qualification of teaching staff of departments
2) Involvement of qualified mentors from practical health care in the training of residents
3) Active cooperation of teaching staff with Kazakh and international universities
4) Development of teaching competence of teaching staff

**Conclusions of the EEC on the criteria.** Out of 7 standards conform: completely - basic standard (BS) - 5, improvement standard (IS) - 2, significantly - BS - 0, IS - 0, partially - 0, do not correspond - 0.

**Standard 5:** completed

**Recommendations for improvement identified during the external visit:**
1) Provide for the improvement of the teaching qualifications of the teaching staff not only in the universities of the republic, but also abroad.
2) Increase the coverage of academic residency teachers in teaching innovative teaching methods
3) Strengthen academic mobility, exchange of residents and teaching staff on high-tech methods of diagnosis and treatment with foreign universities

**Standard 6: EDUCATIONAL RESOURCES**

The university has a developed material and technical base for conducting educational and scientific and educational processes. The material and technical base of the university includes: lecture halls, study rooms, educational and research laboratories, a library, information technology facilities, premises for the cultural and social sphere, university clinics.

KazNMU has a scientific library, which the experts visited on the 1st day of their visit to the university. The main task of the library is full and operational library and information-bibliographic services for students, residents, researchers, teachers, in accordance with information requests based on wide access to any funds. By 2020, the area of the library has increased and is 6386 sq. m, including the area of the library premises - 5 396 sq. m., The area of book storage - 902 sq. m. The library consists of 5 departments: reference and bibliographic department; department of acquisition and storage of literature; department of scientific processing of literature and cataloging; department of automation and electronic resources; subscriber department for students of all courses.

The clinical bases of the department are: Research Institute of Cardiology and Internal Diseases, City Clinical Hospital No. 1, Medittera Medical Centre. Residents have access to thematic patients, equipment, and have the opportunity to improve their skills and competencies. During the visit, the experts visited the Medittera clinic, where they had the opportunity to see clearly the working conditions of the residents.

In addition, the university has a Centre for Practical Skills, which the experts visited on the 1st day of the visit. Residents have the opportunity to improve their practical skills using high-tech simulators.

Thus, the university has a sufficient number of clinical bases and a centre for the formation and development of practical skills among residents in accordance with the goals and objectives of the educational programme in the specialty "Pulmonology, including children's"

**Strengths:**
1) Availability of highly specialized clinics with sufficient modern equipment
2) Rich library fund, ubiquitous access to IT and electronic resources, including international electronic databases of literature
3) Resident training in a well-equipped hands-on skills centre

**Conclusions of the EEC on the criteria.** Conforms out of 21 standards: fully-basic standard (BS) - 9, improvement standard (IS) - 11, significantly - BS - 1, IS - 0, partially - 0, do not correspond - 0.

**Standard 6:** completed

**Recommendations for improvement identified during the external visit:**
1) Develop indicators for the implementation and evaluation of research work by residents
2) Expansion of international cooperation

**Standard 7: PROGRAMME EVALUATION**

In Asfendiyarov KazNMU, mechanisms for evaluating educational programmes have been developed, providing for the evaluation of programmes at the stages of planning, implementation, analysis of results and implementation of changes, which allows to monitor the implementation of the educational programme and the progress of students, and ensures the identification and timely solution of emerging problems. Such structures as CEP, HD, DEMW, MS, CMAQE, SSRME are involved in the process of evaluating educational programmes.

At the Department of Pulmonology, there is a working group for the development and implementation of the EP of residency in the specialty 7R09170 "Pulmonology, including children's", which has developed the EP, participates in the preparation of working curricula, syllabuses of disciplines, CIS, and also analyzes the results of examinations, a survey and survey of residents, collection of proposals for improvement from the teaching staff and residents.

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

The participation of a wide range of stakeholders in the assessment and improvement of educational programmes at KazNMU is ensured by authorized bodies in the field of education and health (MoH RK), representatives of the public, professional organizations, as well as persons and structures responsible for postgraduate education.

Independent monitoring of data on the implementation and achievement of learning outcomes (LO) is carried out by examining EP graduates through the National Centre for Independent Examination (NTSNE) and by questioning employers.

**Strengths:**

1) Conducting external and internal evaluation of educational programmes
2) Engaging independent examiners to assess residents
3) Participation of all stakeholders in the assessment and development of educational programmes
4) Feedback through a survey of teaching staff, residents and employers

**Conclusions of the EEC on the criteria.** Conforms out of 15 standards: completely - basic standard (BS) - 10, improvement standard (IS) - 4, significantly - BS-0, IS-1, partially -0, do not correspond - 0.

**Standard 7: completed**

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

1) Involvement of specialists from practical health care in the development of pulmonology programmes
2) Strengthening feedback from alumni, residents and employers to improve educational programmes

**Standard 8: GOVERNANCE AND ADMINISTRATION**

According to this standard, corroborating data were obtained from interviews with representatives of the administration, finance department and the presentation of the Vice-Rector for Academic Affairs.

KazNMU developed and approved the main internal document defining the scope of duties and powers of the University in relation to EP residency, including the obligation to provide the educational process in full with all the necessary information sources and access to network educational resources - "Academic Policy ". This document is guided by the dean's office and departments in the management of the educational residency programme. The dean's office of
postgraduate education coordinates the implementation, control and monitoring of the implementation of residency programmes in all licensed specialties.

In order to effectively manage the educational process, the successful implementation of the Model of Medical Education in KazNMU, since 2010, innovative subdivisions have been created - the Committees of Educational Programmes (CEP).

Determination of the financial and economic policy of KazNMU and the management structure of the university is the responsibility of the first head of the university - the rector, Chairperson of the Board and DEF. Funding for the residency programme depends on the formation of an annual government order.

For the development of residency programmes, their improvement, representatives of practical health care are involved. In order to effectively plan, develop and implement residency programmes, KazNMU included representatives of practical health care, residents and teachers of departments involved in the implementation of residency programmes in the advisory bodies (Faculty Council, CEP, Senate).

**Strengths:**
1) Continuous improvement of the work of the administration to achieve the mission and goals of the University
2) A clear distribution of responsibilities in the management of the educational process
3) Financial well-being of the university
4) High satisfaction with the learning outcomes of all stakeholders
5) Partnerships with potential employers and health care organizations

**Conclusions of the EEC on the criteria.** Conforms out of 15 standards: fully-basic standard (BS) - 8, improvement standard (IS) - 6, significantly - BS-0, IS-1, partially -0, do not correspond - 0.

**Standard 8: completed**

**Recommendations for improvement identified during the external visit:**
1) Improvement financing mechanisms for all levels of education (academic mobility of residents, participation of residents in international events)
2) Strengthen academic mobility, exchange of residents and teaching staff on high-tech methods of diagnosis and treatment with foreign universities

**Standard 9: CONTINUOUS RENEWAL**

Due to the fact that this educational programme is new and has not been conducted before, this standard will be considered later in the process of post-accreditation monitoring.

Thus, 8 accreditation standards have been met, no inconsistencies in the fulfillment of the criteria of each of the basic accreditation standards in the process of analyzing the self-assessment report and carrying out the examination as part of the tasks of the external peer review programme were found.

5. Recommendations for improving the educational residency programme in the specialty 7R09170 "Pulmonology, including children's" KazNMU:

**Standard 1: MISSION AND END OUTCOMES**
1. In teaching, more widely use innovative teaching methods, in particular distance learning.
2. It is recommended to introduce the scientific basis of research into teaching as a component of choice.
3. To improve the awareness of employers and other stakeholders with the mission, goals and end results of the EP on residency.

**Standard 2: EDUCATIONAL PROGRAMMES**
4. Provide in educational programmes for training residents in the management of scientific research, medical statistics, health care organization as a component of their choice.
5. Develop quantitative indicators for the implementation and assessment of the scientific work of residents.
6. The scientific component should be prescribed in thematic plans in the form of the implementation and defense of scientific projects.
7. Provide training of clinical mentors from among doctors of practical health care in pedagogy and psychology.
8. Introduce an assessment of the educational activities of clinical mentors through the eyes of residency graduates.

**Standard 3: ASSESSMENT OF TRAINEES**
9. Document the assessment of the validity and reliability of the corporate information system with a view to continual improvement
10. Improve the efficiency of the CEP in terms of assessing and unifying syllabuses
11. It is recommended that individual plans reflect research activities (research topic, programme, publications, conferences, etc.)

**Standard 4: TRAINEES**
12. When admitting to residency, provide for combined methods for evaluating applicants in order to increase the objectivity of the results
13. Document the representation of residents to participate in the development and implementation of a residency programme (for example, a council of residents or other advisory body)
14. Raise awareness of residents about the possibilities of material and social assistance from the university

**Standard 5: TRAINERS**
15. Provide for the improvement of the teaching qualifications of the teaching staff not only in the universities of the republic, but also abroad.
16. Increase the coverage of academic residency teachers in teaching innovative teaching methods
17. Strengthen academic mobility, exchange of residents and teaching staff on high-tech methods of diagnosis and treatment with foreign universities

**Standard 6: EDUCATIONAL RESOURCES**
18. Develop indicators for the implementation and evaluation of research work by residents
19. Expansion of international cooperation

**Standard 7: PROGRAMME EVALUATION**
20. Involvement of specialists from practical health care in the development of pulmonology programmes
21. Strengthening feedback from alumni, residents and employers to improve educational programmes

**Standard 8: GOVERNANCE AND ADMINISTRATION**
22. Improvement financing mechanisms for all levels of education (academic mobility of residents, participation of residents in international events)
23. Strengthen academic mobility, exchange of residents and teaching staff on high-tech methods of diagnosis and treatment with foreign universities
7. Recommendation to the ECAQA Accreditation Board
The members of the EEC came to a unanimous decision to recommend to the Accreditation Council to accredit the educational programme of residency in the specialty 7R09170 "Pulmonology, including children's" for a period of 5 years.

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Turgunov Ernek Meyramovich</th>
</tr>
</thead>
<tbody>
<tr>
<td>The foreign expert</td>
<td>Kashirskaya Natalia Yurievna</td>
</tr>
<tr>
<td>Academic expert</td>
<td>Zhumalina Akmaral Kanashevna</td>
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<tr>
<td>Academic expert</td>
<td>Ramazanova Raigul Mukhanbetovna</td>
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<td>Academic expert</td>
<td>Esengaraeva Saule Damirovna</td>
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<td>Academic expert</td>
<td>Beketova Bayan Beysengalieva</td>
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<tr>
<td>Academic expert</td>
<td>Akhmetova Almira Kalikapassova</td>
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<tr>
<td>Academic expert</td>
<td>Urazova Saltanat Nurgozhaevna</td>
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<tr>
<td>Academic expert</td>
<td>Kalieva Sholpan Sabataevna</td>
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<td>Zhantelieva Lyazzat Asanovna</td>
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<td>Madyarov Valentin Manarbekovich</td>
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<tr>
<td>Academic expert</td>
<td>Sadieva Zhanar Zamankhanovna</td>
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<tr>
<td>Academic expert</td>
<td>Lovinskaya Anna Vladimirovna</td>
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<tr>
<td>Representative of practical health care</td>
<td>Zholdasbaeva Kyrmzy Zhumabekovna</td>
</tr>
<tr>
<td>Representative of practical health care</td>
<td>Nartpayeva Asel Tarasovna</td>
</tr>
<tr>
<td>The representative of the residents</td>
<td>Bayashov Erdos Nuridinuly</td>
</tr>
<tr>
<td>The representative of the residents</td>
<td>Tarasyukov Alexander Andreevich</td>
</tr>
<tr>
<td>The observer ECAQA</td>
<td>Umarova Makpal Aldibekovna</td>
</tr>
</tbody>
</table>
Quality profile and external evaluation criteria (summary)
Of educational programme in the specialty of residency
7R09170 "Pulmonology, including children’s" of KazNMU

<table>
<thead>
<tr>
<th>Standard</th>
<th>Criteria for evaluation</th>
<th>Assessment</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Totally coincides</td>
</tr>
<tr>
<td>Number of standards = BS * SU</td>
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</tr>
</tbody>
</table>

1. MISSION AND END OUTCOMES  
17 = 10/7  
21/6 1/5

2. EDUCATIONAL PROGRAMME  
31 = 22/9  
5/4 2/0

3. ASSESSMENT OF TRAINEES  
11 = 7/4  
18/12 -

4. TRAINEES  
30 = 18/12  
9/2 1/5

5. TRAINERS  
7 = 5/2  
5/2 -

6. EDUCATIONAL RESOURCES  
21 = 10/11  
10/4 0/1

7. PROGRAMME EVALUATION  
15 = 10/5  
9/11 1/0

8. GOVERNANCE AND ADMINISTRATION  
15 = 8/7  
8/6 0/1

9. CONTINUOUS RENEWAL  
4 = 1/3  
1/1 0/2

Total: 151 = 91/60  
86/48 5/12  
151