

To the Accreditation Council  
of the Eurasian Center for Accreditation  
and Quality Assurance  
in Education and Health care  
April 20, 2023

**REPORT**  
**OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE**  
**EVALUATION OF THE EDUCATIONAL PROGRAM 7R01145 -**  
**"ORTOPEDIC DENTISTRY" FOR COMPLIANCE WITH THE**  
**ACCREDITATION STANDARDS OF POSTGRADUATE EDUCATION**  
**PROGRAMS (RESIDENCY SPECIALTIES) IN MEDICAL EDUCATIONAL**  
**ORGANIZATIONS**  
**NJSC "KAZAKH NATIONAL MEDICAL UNIVERSITY NAMED AFTER N.**  
**S.D. ASFENDIYAROV"**

**external expert evaluation period: April 18-20, 2023**

**Almaty, 2023**

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## LIST OF ABBREVIATIONS AND DEFINITIONS

Abbreviation	Definition
AMS	Administrative and Managerial Staff
HEI	High Education Institution
SCC	State Certifying Commission
SCES	State Compulsory Educational Standard
DSHR	Department of Science and Human Resources
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Health Care
FCE	Final Certifying Examination
IEP	Individual Education Plan
CS	Clinical Specialties
CHIS, AIS, Damu	Health Information Systems
CP	Clinical Protocol
CoC	Component of Choice
ESC	Elective Subjects Catalogue
MoH	Ministry of Healthcare of the Republic of Kazakhstan
MoEDSc	Ministry of Education and Science of the Republic of Kazakhstan
SR	Scientific Research
NSCS	A.N. Syzganov National Scientific Centre for Surgery Joint Stock Company
NCIE	National Centre for Independent Examination
EP	Educational Programme
OSCE	Objective Structured Clinical Examination
MS	Major Subjects
PGCE	Department for Postgraduate Continuing Education
PHC	Primary Health Care
ATS	Academic Teaching Staff
SYL	Syllabus
RCHD	Republican Centre for Health Development
IWR, GWR	Independent Work of Residents, Work of Residents Guided by a Teacher
ST RK ISO, QMS	Quality Management System of the Republic of Kazakhstan
TSYL	Typical Syllabus
TP	Training Package on
EMB	Educational and Methodological Board
AB	Academic Board
CBL	Case-based learning
ESG	European Standards and Guidelines
ESC	European Society of Cardiology
MCQ	Multiple-choice question
RBL	Research based learning

TBL	Team-based learning
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## 2. General part of the final report

### 2.1 Presentation of the educational program of residency in the specialty 7R01145 - "Orthopedic Dentistry"

Organization name, legal form of ownership, BIN	Non-profit joint stock company "Kazakh National Medical University named after S.D. Asfendiyarov"
Management body	Ministry of Health of the Republic of Kazakhstan Ministry of Education and Science of the Republic of Kazakhstan
Full name of the chief executive officer	Shoranov Marat Edigeevich
Location and contact details	The Republic of Kazakhstan postal code 050012, Almaty city, Tole bi street, 94 Tel/Fax: 8727/3387090 e-mail: info@kaznmu.kz Official website: www.kaznmu.kz
State license for educational activities (date, number)	State license No. KZ74LAA00017008 dated September 19, 2019
The total number of educational programs since the founding of the college and for the last five years	1
Graduate employment rate (average), %	The first release is planned for 2025
Full-time teachers/ Part-time workers, including % degrees	The total number of teachers - 24, including full-time - 22, part-timers - 2. Degrees - 44%

In 2018 KazNMU named after S.D. Asfendiyarov was reorganized into a non-profit joint-stock company (NJSC) in accordance with the Decree of the Government of the Republic of Kazakhstan No. 166 dated April 5, 2018 and received the status of a research university in accordance with the Decree of the Ministry of Health of the Republic of Kazakhstan dated November 12, 2018. The status of a research university creates conditions for the integration of scientific activities, the educational process and clinical activities.

For several years, KazNMU has been recognized as the leader in medical education in the country and occupies leading positions in Kazakhstani and international rankings.

In November 2020, KazNMU again became the owner of the independent award Leader of Science - "Web of Science Awards" in the nomination "Leader in the number of publications in journals" Q1 and Q2 quartiles Web of Science Core Collection for 2018, 2019 and 2020 among medical universities of Kazakhstan.

KazNMU in 2021 for the first time entered the top 47 in the QS World University Rankings. Since 2022, the university has been included in the elite QS World University Ranking, where it took the position at number 601.

It should also be emphasized that in the QS EECA University Rankings, which includes 400 institutions from Europe and Central Asia, KazNMU ranked 135th in 2021.

To date, KazNMU has taken first place in the ranking of the Center for the Development of Education and Science of the Republican State Enterprise "Republican Center for Health Development" among medical universities.

In the national ranking, KazNMU takes an honorable 5th place out of 85 universities in Kazakhstan and 1st place among the medical universities of the country. The website of the university is in 5th place among the websites of all universities in the country.

The staff of the University is 2099 people. Of these, the teaching staff - 1283, incl. academicians - 9, doctors of sciences - 151, candidates of sciences - 401, doctors of PhD - 20. The teaching staff of KazNMU has a high scientific and pedagogical potential. The holders of the grant of the Ministry of Education and Science of the Republic of Kazakhstan "The Best Teacher of the Republic of Kazakhstan" are 17 teachers of the university.

KazNMU students study in 89 educational programs, 9 of which are joint programs with partner universities and there is an opportunity to receive 2 diplomas in 3 educational programs at once.

For 91 years of work, the university has trained more than 100 thousand highly qualified doctors, graduates of the international faculty of KazNMU hold high positions in 30 countries of the world.

Now 13,536 students study at the university, of which 1,784 are foreigners from 22 countries of the world. The university has been accepting foreign students since 1983. KazNMU has accumulated extensive experience in teaching in English, co-education with Kazakh students contributes to the creation of a new socio-cultural, international environment at the university.

KazNMU consists of 7 schools and faculties, 68 departments. The university has 4 university clinics and 5 research institutes and research centers. Future doctors are trained in 2 branches in different cities of the country and 7 academic buildings. For the comfort of students, there is one of the largest housing stocks, consisting of 8 dormitories.

NJSC "KazNMU named after S.D. Asfendiyarov" over the years of its activity has formed its brand, traditions and values, continues to follow the course towards international universities, designated by the country's leadership. Since 2007, the university has quarterly published the scientific and practical journal "Bulletin of KazNMU", which is included in the list of publications recommended by the Committee for Control in 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.

KazNMU is one of the founders of the League of "Academic exactingness", the purpose of which is to improve the quality of education by implementing and promoting the principles of academic honesty.

During the period of work of KazNMU, 124 cooperation agreements have been concluded with universities, medical and scientific organizations of 34 countries of near and far abroad.

For the period from 2015 to 2020, 107 visiting professors were invited to KazNMU. External outgoing and incoming academic mobility for the reporting period amounted to 59 university employees and 172 residents, of which 22 residents made outgoing external academic mobility.

In the framework of the Erasmus + program in 2015, agreements were signed with universities in Europe - Finland, Lithuania, Spain, and Estonia. In 2020, KazNMU won 4 grants for projects:

AccelEd, HARMONE, LMQS, FOR21, aimed at promoting the modernization and sustainable development of the education and training system.

Residency programs at the University have been implemented since 2008. Currently, in accordance with Attachment No. 2 of the State License # KZ74LAA00017008 dated September 19, 2019, training is carried out at the postgraduate level in 47 educational residency programs. The first issue of residents was carried out in 2010. In KazNMU, from 2016 to 2022, 5422 people received postgraduate education, of which 719 people were residents. The employment of residency graduates over the past 5 years is 100%.

EP 7R01145 - "Orthopedic Dentistry" was developed and entered into the Register of Educational Programs of Higher and Postgraduate Education in 2022. The structure and content of the EP were developed in accordance with the requirements of the State Educational Standard of the Republic of Kazakhstan - 2022 in accordance with the order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2 "On approval of state compulsory standards of higher and postgraduate education" and registered with the Ministry of Justice of the Republic of Kazakhstan dated July 27, 2022 # 28916.

Accreditation of the educational program in the specialty of residency 7R01145 - "Orthopedic Dentistry" is carried out for the first time, as it is planned to enroll for the 2023-2024 academic year.

## **2.2 Information about previous accreditation**

EP 7R01145 - "Orthopedic Dentistry" was developed and entered into the Register of Educational Programs of Higher and Postgraduate Education in 2022. Accreditation of the educational program of residency 7R01145 - "Orthopedic Dentistry" is carried out for the first time. It is planned to recruit residents for the 2023-2024 academic year.

## **2.3 Conclusion on the results of the review of the report on self-assessment of the educational program of residency in the specialty 7R01145 - "Orthopedic Dentistry" for compliance with the Standards for Accreditation of Postgraduate Education Programs (Residency Specialty) of Medical Educational Organizations and conclusions**

Self-assessment report of the educational program of residency in the specialty 7R01145 - "Orthopedic dentistry" (hereinafter referred to as the report) is presented on 46 pages of the main text, applications on 5 pages, copies or electronic versions of 55 documents located at the link <https://drive.google.com/drive/folders/10y0qAhpXymKMku9etl6Dag5FnGDwNv-I?usp=sharing>.

The report is characterized by the completeness of answers to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for the self-assessment of the educational program provided to the educational organization by the accreditation center - ECA, as well as the internal unity of information. Attached to the report is a cover letter signed by Rector Shoranov Marat Edigeevich, which confirms the accuracy of the quantitative information and information included in the self-assessment report.

The report contains a list of 1 chairman of 28 members of the internal self-assessment commission indicating the responsibility of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational program.

Self-assessment of the residency educational program 7R01145 - "Orthopedic Dentistry" was carried out on the basis of the order of the Rector of the University No. 31 dated 18.01.2023. "On the

establishment of a working group to prepare a self-assessment report and conduct primary specialized accreditation of educational programs for undergraduate, graduate and residency programs.”

The report was reviewed by the accreditation expert Aldabergenova Taurzhan Kalibekovna and the review noted the strengths and areas for improvement, as well as recommendations for additions and changes, which were taken into account in the process of feedback from the representative of the university and the corresponding changes and additions were made to the self-assessment report.

All standards provide the actual practice of the University in training residents in the specialty 7R01145 - "Orthopedic dentistry", taking into account the start of admission of students in 2023, reasoned data, examples of the implementation of the tasks of the educational program, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is quite complete and updated in terms of the number of residents, teachers, administration, information on selection and admission, learning outcomes, knowledge and skills assessment results, the material and technical base of the university and clinical facilities, contractual obligations with partners, financial information, plans for development and improvement.

The report is submitted to ECA in a finalized form, with data adjusted according to the above recommendations, written in competent language, the wording for each standard is clear and understandable, described in accordance with the criteria of the standards, the tables contain references in the text and are consecutively numbered.

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

### **3. Description of external expert evaluation**

External expert work within the framework of the evaluation of the educational program 7R01145 - "Orthopedic Dentistry" was organized in accordance with the Guidelines for the External Evaluation of ECA Educational Organizations and Educational Programs and in accordance with the program approved on February 10, 2023 by the ECA Director General Sarsenbayeva S.S. and agreed with the vice-rector of the NJSC “KazNMU named after. Asfendiyarov” Bayldinova C.Zh. 10.04.2023 Dates of the visit to the organization from April 18 to April 20, 2023.

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 3 days is detailed in the Visit Program (hereinafter referred to as the program), which is located in the documentation of the accreditation center. The program is proof of the implementation of all planned activities within the framework of an external peer review.

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

- interviews with management and administrative staff - 20 people;
- interview with heads of departments - 7 people;
- interviews with residents - 15 people;
- studying the website [info@kaznmu.kz](mailto:info@kaznmu.kz);
- interviewing 14 employees, 11 teachers, 6 mentors;
- questioning of 28 teachers and 19 residents;

- review of resources in the context of the implementation of accreditation standards: visited 7 clinical training bases - Dental Clinic "Dobrodent", Dental Clinic "Eurodent", Family Dental Center "Vita Dental Clinic", Children's Dental Clinic, City Clinical Hospital No. 5, maxillofacial and ENT surgery; Dental clinic of the School of Dentistry, SS Team Clinic, where training is provided in 4 educational programs with the participation of 2 full-time teachers;
- study of educational and methodological documents in the amount of 55 units both before the visit to the organization and during the visit to the departments (the list of examined documents is in **Attachment 2**).

The staff of the accredited organization ensures the presence of all persons indicated in the visiting programme and according to the lists of interview sites and interviews (Table 1).

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

<b>No.</b>	<b>Position</b>	<b>Quantity</b>
1	Vice-rector	3
2	Dean	3
3	Acting Head of Academic Affairs Department	1
4	Head of the Alumni Career Center	1
5	Head of the Department of Academic Affairs	1
6	Head of the Alumni Career Center	1
7	Head of Human Resources Development Department	1
8	Head of the Human Resources Department	1
9	Chairman of the Committee for Educational Programs	2
10	Head of the Department of Clinical Work	1
11	Head of Research Institute of Fundamental and Applied Medicine named after B. Atchabarov	1
12	Head of the Department of Science	1
13	Financial Director	1
14	Chief Accountant	1
15	Head of Planning and Budget Execution Department	1
16	Head of Clinical Department	1
17	Deputy Financial Director	1
18	Acting Library Manager	1
19	Deputy Head of Research Institute of Fundamental and Applied Medicine named after B. Atchabarov	1
20	Department head	7
21	Head of the simulation center	1
22	Teachers	10
23	Residents	7
24	Employers	11
25	Clinical Mentors	11

A visit to the EEC ECA NJSC "KazNMU" within the framework of accreditation EP 7R01145 - "Orthopedic Dentistry" was carried out according to the program from April 18 to April 20, 2023.



During a visit to the departments of the University, experts found that the University has departments that are directly related to the educational program 7R01145 - "Orthopedic Dentistry", which can be noted as the best practice in education, namely, the EP in the specialty of residency was developed based on the requests of internship graduates "stomatology" and practical healthcare (availability of vacancies in dental clinics in Almaty (more than 100 vacancies according to the sites HeadHunter, Jobs in Almaty, Market.kz, Jooble, Rabota.nur.kz, etc.), which demonstrates the work on demand of the labor market.

Despite the fact that the admission of residents will be carried out for the first time in 2023, all educational and methodological documentation and the resource base are available in full and comply with accreditation standards. During interviews with residents, teachers and employers, their participation in the development of the mission, in the development and evaluation of the EP, topics of elective classes, in collegiate and advisory bodies was clarified. The main direction of EP 7R01145 - "Orthopedic dentistry" is "patient-oriented education" by providing them with wide access to patients in the Dental Clinic of the School of Dentistry, Saradan LLP (contract No. 286 of 09/01/2021), SS TEAM LLP (No. 18 of 09/01/2022), CSE on REM "Emergency Medical Service" of the Public Health Authority of Almaty (agreement No. 552 of 09/01/2022). The teaching staff has scientific achievements and the first, highest medical qualification categories, closely cooperates with practical healthcare, participate in competitions, win scientific and technical progress and perform. The clinical bases have classrooms equipped with a multimedia installation and laptops, interactive whiteboards for conducting the theoretical part of the lesson, and a sufficient number of thematic patients. In the dental clinic of the School of Dentistry, for practicing the practical skills of students in the specialty 7R01145 - "Orthopedic Dentistry", there is a Simulation Center equipped with the latest technology.

On the last day of the visit to the organization, a meeting of the members of the EEC was held following the results of accreditation. The final discussion of the results of the external evaluation of the educational program, the study of documents, the results of interviews and questionnaires was held. EEC members have begun drafting the final report of the EEC. Generalizations of the results of the external evaluation are made. The experts individually completed the "Quality Profile and Criteria for External Evaluation of the Educational Program 7R01145 - Orthopedic Dentistry" for compliance with the ECAQA Accreditation Standards. No comments were made by the EEC members. Recommendations for improving the educational program were discussed and the final open vote on recommendations for the ECAQA Accreditation Council for the accreditation period of 5 years was held by the chairwoman Kabildina Nailya Amirbekovna.

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 the corporate culture of the University, the high degree of openness of the team in providing information to the members of the EEC.

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

### **3. Analysis for compliance with accreditation standards based on the results of an external evaluation of the educational program of residency in the specialty 7R01145 - "Orthopedic Dentistry".**

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

### **Evidence of Compliance:**

#### **1.1 Mission statement**

The mission of the educational program 7R01145 - "Orthopedic Dentistry" is aimed at implementing the mission of the University by preparing a qualified specialist in orthopedic dentistry who has a system of universal knowledge and professional competencies, capable and ready for independent professional activity, organization and provision of qualified and specialized orthopedic dental care.

EP 7R01145 - "Orthopedic Dentistry" was developed collegially (minutes of the meeting of the department No. 8 dated 24.08.2022) and approved at the meeting of the CEP of the Faculty of Postgraduate Education (No. 1 dated 08.31.2022), and the Academic Committee of the University (No. 3 dated 20.09. 2022).

The mission of the EP was brought to the attention of all employees of the department, residents by posting syllabuses and information about residency on the university website ([www.kaznmu.kz](http://www.kaznmu.kz), web page "Residency").

The health authorities are informed about the mission of the educational program as a result of the active participation of the staff of the department, the university, who studies at scientific and practical conferences, joint charitable clinical events with clinical sites, popularization of the discipline through participation in flash mobs, volunteer events and on the Internet sites of medical organizations.

Information about the mission of the educational program is provided to partners from far and near abroad when participating in scientific and practical conferences, jointly conducting master classes or in the process of "academic mobility" of teachers and students.

When implementing the activities of the visit program, namely, based on the results of interviews with the heads of the organization, in interviews with residents and teachers, compliance with the criteria of **standard 1** was established. the mission and goals of the EP at all levels of the advisory commissions of the university with approval by the advisory and advisory council of the university in accordance with the law and the regulatory legal acts, with the systematic collection, accumulation and analysis of information about the activities of the department, implementing the educational residency program with an assessment of strengths and weaknesses (SWOT-analysis) to determine the policy and direction of strategic and tactical plans.

To verify **standard 1**, a meeting was held with the head of the organization Bayldinova Clara Zhenisovna. This interview provided evidence that the mission of the residency program and the mission of the university are fully consistent with each other. The vice-rector announced a strategy for the development of postgraduate education, including residency programs, which indicates a clear vision of the university and an interest in improving residency programs, taking into account the needs of practical healthcare.

Interviews with teachers confirmed that the mission is brought to the attention of the teaching staff at cathedral meetings. During a conversation with residents, it was found that the mission is brought to the attention of students at curatorial hours, meetings with deans, posted on the information stands of the university buildings, the official website of the university. During the work of the EEC according to the program, following the results of interviews with the administration of the university, heads of structural divisions, as well as during meetings with graduates, residents and employers, everyone confirmed their knowledge of the mission and final results of the residency

educational programs, as well as active participation in its formation.

An analysis of the compliance of the University's activities with the criteria of this Standard as a whole indicates the presence in this organization of a strategic plan for KazNMU for 2019-2023, the corresponding mission and vision. The management of the university conducts an analysis of target indicators of activities, monitoring and improvement measures.

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

The postgraduate educational program of residency in the specialty 7R01145 - "Orthopedic Dentistry", implemented at the university, is built on the basis of the mission, taking into account the requirements of the State Educational Standard of the Republic of Kazakhstan - 2022 and the professional standard of the Republic of Kazakhstan "Dental Activities" (Appendix No. 1 to the Order of the Deputy Chairman of the Board of NCE RK "Atameken" "No. 285 dated October 22, 2018).

A visit to the Dental Clinic and the Simulation Center of the School of Dentistry, meetings with heads of departments, teachers, curators, mentors and residents showed a competence-oriented EP, which allows you to prepare a dentist-orthopedist, capable of medical, organizational, managerial, scientific and research activities.

The University, on the basis of the State Educational Standard of the Republic of Kazakhstan-2022, independently developed EP 7R01145 - "Orthopedic Dentistry", conducted an assessment, selection of teachers, employment conditions and distribution of resources. The compilation of syllabuses, CED, IEP, Working Curriculum, the form, structure and procedure for the development of these documents are determined by the University independently, and all educational and methodological documentation has been reviewed and approved at all levels of the advisory commissions of the university with approval by the advisory and advisory council of the university in accordance with the law and regulatory legal acts. The EP presents the list of practical skills recommended by the State Educational Standard, their number and the level of performance of competencies.

*19 residents completed the survey on the <https://webanketa.com/> resource, of which 52.6% are residents of the 1st year of study, 47.4% are residents of the 2nd year of study, who answered 24 questions, including and questions related to the quality of the educational process and the educational program.*

*It has been established that 73.7% of residents will recommend studying at this educational organization to their acquaintances, friends, relatives. And 84.2 respondents believe that the leaders of the educational program and teachers are aware of the problems of students related to learning. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?" 73.68% of residents answered positively, 10.53% could not answer this question yet and 15.79% would like to believe it.*

*In the questionnaire for teaching staff, consisting of 23 questions, 28 teachers participated, of which 84.38% were full-time employees, 6.25% were part-time employees, 6.25% did not teach residents, and 1.56% were mentors. At the same time, 89.3% of teachers have a teaching experience of more than 10 years, 10.7% - up to 10 years, 0% - up to 5 years. There were 48.44% of teachers of the therapeutic profile, 29.69% of the surgical profile, 4.69% of the pediatric direction (including pediatric infection and neonatology), 4.69% of the diagnostic direction (functional diagnostics, radiation diagnostics) - 4.69%, oncology, radiology, radiation therapy - 6.25%, dental profile - 6.25%.*

*When asked whether the organization of labor and the workplace in this organization of education, 89.29% of teachers answered that they were completely satisfied, and 10.71% partially agreed with this statement. According to the survey data, KazNMU has a healthy microclimate, so 67.19% of teachers note that the management of the organization systematically listens to the opinion of teachers regarding questions on the educational process, research, clinical work, 26.56% - sometimes, 4.69% did not give an answer. According to 84.38% of KazNMU teachers, there is an opportunity to be realized as a professional in their specialty completely, and 10.94% agree partially, 3.13% partially disagree.*

### **1.3 Final learning outcomes**

The EP of the specialty 7R01145 - "Orthopedic Dentistry", is aimed at the formation of professional competencies based on a competency-based approach to learning. The competencies that a resident must master upon completion of training are defined in the "Qualification Characteristics of a Graduate" in accordance with the Dublin descriptors, the State Educational Standard of the Republic of Kazakhstan - 2022 and the professional standard of the Republic of Kazakhstan "Dental Activities" (Attachment No. 1 to the Order of the Deputy Chairman of the Board of the NCE RK "Atameken" No. 285 dated October 22, 2018).

At the university, for a consistent, phased mastery of these competencies, in each curriculum and in the syllabus of the discipline, the end results of learning are defined, including knowledge, skills, and the need for analysis, communication skills and continuous training of the resident.

Each discipline, in turn, is a pre- or post-requisite of an adjacent discipline. Consolidation of communication skills at the Department of Orthopedic Dentistry is provided by training at clinical sites when receiving patients, consultations, debriefing scenarios of clinical situations, questioning the resident, which also forms the habit of professional behavior of the resident with the patient, his environment and colleagues.

The quality control of the overall final results of the competencies of students is carried out through the final certification, in accordance with the requirements of the State Educational Standard of the Republic of Kazakhstan - 2022. The commission for final exams includes teaching staff of the University and representatives of practical healthcare, operating in medical organizations in Almaty. The monitoring results are heard at the Academic Council of KazNMU and the Academic Council, where administrative decisions are made. Employers expect new employees to have professional knowledge, skills, competencies, innovative thinking skills and creative experience, experience of personal achievements, teamwork skills and effective communication skills, and a desire for professional development. All material resources are used for the purpose of worthy implementation of the missions and goals of the University and EP 7R01145 - "Orthopedic Dentistry".

The norms of behavior of colleagues and students are spelled out in the Code of Honor of the teaching staff and employees of KazNMU, in the Code of Academic Integrity of students dated 09/01/2022. This is done by familiarizing employees and residents with the provisions of internal regulatory documentation, requirements for the organization of the educational process, the main areas of work of structural divisions, and the internal regulations of the University. Each student upon enrollment and each newly hired teacher or employee get acquainted and sign the Code of Honor. At the University, in order to maintain a moral, psychological and moral climate, prevent offenses and requirements, the Ethical Council (decision of the Board of KazNMU, protocol No. 2 of 03.20.2020) and the Disciplinary Council to consider the responsibility of residents (decision of the Board of KazNMU, protocol No. 2 of 09.12. 2019).

At clinical sites, on the first day of work, a resident is instructed to familiarize himself with the Code of Ethics of a Medical Worker, with the rules of conduct in the team of a medical institution. Compliance with the norms of the Code is under the control of the heads of the resident.

A clear continuity has been established between the final results of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 47 additional education programs, including those for the specialty 7R01144 - 7R01145 - "Orthopedic Dentistry". Residents are informed about this.

*Of the 28 teachers surveyed, 57.14% answered that they were fully satisfied with the level of previous training of residents, and 39.29% were partially satisfied.*

#### **1.4 Participation in the formulation of the mission and final results**

The University implements the mission of the EP, taking into account the needs of all stakeholders - students, residency graduates, university employees, government bodies and healthcare organizations, employers of all forms of ownership, professional associations, the public, strives to fulfill their requirements and wishes, constantly working to improve. The EP is focused on the expectation of the employer and the needs of the labor market. The effectiveness of the educational program is evidenced by 100% employment of all graduates of KazNMU.

At a meeting with employers, it was found that the university, together with them, is discussing the educational program in terms of choosing compulsory majors and CED.

To the question to residents, employers, "Do you participate in formulating the mission and goals of the organization, the educational program 7R01145 - Orthopedic Dentistry"? The answer was clear: "Yes."

To the question to residents and employers "What personal contribution did you make to improve the educational program?" Residents answered that they express their opinions and wishes after mastering a particular discipline and at the end of each course of study in questionnaires. And employers answered this question that they constantly express their recommendations, opinions and wishes at the meetings of the CEP, scientific and practical meetings of the University, as well as in reviews of the EP. (<https://drive.google.com/drive/folders/10y0qAhpzymKMku9etl6Dag5FnGDwNv-I?usp=sharing>).

*Conclusions of the EEC according to the criteria. Out of 17 standards conform: fully - 17, significantly - 0, partially - 0, do not comply - 0.*

*Standard 1: done*

### **Standard 2: EDUCATIONAL PROGRAM**

#### **Evidence of Compliance:**

##### **2.1 Framework parameters for the postgraduate medical education program**

The educational process in KazNMU is organized in accordance with the "Rules for organizing the educational process on credit technology of education" (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152).

To implement the educational program in the specialty 7R01145 - "Orthopedic Dentistry", the organization's documents contain the EMCDs, which defines the goal, takes into account the integration of practical and theoretical components, independent work in accordance with the State Educational Standard of the Republic of Kazakhstan-2022.

Residents during the interview confirmed that in KazNMU the observance of ethical aspects in the implementation of the educational program is ensured in accordance with the “Regulations on the Ethical Council”, the decision of the Board of KazNMU, protocol No. 2 of 03/20/2020.

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

The mentoring system was also evaluated, which is described in the "Regulations on mentoring" (order of the rector No. 231 of 09/16/2019). The results of interviews with mentors showed that their tasks are to prepare a highly qualified specialist, a personality that is comprehensively developed, moral, and cultural.

The procedure for informing residents about their rights and obligations is reflected in the Academic Policy of the University, Order No. 418 of 09/01/2022.

This indicates compliance with **standard 2** in terms of adapting training to the needs of residents. Also, the principles of quality and academic honesty work in KazNMU, which are described in the Code of Academic Integrity of Students Order No. 615 dated 11/24/2021. The university operates the software "Anti-plagiarism university", acquired by KazNMU (license agreement No. 524 dated 06/28/2018).

## **2.2 Scientific method**

EP 7R01145 - “Orthopedic dentistry provides for training in research skills, taking into account the real needs of modern medicine, aimed at developing the skills of medical research methodology using scientific foundations.

In KazNMU, scientific research is a mandatory component of residency training and involves the integration of educational, practical and research processes, with the result in the form of publications of scientific papers, speeches at conferences of various levels.

Since 2014, the University has adopted the “Learning through Research” program, which forms the basic research competencies of students necessary for their future professional activities.

For the successful implementation of research, the educational program includes elective disciplines: "Digital Dentistry" - 2 credits, "Fundamentals of Gnathology" - 2 credits, "Gerontostomatology (orthopedic)" - 2 credits, "Medical Law, Management, Marketing and Audit in Dentistry" - 2 credits, which are required for an in-depth study of scientific research standards, organization of scientific research, evidence-based medicine, information technology, data processing and analysis, publication of results.

At the Department of Orthopedic Dentistry, when teaching residents, improving the skills of performing scientific research is provided for by actively involving employees of basic institutions and teaching staff of the department in the recruitment, analysis and statistical processing of the material. Residents will work in a scientific circle, participate in scientific competitions. Conducting scientific research and publications will be positively evaluated when evaluating the portfolio of residents

*When questioning residents, it was found that the educational organization has access to the participation of students in research work and 78.57% of respondents are completely satisfied with this, 21.43% are partially satisfied. When asked whether residents should do R&D, 78.95% of the respondents answered that they are already doing R&D, 10.53% have started planning R&D, and 10.53% answered that the teacher did not offer to do R&D.*

Also, 70.31% of teachers fully agree that in this educational organization they have the opportunity to engage in scientific work and publish the results of research, 28.13% - partially and 1.56% (1 person) completely disagree.

### **2.3 Structure, content and duration of the residency program**

The educational program 7R01145 - " Orthopedic dentistry " was developed in accordance with the State Educational Standard of the Republic of Kazakhstan-2022 and standard professional training programs, the National and Industry Qualifications Framework, professional standards, and is aligned with the Dublin descriptors and the European Qualifications Framework

When developing the EP, the contribution of each discipline to the formation of competencies at a certain level was taken into account.

EP 7R01145 - "Orthopedic Dentistry" is designed for 2 years of study (140 credits). Major disciplines are "Defects of the crowns of the teeth" - 34 credits, "Partial dentition of the jaws" - 34 credits, "Complete edentulous jaws" - 32 credits, "Defects of the organs of the maxillofacial region" - 32 credits and an optional component - "Digital Dentistry" - 2 credits, "Fundamentals of Gnatology" - 2 credits, "Gerontostomatology (orthopedic)" - 2 credits, "Medical Law, Management, Marketing and Audit in Dentistry" - 2 credits.

The distribution of disciplines by semester is carried out by the Educational and Methodological Department.

The structure of the EP is integrated horizontally - these are the issues of receiving orthopedic patients; vertically - the formation of knowledge within two years from simple to complex - from uncomplicated forms to severe comorbidities, the gradual formation of clinical experience so that the graduate could independently make an effective and optimal decision in a non-standard situation

In accordance with the Classification of Specialties, the specialty is legitimate and persons who have completed training in the residency program and successfully passed the final certification are awarded the qualification "stomatologist - orthopedist" and a certificate of completion of residency is issued.

The EP of the residency complies with the International requirements and level 7 of the National Qualifications Framework in Medical Education and the Framework for Qualifications in the European Higher Education Area (*ESG*).

According to the results of the survey, 89.47% of residents are completely satisfied with the provision of methodological and didactic materials, additional literature for preparation for classes by teachers, 10.53% are dissatisfied. 84.2% of residents are fully provided with the necessary educational literature, 5.3% are partially provided, 10.5% are not fully provided. 68.4% of residents are satisfied with the conditions and equipment of classrooms, classrooms of this educational organization, and 31.6% are partially satisfied. And 78.9% of residents have personal access to equipment (training and real) in order to master practical skills in their specialty, 21.1% partially have it.

The organization has its own dental clinic of the School of Dentistry, the Simulation Center of the School of Dentistry, and also concluded 3 contracts with medical organizations. And to the question of the questionnaire "Is there enough time for practical training (supervision of patients, etc.)", 100% of residents answered in full agreement. At the same time, 73.68% of residents claim that after the completion of classes, the teacher provides feedback (listens to your opinion, conducts mini-questionnaires, work on mistakes), and 26.32% of teachers give feedback sometimes.

At the same time, to the question "Do representatives of residents participate in the development of educational programs?", the experts received the answer: "Yes".

*The schedule of training sessions is fully satisfied by 94.74% of the residents surveyed.*

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

From interviews with vice-rectors, it is known that the vice-rector for academic activities is the responsible vice-rector for the educational activities of the residency. Clinical sites are selected by the Department of Orthopedic Dentistry, and their suitability for training in the residency program is determined by the Department of Clinical Work.

Training of residents under the educational program 7R01145 - " Orthopedic dentistry " at the Department of Orthopedic Dentistry will be carried out at the clinic of the School of Dentistry and at the dental clinics of Saradan LLP (contract No. 286 dated 09/01/2021), SS TEAM LLP (No. 2022), CSE on REM "Emergency Medical Service" of the Public Health Authority of Almaty (contract No. 552 of 09/01/2022).

Practical training is carried out through the daily personal participation of a young specialist in medical activities using diagnostic and treatment methods based on evidence-based medicine, mastering the practical skills provided for by the training program, and promoting a healthy lifestyle.

This is also facilitated by mentoring, which is carried out in the organization. *89.5% of residents fully agree that the teacher (mentor, curator) of this educational organization is an example for them as a professional doctor, a person (ethics, communications, appearance, speech), and 10.5% completely disagree*

*100% of the interviewed residents have enough time for practical training (patient care, clinical rounds, clinical reviews, assisting in operations). Of all the respondents, 78.9% rate the organization of clinical training as "excellent", 10.5% had a good impression, 10.6% were not satisfied. In turn, 93.75% of the interviewed teaching staff fully agree that residents have free access to patients at clinical sites and all conditions for improving practical skills, 6.25% agree partially.*

The ability to work in clinics and independently engage in medical activities increases the responsibility of residents to the patient and colleagues.

To improve the educational process, various teaching methods are used to achieve the final result of education. Innovative teaching methods that are practice-oriented are being actively introduced. Resident training methods include: seminars, webinars, conferences, case studies, problem-based learning (PBL); case-based learning (CBL), team-based learning (TBL); simulation-based learning, role-playing, brainstorming, portfolio, combined survey, presentations, projects, etc.

At the Department of Orthopedic Dentistry, the expediency of using one or another teaching method to achieve the final result is displayed in a syllabus. The syllabuses are evaluated by the group "Educational programs (including teaching methods)" of the CEP according to the approved Syllabus Examination Act (Drafting, discussion and approval of syllabuses Protocol AS No. 12 of 08.25.2022). Analysis of teaching methods, examination of the quality of educational programs is regularly carried out by departments and CEP, with mutual visits to classes, conducting open classes, discussing them at meetings of the department, with the participation of teaching staff in scientific and methodological seminars, conferences

The average duration of a resident's daily work is 9 academic hours. The practical part of education occupies 90% of training.

*Of the 19 residents surveyed, 94.68% answered that teachers in the classroom use active and interactive teaching methods quite often, 26.32% believe that rarely or sometimes.*



Teachers in the questionnaire indicated that in the process of teaching residents they use a variety of teaching methods, but more often analysis of situational problems (78.13%), compiling and solving cases (64.06%), work in small groups (64.06%), problem-oriented learning (60.94%), interactive learning (60.94%), oral questioning of students (54.69%), oral discussion of the topic (50%), test solving (43.75%), practical training in clinical skills in a clinical training center (42.19%).

**Conclusions of the EEC according to the criteria.** Out of 30 standards conform: fully -28, partially - 2, do not comply - 0.

**Standard 2: completed**

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

- 1) Develop quantitative indicators of R&D performance by residents (Standard 2, paragraph 2.2.1.).
- 2) Increase the list of elective disciplines on an interdisciplinary basis (Standard 2, paragraph 2.4.2.).

### **Standard 3: RESIDENT ASSESSMENT**

#### **Evidence of Compliance:**

##### **3.1 Evaluation methods**

The policy and methods for assessing residents of EP 7R01145 - " Orthopedic dentistry " are reviewed and approved at a meeting of the CEP of the Faculty of Postgraduate Education. The general policies, principles, methods for assessing residents are reflected in the following internal regulatory documents of KazNMU:

- Academic policy of the university No. 418 of 09/01/2022;
- "Regulations on the ongoing monitoring of academic performance, intermediate and final certification of students of NJSC "KazNMU named after S.D. Asfendiyarov" (Meeting of AC Minutes No. 5 dated 25.08.2022);
- SOP "Maintaining an electronic journal" (Meeting of the AC, Minutes No. 1 of 10/31/2022)
- SOP "Development and approval of a system for assessing educational achievements" (AC meeting, Minutes No. 12 of 08.25.2022)
- SOP "Formation, examination and approval of instrumentation in the format of testing" (AC meeting, Minutes No. 1 of 10/31/2022)
- SOP "Organization and conduct of an exam in the form of testing, including remotely" (Order of the Vice-Rector for Academic Affairs No. 200 dated April 26, 2021)
- SOP "Rules for monitoring the progress of a student" (Order of the Vice-Rector for Academic Affairs No. 301 dated November 11, 2019).

The list of compulsory disciplines for conducting the final control during the period of intermediate certification is regulated by the disciplines passed and reflected in the working curricula. The number of test questions is compiled according to the number of credits passed by disciplines. The system for monitoring the educational achievements of residents at the University includes: current and midterm monitoring of progress, intermediate certification of residents and final state certification. The assessment of the educational achievements of residents was carried out on the basis of measuring the level of competence formation in the form of: control questions, test tasks, situational tasks, and clinical situations.

At the first lesson in the disciplines, teachers bring to the attention of the residents the

evaluation criteria. The forms of carrying out all types of control are displayed in syllabuses. Electronic versions of syllabuses, EP are available in AIS "Sirius". Information about the point-rating system of assessment is available on the website [www.kaznm.kz](http://www.kaznm.kz). Current control is evaluated according to the evaluation list, checklist, midterm control is calculated according to a 100-point rating system. Evaluation sheets for all types of assessment are discussed at a meeting of the department, approved at a meeting of the CEP. The form of the final control in the disciplines is presented in the form of a two-stage exam - from a mini-clinical exam and in the form of testing. The final state certification is carried out in 2 stages: comprehensive testing (in all disciplines) and a practical (mini clinical) exam at the bedside at the NCIE. The results of the residents' achievement are displayed in the electronic journals of the AIS Sirius system, and the progress is analyzed.

A resident who has completed the course program in full, but has not scored the minimum transfer score, is given the opportunity to re-study individual disciplines in the summer semester on a paid basis and re-take exams in order to increase the average score.

Responsibility for the implementation of the policy for assessing the educational achievements of residents lies with the teaching staff of the department, head of the department, office registrar.

A resident with an admission rating of at least 50 points is allowed to take the exams. Exams are held as scheduled. The number of exams is regulated in accordance with the State Educational Standard of the Republic of Kazakhstan 2022. The form of the exams is determined by the decision of the CEP, the Academic Committee. The content of the examination materials (test tasks, checklists, etc.) is developed by the staff of the department, approved by the CEP of the faculty of postgraduate education.

In case of disagreement with the results of the rating of the final control, the final attestation in the discipline, the resident has the right to file an application for an appeal addressed to the chairman of the appeal commission. The procedure and procedure for conducting an appeal is regulated by the rules for conducting appeals of the Academic Policy of KazNMU.

After the exams, a survey of residents is conducted to study their opinion on the quality of teaching the discipline, the exam procedure, the results of the sessions are analyzed by the department and the Council of the Faculty of Postgraduate Education. During the final state certification to assess the educational achievements of residents, the commission will include practical healthcare specialists in the educational program "Dentistry", external examiners.

A review of the website showed that its pages contain the necessary information for residents of the EMCD and there is information that is regularly updated. Review of control and measuring instruments is carried out at several levels - within the department - from an employee of the department, within the university - from a university employee or external review, when employees of external organizations, associations or employers act as reviewers. Reviews are recorded at a meeting of the department or meetings of the COP.

*89.5% of the surveyed residents are satisfied with the methods of assessing knowledge and skills, and 10.55% would like to change*

### **3.2 Relationship between evaluation and learning**

A visit to KazNMU members of the EEC showed that the methods used to assess the competencies of students at KazNMU are prescribed in syllabuses for disciplines that are discussed and approved at departmental meetings, CEP, AC, SC.

Interviews with teachers confirmed that an objective assessment of theoretical knowledge is carried out using an oral survey and testing, practical skills - a mini-clinical exam using checklists. Residents also noted that assessment methods are fully comparable with teaching and learning methods and cover the assessment of all competencies, both during practical classes and during exams.

*According to the survey data, 73.7% of respondents claim that after the completion of classes, the teacher constantly provides feedback (listens to your opinion, conducts a mini-questionnaire, corrects mistakes), and 26.3% said it happens sometimes*

In the process of mastering the educational program, the resident is trained using phantoms, simulators, computer programs, practical work directly with patients, etc. Confirmation of the effectiveness of the education received is based on the results of feedback from the resident - an anonymous survey.

During a visit to the simulation center, Nailya Anuarovna Talkimbayeva showed evaluation sheets for each practical skill.

*The EEC conclusions on the criteria. Out of 11 standards conform: in full - 11.*

*Standard 3: completed*

*There are no recommendations for improvement identified during the external visit.*

#### **Standard 4: RESIDENTS**

##### **Evidence of Compliance:**

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

The conditions for admission of residents to KazNMU are prescribed in the "Rules for admission to residency for 2022-2023" and posted on the website [www.kaznmu.kz](http://www.kaznmu.kz). Admission, examination and appeal commissions have been established at the University to receive documents and organize entrance examinations.

Baimakhanov Abylai Niyatovich, Dean of the Faculty of Postgraduate Education, spoke about the policy for the admission of residents: "The resident consulting service is represented by the admissions committee, the dean's office (dean, deputy dean, chief specialist, specialist), employees of the registrar's office, DIT, libraries, curators, clinical mentors, the military department, accounting, head of legal and passport and visa work. The regulatory framework for the admission of residents, and KazNMU is contained on the website of the university. This provision is being reviewed depending on the changes in the current directive legal and regulatory documents, regulating the policy of selection of students of residency. The EP of residency assumes a clinical orientation of education and in-depth specialized training in the specialty 7R01145 - "Orthopedic dentistry". The admission of citizens to residency is carried out on a competitive basis based on the results of entrance examinations. Applicants to residency take an entrance exam in their specialty. During admission, the personal achievements of the applicant, the results of research work, etc. are also taken into account.

In the 2022-2023 academic year, the Chairman of the Examination Commission for Dental Specialties was Prof. Altynbekov K.D., examiner - employee of the Department of Orthopedic Dentistry, Candidate of Medical Sciences, Associate Professor Nysanova B.Zh. The examination was recorded on camera; the video materials were transferred to the selection committee. Exams were taken face-to-face. The composition of the appeal commission for admission of entrance examinations to residency for the 2022-2023 academic year in EP 7R01145 - "Orthopedic Dentistry" included Candidate of Medical Sciences, Associate Professor Bairov M.K.

According to EP 7R01145 - "Orthopedic Dentistry", the first enrollment will be carried out in the 2023-2024 academic year.

Since there was no recruitment for residency under the educational program 7R01145 - "Orthopedic Dentistry", there was no experience of involving residents in the process of developing a policy for the admission and selection of residents

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

The number of accepted residents is regulated by the state order of the Ministry of Health of the Republic of Kazakhstan for the training of medical personnel, the possibilities of clinical, practical training, the maximum allowable workload for curators, the provision of educational, educational, methodological and scientific literature, the capacity of clinical bases, as well as the material and technical resources of the University.

Reception of residency students is carried out by the selection committee.

The number of accepted students is agreed with the relevant stakeholders, taking into account the needs of practical healthcare and the labor market in graduates of the educational programs being implemented, therefore, annually, the University sends a request for the need for scientific and pedagogical personnel and clinical residency specialties in the Department of Science and Human Resources of the Ministry of Health of the Republic of Kazakhstan. In accordance with the legislation of the Republic of Kazakhstan, the university has the right and carries out admission in excess of the state order on the basis of contracts with tuition fees at the expense of individuals or legal entities.

#### **4.3 Support and advice to residents**

The University has a system of academic consulting for residents at the departments: before the start of each examination session, the department develops and approves a schedule for consultations on disciplines by experienced teachers, associate professors, professors. By order of the vice-rector of the academic block, the resident is assigned a curator from among the teaching staff of the department, who provides the functions of an academic mentor, participates in the formation and implementation of an individual curriculum, manages the educational and scientific activities of the student, and assists in employment. In addition, a clinical mentor in a medical organization is assigned to the resident, coordinating the training of the resident in the process of mastering practical skills and competencies in accordance with the EP. Information about teachers is posted on the AIS KazNMU portal. Residents are consulted based on the results of assessment and questioning of residents. During the academic year, it can be presented both in person and remotely (on online platforms, in chats, etc.).

The program "Healthy University", a social program to support students and faculty "Health of teaching staff" and "Health of students", "Program for the prevention and early detection of tuberculosis among students of KazNMU", a program to provide discounts for various groups of residents on a paid basis are being implemented.

Those in need are provided with social assistance in accordance with the "Regulations on the provision of social assistance to students" (Decision of the Board, protocol No. 1 of 02/01/2022), social assistance to students is assigned by order of the rector by decision of the Economic Council in the form of: one-time material assistance, provision of free accommodation in a hostel University (orphans), discounts on tuition fees - for special categories of residents.

Residents receive information about support services based on the information provided at the stands of the departments, the dean's office and the University's website [www.kaznmu.kz](http://www.kaznmu.kz), where there is also a rector's blog, an internal information forum, and information about the National Helpline for Children and Youth (150). When providing social support, counseling, the principle of

confidentiality is strictly observed.

#### **4.4 Representation of residents**

Participation in the development and evaluation of the EP is carried out by residents of the residency by providing systematic feedback and representation in the CEP, AC, AC and SC of the university.

Resident students have the opportunity to attend meetings of advisory bodies, actively participate in the discussion of issues in the context of their specialty. The proposals and recommendations of the students are necessarily taken into account by the members of the advisory bodies and taken into account when forming the final decision of the meeting.

*According to the results of the survey, 73.7% of residents believe that program managers and teachers constantly involve students in the work of advisory bodies (methodological council, academic council, educational program committees), do not involve -10.5%, involve, but sometimes -5.3 % do not know about it - 10.5%.*

#### **4.5 Working conditions**

The teaching load of residents at the Department of Orthopedic Dentistry is planned in accordance with the Law of the Republic of Kazakhstan "On Education". The class schedule from 08.00 to 17.00 is regulated by educational programs developed on the basis of the State Educational Standard of the Republic of Kazakhstan - 2022, sanitary and epidemiological rules and norms, curricula and recommendations of health and education authorities. The relationship between training and participation of a resident in the provision of medical care is regulated by the "Rules for the organization of the educational process in the residency of KazNMU".

The schedule of classes for the departments is formed by the Department of planning and control of the educational process. In the future, the schedule of classes is compiled according to the approved form by the departments, agreed with the methodologist of the Department of planning and control of the educational process. The form of conducting contact classes is carried out by the decision of the meeting of the department. 10 employees of the department will be involved in conducting classes, including 1 MD, professor, 2 MD, associate professors, 4 MD, associate professor, 2 assistants, 2 masters with sufficient practical experience in the educational program

The volume of study hours is distributed by type of work in the following ratio: contact hours - 3, independent work under the supervision of a mentor - 22, independent work of a resident - 5 hours. Work in residency is the main and dominant duty of the resident.

According to the order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. KR DSM-270/2020 "On approval of the rules for placing a state order, admission for training and training of medical personnel in residency", resident doctors studying under the state educational order are paid a scholarship.

Residents are provided with holidays between academic periods. The duration of holidays during the academic year is six weeks, after the final state certification of at least 4 weeks, with the preservation of the scholarship. It is allowed to combine education with work for 0.5 rates in areas close to his future specialty in his free time from study with the consent of the curator, head of the department and residency department. If they have a specialist certificate, residents of the 2nd and 3rd years of study are allowed to conduct independent medical activities in public and private medical institutions, outside of school hours.

When interviewing residents, during meetings with employees of the department of postgraduate education and university management, it was found that residents have the opportunity to express their

opinions and wishes regarding their participation in the decision-making process, ensuring academic quality and other professional, financial and social issues. All issues raised and discussed at these meetings are resolved in a timely and appropriate manner.

*Of the 19 residents surveyed, 94.7% are completely satisfied with the organization of teaching (the amount of time for practical training, the location of the seminars, the topics of the seminars), and 5.3% of the respondents are partially satisfied.*

**Conclusions of the EEC according to the criteria.** Comply with 30 standards: fully - 30.

**Standard 4:** completed

**There are no recommendations for improvement identified during the external visit.**

## **Standard 5: TEACHERS**

### **Evidence of Compliance:**

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

The total number of teachers and mentors at the Department of Orthopedic Dentistry - 24 people, including full-time - 22, part-time - 2. Degrees - 44%

The personnel policy of KazNMU is guided by the following legal documents: "Rules for the search, selection, selection of admission and adaptation of university employees" (Decision of the Board No. 10 dated December 09, 2019) "Personnel policy of KazNMU" (order No. 7 dated October 14, 2019); "Qualification requirements for the positions of the teaching staff of KazNMU" (Order of the Rector No. 281 dated 05.06.2019), "Regulations on the teaching load" (Meeting of the Academic Committee No. 12 dated 08.25.2022), "Regulations on mentoring" ( Order of the rector No. 231 of 09/16/2019).

The Department of Orthopedic Dentistry has a sufficient number of teachers for the successful implementation of the educational program for residency in the educational program 7R01145 - "Orthopedic Dentistry". To work with residents, 10 employees of the department will be involved, including 1 MD, professor, 2 MD, associate professors, 4 MD, associate professor, 2 assistants, 2 masters, having sufficient practical experience in the educational program. All teachers are active specialists in their field, conduct clinical work, supervise or advise patients, conduct instrumental studies, peer review of case histories, conduct scientific work, and have scientific publications.

At the Department of Orthopedic Dentistry, the ratio of the number of teachers to the number of residents is 1: 3, as well as the ratio of the number of mentors and residents

*When questioning teachers, it was found that 89.28% are completely satisfied with the organization of labor and workplace, and 10.71% of teachers are partially satisfied. Also, 84.38% of teachers claim that they can fully realize themselves as professionals in their specialty in this educational institution, and 10.94% agree partially, 3.13% partially disagree. 78.57% of teachers have the opportunity to engage in scientific work and publish the results of research. 57.14% of teachers are completely satisfied with the salary, 25% are not satisfied.*

#### **5.2 Teacher Commitment and Development**

The work of the teaching staff of the Department of Orthopedic Dentistry is carried out according to the individual plans of teachers (IPT), which is the main document regulating the activities of each teacher and is compiled on the basis of the annual work plan of the department.

Evaluation of the activities of the teaching staff is carried out at the level of the department through the implementation of the IPT and through intra-departmental control. The University

systematically conducts a survey "Teacher through the eyes of the student." At the level of the School of Dentistry, the department's report on all activities is heard at the School Council in accordance with the plan. At the University level, every 5 years a competition of teaching staff for a position is held.

When meeting with the teaching staff of the university, it was found out that one of the priority areas for the development of teaching staff is to increase the level of pedagogical skills. The system of professional and pedagogical improvement of the teaching staff of KazNMU includes the following units: School of Pedagogical Excellence. H.S. Nasybullina, School of Public Health. H. Dosmukhamedova, Institute of Postgraduate Education, Center for Communication Skills. Julia Draper, Office for Human Resources Development, Department of Academic Quality, winter and summer schools organized by the DAD, which contribute to the formation and development of the competence and potential of teaching staff.

During the academic year, KazNMU systematically conducts training seminars for the teaching staff of the university on the organization of the educational process of methodological work, interactive teaching methods (TBL, PBL, CBL; "brain ring", case study, "brainstorming", "visual organizers" etc.).

The teaching staff of the department and faculty develops and implements innovative teaching methods, has acts of implementation in practical healthcare (Acts of implementation 2018-2023), develop video lectures and upload them to (Video lectures of the Department of Orthopedic Dentistry). <https://www.youtube.com/channel>.

The professional development program implemented at the IPE University through retraining and advanced training courses determines the contingent of students at the rate of 20% of the total number of teaching staff. Thus, each employee of the department, with and without separation (online) from the main activity, undergoes full training in the relevant EP programs at least once every five years.

In order to verify the data of standard 5, at a meeting with the head of the personnel department and during interviews with teachers, experts received an opinion on approaches to the development of the pedagogical competence of teachers, motivation to work with residents, mentoring, which includes the organization of advanced training cycles in pedagogical skills for mentors, teachers (certificate of completion of the cycle of 60 hours), material incentives in the form of bonuses to employees. However, given the level of EP - residency, the experts identified a limited opportunity for international professional internships for teaching staff.

*There is an opportunity for career growth and development of teacher competencies in the organization - 71.43% of the surveyed teachers answered completely agree, and 25% partially agree with this and disagree - 3.57%. 39.29% studied at professional development programs during this year, 53.57% more than 3 years ago, 7.14% more than 5 years.*

*The organization implements social support programs for teachers - 57.14% answered that "yes, such programs exist", 25% of respondents do not know about this and 17.86% doubt the answer.*

**Conclusions of the EEC according to the criteria.** Out of 7 standards conform: fully - 6, partially - 1, do not comply - 0.

**Standard 5: done**

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

1) Increase the number of international clinical fellowships (Standard 5, paragraph 5.2.4.).

## **Standard 6: EDUCATIONAL RESOURCES**

### **Evidence of Compliance:**

#### **6.1 Logistics and equipment**

The University, including the Department of Orthopedic Dentistry, has a rich material and technical base for the professional training of residents in the educational program 7R01145 - "Orthopedic Dentistry" and includes the presence of lecture halls, study rooms, a scientific library, information technology tools, cultural and social facilities spheres, the university dental clinic of the School of Dentistry, the Simulation Center of the School of Dentistry and clinical bases under the contract of Saradan LLP (contract No. 286 of 09/01/2021), SS TEAM LLP (No. emergency medical care " Public Health Authority of Almaty (agreement No. 552 of 09/01/2022).

Lecture halls are equipped with the necessary technical support - stationary multimedia projectors and are designed for 2040 seats. All clinical bases have training rooms for 6-10 seats. The classrooms are fully equipped for practical training with cabinet furniture, teaching aids, personal computers.

According to the program of visits of the EEC KazNMU, they visited the Simulation Center within the framework of the program of the Ministry of Health of the Republic of Kazakhstan 003/109 "Creation of educational and clinical centers at state medical higher educational institutions", the library, while visiting the dental clinic of the School of Dentistry, they visited the Simulation Center of the School of Dentistry.

*An analysis of the residents' survey showed that 68.42% of residents were completely satisfied with the conditions and equipment of the classrooms and classrooms of this educational organization, and 31.58% were partially satisfied. To the question whether the resident has access to equipment (training and real) in order to master practical skills in the specialty, they fully answered -78.95% and partially have access - 21.05%. The organization of clinical training in the opinion of 78% of residents is excellent, 10, 53 are good, and 20.53% are satisfactory. 63.2% of residents are fully satisfied with the library fund of KazNMU, and 15.8% are partially satisfied.*

*76.56% of teachers fully agree that the organization has enough equipment and resources to conduct training for residents under accredited programs, 20.31% agree partially*

#### **6.2 Clinivcal sites**

According to the program of visiting EEC KazNMU, 7 clinical training bases were visited: Dental Clinic "Dobrodent", Dental Clinic "Eurodent", Family Dental Center "Vita Dental Clinic", Children's Dental Clinic, City Clinical Hospital No. 5, maxillofacial and ENT surgery; Dental clinic of the School of Dentistry, SS Team Clinic, where training is provided in 4 educational programs.

For the implementation of the EP in the specialty 7R01145 - "Orthopedic Dentistry", the clinical bases of the Department of Orthopedic Dentistry are the dental clinic of the School of Dentistry with the Simulation Center of the School of Dentistry equipped with the latest technology and modern, well-equipped, with the ability to solve any local problem or develop and implement a comprehensive rehabilitation plan, with the utmost strictness following the indications for prescribing all procedures and using modern methods of thorough diagnosis and competent treatment of clinical facilities under the agreement of Saradan LLP (agreement No. 286 of 09/01/2021), SS TEAM LLP (No. 18 of 09/01/2022), CSE on REM "Ambulance Service" of the Public Health Authority of Almaty (contract No. 552 of 09/01/2022).

The dental clinic of the School of Dentistry is ISO 9001:2015 certified and has an international certificate from CERT International, Slovakia (recertified in 2020).



During a conversation with the head of the Department of Clinical Work Tuleev Bakyt Izyadinovich, it was found that contracts with clinical bases are drawn up taking into account the needs of the university in the profile of patients, the level of medical care provided by medical institutions, the availability of study rooms, laboratories. Particular 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. The Department of Clinical Work annually updates cooperation agreements

The residents showed their commitment to the University, during the conversation they were distinguished by their activity, showed their command of the English language, answering the questions of the foreign expert Katrova L.

### **6.3 Information technology**

In accordance with the plan "On the implementation of the KazNMU Informatization Concept" based on the introduction of "cloud technologies", an agreement was concluded for the provision of a hosting platform service from the Directorate of Information Systems of Kazakh telecom JSC - this is a virtual disk space - VPS services and a virtual server. These resources include: storage, processing power, memory, network bandwidth, virtual machines, and software.

The University has formed bases of educational information resources to which there is access from the internal network of the University. The distance learning system is based on the Moodle program, Microsoft Teams 365, Classroom, Zoom, which provide free communication between teachers and residents via the Internet.

In KazNMU, the computer park of the university has been updated by 60%, a system for identifying books using a barcode in the library is working, a project has been implemented to create a Situation Center with an IP video surveillance system.

KazNMU has a *scientific library* Fund of the library of KazNMU more than 1,428,434 copies of literature, 13952 copies of electronic textbooks. The library's electronic catalog is available in all academic buildings via the Internet - from the library's website <http://lib.kaznmu.kz>. Since 2019, the KazNMU library has access to: Web of Science - [webofknowledge.com](http://webofknowledge.com), Elsevier - Science direct - [sciencedirect.com](http://sciencedirect.com), Scopus - [scopus.com](http://scopus.com), Cochrane Library, DynaMedPlus, MEDLINE Complete, eBook Clinical Collection, Republican Interuniversity Electronic Library - [rmeb.kz](http://rmeb.kz), Database epigraph data. Residents have the opportunity to receive medical care. The scientific library is equipped with 135 computers, 1 laptop, 1 video projector, 2 screens, duplicating and copying equipment.

*A survey of residents found that 63.2% were completely satisfied with the library fund of KazNMU, and 15.8% were partially satisfied.*

### **6.4 Clinical teams**

Residents in the specialty 7R01145 - Orthopedic Dentistry, daily develop the skills of coordinating work with colleagues and other healthcare professionals during examination, treatment and emergency care for patients in clinics. The resident is present during the consultations, carries out the instructions of senior colleagues within the framework of his competence. The result of the resident's activity is checked by the teacher and reflected in the diary-report.

*Students have free access to patients at clinical sites and all the conditions for improving their practical skills - 85.71% of teachers fully agree with this, 14.29%% partially agree.*

### **6.5 Medical Research and Advances**

Since the formation of scientific competence is one of the results of the training of residents, the

acquisition of experience in conducting scientific work of residents in the specialty 7R01145 - "Orthopedic Dentistry" begins with the "Learning through Research" program. The result of the training is evaluated according to the output data - this is an article, thesis, report, participation in the work of the scientific circle of the department. Residents participate in scientific practice, starting with the analysis of literature data, processing clinical material, entering information into databases, and ending with writing an article and making a scientific report. Residents can be involved in scientific research not only by the curator, but also by the doctors of the base institution.

The Department of Orthopedic Dentistry involves residents of the educational program 7R01145 - "Orthopedic Dentistry" in conducting scientific medical research on grant funding, within the framework of intra-university grants planned by the Department.

*Interviews with 28 teachers, including 15 full-time teachers, showed that there are no problems in the management of education, depending on the specific base (the admission of residents to equipment, a sufficient number of thematic patients, time to maintain medical records, independent work). And the residents in the questionnaire to the question whether they are currently engaged in scientific work under the guidance of their teacher or mentor, 78.9% of the respondents answered: "Yes", 10.5% have started planning the implementation of research, 10.5% of the residents the teacher did not offer to engage in research .*

#### **6.6 Expertise in the field of education**

The development of expertise in educational assessment and research in the discipline of medical education is a systemic process and is ensured through the joint work of the DAD (approval of the EP), the Faculty of Postgraduate Education (implementation of the EP), the Committee for Educational Programs (CEP) (planning, development and evaluation of the EP), EMA ( EP monitoring). The CEP includes teachers, representatives of professional associations, employers, and students.

Employees of the University and the department, in particular, the associate professor of the department Shayakhmetova M.K. were trained in writing educational programs and got acquainted with the experience in the formation of an EP at Nazarbayev University.

In order to develop the skills of peer review of residency programs at the University, teachers, members of the CEP were trained on the basis of the School of Pedagogical Excellence (SPE) named after. H.S. Nasybullina, winter and summer Schools organized by DAD.

The mechanisms for motivating the staff of the department to study the peculiarities of training in residency are raising the professional level of teaching staff, self-improvement, and the opportunity to become a clinical mentor.

*According to the results of the survey, 28 teachers are completely satisfied with the work of the department of postgraduate education, 75% of the respondents, 20.31% - partially, the rest - are not satisfied or doubt the answer.*

#### **6.7 Training in other institutions**

The University implements the programs "Academic mobility of students" and "Visiting professor of KazNMU" in accordance with the principles of the Bologna process and in accordance with the goals and needs of students and staff in compliance with ethical principles. The implementation of these programs contributes to the internationalization of education and integration into the global educational space and is in line with the University's Strategic Plan. "Regulations on the academic mobility of residents, teachers and employees", (minutes No. 9 of the Decision of the Board of NJSC KazNMU dated November 11, 2019) determines the general procedure and conditions for organizing academic mobility of residents and teaching staff in

KazNMU and was developed in order to improve the quality of education, further expand and strengthen cooperation between foreign and Kazakh universities and universities

To ensure the academic mobility of residents and the recognition of educational programs (all levels and forms of higher and postgraduate education) in the European educational space, Kazakh loans were recalculated into ECTS loans.

The academic mobility of the teaching staff was carried out by prof. Altynbekov K.D. at the Ryazan State Medical University in 2021 Associate Professor Nysanova B.Zh. and associate professors Shayakhmetova M.K., Kulmanbetov R.I. in 2020, academic mobility took place online at the West Kazakhstan Medical University named after. M.Ospanov in 2020

There was no academic mobility of residents in view of the fact that the admission of residents in the EP of the specialty 7R01145 - "Orthopedic Dentistry" will be carried out in the 2023-2024 academic year for the first time.

***Conclusions of the EEC according to the criteria. Out of 21 standards conform: fully - 21.***

***Standard 6: completed***

***There are no recommendations for improvement identified during the external visit.***

## **Standard 7: EDUCATIONAL EVALUATION**

### **Evidence of Compliance:**

#### **7.1 Monitoring and evaluation mechanisms**

The University has a multi-level EP evaluation system, including constant monitoring by the residency department, as well as by the Department of Academic Affairs. Academic achievements are systematically analyzed according to the mission and learning outcomes of the EP. The University monitors progress based on the results of sessions, the results of the state final exam and intermediate certification. Independent monitoring of the final learning outcomes is carried out at the NCIE and by surveying employers. The monitoring results are heard at the Academic Council of the University and the Academic Council, on the basis of which corrective measures are developed.

In order to monitor the implementation of the EP and identify problems, including those related to resource provision, the following documents are approved and updated at the University: SOP "Assessment and analysis of educational programs of KazNMU" (meeting of AC No. 3 dated November 26, 2020), SOP "Formation, discussion, approval of CED. Recording for a component of your choice" (meeting of the AC dated August 12, 2022), Regulations on methodological work ((order of the Vice-Rector for AD No. 498 dated November 26, 2020), SOP "Drafting, discussion, approval of syllabuses" (order No. 12 of 25.08.2022) and SOP "Monitoring the quality of the educational process, the use of active teaching methods and multilingualism in the departments" (order No. 4 of 14.01.2020).

EP 7R01145 - "Orthopedic Dentistry" was adjusted taking into account the comments of all interested parties and entered into the Register of Educational Programs. On the recommendation of independent experts and employers, the description of the content of disciplines was finalized and the list of disciplines of the elective component was optimized. This procedure is carried out annually, after which disciplines are introduced into the catalog of elective disciplines (CED), which allow to enhance the achievement of the expected final RE in the EP.

*An analysis of the survey of residents and teachers showed that, according to 78.95% and 67.19%, respectively, accreditation of an educational institution and a study program is an important and necessary mechanism for ensuring the quality of education in residency, and 21.05%*

*and 28.13% doubt answer and 23.44% of teachers expressed the opinion that yes, it is, but in combination with other*

## **7.2 Feedback from teachers and residents**

Feedback from consumers is maintained in each structural unit. According to the requirements of the QMS, in each structural unit there is a box for complaints and suggestions, a performance improvement log (form 19) is kept, in which all inconsistencies, claims, consumer complaints, their causes, and the implementation of corrective actions are recorded.

Feedback on the EP educational program 7R01145 - "Orthopedic Dentistry" at the Department of Orthopedic Dentistry is carried out once a year; the head department and teacher for residency are responsible for collecting and processing the results of the discussion.

The Department of Academic Development conducts a survey of the heads of residency departments, heads of structural divisions, teachers and residents to assess all components of the educational program (perception of the program, mastering the program and achieving learning objectives). The assessment of the perception of the educational program is analyzed based on the results of a survey of students by year of study, regarding their impressions of the content of the EP and the learning process as a whole. The questionnaire includes a list of questions related to the quality of the educational process. The results of all surveys are discussed at meetings of the Quality Council. Questionnaires are periodically updated and updated. In the process of monitoring, on the basis of the data obtained, the educational program is adjusted, taking into account the main priority areas in education, by the responsible structural divisions for their implementation.

For feedback with teachers and residents, the rector's blog is used, where students and university staff receive answers to their questions about the conditions for the implementation of the EP. Representatives of the residents are members of the Faculty Council, CEP, Academic Council, where they participate in discussing the implementation of the educational program.

Feedback results are analyzed and discussed at the meetings of the departments, CEP, Academic Council.

Also, for the purpose of feedback, an annual survey of employers is conducted to assess the degree of satisfaction with University graduates, to identify the compliance of the educational program with the real requirements of the labor market, opportunities for its improvement, as well as the degree of compliance of graduates' competencies with positions in the workplace.

## **7.3 Results of residents and graduates**

There was no graduation from the EP in the specialty 7R01145 - "Orthopedic Dentistry".

## **7.4 Stakeholder Engagement**

Stakeholders in the evaluation and improvement of the EP at KazNMU are:

- the Ministry of Health of the Republic of Kazakhstan, which conducts an independent assessment of the knowledge of residents;
- employers are medical institutions of the Republic of Kazakhstan that promote the employment and adaptation of graduates to the labor market, annually there is a correspondence about the quality of training of residency graduates, reviews of doctors on the results of training are collected;
- representatives of the Committee for the Control of Medical and Pharmaceutical Services and representatives of practical healthcare - KazNMU widely uses the principle of independent objective assessment, involving as chairmen, members and examiners of the state attestation commission for the final attestation of graduates;

- representatives of public associations of doctors - organize scientific and practical conferences on topical issues of medical education and EP.

To study the opinions of stakeholders, activities are carried out: career guidance work among school graduates, questioning and interviews with applicants, questioning of students, employers, teaching staff, university graduates. Based on the analysis of the activities carried out, measures are formed to improve activities and meet the needs, as a result of which the goals and objectives, as well as the mission of the university, are updated. Taking into account the opinions of representatives of practical health care who are members of the AC and the AC, as well as according to the trajectory of training in the specialty, a catalog of elective disciplines is formed and approved annually. The number of hours of the elective component (elective disciplines), their correlation with the compulsory disciplines are regulated by the State Educational Standard of the Republic of Kazakhstan

Interviews with 11 employers included such questions as: knowledge of the mission of the university, 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 residency graduates, etc.

#### **7.5 Approval procedure for educational programs**

Examination of the EP in the specialty 7R01145 - "Orthopedic Dentistry" is carried out according to the mechanism for approving the EP developed at KazNMU:

- CEP for compliance with SCES, carries out a systematic study and comprehensive assessment of the EP in order to improve. and quality assurance (determining the value of the program, achieving goals, implementing tasks, the degree of compliance with the needs of society, the requirements of employers, the effectiveness of teaching methods), as well as assessing educational and methodological support;

- CED, taking into account pre- and post-requisites, evaluates the choice of methods for assessing the learning outcomes of residents, taking into account all the proposals of stakeholders.

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

**Standard 7: completed**

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

1. Expand the representation of stakeholders in advisory and collegiate bodies. (Standard 7 Clause 7.4.2.)

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

#### **Evidence of Compliance:**

##### **8.1 Management**

KazNMU has a developed management system that provides for the fulfillment of the mission and goals, maintains institutional efficiency and integrity, creates and maintains an environment for learning and conducting research and creative activities.

On the basis of the LSI RK, in order to implement the mission and strategic plan of the university for 2019-2023, the Regulations on structural divisions were developed and approved, which determine the main directions of their activities, requirements for administrative and legal

consolidation, its status in the organizational structure of the university management dated July 15, 2020, list of normative documents; job descriptions of employees, which determine the procedure for their appointment and dismissal, rights, duties, powers.

The implementation of the residency program in the specialty 7R01145 - "Orthopedic Dentistry" is carried out in accordance with:

- The Law of the Republic of Kazakhstan "On Education" subparagraph 2-1 of Article 5 in order to implement the Decree of the Government of the Republic of Kazakhstan dated May 20, 2013 No. 500 "On approval of the state educational order for the training of specialists with higher and postgraduate education", which regulates the number of state educational orders for training of residents in the field of healthcare;

- "On Approval of the Model Rules for Admission to Education in Educational Organizations Implementing Educational Programs of Higher and Postgraduate Education", subparagraph 11) of Article 5 of the Law of the Republic of Kazakhstan "On Education", which determines the procedure for admitting citizens to residency;

- SCES residency in medical specialties and a model professional curriculum for medical specialties of residency;

- The academic policy of KazNMU defining the Basic concepts, the procedure for organizing and conditions for the implementation of educational programs at all levels of training of a resident (Order of the rector No. 418 of 09/01/2022);

Students who have mastered the EP residency and successfully passed the state certification are issued a state-recognized document on the qualification "Dentist - orthopedist", on the basis of the order of the Ministry of Education and Science of the Republic of Kazakhstan dated January 28, 2015 No. their issuance", in accordance with subparagraph 6-3) of Article 5 of the Law of the Republic of Kazakhstan "On Education" dated July 27, 2007. After passing the FSA, the NCIE issues a certificate of a specialist without a category in the educational program "Orthopedic Dentistry".

The quality of the implementation of the EP in the specialty 7R01145 - "Orthopedic Dentistry" is the responsibility of the Dean's Office of the Faculty of Postgraduate Education, the Department of Orthopedic Dentistry. Ensuring the quality of the educational process in the residency is determined by the fulfillment of the mandatory requirements for the level of preparation of the State Educational Standard 2022 and the creation of a system for monitoring the effectiveness of the teaching staff and the implementation of the IEW of the resident (open classes, intra-departmental control). Monitoring of the quality of the educational process is carried out by educational departments, members of the committee of educational programs, the dean's office, and independent experts.

The transparency of the management of the EP is carried out through the discussion of educational and methodological documentation for the residency program at a meeting of the department, CEP, AC and approval by the vice-rector of the academic unit. The website of the "Dean's Office of the Faculty of Postgraduate Education" is functioning. KazNMU website is available through RSS zhanalyk, Twitter, Facebook, YouTube, VK, Izdeu, Zhanalyktar. The page of the dean's office's website provides information on residency educational programs: information for applicants, class schedule, academic calendar, catalog of elective disciplines, etc.

## **8.2 Academic Leadership**

The University annually reviews and approves the Academic Policy, which regulates in detail the rights, duties and responsibilities of residents and the administration of the University,

the procedure for organizing the educational process. These Rules fix the officials responsible for the proper implementation of the Rules and the scope of their responsibility.

Management of the educational process is carried out in accordance with the organizational structure of KazNMU (approved by the Board of Directors No. 1 dated July 15, 2020).

The executive body of the University is its Rector, Chairman of the Board.

Residency issues are under the supervision of the vice-rector of the academic block in terms of the educational process.

The direct management of residency programs and the coordination of the activities of residents from the moment of the existence of the residency are carried out by the dean's office of postgraduate education. The main goal of the dean's office is to conduct continuous organizational, coordinating and administrative work aimed at achieving the mission and goals of the EP, including residency in an accredited educational program. The activities of the dean's office of the faculty of postgraduate education are managed by the dean, who is appointed to the position by order of the rector. The general management of the dean's office is carried out by an elected representative body - the Faculty Council, which organizes its work under the leadership of the dean. The composition of the Council is approved by order of the vice-rector. The Dean's Council consists of the following positions: Dean of the Faculty of Postgraduate Education (Chairman of the Council); heads of departments, professors and associate professors of departments; stakeholder representatives (residents, employers). The dean's office is responsible for subsequent decisions: drawing up and approving the mission of the programs, the rules for organizing the work process in the residency, clarifying the recruitment of residents. The dean's office received the control of residents, support for relations with the practical healthcare sector and residency graduates, interaction with other structural units of the University involved in the implementation and support of residency programs (DAD, DIT).

The Department of Orthopedic Dentistry is the leading one for residents in the educational program 7R01145 - "Orthopedic Dentistry". The department provides training for bachelors, masters, residents, doctoral students. During the implementation of the EP, the department interacts with all structural divisions according to the organizational structure of KazNMU.

*When asked whether you are satisfied with the work of the department of postgraduate education, 75% of teachers answered that they are completely satisfied, 20.31% - partially, the rest - are not satisfied or doubt the answer. Also, 75% of teachers answered that the heads of the organization systematically listen to their opinion regarding issues on the educational process, research, clinical work, 14.29% not always and 10.71% left the question unanswered.*

### **8.3 Budget for training and allocation of resources**

The financial and economic policy of KazNMU and the management structure of the university are determined by the rector, the Chairman of the Board and the DEF.

Financing of the residency program depends on the formation of the annual state order. Every year, the Decree of the Government of the Republic of Kazakhstan approves the state educational order for the training of specialists with higher and postgraduate education, in accordance with which the funding of bachelor's, master's, doctoral and residency programs by type of educational institution is determined. In accordance with the order of the Acting Minister of Health of the Republic of Kazakhstan dated January 19, 2021 No. KR DSM-6 "On Approval of the Methodology for Forming the Cost of Education for Health Education Programs", a financial and economic calculation of the cost of training a resident within the framework of the state educational order, the

rational use of funds allocated from the republican budget for training of specialists with medical and pharmaceutical education.

Ensuring the implementation of residency programs consists of the salary fund of residency teachers, providing residents with educational resources (educational and scientific literature, access to the Internet and international information databases of literature, information and communication technologies), strengthening the program through invited foreign teachers, academic mobility programs and the possibility of participation of residents at international and republican conferences, seminars.

The financial activities of the university are also quarterly, annually reviewed at a meeting of the Supervisory Board. Accounting and preparation of financial statements is carried out in accordance with the National Financial Reporting Standard No. 2. Separate accounting for the implementation of the Plan of financial and economic activity is carried out in the context of state programs and income from paid services.

To ensure effective planning for the implementation of the educational program by the Department of Administrative and Personnel Work, the Department of Economics and Finance, the Department of Academic Affairs, the dean's office forms the staffing table (number of teaching hours, number of teachers), class schedule, etc. by the beginning of the academic year. The Public Procurement and Analysis Department annually at the beginning of the academic year collects applications for the purchase of goods that support the implementation of the residency educational program. The Department of Clinical Work supervises the conclusion of contracts with clinical bases, where the departments implementing residency programs are located. For the first time since January 2020, financial management was provided to the dean's office.

All departments that train residents are provided with an auditor fund. The commission for the purchase of educational and methodological literature at the end of the academic year forms an application for the purchase of the necessary literature for the implementation of the educational program in the new academic year. The IT department ensures the uninterrupted functioning of the Internet and WIFI on the territory of the university, thereby guaranteeing the ability of residents to use electronic and library resources.

In order to ensure the efficient use of financial resources (including distribution), a budget commission has been established to review the results of the formation and use of financial resources.

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

When interviewing the AMP and teachers, members of the EEC noted that the University clearly defined the responsibility of the academic leadership in relation to the development and management of the educational program. During an online conversation with focus groups, a response was received from the interviewers that the University periodically evaluates the academic leadership regarding the achievement of the mission and the final learning outcomes. Administration and management are implemented in accordance with international standards, regularly updated internal regulations in the field of healthcare and education, which ensures the increase of competence and the achievement of the final results of training in residency.

#### **8.5 Requirements and regulations**

The EEC established that KazNMU closely cooperates and fulfills all the requirements 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 residency, implements the



EP in the specialty 7R01145 - "Orthopedic Dentistry" on the basis of SCES-2022 and coordinates with the priority areas of the following national legislative and program documents:

- Law of the Republic of Kazakhstan "On Education" dated June 27, 2007 No. 319-III (as amended and supplemented as of 07.07.2020);

- The State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025, approved by the Decree of the Government of the Republic of Kazakhstan dated December 27, 2019 No. 988;

- The State Health Development Program of the Republic of Kazakhstan for 2020-2025, approved by the Decree of the Government of the Republic of Kazakhstan dated December 26, 2019 No. 982.

***Conclusions of the EEC according to the criteria.*** Out of 15 standards conform: fully -15.

***Standard 8: completed***

***There are no recommendations for improvement identified during the external visit.***

## **Standard 9: CONTINUOUS IMPROVEMENT**

### **Evidence of Compliance:**

The University, in order to continuously improve the postgraduate educational process, taking into account the needs of practical health care in the Republic of Kazakhstan, is constantly in the process of reform, regularly initiating a review and updating of processes.

At the same time, the review procedure is carried out at 3 levels and is accompanied by a documentation procedure:

- administration and management of the university, working groups for the examination and evaluation of curricula, methods of teaching and assessment, development and monitoring of the portfolio of residents, examination of the catalog of elective disciplines, audit of the QMS - 1 time per year, analysis is carried out for compliance with the fundamental concepts and criteria of the European Model of Excellence ;

- internal audit (head of the department) based on the individual plan of the teacher, the individual plan of the resident, IRB (Institutional Review Board) (the annual plan is approved at the beginning of the academic year) - once a year, with a discussion at the cathedral meeting and inclusion in the annual report of the department;

- feedback from residents and teachers - implemented through a questionnaire.

All areas of the university's activities are regulated by corporate documents (Procedures, Regulations, Instructions, Rules, Standard Operating Procedures, Methodological Recommendations, etc.).

Based on the analysis of the documented review, resources are allocated at all levels and an action plan is determined to update the postgraduate educational process and improve management.

The university has a QMS in order to monitor and obtain high-quality results in the training of specialists; the competence of a residency graduate in all specialties is constantly being modified.

To ensure the training of specialists, modern teaching technologies have been introduced into the educational process; interdisciplinary approaches have been introduced in the development of disciplines and principles of evidence-based medicine.

To develop and improve clinical skills, simulation technologies have been introduced into the educational process at the Simulation Center.

The university is constantly working to update resources in accordance with the needs of the university and the needs of employers. The university develops the potential of the teaching staff, the policy of selection and admission of teaching staff, attracts highly qualified specialists in medical science and practical health care to train residents. In the future, the teaching staff continues continuous education in the clinical specialty and pedagogy. The equipment at the clinical bases is constantly updated and the clinical bases are equipped with modern equipment.

The members of the EEC, after analyzing the submitted documents, the results of the survey of teaching staff and teachers and talking with the participants of the focus groups, came to the conclusion that the University, as a dynamic and socially responsible institution, initiates procedures for regular review and revision of the content, results / competencies, assessment and educational environment.

**Conclusions of the EEC according to the criteria.** Out of 1 standards conform: fully -1.

**Standard 9: completed**

**There are no recommendations for improvement identified during the external visit.**


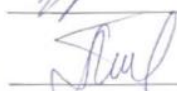
## CONCLUSION:

When conducting an external evaluation of the educational program in the specialty 7R01145 - "Orthopedic Dentistry", it was found that out of 147 standards (including basic standards - 91 and improvement standards - 56), 9 accreditation standards demonstrate full compliance, including 91 basic standards and 56 standards improvements. 2 basic standards and 2 improvement standards were partially implemented. No compliance standards have been established. The implementation of improvement standards indicates the compliance of the educational organization with international consensus.

## 5. Recommendations for improving the educational program in the specialty 7R01145 - "Orthopedic Dentistry":

- 1) Develop quantitative indicators of R&D performance by residents (Standard 2, paragraph 2.2.1.);
- 2) Increase the list of elective disciplines on an interdisciplinary basis (Standard 2, paragraph 2.4.2.);
- 3.) Increase the number of international clinical fellowships (Standard 5, paragraph 5.2.4.);
- 4) Expand the representation of stakeholders in advisory and collegiate bodies. (Standard 7, paragraph 7.4.2.)

## 6. Recommendation to the ECAQA Accreditation Council

Члены комиссии	ФИО	Подпись
Председатель	Кабилдина Найля Амирбековна	
Зарубежный эксперт	Катрова Лидия Георгиевна	


Академический эксперт	Алдабергенова Тауржан Калибековна	
Академический эксперт	Султанова Гулнар Достановна	
Академический эксперт	Маукаева Сауле Боранбаевна	
Академический эксперт	Шабдарбаева Дария Муратовна	
Представитель работодателей	Вовк Виктор Евгеньевич	
Представитель резидентов	Абылгазиева Айдана Бакытжановна	

**Attachment 1.**

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

Standard	Evaluation criteria	Number of standards	BS*/SI	Evaluation		
				Fully corresponds	Partially corresponds	Does not correspond
1.	MISSION AND OUTCOMES	17	10/7	17		
2.	EDUCATIONAL PROGRAM	30	22/8	28	2	
3.	EVALUATION OF RESIDENTS	11	7/4	11		
4.	RESIDENTS	30	18/12	30		
5.	ACADEMIC STAFF/TEACHERS	7	5/2	6	1	
6.	EDUCATIONAL RESOURCES	21	10/11	21		
7.	EVALUATION OF THE EDUCATIONAL PROGRAM	15	10/5	14	1	
8.	MANAGEMENT AND ADMINISTRATION	15	8/7	15		
9.	CONTINUOUS RENEWAL	1	1/0	1		
		147	91/56	143	4	
				147		

## Attachment 2

List of documents reviewed by EEC members as part of an external evaluation of the residency educational program

<b>No.</b>	<b>Name of documents</b>	<b>Quantity</b>	<b>Date Approval</b>
1.	Extract from Minutes No. 3 of the meeting of the Academic Committee.	1	20.04.2020
2.	Extract from the minutes of the meeting of the Senate of KazNMU No. 8.	1	28.05.2020
3.	Minutes of the meeting of the CEP "Dentistry" No. 8	1	24.09. 2022
4.	Minutes of the meeting of the Department of Orthopedic Dentistry No. 8	1	28. 08.2022
5.	Educational residency program in the specialty "Orthopedic Dentistry"	1	24.08.2020
6.	SOP: Transfer, restoration of a student from other specialties, another language of instruction, another educational organization and exit from academic leave.	1	24.12.2021
7.	SOP: Electronic journaling.	1	31.10.2022
8.	SOP: Drawing up a map of educational and methodological support (EMS) of the discipline / specialty / EP	1	25.08.2022
9.	SOP: Formation, discussion, approval of CED. Write to a component of choice	1	25.08.2022
10.	SOP: Formation, examination and approval of control and measuring materials in the testing format	1	31.10.2022
11.	SOP: Monitoring the quality of the educational process, the use of active teaching methods and multilingualism in the departments	1	24.01.2020
12.	SOP: Evaluation and analysis of educational programs of KazNMU	1	26.11.2020
13.	SOP: Norms of time for planning and accounting for the teaching load of teaching staff	1	14.11.2020
14.	SOP: Feedback Procedure and Forms	1	08.02.2021
15.	SOP: The procedure for registration of academic mobility of a student of the Kazakh National Medical University named after S.D. Asfendiyarov	1	25.08.2022
16.	SOP: Dealing with appeals and complaints of teaching staff and students	1	25.01.2021
17.	SOP: Development and approval of a system for assessing the educational achievements of students	1	25.08.2022
18.	SOP: Compilation, discussion, approval of syllabuses	1	25.08.2022
19.	Academic policy of NJSC "KazNMU named after S.D. Asfendiyarov" for the 2022 - 2023 academic year	1	01.09.2022
20.	Personnel policy of NJSC "KazNMU named after	1	10.10.2019

	S.D. Asfendiyarov"		
21.	Code of Academic Integrity of Students of NJSC "KazNMU named after S.D. Asfendiyarov"	1	01.09.2022
22.	Code of honor of teaching staff and employees of NJSC "KazNMU named after S.D. Asfendiyarov"	1	24.11.2021
23.	License to engage in educational activities NJSC "KazNMU named after S.D. Asfendiyarov" No. KZ74LAA00017008	1	19.09.2019
24.	On approval of the Model Rules for Admission to Education in Educational Organizations Implementing Educational Programs of Higher and Postgraduate Education Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600.	1	October 31, 2018
25.	Work plan of the committee for academic activities for the 2021-2022 academic year	1	23.09.2021
26.	Work plan of the School of Dentistry for 2023	1	29.12. 2022
27.	Policy and goals of NJSC "Kazakh National Medical University named after S.D. Asfendiyarov" in the field of quality for 2021-2023	1	01.03.2022
28.	Regulations on the Commission for Quality Assurance of the School/Faculty	1	24.08.2020
29.	Regulations on the Council of Employers of Schools / Faculties of the NJSC "Kazakh National Medical University named after A.I. S.D. Asfendiyarov"	1	19.03.2021
30.	Rules for the search, selection and adaptation of employees of the NJSC "Kazakh National Medical University. S.D. Asfendiyarov"	1	09.12.2019
31.	Professional standard "Dental activity"	1	22.10.2018
32.	ISO 9001:2015 certificate	1	19.06.2020
33.	Internal quality assurance standards for educational activities KazNMU named after S.D. Asfendiyarov	1	12.11. 2020
34.	Strategic directions of NJSC "KazNMU named after S.D. Asfendiyarov" for 2019-2023 with additions and changes from 19.03.2021	1	20.03.2019
35.	Organizational structure of NJSC "Kazakh National Medical University named after A.I. S.D. Asfendiyarov"	1	16.08.2022
36.	Syllabuses for the disciplines of EP residency in the specialty "Orthopedic Dentistry"	4	14.05.2022
37.	"Regulations on the ongoing monitoring of academic performance, intermediate and final certification of students of NJSC "Kazakh National	1	25.08.2022

	Medical University named after S.D. Asfendiyarov"		
38.	Rules for admission to residency of the NJSC "Kazakh National Medical University named after S.D. Asfendiyarov"	1	29.06.2022
39.	Regulations on the provision of social assistance to students	1	01.02.2022
40.	Tickets for entrance examinations for residency in the specialty "Orthopedic Dentistry"	1	13.03.2023
41.	Extract from the minutes of the meeting of the scientific commission in the direction of "Dentistry"	1	20.10.2022
42.	Regulations on the organization of inclusive education in NJSC "KazNMU named after S.D. Asfendiyarov"	1	28.06.2021
43.	The amount of tuition fees for programs of higher and postgraduate education for 2022 - 2023, 2023 - 2024 academic years (on a paid basis)	1	29.06.2022
44.	On approval of the form of a model agreement on training under the residency program Order of the Minister of Health of the Republic of Kazakhstan dated November 3, 2020 No. KR DSM - 178/2020. Registered with the Ministry of Justice of the Republic of Kazakhstan on November 5, 2020 No. 21594	1	05.11.2020
45.	Job descriptions of teaching staff of NJSC "KazNMU named after S.D. Asfendiyarov"	4	22.09.2022
46.	Regulations on the department of NJSC "KazNMU named after S.D. Asfendiyarov"	1	11.02.2020
47.	Regulations on the clinical work of the teaching staff of clinical disciplines of NJSC "KazNMU named after S.D. Asfendiyarov"	1	01.10.2021
48.	Regulations on the methodological work of NJSC "KazNMU named after S.D. Asfendiyarov"	1	26.11.2020
49.	Regulations on the academic load of the teaching staff of NJSC "KazNMU named after S.D. Asfendiyarov"	1	25.08.2022
50.	Regulations on the working group on the introduction of innovative and active teaching methods	1	20.12.2020
51.	Regulations on the procedure for the preparation, examination and publication of educational literature	1	08.02.2021
52.	Professional Development Program (for Resident Clinical Mentors)	1	07.11.2022
53.	Regulations on the supervision of NJSC "KazNMU named after S.D. Asfendiyarov"	1	03.09.2021

54.	Regulations on mentoring NJSC "KazNMU named after S.D. Asfendiyarov"	1	16.09.2019
55.	Extract from the meeting of the Committee for Educational Programs in the specialty "Dentistry"	1	31.08.2022

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