

To the Accreditation Council of the
Eurasian Center for Accreditation
and Quality Assurance
of Education and Health Care
February 05, 2025

**REPORT
OF THE EXTERNAL EXPERT COMMISSION
ON THE RESULTS OF THE ASSESSMENT OF THE EDUCATIONAL
PROGRAM
IN SPECIALTY 7R01107 "ADULT AND PEDIATRIC CARDIOLOGY"
OF LLP KAZAKHSTAN MEDICAL UNIVERSITY "HSPH"
ON COMPLIANCE WITH THE ACCREDITATION STANDARDS OF
POSTGRADUATE EDUCATION PROGRAMS (RESIDENCY SPECIALTIES)
OF MEDICAL EDUCATIONAL ORGANIZATIONS**

Period of external expert assessment: January 21-23, 2025

Almaty, 2025

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LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Designation
ECAQA	Eurasian Center for Accreditation and Quality Assurance in Education and Health Care
EEC	External Expert Commission
WFME	World Federation for Medical Education
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
LLP	Limited Liability Partnership
KMU	Kazakhstan Medical University
HSPH	Higher School of Public Healthcare
NCIE	National Center for Independent Examination
RLA	Regulatory and legal acts
TS	Teaching staff
EP	Educational program
DR	Residency Department
DSC	Science and Consulting Department
JSC	Joint-stock company
SUE on REM	State-owned utility enterprise based on the right of economic management
SCP and PS	Scientific Center for Pediatrics and Pediatric Surgery
CP and PCS	Center for Perinatology and Pediatric Cardiac Surgery
CME	Control and measuring equipment
CED	Catalog of elective disciplines
QMS	Quality and management system
IWR	Independent work of residents
RWR	Residents' research work
FSC	Final state certification
AMS	Administrative and managerial staff
RW	Research work
STP	Scientific and technical program
PTF	Program-targeted financing
TM	Teaching materials

1. Composition of the External Expert Commission

In accordance with the order of the ECAQA under No.01 dated 09.01.2025, the External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external assessment of the educational program of residency in the specialty 7R01107-"Adult and Pediatric Cardiology" in the period from January 21 to 23, 2025, consisting of the following members:

No.	Status in the EEC	Full name	Academic degree/title, position, place of work/place of study, year, specialty
1	Chairperson	Kudabayeva Khatimya Ilyassovna	Associate Professor, Candidate of Medical Sciences, Professor of the Department of Internal Medicine No.1 of the NJSC "West Kazakhstan Medical University named after M. Ospanov"
2	International Expert	Sheppley Yelena Vladimirovna	MBA, Lecturer of the Department of Modern Management Technologies in Healthcare of the Private Educational Institution of Additional Professional Education "Academy of Medical Education named after I. F. Inozemtsev". Expert at the Federal State Budgetary Institution "National Institute of Quality" of Federal Service for Supervision of Healthcare in the project on the implementation of practical recommendations of Federal Service for Supervision of Healthcare. Deputy Director General of the Self-Regulatory Organization "Association of Private Clinics of St. Petersburg"
3	Academic Expert	Zhumalina Akmaral Kanashevna	Doctor of Medical Sciences, Professor, Head of the Department of Pediatric Diseases with Neonatology of the NJSC "West Kazakhstan Medical University named after M. Ospanov"
4	Academic Expert	Bozhbanbayeva Nishankul Seitbekovna	Doctor of Medical Sciences, Head of the Department of Neonatology of the NJSC "Kazakh National Medical University named after S. Asfendiyarov"
5	Academic Expert	Bagiyarova Fatima Arystanovna	Candidate of Medical Sciences, Professor of the Department of Communication Skills of the NJSC "Kazakh National Medical University named after S. Asfendiyarov"
6	Academic Expert	Akhmetova Almira Kalikapassovna	Candidate of Medical Sciences, Associate Professor, Acting Professor of the Department of Infectious Diseases, Dermatovenereology and Immunology of the NJSC "Semey Medical University"
7	Academic Expert	Karibayeva Dina Orynassarovna	Candidate of Medical Sciences, Associate Professor of the Department of General Medical Practice of the NEI "Kazakh-Russian Medical

			University”
8	Academic Expert	Zhakenova Saira Sakhipkereyevna	Candidate of Medical Sciences, Senior Lecturer of the Otorhinolaryngology Course of the NEI “Kazakh-Russian Medical University”
9	Academic Expert	Kabildina Nailya Amirbekovna	Candidate of Medical Sciences, Professor, Oncosurgeon, Head of the Department of Oncology and Radiation Diagnostics of the NJSC “Karaganda Medical University”
10	Academic Expert	Zhanaspayeva Galiya Amangaliyevna	Candidate of Medical Sciences, Head of the Rehabilitation Department of the Republican State Enterprise on the Right of Economic Management "National Scientific Center of Traumatology and Orthopedics named after Academician N.D. Batpenov" of the Ministry of Healthcare of the Republic of Kazakhstan, doctor of physical medicine and rehabilitation of the highest category
11	Employer Expert	Kunayeva Gulbanu Dzhanabayevna	Deputy Director for Strategic Development of the Central City Clinical Hospital of Almaty
12	Student Expert	Bekenova Asemkul Berikovna	Second-year resident in the specialty "Radiology" of the Kazakh National University named after Al-Farabi

The EEC report includes a description of the results and the conclusion of the external assessment of the educational program "Neonatology" for compliance with the Accreditation Standards for postgraduate education programs (residency specialty) of medical educational organizations and conclusions (hereinafter referred to as the Accreditation Standards), recommendations of the EEC for further improvement of approaches and conditions for the implementation of the above-mentioned educational program and recommendations for accreditation for the ECAQA Accreditation Council for Accreditation.

2. General part of the final report

2.1 Presentation of the residency educational program in specialty 7R01107-"Adult and pediatric cardiology"

Name of the organization, legal form of ownership, BIN	LLP "Kazakhstan Medical University "HSPH" BIN 011 240 001 712
Management body	Rector
Full name of the first director	Auyezova Ardak Mukhanbetzhanovna Rector, PhD.
Date of establishment	21.07.1997
Location and contact details	The Republic of Kazakhstan, Almaty, Utepov St. 19A.
State license for educational activities in residency (date, number)	License for educational activities № KZ18LAA00006861 dated 21.04.2016 Annex to the license for educational activities - Postgraduate education (7R011 - Healthcare), date of issue of the annex – 26.12.2023
Year of commencement of the implementation of the accredited educational program (EP)	Start year - 2024 Total number of graduates since the beginning of the residency programs - none.
Duration of study	from 2 to 3 years
Number of residents in the current	39, incl. 2 cardiologist residents

academic year	
Quality indicators in residency	Number of residents in programs "_39_" expelled over a period of 5 years - 0, including for poor performance - 0 people.
Full-time teachers/part-time workers involved in the implementation of the EP, including % of degrees	Total number of teachers - 112, including full-time - 42, part-time - 70 teachers-mentors (clinical). Proportion of degrees, % - 81% Categorization, % - 100
Website	https://ksph.edu.kz/

2.2 Information about previous accreditation

Until now, the residency educational program in the specialty 7R01107 "Adult and pediatric cardiology" has not been accredited.

2.3 Brief description of the results of the analysis of the self-assessment report of the residency educational program in the specialty 7R01107 "Adult and Pediatric Cardiology" and conclusions on completion

The self-assessment report of the residency educational program in the specialty 7R01107 "Adult and Pediatric Cardiology" (hereinafter referred to as the report) is presented on 154 pages of the main text, annexes on 20 pages, electronic versions of 29 documents located at the link <https://drive.google.com/drive/folders/1P1kuKjUSMDrBjWguu8rNIIHsEZnXCbbs>

The report is characterized by the completeness of answers to all 9 main accreditation standards and criteria, structuring taking into account the recommendations of the Guidelines for conducting self-assessment of the educational program provided to the educational organization by the accreditation center - ECAQA, as well as the internal unity of information. The report is accompanied by a cover letter signed by the rector, Auyezova Ardak Mukhanbetzhanovna, which confirms the accuracy of the quantitative information and data included in the self-assessment report.

The report contains a list of 23 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 – Abirova Akmaral Adilkhanovna, Director of the Residency Department.

The self-assessment of the educational program 7R01103 "Neonatology" was carried out on the basis of order No.139 dated September 23, 2024 "On the creation of a working group".

All standards provide the University's actual practice of training residents in the specialty 7R01107 "Adult and Pediatric Cardiology" taking into account the start of student admission in the 2024-2025 academic year, substantiated data, examples of the implementation of the educational program objectives, 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, training results, knowledge and skills assessment results, the material and technical resources of the university and clinical sites, contractual obligations with partners (universities, associations, bases), financial information, development and improvement plans.

The report is submitted to the ECAQA in its completed form, with data adjustments based on the above recommendations, written in literate language, the wording for each standard is clear and understandable and is described in accordance with the criteria of the standards, tables and contains links in the text and has continuous numbering.

3. Description of the external expert assessment

The external expert work within the framework of the assessment of the educational program 7R01107 "Adult and Pediatric Cardiology" was organized in accordance with the Guidelines for the

external assessment of educational organizations and educational programs of the ECAQA. Dates of the visit to the organization: January 21-23, 2025. The sequence of the visit over 3 days is presented in detail in Annex 3 to this report.

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

- conversation with management and administrative staff - 13 people;
- interviews with residents - 38 people, including foreign (*none*);
- study of the website <https://ksph.edu.kz> ;
- interviews with 25 employees, 29 teachers, 10 mentors;
- questionnaires of teachers and residents - 37 and 37, respectively;
- observation of resident training: attendance of 1 practical lesson ("Acute coronary syndrome", teacher - Professor Karibayev Kairat Rakhmaniyevich, first-year cardiology residents, clinical site – State-owned utility enterprise based on the right of economic management "Central City Clinical Hospital", lectures - no;
- review of resources in the context of fulfilling accreditation standards: 1 practice/clinical engagement base was visited, including State-owned utility enterprise based on the right of economic management "Central City Clinical Hospital", where training is conducted under 2 educational programs with the participation of 2 full-time teachers/part-time workers;
- study of educational and methodological documents in the amount of 29 units both before the visit to the organization and during the visit to the divisions (the list of documents studied is in Annex 2).

The staff of the accredited organization ensured the presence of all persons specified in the visit program and in the lists of interview and conversations sites (Table 1).

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

No.	Position	Quantity
1	Vice-Rector for Academic and Scientific Activities	1
2	Vice-Rector for Clinical Activities	1
3	Commercial Director	1
4	Department of Science and Consulting, Director	1
5	Scientific Council, Secretary	1
6	Residency Department, Director	1
7	Residency Department, Deputy Director	1
8	Educational and Clinical Center, Specialist	1
9	Department of International Activities, Acting Director	1
10	Department of Methodology and Quality of Educational Programs, Director	1
11	Department of Strategic Development, QMS, Acting Director	1
12	HR Department, HR Specialist	1
13	Department of Digitalization and Technical Support, Director	1
14	Library, Librarian	1
15	Department of Additional Professional Education, Director	1
16	Academic Council, Secretary	1
17	Department of Economics and Finance, Chief Accountant	1
18	Head of Department of Therapy with courses in gastroenterology, psychiatry, medical rehabilitation and gerontology	1
19	Head of the Department of Therapy with courses in gastroenterology, psychiatry, medical rehabilitation and gerontology	1
20	Professor of the Department of Therapy with courses in gastroenterology, psychiatry, medical rehabilitation and gerontology	3

21	Teacher of the Department of Therapy with courses in gastroenterology, psychiatry, medical rehabilitation and gerontology	3
22	Residents in the specialty 7R01107- Adult and Pediatric Cardiology	2
23	President of the Association of Clinics of Almaty	1
24	Director of JSC "Scientific Center of Pediatrics and Pediatric Surgery"	1
25	Director of the State-owned utility Enterprise based on the Right of Economic Management "Emergency Hospital"	1
26	Director of the State-owned utility Enterprise based on the Right of Economic Management "Children's Emergency Medical Care Center"	1
27	General Director of the Medical Center "Keruen Medicus"	1
28	Director of the State-owned utility Enterprise based on the Right of Economic Management "Almaty Oncology Center"	1

On the last day of the visit to the organization, a meeting of the EEC members was held on the results of the external assessment. A final discussion of the results of the external assessment of the educational program, examination of documents, conversation results, questionnaires was held. The EEC members began drafting the final report of the EEC. Generalizations of the external assessment results were made. The experts individually filled out the "Quality Profile and Criteria for External Assessment of the Educational Program 7R01103 "Neonatology" for Compliance with the ECAQA Accreditation Standards". The EEC members made no comments. Recommendations for improving the educational program were discussed and the chairperson, Kudabayeva Khatima Ilyassovna, held a final open vote on the recommendations for the ECAQA Accreditation Council.

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

When conducting a survey of residents, 97.3% rated the work of the External Expert Commission for Accreditation as positive, 2.7% - as satisfactory. The majority of respondents (86.49%) believe that it is necessary to conduct accreditation of an educational organization or educational programs.

According to 83.78% of teachers, the survey conducted by the ECAQA is useful for developing recommendations for improving key areas of activity of the accredited educational organization.

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

4. Analysis of compliance with accreditation standards based on the results of an external assessment of the residency educational program in the specialty 7R01107 "Adult and pediatric cardiology"

Standard 1: MISSION AND FINAL OUTCOMES

1.1 Mission statement

During the implementation of the activities of the visit program, based on the results of an conversation with the management of the LLP Kazakh Medical University "HSPH", as well as interviews with residents and teachers, compliance with the criteria of *Standard 1* was established. Participants in the educational process are familiar with the mission of the educational program and took part in formulating the mission. At the same time, the mission was communicated to students through the website, social networks; information letters were sent to medical organizations. The strategic plan of the organization for the period 2020-2025 was reviewed (approved at the meeting of the Academic Council of the University, minutes No.1 dated 27.02.2020), including such areas as training competitive and healthcare specialists in popular specialties and specializations, improving the quality of educational programs, agreed upon by the senior management and employees of the

University directly involved in the process of their development, in the main areas of activity, the development of the university as an integrated medical center operating on the basis of the trinity of education, science and practice, which confirms the fulfillment of the accreditation standard and demonstrates the goals, objectives and prospects of the organization. From interviews with residents, it was established that before the start of classes, teachers inform them about the mission of the EP, the work plans of the KMU "HSPH", and also indicate sources for obtaining the necessary information about the educational program, teachers, training bases.

During the visit to the divisions, the experts noted the strengths of KMU "HSPH" in relation to the accredited educational program, including: developed partnerships with practical healthcare organizations, demonstrate the integration of theoretical education with practical training and joint responsibility in the training of medical personnel; the university's participation in employee exchange and internship programs indicate a desire to achieve its mission and goal; the system of student support and the development of creative learning abilities is one of the important strategic directions for the development of the university.

In KMU "HSPH" there are divisions that are directly related to the educational program 7R01107 "Adult and Pediatric Cardiology", which can be noted as the best practice in education, namely, the Residency Department, the Educational and Clinical Center, the Department of Methodology and Quality of Educational Programs. This conclusion is made because these divisions demonstrated the conditions for starting the implementation of the residency program and achieving the final outcomes.

The results of the documentation study allowed us to conclude that the mission of the LLP Kazakh Medical University "HSPH" and the mission of the educational program 7R01103 "Neonatology" reflect the activities of the university aimed at training in-demand and professionally trained specialists in the field of neonatology; the educational process is built in accordance with the State Compulsory Educational Standard and current regulatory legal acts in healthcare.

The educational organization conducts training of cardiology residents at the State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital", where the organization of work on the joint use of the Clinic's equipment is provided and provides a patient-oriented approach through strengthening interdisciplinary and team training. The educational organization pays due attention to the safety and autonomy of patients by ensuring healthy and safe conditions when training residents in the University Clinics and at clinical sites.

Experts have established that residents have appropriate working conditions to support their own health, since the educational organization provides conditions for independent work of residents, work of residents under the supervision of teachers (mentors), rest during breaks and provision of first aid, the possibility of hot meals, work with specialized educational and scientific literature.

Such basic competencies of residents in the accredited specialty as the formation of knowledge and skills in conducting a clinical examination, laboratory and instrumental studies, differential diagnostics and selection of effective treatment for patients, as well as special competencies, including mastering practical skills in the specialty 7R01107 "Adult and pediatric cardiology", further improvement in interpreting the results of modern diagnostic methods and mastering the latest treatment methods, mastering the skills of scientific research activities help the educational organization to apply innovative forms of training with an interdisciplinary and team approach to training. This allows developing such skills and qualities in residents as management skills, communication skills, teamwork skills.

The educational organization encourages residents to participate in research in their chosen specialty through involvement in research projects and also ensures the participation of residents in such academic events as scientific and practical conferences, a competition for young scientists.

During the implementation of the program activities, namely, following the results of a conversation with the first head of the organization, members of the Academic Council, the Educational and Methodological Council, the Council of Young Scientists, in interviews with residents and teachers, compliance with the criteria of *Standard 1* was established. Many participants in the

educational process know the mission of the educational program, took part in the formation of proposals for formulating the mission, while the mission was communicated to potential residents through the website, social networks and information letters to medical organizations. The strategic plan of the organization for the period 2020-2025 was reviewed, including such areas as improving the quality of the educational process, integrating science, clinic and practice, which confirms the implementation of the Accreditation standard and demonstrates the goals, objectives and prospects of the organization. From interviews with residents, it was established that before classes start, teachers inform about the mission, work plans of the educational organization, tell where to get the necessary information about the educational program, teachers, training bases.

During the visit to the divisions of the educational organization, experts noted the strengths of the educational organization in relation to the accredited educational program, including: the presence of the Dissertation Council for the specialties "Public Healthcare", "Medicine", developed partnerships with practical healthcare organizations, demonstrate the integration of theoretical education with practical training and joint responsibility in the training of medical personnel; participation in the work of public organizations, participation of the university in international scientific projects, exchange and internships programs of employees indicate the desire to achieve its mission and goal; the system of support for students and the development of creative learning abilities is one of the important strategic directions of the university development.

The educational organization has divisions that are directly related to the educational program 7R01107 "Adult and Pediatric Cardiology", which can be noted as the best practice in education, namely the Department of Methodology and Quality of Educational Programs, the Department of Science and Consulting, the Department of Strategic Development and QMS. This conclusion was made, since these departments participate in the implementation of the final learning outcomes, in improving the quality of the educational process and strengthening the scientific component.

The results of the documentation study demonstrate that the mission of the organization and the mission of the educational program 7R01107 "Adult and Pediatric Cardiology" and the educational process are built in accordance with the State Compulsory Educational Standard and current regulatory legal acts in postgraduate education and healthcare.

1.2 Professionalism and professional autonomy

A visit to the clinical site, an open class, meetings with teachers and residents made it possible to see that by adhering to a patient-centered approach in the clinical process, maintaining the need for assistance, each resident develops an individual level of such quality as professionalism. The formation of professionalism is based on direct training in the workplace, where residents are faced with clinical cases of varying levels of complexity, adopting the experience of senior colleagues, and thereby building their own model of behavior.

Based on the Law on Education of the Republic of Kazakhstan, which establishes the autonomy of higher and postgraduate education organizations, which gives the right, on the basis of standard rules, orders, etc. RLA, the university independently determines the development of the educational program, assessment, selection and admission of residents, selection/screening of teachers, distribution of resources.

The Regulation on Residency reflects the rights of residents, the implementation of which is facilitated by the department. Ensuring the freedom of expression of the resident's opinion on issues of their education, as a rule, is carried out through anonymous questionnaires. The analysis of feedback on satisfaction with training is reported at a department meeting.

During the interview with residents, it was established that the freedom of practical and research activities is realized through the work of residents, where under the guidance of a department employee, research work, subsequent analysis and interpretation of data and then writing an article or thesis are carried out.

The experts found that the educational organization fully exercises autonomy in relation to the selection of residents for the accredited specialty 7R01107 "Adult and Pediatric Cardiology", the development of the educational program, the determination of approaches to the assessment of

residents (developed CME), since there are teachers trained in testology, clinical sites and clinical mentors. The responsible employees demonstrated to the experts a document defining the requirements for teachers of the residency program (Regulations on Clinical Mentoring, 29.08.2024). There is no employment of residents, since there were no graduates. For this specialty, residents were admitted only in this academic year, there are 2 residents in total.

To verify *Standard 1* a meeting was held with the heads of the organization: Vice-Rector for Academic and Scientific Activities, Doctor of Medical Sciences, Professor Kamaliyev M.A., Vice-Rector for Clinical Activities, Doctor of Medical Sciences, Professor Dzhumabekov A.T. During the conversation, the experts asked the following questions: what is the vision of the implementation of the educational program (EP) in the context of the scientific component, what is the resource provision of the EP, does the mission of the university and EP 7R01107 "Adult and Pediatric Cardiology" meet the needs of practical healthcare in the regional aspect. During the answers, confirmation was received that the university has created the necessary conditions for the implementation of EP 7R01107 "Adult and Pediatric Cardiology". Vice-Rector of the organization Dzhumabekov A.T. confirmed that, based on the principle of the trinity of education, science and clinic, resident cardiologists, taking into account the patient-centered approach, are trained under the guidance of clinical mentors professionally in medical institutions of the city of Almaty, where all the conditions for the educational process are available.

The academic freedom of residents is manifested in the choice of elective disciplines, the introduction of proposals for updating the EP is ensured by the educational organization through such mechanisms as _ holding a round table with employers, on the basis of which the catalog of elective disciplines is updated annually, which is described in the document "Academic Policy" of LLP KMU "HSPH" (approved on August 29, 2024).

When conducting a survey of 37 residents (on the resource <https://webanketa.com/>), out of 22 questions, a number were devoted to the quality of the educational process and the educational program. It was found that 97.3% of residents will recommend studying in this educational organization to their acquaintances, friends, relatives. And 94.59% of respondents believe that the heads of the educational program and teachers are aware of the problems of students related to training. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", _ 100% of residents answered positively.

The 37 teachers surveyed (21 questions in the questionnaire) also responded that 94.59% are satisfied with the organization of work and the workplace in this educational organization, and 2.7% partially agree with this statement. The experts determined that the organization has a healthy microclimate, since the head is quite accessible to both residents and employees, responds promptly to requests and suggestions. In the questionnaire, 89.19% of teachers are satisfied with the microclimate of the organization, and 8.11% are partially satisfied. According to 89.19%, in the educational organization, a teacher has the opportunity to realize himself/herself as a professional in his/her specialty. For your information, a total of 37 people responded (42 on staff in total), while 10.81% have up to 5 years of teaching experience, 13.51% have up to 10 years, and 75.68% have over 10 years of teaching experience.

1.3 Final learning outcomes

The final learning outcomes presented in the program 7R01107 "Adult and Pediatric Cardiology" are aimed at developing a qualified specialist in the field of cardiology, capable of working as a cardiologist and providing specialized cardiological care at the inpatient level.

The final learning outcomes are defined and included in the document "Educational program 7R01107 "Adult and Pediatric Cardiology" after discussion at meetings of the collegial bodies of the KMU "HSPH". The working groups for the formation of the EP include heads of departments, professors, teachers of departments providing the educational process, leading specialists in practical healthcare, employers, representatives of the contingent of students. The composition of the working group is approved by the rector ([Order "On the creation of project teams for the development of the EP"](#)).

The educational program 7R01107 "Adult and Pediatric Cardiology" was discussed at a meeting of the Department of Therapy with courses in gastroenterology, psychiatry and medical rehabilitation of LLP KMU "HSPH", and at meetings of collegial bodies, which include representatives of practical healthcare, the Council of Employers, the Educational and Methodological Council ([Minutes of the Meeting of the Educational and Methodological Council dated 20.04.2023](#)) and approved at a meeting of the Academic Council ([Minutes of the Meeting of the Academic Council dated 27.04.2023](#)). Informing interested parties about the final learning outcomes of residents is carried out by publishing on the official website of the university <https://ksph.edu.kz/>. The experts were convinced that the professional behavior and communication skills of cardiology residents are formed on an ongoing basis through conversations, participation in trainings conducted by the department staff and are reflected in the relevant document - "Residency Regulation" (approved on August 29, 2024). The Code of Honor of a Student and Teacher of KMU "HSPH", which is set out in more detail in the document "Academic Policy" of KMU "HSPH" (approved on August 29, 2024). The Code defines the basic rules of corporate culture and is an establishment of a set of norms of behavior of the teaching staff, students and employees of KMU "HSPH", and also determines the attitude of residents and doctors to patients. The Code of Honor of teachers and staff is also spelled out in the document "Regulation on Academic Integrity", which the teachers and staff are informed about. Regulation on Academic Integrity of Teachers and Staff, adopted by KMU "HSPH" on August 29, 2024, includes principles of ethical behavior of teachers and staff, anti-corruption culture, etc.

When determining the final learning outcomes, the staff of the Department of Therapy with courses in gastroenterology, psychiatry and medical rehabilitation and the Department of Residency took into account the previous learning outcomes in the bachelor's degree and internship, and also took into account the goals and objectives of subsequent continuous professional development in the chosen specialty. The educational organization has a Department of Additional and Professional Education, which organizes training in additional and non-formal education (continuous professional development), including programs in the specialty of the accredited educational program.

The surveyed teachers answered that 40.54% are fully satisfied with the level of previous training of residents, and 51.35% are partially satisfied.

The experts established a clear continuity between the final outcomes of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 2 programs of additional education, including for the specialty "7R01107" Adult and pediatric cardiology ". Residents are informed about this.

83.78% of the teachers-respondents believe that students of this educational organization have a high level of knowledge and practical skills after completing the training program, and 13.51% partially agree with this.

1.4 Participation in the formulation of the mission and final outcomes

At KMU "HSPH" all interested parties (university staff, residency graduates, healthcare and education authorities, healthcare organizations, employers, professional medical associations, the public) participate in the formation of the mission and final learning outcomes, taking into account their suggestions.

The mission and final learning outcomes for the specialty 7R01107 "Adult and Pediatric Cardiology" are formulated on the basis of the Standard for the Organization of Neonatal Care to the Population in the Republic of Kazakhstan (Order No.52 dated March 31, 2023).

All interested parties (university staff, residency graduates, employers, professional medical associations) took part in the development of the goals and objectives of the educational program, which is confirmed by the document "Regulations on the educational program: development and updating", approved by the rector on August 29, 2024. Since the residency program in cardiology is focused on employer expectations and labor market needs, training elements and a catalog of elective disciplines (CED) are agreed upon with employers. Employers and members of professional

associations are involved in reviewing the residency program and discussing the results at meetings of the training quality assurance committee.

Proposals were made to strengthen the final learning outcomes of residents in clinical skills, knowledge of legal aspects, ability to work in an information system and development of communication skills. When updated regulatory legal acts and orders in education and healthcare are issued, the developers of the educational program take into account proposals from the Council of Employers and Residents and make appropriate changes. For example, based on proposals from employers, the following elective disciplines were included in the EP:

- 1) Cardiovascular diseases in pregnant women;
- 2) Clinical ECG;
- 3) Rehabilitation of patients with a cardiological profile;
- 4) Acute coronary syndrome;

At the same time, when talking with residents and employers, experts did not receive a clear answer to the question "Do you participate in formulating the mission and goals of the organization, educational program?", "What is the personal contribution of residents to improving the educational program?". Residents answered these questions that they gave suggestions for electives and employers answered that the final learning outcomes should be to strengthen resuscitation skills in unusual cases, for example, in a comorbid patient. The psycho-emotional status of residents is excellent, residents are satisfied with the clinical site and mentors.

Conclusions of the EEC by criteria. Comply with 14 standards (including 9 basic and 5 improvement standards): fully - 14, partially - 0, do not comply - 0.

Standard 2: EDUCATIONAL PROGRAM

2.1 Framework parameters of the postgraduate medical education program

The educational program for the specialty 7R01107 "Adult and pediatric cardiology" is compiled in accordance with the State Compulsory Educational Standards and the Standard Curriculum of the Ministry of Healthcare of the Republic of Kazakhstan. All procedures for approving educational program documents are carried out in accordance with the regulatory documents of the Ministry of Science and Higher Education and the Ministry of Healthcare of the Republic of Kazakhstan. The residency program complies with international requirements, level 8 of the national qualification framework in medical education and the Framework of Qualifications in the European Higher Education Area.

The educational program model is determined based on the final learning outcomes of residents; therefore, it includes the following: The training consists of a mandatory component and an elective component. The content of the academic disciplines of the mandatory component is strictly regulated by the State Compulsory Educational Standard and the Standard Curriculum of the Ministry of Healthcare of the Republic of Kazakhstan and is reflected in the standard curricula of the disciplines of the educational program.

The implementation of the educational program is planned using the following educational and clinical activities: According to the State Compulsory Educational Standard of the Ministry of Healthcare of the Republic of Kazakhstan and the Working Curriculum, independent work is carried out in two areas: IWRCM (with a clinical mentor) - 60%, IWR - 20% of hours, and 20% is allocated to work with a teacher. Duration of study is 2 years. The systematicity and transparency of training is guaranteed by the fact that the educational program is reflected on the university website. The list of the most common diseases and conditions subject to diagnosis and treatment by a cardiologist, given in the Standard Curriculum for the specialty 7R01107 "Adult and Pediatric Cardiology" is fully covered by the list of nosologies and conditions that a resident must master according to the training program, developed on the basis of a study of the requirements of regulatory documents, the needs of practical healthcare. A working curriculum and an educational program are developed, providing for a modular

study of disciplines in compliance with the logical sequence of studying the disciplines and are approved by the Chairperson of the Educational and Methodological Council and at a meeting of the Academic Council. The working curriculum contains a complete list of academic disciplines grouped into modules with disciplines, indicating the workload of each academic discipline in credits and academic hours.

For the implementation of the educational program in cardiology, the organization's documents contain teaching materials, which define the goal, take into account the integration of practical and theoretical components and independent work. Compliance with the State Compulsory Educational Standard and standard requirements, including the needs of practical healthcare, has been established.

While attending a practical lesson on the topic "Acute coronary syndrome" (3 hours), the experts received convincing data that the training is carried out according to plan, before the start of the lesson, residents answer tests, receive feedback from the teacher and have the opportunity to improve such skills on dummies as: artificial ventilation of the lungs with an Ambu bag, tracheal intubation. The organization ensures compliance with ethical aspects in the implementation of the educational program, since the experts have studied the code of ethics, which is spelled out in the document "Academic Policy of LLP KMU "HSPH"" (29.08.2024) and during the interview, the residents responded that they were informed about the content of this document.

The analysis of educational activities showed that the scientific basis and all scientific achievements in the relevant disciplines are taken into account, but insufficient additions have been made to the bibliography of the teaching materials and syllabuses. At the same time, teachers use the latest scientific achievements and current clinical protocols of the Ministry of Healthcare of the Republic of Kazakhstan in their classes.

The mentoring system, which is described in the document "Regulations on clinical mentoring of KMU "HSPH"" (29.08.2024), was assessed. There are 2 mentors. Currently, almost every resident has their own mentor. A mentor is assigned to a specific resident during the resident's rotation in a given department of the clinical site, which allows them to support the resident's practical training.

The procedure for informing residents about their rights and responsibilities is reflected in the document "Academic Policy" of the KMU "HSPH" (approved on August 29, 2024). ***The qualification obtained as a result of mastering the educational program in the specialty 7R01107 "Adult and Pediatric Cardiology" corresponds to level 8 of the national qualification framework (ESG1.2) and has the code 7R01107.***

Teachers use such methods of teaching residents as seminars at the intersection of related disciplines, practical classes based on a clinical-based learning (CBL), problem-based learning (PBL), research-based learning (RBL), D-PBL, the use of case problems in practical classes. The list of teaching methods is described in the syllabuses of the disciplines. Thanks to these methods, residents can take part in providing medical care to patients. Teachers can provide a resident with supervision of approximately 5 issue-related patients per day and 20 patients per month. For example, upon completion of training, residents of the educational program in the specialty 7R01107 "Adult and Pediatric Cardiology" can calculate the volume and rate of administration of drugs, including using an infusion pump, prescribe and monitor the treatment of patients with cardiovascular diseases, provide medical care to patients with cardiovascular diseases in an emergency form with the development of life-threatening side effects, etc.

Experts have found that the principles of academic honesty and anti-plagiarism are fully implemented in the educational organization. This is reflected in the document Regulation on Academic Integrity, adopted by LLP Kazakhstan Medical University "HSPH" on August 29, 2024. Academic integrity is applicable at such stages of resident training as practical training in hospitals. And antiplagiarism (StrikePlagiarism.com) is applicable when residents are engaged in research work. Residents are trained to promptly collect informed consent from patients for any diagnostic and therapeutic procedures. Experts noted that the medical records contain a corresponding document signed by the patient.

Thus, by the end of 2 years of training, residents will acquire basic skills and abilities in the specialty 7R01107 "Adult and Pediatric Cardiology", which will allow them to work in hospitals providing cardiology care (ESG 1.2).

The experts did not find any violations regarding the principle of equality in postgraduate education and continuous professional development, since the educational organization complies with the Constitution of the Republic of Kazakhstan, the Law on the Languages of the Peoples of the Republic of Kazakhstan and other regulatory legal acts in the field of education and healthcare. For example, 169 people work in the educational organization, of which 96% are women and 4% are men.

The educational organization has a mechanism for regular adaptation of teaching and learning methods to the requirements of modern science and education, as well as to the current needs of practical healthcare. This mechanism includes the work of the Department of Methodology and Quality of Educational Programs, headed by Sarsenova L.K. It is planned to train teachers and clinical mentors in modern teaching methods and assess the quality of the implementation of educational programs.

This indicates compliance with Standard 2 in terms of adapting training to the needs of residents. The university has an anti-plagiarism system StrikePlagiarism.com Agreement 2023 Strikeplagiarism.pdf.

2.2 Scientific method

In order to improve knowledge of the scientific foundations and methodology of medical scientific research, in the process of mastering the core disciplines of the mandatory component and the elective component through the IWR (teacher's assignments), topics on biostatistics, evidence-based medicine and research methods will be introduced, the results of which will be heard at the Council of Young Scientists and Clinicians (<https://ksph.edu.kz/young-scientists/>), and reflected in articles, collections of publications of conferences and congresses, scientific projects. And this will also be preparation for passing exams upon admission to doctoral studies.

During a conversation with residents, the experts learned that they use scientific data in training and know the basics of evidence-based medicine. The teachers said that they teach residents in methods of critically assessing literature, articles and scientific data, and the application of scientific developments. During training in core disciplines, cardiology residents develop skills in critically assessing literature, articles and scientific data within the framework of "Journal Club"-type classes. Residents also participate in medical planning meetings and consultations of cardiology centers in Almaty.

When surveying residents, it was found that the educational organization has access to the participation of students in research work and 9.19% of people are completely satisfied with this, 10.81% are partially satisfied, and 0% are not satisfied. Residents should engage in R&D and in response to the questionnaire, 67.57% wrote that they are already engaged in R&D, 13.51% are planning to start, 16.22% are looking for a R&D topic, and 2.7% are not engaged.

2.3 Structure, content and duration of the residency program

There are documents containing requirements for the structure and content of educational programs, including the Working Curriculum, approved class schedule, approved syllabuses for disciplines, control and measuring equipment, reviews of the CME (reviewer is the deputy director of the State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital"), and a catalog of elective disciplines for the 2025-2026 academic year. The department is responsible for the selection and implementation of innovations in the educational process.

The content of the working programs and the catalog of elective disciplines reflect the needs of the healthcare system, including - cardiovascular diseases in pregnant women; Clinical ECG; Rehabilitation of patients with a cardiology profile; Acute coronary syndrome; as well as the specifics of R&D and scientific achievements of teachers. These include the following: leading healthcare specialist Dzhusipov Alikhan Kazakhbayevich - MD, Professor, cardiologist of the highest category.

For the successful implementation of the educational program in the specialty 7R01107 "Adult and Pediatric Cardiology", the organization has resources for organizing the assessment of the practical

skills of residents (Simulation Center of the State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital"). However, there are difficulties in planning, developing and approving educational programs, since the content of the training program in the residency specialty 7R01107 "Adult and Pediatric Cardiology" changes depending on the results of the program assessment, legislation requirements, the needs of practical healthcare and the study of international experience. Experts have found that the educational program takes into account the requirements of the legislation, including with respect to the ratio of classroom and extracurricular hours, elective disciplines.

The number of academic hours for two years of study is 4200, which corresponds to 140 credits, 4 of which are elective disciplines. The ratio of classroom studies and independent work under the guidance of a mentor and independent work of a resident is 20%-60%-20%.

Possible future roles of a residency graduate, namely, a medical expert and a manager are formed through participation in medical conferences, consultations and the work of medical expert commissions.

The scientific component in resident training is formed through participation in journal clubs, Research work and in STP.

The educational organization guarantees the adjustment of the structure, content, and duration of the educational program in the event of any changes in various sciences, demographics, and also in response to the needs of the healthcare system. For this purpose, there is a mechanism for selecting elective disciplines discussed at the Employers' Council and round tables with employers. The Employers' Council includes the Deputy Director of the Clinical site of the State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital" Abenova A.T.

Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, in which 72.97% are fully satisfied, 21.62% are partially satisfied, 5.41% are not satisfied.

Based on the cooperation agreement, the Department of Therapy with Courses in Gastroenterology, Psychiatry, Medical Rehabilitation and Gerontology is based on the following clinical sites: State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital". In general, LLP KMU "HSPH" has 73 agreements with clinical sites, both public and private. Clinical sites are multidisciplinary hospitals, which allows to expand the practical horizons of doctors - residents in related specialties.

In the State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital", residents supervise, under the supervision of the teaching staff and mentors, patients in the cardiology department and consult in the following divisions: neurology, traumatology, cardiology, stroke center, neurosurgery, in other divisions.

To the question of the questionnaire "Is there sufficient time for practical training (supervision of patients, etc.)", 97.3% of residents answered with full agreement, 2.7% partially agree, 0% disagree. At the same time, 94.59% of residents claim that after the end of classes, the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, error analysis session).

At the same time, to the question "Do residents' representatives participate in the development of educational programs?", the experts received the following answer: yes, they participate in the formation of the catalog of elective disciplines. *The surveyed residents are completely satisfied with the schedule of classes (97,3%).*

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

The management of the educational process, reflected in the self-assessment report (*Standard 2*) and general approaches to management were confirmed during interviews with the management of the Residency Department, the Department of Strategic Development and QMS, the Department of Methodology and Quality of Educational Programs and conversations with the head and employees. During the visit to the clinical site of the State-owned utility enterprise based on the Right of

Economic Management "Central City Clinical Hospital", the experts got acquainted with the work of the divisions, including the department of interventional cardiac surgery, resuscitation and intensive care, the cardiology department, the library and the clinical laboratories of the State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital". A total of 5 meetings were held and during the cross-interview it was established that all residents have access to all patients, departments of the laboratory and diagnostic service, including X-ray diagnostics, MRI, CT and the library fund of the site.

Thus, clinical sites are selected for compliance with the residency program by the Residency Department, which draws up agreements with clinical sites. The lawyer of LLP KMU "HSPH" is responsible for concluding and registering contracts with clinical sites. The department, headed by the head of the department, determines the clinical sites where the resident can get maximum access to patients according to his/her profile of the educational program of residency at all levels of medical care. For the EP in specialty 7R01107 "Adult and Pediatric Cardiology", the clinical sites are the State-owned utility enterprise based on the right of economic management "Central City Clinical Hospital".

Experts analyzed the information on the accreditation of clinical sites and concluded that these clinical sites are accredited. State-owned utility enterprise based on the right of economic management "Central City Clinical Hospital" is a unique multidisciplinary medical institution, as well as an educational base for the leading universities of the country. The multidisciplinary clinic provides high-quality medical services and innovative approaches to treatment, based on the experience of the best specialists and advanced technologies. The Central City Clinical Hospital was opened in 1971. By 1978, the hospital operated with 910 inpatient beds and had an outpatient clinic serving 80,000 people in Almaty. About 500,000 people visited the outpatient clinic per year; at that time, the outpatient clinic had 59 treatment and diagnostic rooms. The only speech center in the republic, a glaucoma room and a laser beam receiving laboratory were located at the outpatient clinic. State-owned utility enterprise based on the right of economic management "Central City Clinical Hospital" continues to play a key role in the Almaty healthcare system, providing high-quality and affordable medical care for the entire population. In 2024, 11,000 patients applied to the hospital under compulsory social health insurance. The number of employees is 1,200. The clinic is accredited.

The outpatient stage of training is carried out at the bases of city polyclinics: City polyclinic No.9, which is the largest clinic of primary medical care, equipped with modern equipment and information, communication technologies.

Training of cardiologist residents is aimed at meeting the needs of practical healthcare, taking into account the stable growth of diseases of the heart and circulatory system in Kazakhstan. Thus, during a conversation with the management of the organization, experts received information that residents have access to patients, laboratories, work in the library, a conference hall, have classrooms equipped with modern equipment and teachers confirmed that the training of residents is carried out directly in the clinical departments of a multidisciplinary hospital. Clinical sites used for residency training in the specialty 7R01107 "Adult and pediatric cardiology" are equipped with modern diagnostic equipment: Electrocardiography (ECG); Echocardiography (ultrasound of the heart); Treadmill test (test with physical activity); Holter monitoring (24-hour ECG monitoring); Cardiorespiratory monitoring; Partial and complete computed tomography (CT) of the heart; Magnetic resonance imaging (MRI) of the heart; Angiography (coronary angiography); Positron emission tomography (PET) of the heart. Also the analysis of the results of the assessment rehabilitation scales, computer and magnetic resonance tomographs, angiographs, ultrasound scanners, endoscopic equipment, functional diagnostics, gas analyzers, laboratories of various profiles, etc. are used.

During a practical lesson on the topic "Acute coronary syndrome", lasting 3 hours and a conversation with residents, the experts saw that the organization promotes the development of practical competencies of residents, including on simulation equipment. At the same time, residents deepen their theoretical knowledge, develop communication skills.

Integration between training and provision of medical care (on-the-job training) is carried out through a mentoring system for residents. Training is conducted in accordance with the clinical

protocols for diagnosis and treatment of the Ministry of Healthcare of the Republic of Kazakhstan and modern clinical guidelines.

Out of the 37 residents surveyed, 97.3% responded that teachers use active and interactive teaching methods in classes quite often, 2.7% believe that they use rarely or sometimes.

When planning, discussing, approving and reviewing the educational program for the specialty 7R01107 "Adult and Pediatric Cardiology", teachers of the Department of Therapy with courses in gastroenterology, psychiatry and medical rehabilitation, where cardiology residents are trained, and employees of the Residency Department took part.

Conclusions of the EEC by criteria. Compliant out of 22 standards (including 19 basic and 3 improvement standards): fully - 21, partially -1, do not comply - 0.

Recommendations for improvement:

1. To introduce scientific foundations and methodology of medical research into the educational program "Adult and Pediatric Cardiology" (Standard 2.2.1).

Standard 3: RESIDENT ASSESSMENT

3.1 Assessment methods

A study of the control and measuring equipment (a bank of 600 tests (MCQ) for all sections of 7R01107 "Adult and pediatric cardiology", 50 tasks, questions for oral questioning, patient presentations for clinical analysis, 10 checklists for assessing practical skills showed that the organization has implemented an appropriate assessment policy that allows for a comprehensive assessment of the academic achievements of residents. The certification policy, as well as the principles, goals, methods and practices of assessing students are described in the Academic Policy dated 29.08.2024, approved by the Academic Council.

During the interview, residents talked about the forms of assessment, for example, about assessing the performance of practical skills upon completion of the discipline "Cardiology in a hospital", as well as assessing the quality of filling out a medical record, that they are satisfied with everything. And they also receive regular feedback from teachers. The appeal system for assessment results is reflected in the documents "Academic Policy" and "Residency Regulation" (dated August 28, 2024). During the period of operation of the educational organization, there were no applicants for appeal. The assessment covers not only knowledge and practical skills, but also professional behavior and communication skills, which is confirmed by the following: at the end of the discipline "Cardiology in hospital", a 360-degree assessment was carried out.

The criteria for permission to the final certification are the successful passing of the student's midterm certification, which is carried out in accordance with the academic calendar, the working curriculum and the educational program. Permission to the midterm certification of students is carried out on the basis of the admission rating. The admission rating for the discipline must be at least 50%. The purpose of the final exam is to monitor the academic achievements of students. The main purpose of the final exam is to assess the level of mastery of the programs of academic disciplines by students. This is documented in the "Academic Policy" and the "Residency Regulations".

Admission to the independent examination of residents is the completion of the entire curriculum. Students who have no debts for the studied disciplines and for tuition fees are admitted to the FC. The final certification of residency graduates consists of 2 stages: Stage 1 - independent comprehensive testing organized by the National Center for Independent Examination; Stage 2 - mini-clinical exam (Mini-CEX) at the clinical sites of KMU "HSPH". Based on the results of the two stages, a final (arithmetic mean) grade is given according to the point-rating system for assessing the academic achievements of students. In the practice of the educational organization, residents (including other specialties) will take an independent examination for the first time.

Validation and assessment of the reliability of resident assessment methods (tests, tasks, cases) is carried out as follows: it is carried out in the form of studying and analyzing the control and measurement fund (examination questions, case problems).

The educational organization has a practice of involving external examiners in assessing residents, in particular, heads of departments of the State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital", which is documented in the "Residency Regulation". This ensures the independence and objectivity of the assessment results.

So, to verify data of *Standard 3*, the experts asked questions to the head of the postgraduate education department, director of the Department of Methodology and Quality of Educational Programs Sarsenova L.K., and checked the documents and methods for assessing residents. The following questions were asked: what assessment methods are used in monitoring the knowledge of residents and how objectively are they assessed?

The following grade reports have been developed at the HSPH: a mini-clinical exam, an assessment of the quality of medical records (Chart Evaluation Tool), an assessment of patient presentation skills (Patient Presentation Rating), direct observation of procedural skills and a grade report for the performance of a practical skill (DOPS).

The Department of Childhood Diseases with a course in neonatology has a CME, which includes a bank of 600 tests (MCQ) in all sections of neonatology, 50 tasks, questions for oral questioning, patient presentations for clinical analysis, 10 checklists for assessing practical skills, which were compiled by the teachers of the department and approved at a meeting of the Department of Therapy with courses in gastroenterology, psychiatry and medical rehabilitation, the Academic Committee (minutes No.5 dated 28.12.2024). The Head of the Department of Methodology and Quality of Educational Programs responded that additions and updates to the control and measuring equipment are planned to be made at the end of the academic year, taking into account the fact that residency training in this organization began only in the current academic year.

The results of the resident assessment are documented as follows: assessments are entered into the "PLATONUS" program, which creates an open system for assessing residents' knowledge. The assessment procedure is complete, accessible and makes it easier to calculate the resident's rating.

At the same time, 2 people received "excellent" based on the results of the final exam in the discipline.

There is a document on appealing the assessment results - "Appeal Regulations", which was approved in 2024. To date, no applications for appeal have been filed by residents.

During a visit to the organization and a conversation with the acting Director of the Department of Strategic Development and QMS Turykbayeva Zh.B., the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and employees, and includes such documents as annual operational plans, annual reports, department regulations, agreements with teachers and residents, regulations on the organization of the educational process, academic policy, rules for the development of basic documents and educational and methodological documentation (work program, working curricula, syllabuses, journals), assessment tools (checklists, statements), certificates, verifications and evidences. A review of the website showed that its pages contain the documents necessary for residents: the educational program of the discipline, the requirements for the applicant, and there is information on the form of entrance examinations, which is regularly updated.

During the visit to the organization, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" And the answer was received: the heads of the departments of the State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital" are involved in assessing the knowledge of residents from among the external examiners.

3.2 Relationship between assessment and training

During the visit to the HSPH, the EEC members confirmed that the resident assessment methods are comparable with the training and teaching methods and cover the assessment of all students' competencies both during practical classes and during exams.

Differentiated assessment methods are used to assess various learning outcomes, so theoretical knowledge is mainly assessed by testing, and practical skills are assessed using grade reports for each section of practical work.

When interviewing 29 teachers regarding assessment methods, the experts received convincing information that tests, case problems and assessment of practical skills using checklists are used to assess knowledge. Residents in the specialty 7R01107 "Adult and Pediatric Cardiology" also shared their opinions on the timeliness of providing tests, conducting consultations before exams, the clarity of the entire assessment procedure and its fairness. *For example, residents reported that the achievement of the learning outcomes stated in the educational program is achieved due to a significant number of issue-related patients in the dermatovenereology department of the regional dermatovenereology dispensary, as well as ongoing advisory assistance from a clinical mentor or teacher. Residents are provided with the necessary access to patient management, to all types of medical documentation, to participation in consultations and clinical discussions with colleagues of related specialties, and to work in a multidisciplinary team.*

During their visit to the clinical site, experts inspected the resources for organizing the assessment of knowledge and practical skills, namely, a sufficient number of patients, access of residents to all procedures and equipment, highly qualified teachers and clinical mentors.

The experts determined that the choice of resident assessment methods is based on daily supervision of patients, since the practical part of the training is the main one. For example, such formative assessment methods as a "clinical case" contribute to interprofessional learning. A method such as "implementation of practical skills" demonstrates the integration of training and an emphasis on clinical skills. Established assessment methods ensure that the resident has mastered all sections of the educational program and acquired the necessary practical skills.

Feedback from residents based on the results of their assessment is collected in the form of a questionnaire and published on the organization's website. In an interview, residents confirmed that they are provided with feedback after completing the training.

The 7 interviewed employer representatives also indicated that the training of residents corresponds to the modern development of medical practice and science, since there is high competition in the labor market and highly qualified specialists are required. Employers said that they themselves participate in the assessment of residents, since they are included in the examination committee.

The development of new control and measuring equipment is carried out by teachers through studying world experience in assessing knowledge in residency, and then implemented in the department. At the same time, no examples of test validation were presented to the experts.

Conclusions of the EEC by criteria correspond to 9 standards (including 6 basic and 3 improvement Standards): fully - 8, partially - 1, do not correspond - 0.

Recommendations for improvement:

- 1) To document the assessment of the reliability and validity of control and measuring equipment for the purpose of their continuous improvement (Standard 3.1.4).

Standard 4: RESIDENTS

4.1 Admission and selection policy

The educational organization has a policy for the admission of residents, which is called "Rules for admission to residency" (dated 29.08.24). Approaches to the admission of residents are based on the requirements of the country and internal regulations, namely, according to the "Model rules for admission to training in educational organizations implementing postgraduate educational programs", approved by the Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 31.10.2018 under No.600, with additions and amendments made on May 24, 2021 (No.241 The Regulation on the admission of students to higher and postgraduate education is posted on the university website at HSPH and is available to all interested parties. Section 5 of the Admission Rules

regulates the procedure for admitting students to postgraduate educational programs.

The specialty exam includes 3 stages, assessed on a 100-point assessment scale, where: Stage 1, 20% - is the sum of the GPA score for the period of study in the internship training + GPA for the period of study in the bachelor's degree; Stage 2, 30% - the result of computer testing on the 7th-year FC (independent testing conducted by the NCIE). If the applicant did not have an independent testing assessment in the year of completion of the internship training, the applicant presents a specialist certificate/ or category and a document confirming work experience of more than 5 years; 3 - stage, 50% - motivational interview with video/audio recording. During the interview, members of the examination committee must assess the applicant's potential for the future, interest in the specialty, motivation and basic knowledge of the training profile.

The document takes into account the requirements for residency applicants in terms of their previous achievements in bachelor degree and internship studies (for example, GPI for this period of study).

The procedure for appealing the results of admission to residency is prescribed in the "Rules for Admission to Residency". In case of disagreement with the grade given for the oral stage of the exam, an appeals Committee is created (Order No.70-N dated 20.05.2024), which decides on adding or denying points to the person appealing the results of the entrance exam in specialties (clause 8.3).

To date, there have been no appeals from applicants.

Representatives of students were not included in the process of developing the policy for admission and selection of residents, since enrollment to the residency in the specialty 7R01107 "Adult and Pediatric Cardiology" was carried out for the first time

In the current academic year, a revision of the admission and selection policy, the number of residents is planned. The Department of Residency, Director - Abirova Akmaral Adilkhanovna, is responsible for this.

During the conversation of the EEC experts with resident cardiologists, it was confirmed that applicants who actively participated in scientific clubs, conferences during their studies, have mastered the internship training program well, have good practical skills, clinical thinking and are constantly working on the development and improvement of their competencies (from interviews with residents, teaching staff, vice-rector for academic activities) have advantages in enrollment in the residency in the specialty 7R01107 "Adult and Pediatric Cardiology".

Thus, the experts validated the data according to Standard 4. In general, all criteria are met. The experts reviewed the documentation on the admission of residents, including entrance exam tickets, statements and personal files of applicants.

4.2 Number of residents

The EEC experts confirmed that the requirement established by the Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 under No.606 and paragraph 8 of Article 52 of the Law of the Republic of Kazakhstan dated July 27, 2007 "On Education" (with additions and amendments) is met at LLP KMU "HSPH". The number of residents in the specialty 7R01107 "Adult and Pediatric Cardiology" per teacher is 1:2. Adjustments to the admission figures are made by the authorized body - the Ministry of Healthcare of the Republic of Kazakhstan. The enrollment of residents for all educational programs, including the program in the specialty 7R01107 "Adult and Pediatric Cardiology" was carried out for the first time. A total there are 2 first-year residents.

No.	Resident's full name	Group name	Form of study
1.	Idrissov Kair Kairatovich	Card24-001	on a contractual basis
2.	Urinbossarov Samat Kuanyshbek ugli	Card24-001	on a contractual basis

Accordingly, the first graduation of residents in all specialties will be in the next academic year.

The educational organization analyzed the need of practical healthcare for specialists and plans to form an application in March-April of this year, based on a request from the Ministry of Healthcare of the Republic of Kazakhstan, for a certain number of places in each residency specialty in accordance

with the annexes of the state license, analysis of concluded contracts for clinical training, qualification of teaching staff, material and technical resources.

4.3 Support and consulting of residents

During the conversation of the EEC experts with cardiologist residents, it was established that safe conditions for training residents have been created and are being provided at the KMU "HSPH". In order to protect the interests of residents, to assist them in their educational, scientific, and extracurricular activities, the University has various services for organizing advisory, psychological, social and medical support for students.

During interviews with residents and graduates, the following information was obtained: during the period of study, if a problem arises, residents can seek help and advice from a teacher/mentor (in case of emotional burnout, psychological problems, etc.); on issues of interaction with teachers, employees of departments and other divisions - from the Residency Department; legal advice - from a full-time lawyer at the University. Residents also noted that financial support consists of providing residents studying on a grant from the Local Executive Bodies with a monthly stipend; those in need are provided with a dormitory. a system of discounts is provided in accordance with contractual obligations (10% for residents with less than 5 years of experience as a doctor, 15% for residents with 5 years or more of experience as a doctor). Residents receive information about student support services from information through websites and the university's WhatsApp chats. The rector's blog and helpline are functioning.

The HSPH has a department of "Pedagogy, Psychology and Social Sciences", which has developed a "Program of psycho-emotional support for residency learners aimed at identifying and preventing burnout syndrome". The program provides psychological support to residents, including regular consultations and questionnaires to assess their emotional state and identify the need for additional assistance.

In the event of various disagreements with colleagues, residents, the resident has the opportunity to use a wide choice of clinical site, change the curator, clinical mentor, while maintaining confidentiality.

Psychological support for residents is provided through consultation with a full-time psychologist, which is conducted confidentially.

4.4 Representation of residents

Residents of the KMU HSPH participate in the development of the residency program by choosing elective disciplines. Residents have the right to make a proposal, to include in the catalog new elective disciplines, in their opinion, necessary for study and contributing to the improvement of the educational program as a whole. Proposals from residents submitted orally or in writing are necessarily taken into account. An example of this is that at this stage the catalog of elective disciplines for the next academic year in the specialty 7R01107 "Adult and Pediatric Cardiology" has already been completely revised and expanded, which includes disciplines proposed by residents.

As a result of feedback (questionnaire), after completing each discipline, residents can influence the organization of the educational process (choice of teaching staff, training conditions, including the clinical site).

Residents are included in such advisory bodies as the "Council of Young Scientists", which was transformed into the Council of Young Scientists and Clinicians (CYSC), after the enrollment of residents to LLP KMU "HSPH" (Order "On the composition of the Council of Young Scientists and Clinicians of KMU "HSPH" (minutes No.3 dated October 24, 2024). However, residents in the specialty 7R01107 "Adult and Pediatric Cardiology" are not included in the Council of Young Scientists of KMU "HSPH". Therefore, the representation of residents in advisory bodies should be expanded. In order to plan the career of residency graduates, it is necessary to assign a person responsible for career planning and employment of graduates.

4.5 Working conditions

The training of residents in the specialty 7R01107 "Adult and Pediatric Cardiology" is carried out at the expense of the local budget (Local administration's grant) and at the expense of the student's own funds. Both residents are trained at their own expense funds.

Based on the "Residency Regulations" of the KMU "HSPH", it is regulated to plan the resident's academic workload based on this time; night and day watch, as well as other types of work are included in the specified academic workload. Residents' watch at the clinical site is one of the types of independent work and is aimed at mastering the learning objectives. Watch planning is reflected in the discipline syllabus.

In case of pregnancy, the resident is exempted from watch at the clinical site at night. Training according to an individual schedule in residency is allowed only if there are appropriate medical recommendations. Provided that the resident provides the appropriate certificate, by decision of the department and DR, he/she is given the opportunity to study according to an individual schedule.

Residents are given the opportunity to work at extracurricular time, which is reflected in the document - "Residency Regulations" of LLP KMU "HSPH". There are currently 2 such residents. Various events are held at clinical sites for training cardiology residents, in which residents participate. As a rule, residents supervise 5 patients per day, 20 people per month. Residents make thematic reports and other interesting topics in journal clubs in the Republic of Kazakhstan. They participate in health education work, including the promotion of breastfeeding, make presentations on the prevention of hospital infections at online sessions for neonatal nurses. The educational organization has introduced elements of distance learning for residents, for example, the Online Journal Club, CAPS.

Conclusions of the EEC by criteria. Compliant with 20 standards (including 14 basic and 6 improvement standards): fully - 18, partially - 2, do not comply - 0

Recommendations for improvement:

- 1) In the organizational structure of the university, to determine a division or person responsible for implementing activities on career planning, employment and monitoring of graduates of residency programs (Standard 4.3.3).
- 2) To increase the representation of residents in advisory bodies (Standard 4.4.1).

Standard 5: FACULTY

5.1 Recruitment and selection policy

One of the main resources of the university for the implementation of the residency EP in the specialty 7R01107 "Adult and pediatric cardiology" is the teaching staff, which is a priority factor for ensuring the high quality of the educational process and the training of competitive residents, taking into account the needs of the labor market.

The KMU "HSPH" has a department of therapy with courses in gastroenterology, psychiatry and medical rehabilitation and gerontology, where residents-cardiologists are trained. 4 teachers participate in the implementation of the educational program in the specialty 7R01107 "Adult and pediatric cardiology", of which 1 has a doctorate in medical sciences, 3 have a candidate of medical sciences. In general, the academic degree of the teaching staff conducting classes for residents is 100%, all have a medical category.

The personnel policy of the Kazakh Medical University "HSPH" is based on the following regulatory documents:

1. Personnel policy of the KMU HSPH (link: [Personnel policy of the KMU HSPH](#));
2. Regulation on the procedure for competitive replacement of positions of teaching staff and research workers of LLP KMU "HSPH" (link: [Regulation on the procedure for competitive replacement of teaching staff](#));
3. Regulation on the procedure for formalizing labor relations of LLP KMU "HSPH" (link: [Regulation on the procedure for formalizing labor relations](#));

The HR department carries out current procedures for the hiring, registration, dismissal of the teaching staff and employees. Lecturers are hired through a competition for vacant positions, the

procedure for which is regulated by the Regulation on the procedure for competitive replacement of positions of teaching staff and research staff of LLP KMU "HSPH" (link: [Regulation on the procedure for competitive replacement of teaching staff](#)). In accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No.606 "On approval of the average ratio of students to teachers for calculating the total number of teaching staff in higher and (or) postgraduate education organizations, with the exception of the Academy of Justice, military, special educational institutions, educational organizations in the field of culture" the university's teaching staff is determined annually for the new academic year. The teaching staff is formed based on the needs for the effective implementation of educational programs, as well as based on the total amount of academic workload. Requirements for staffing and the educational process are determined by the qualification requirements for educational activities. In accordance with the State Compulsory Educational Standard for clinical training in residency in specialties, a mentor is appointed from among qualified specialists in practical healthcare working at the residency bases, having the first or highest qualification category and at least 5 years of experience in the relevant specialty.

The presence of basic education in accordance with the planned pedagogical activity, the presence of scientific and pedagogical experience, an academic degree and an academic title are mandatory for the teaching staff training residents. These requirements are reflected in the job descriptions approved by the Rector of the KMU HSPH.

The competition is held within the framework of the implementation of the Regulation on the procedure for competitive replacement of positions of teaching staff and research staff of the KMU "HSPH" and contributes to consolidating positions as a leading University among medical universities of the Republic of Kazakhstan.

A positive decision of the competition committee is the basis for concluding an employment contract with the teacher. The rights and responsibilities of the university's teaching staff are defined by job descriptions. Duties are distributed depending on qualifications, work experience, personal characteristics and production needs.

The hired teachers meet the requirements for the qualifications of the positions specified in the job descriptions for the positions of the teaching staff, which contain criteria for the scientific, pedagogical and clinical merits of applicants and the following criteria for the positions:

1. Head of Department/Course: higher (or postgraduate) education; possession of an academic degree of Doctor of Science, Candidate of Science and Doctor of Philosophy (PhD) in the field, academic title, work experience of at least 5 years in scientific and pedagogical activity; possession of a specialist certificate in the field of taught disciplines, the highest or first medical category.

2. Professor: higher (or postgraduate) education; possession of an academic degree of Doctor of Science, Candidate of Science and Doctor of Philosophy (PhD) in the field, academic title; at least 5 years of work experience in scientific and pedagogical activity; a specialist certificate in the field of the taught disciplines, the highest or first medical category.

3. Associate Professor: higher (or postgraduate) education; an academic degree of a candidate of science or a doctor of philosophy (PhD) in the field; at least 5 (five) years of work experience in scientific and pedagogical activity; a specialist certificate in the field of the taught disciplines, the highest or first medical category.

4. Assistant: higher (or postgraduate) education; at least 3 years of experience in the specialty and (or) a master's degree; a specialist certificate in the field of the taught disciplines, and the first or second medical category.

The University ensures a balance between teaching, scientific research and the provision of medical care by invited teachers. The number and composition of the teaching staff of the departments for residency is planned based on the needs of the educational process, the standard teaching load per full-time teacher and the contingent of students. Research work is an integral part of the activities of the university's teaching staff and a prerequisite for training residents in the specialty 7R01107 "Adult and Pediatric Cardiology".

The teaching staff of the department actively participates in conferences, including conferences in near and far abroad. Articles in journals with a non-zero impact factor and publications in collections of international conferences are regularly published. The results of scientific research in the form of teaching aids are used in the practical development of disciplines in the field, and the technologies developed during scientific research are introduced into practical healthcare and mastered by young specialists, including residents. All educational and methodological literature is reviewed at a meeting of the departments and is reviewed by at least two specialists with an academic degree, competent in the relevant field.

The teaching staff of the department actively provides assistance to practical healthcare. In addition to providing qualified specialized medical care to the population at the clinical sites of the University, the employees of the department provide assistance and support to the Ministry of Healthcare of the Republic of Kazakhstan and its structural divisions in coordinating the neonatal service in Almaty and the Almaty region, developing standards, protocols for the diagnosis and treatment of internal diseases, reviewing medical documentation and examining fatal cases, including infant fatalities.

Leading employees from practical healthcare with the highest or first qualification category of a doctor are actively involved as clinical mentors. For teachers of clinical departments, a mandatory requirement is that applicants have certificates and qualification medical categories and a number of other provisions in pursuance of the Labor Code of the Republic of Kazakhstan, job descriptions of the teaching staff.

The University plans to attract heads of departments in the CB as clinical mentors.

The recruitment of teachers to carry out the EP is carried out through a competition for vacant positions, the procedure for which is regulated by the internal Regulation on the procedure for competitive replacement of positions of teaching staff and research staff of the KMU "HSPH" (link: [Regulation on the procedure for competitive replacement of positions of teaching staff](#)).

The Competition Committee is a permanent consultative advisory body of the University, created for the purpose of organizing and ensuring the implementation of procedures for competitive replacement of positions of teaching staff and research staff of the KMU "HSPH". In its activities, the Competition Committee is guided by the current legislation of the Republic of Kazakhstan, the Charter of LLP KMU "HSPH", the Regulation on the procedure for competitive replacement of positions of teaching staff and research staff of KMU "HSPH", job descriptions for positions of teaching staff and research staff and internal documents of the university.

When hiring for teaching positions, the compliance of candidates with the qualification requirements is mandatory.

The main task of the healthcare industry is to create and develop its own scientific and innovative potential and the practice of selecting employees with already formed motivation that meets the requirements of the workplace. In accordance with the regulatory indicators established by the Law of the Republic of Kazakhstan dated July 27, 2007 No.319-III "On Education"; By the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No.606. "On approval of the average ratio of the number of students to teachers for calculating the total number of teaching staff of higher and (or) postgraduate education organizations, with the exception of the Academy of Justice, military, special educational institutions, educational organizations in the field of culture" the teaching staff of the residency is determined annually.

The teaching staff is formed based on the needs for the effective implementation of educational programs, as well as based on the total volume of the teaching load. When drawing up the staffing schedule for the new academic year, in order to conduct classes for residents, a mandatory requirement for teachers is the presence of basic education, compliance of the specialty code with the academic degree, academic title and work experience. Since the training of personnel in residency is carried out in a clinical specialty, the level of qualification of the teaching staff plays an important role, the requirements also include the presence of the first or highest medical qualification category, the academic degree of doctor and candidate of medical sciences/PhD.

The main role in the clinical training of residents, the acquisition of practical skills, the ability to make independent clinical decisions belongs to clinical mentors. For mentors of clinical departments, a mandatory condition is the presence of the first and highest qualification medical categories in the applicants and a number of other provisions in pursuance of the Labor Code of the Republic of Kazakhstan, job descriptions of the teaching staff. For this purpose, specialists from large well-equipped clinical sites who are proficient in modern methods of instrumental diagnostics, patient rehabilitation, performing minimally invasive interventional techniques, surgical interventions are selected as mentors.

A clearly formulated mission, goals and objectives of the EP, created in accordance with the current management system of the University, define a new approach of the University team in training residents, contribute to the development of broad competence of future doctors, support a constant desire to improve the quality of medical care and further continuous professional education and development.

In accordance with the Order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020 No.KR DSM-304/2020 "On approval of the provisions on the clinical site, clinic of the organization of education in the field of healthcare, university hospital, residency base, integrated academic medical center and the requirements imposed on them", mentors involved in the training of students at clinical site will have to meet the following criteria <https://adilet.zan.kz/rus/docs/V2000021848>:

- 1) a qualified specialist with at least five years of work experience in the main activity;
- 2) trained as a mentor to implement the educational residency program.

Leading healthcare specialists have been invited to conduct classes in the residency program in the specialty 7R01107 "Adult and Pediatric Cardiology":

1. Dzhussipov Alikhan Kazakhbayevich – Doctor of Medical Sciences, PhD, professor, cardiologist of the highest category.
2. Baisultanova Ayash Sharipkanovna – Candidate of Medical Sciences, professor, rehabilitation physician, geriatrician of the highest category;
3. Yesengarayeva Saule Damirovna - Candidate of Medical Sciences, associate professor, medical rehabilitation physician;
4. Kumarbekova Nurila Aytymbekovna - Candidate of Medical Sciences, associate professor, medical rehabilitation physician

Among the part-time workers from practical healthcare, the doctors involved in training residents will have the highest category and are leading specialists.

The HR Department ensures compliance with the HR policy requirements in the residency EP by monitoring the ratio of the teaching staff profile, compliance with the range and balance of teachers of basic biomedical sciences, behavioral and social sciences and core (clinical) disciplines necessary for the implementation of the educational program.

Encouragement of employees, creation of motivation, stimulation of employees is carried out on the basis of the university's HR policy. Labor motivation and stimulation is an impact on the behavior of personnel to achieve personal, group and social goals. In order to increase the interest of employees in improving the quality and efficiency of labor, KMU "HSPH" applies incentive payments.

The types, procedure and conditions for the application of incentive payments are determined by the Regulation "On the organization of the system of remuneration and incentives for labor of LLP "Kazakhstan Medical University "HSPH" and acts of the university, taking into account the specifics of production activities, personnel tasks, financial capabilities of the university and other factors affecting the wage fund.

The labor incentive system provides for the following main types of incentive payments: - personal allowances - incentive payments made to an employee in addition to the established official salary in order to encourage success in work and stimulate their further increase, having a regular nature; - bonuses - are one of the types of incentive payments and represent cash payments for achieving certain results in work and in matters of stimulating their further increase.

As an additional type of payment (in addition to the established official salary) to teaching staff:

- for completing academic work in the postgraduate education program, as well as in the additional education program financed from the republican budget, in addition to the approved annual academic load;
- for completing additional academic classes with students in the postgraduate education program not provided for by the working curriculum, if additional academic classes are conducted on a paid basis;
- as well as in other cases stipulated by the current legislation and/or acts of LLP KMU "HSPH".

When questioning teachers, it was found that the majority (94.59%) are completely satisfied with the organization of work and the workplace in this educational organization, but 2.7% are partially satisfied. In this educational organization, teachers have the opportunity to engage in scientific work and publish the results of R&D - 91.89% completely agree, 8.11% partially. Satisfied with the salary - 67.57% completely agree, 18.92% partially.

5.2 Commitments and development of teachers

In order to verify the data of Standard 5, at a meeting with the head of the HR department and during interviews with teachers, experts received an opinion on approaches to the development of pedagogical competence of teachers, motivation to work with residents, mentoring, which includes a pedagogical load for the teaching staff of clinical departments: head of department - 450 hours; senior teacher, teacher - 600 hours.

The work schedule of the residency teachers is agreed upon when drawing up the schedule of classes in the residency. The activities of the teaching staff are planned in accordance with the individual plan of the teacher, which is discussed and approved at department meetings. Planning the teaching load of the teaching staff is carried out in academic hours.

The staffing level conducting classes for residents in the specialty 7R01107 "Adult and Pediatric Cardiology" allows for a rational ratio between the number of teachers and the number of residents, which guarantees their individual relationship and monitoring of the residents' achievements.

The proper level of professionalism of the university employees is supported and developed by the system of advanced training of teachers in Kazakhstan and abroad. The main means of professional development of personnel and improvement of their quality characteristics are retraining and advanced training of employees. To achieve the set goals, KMU "HSPH" uses the following forms of training and advanced training of personnel:

1. participation in various seminars, conferences, round tables, trainings, etc.;
2. Completion of special training courses for advanced training, seminars, etc.

The desire of employees to improve their qualifications is supported and encouraged by the University management.

The University has developed mechanisms and criteria for systematically assessing the effectiveness of teachers, their level of competence, the professional potential of the staff and their readiness to solve the strategic tasks of our organization.

The main methods of assessment are certification, conversation, identification of personnel reserve, observation. In accordance with the University plans, an audit of departments is carried out annually on educational and methodological work, according to regulatory documents. To monitor and assess the quality of teaching, mutual visits to classes, open classes of teachers are held, the results of which are discussed at department meetings. The quality of classes and the educational and methodological materials used, the timeliness of issuing assignments for independent work, the organization of control and assessment of students' academic performance are analyzed at department meetings.

The assessment of the activities of teachers is carried out based on the results of certification. The main goal of certification is to determine the compliance of the teaching staff with the positions they hold based on a comprehensive and objective assessment of their qualifications, professional

competence and business qualities. Certification of the teaching staff is carried out among full-time teachers and is based on the Regulation on the procedure for conducting certification of the teaching staff of LLP "Kazakhstan Medical University "HSPH".

KMU "HSPH" carries out various activities to motivate and encourage employees: ensuring working conditions in accordance with the labor legislation of the Republic of Kazakhstan, an employment contract and a collective agreement, providing employees with equipment, tools, technical documentation and other means necessary for the performance of work duties; timely payment of wages and payment of incentive bonuses for high-quality work in accordance with the regulation on remuneration.

In order to improve the professional and pedagogical culture of the teaching staff, stimulate and motivate teachers for further professional development, support scientific research and educational innovations, the university holds a competition for the title of "Best Teacher of KMU "HSPH". The competition for the title of "Best Teacher of KMU "HSPH" is held annually in the first half of the calendar year. Teachers with high achievements in teaching and research activities are allowed to participate in the competition. The rules for holding this competition are set out in the internal document "Rules for holding the awarding of the title "Best Teacher of LLP KMU "HSPH" (link: [Rules for organizing and holding the competition for the title "Best Teacher of LLP KMU "HSPH"](#)).

The experts determined that the faculty and residents have enough time for teaching, mentoring and training. The faculty work schedule is set in accordance with the personnel policy. Working hours: from 8.00 a.m. to 4.00 p.m. The faculty conducts weekly seminars lasting 6 hours. Time for clinical reviews, clinical rounds is daily. Watch - twice a month.

The experts received responses about the program for advanced training of teachers, which is held annually and 104 teachers participating in the implementation of the educational program were trained in 2024, including teachers of the accredited educational program in the specialty 7R01107 "Adult, Pediatric Cardiology" - 2 people. These activities are funded by the educational organization.

Today, the system of advanced training at the University is carried out in accordance with the plan for advanced training of the university's teaching staff. It is planned to update the advanced training system in accordance with the indicators of Strategic Development for 2020 - 2025.

The organization of courses for advanced training (AT) for the development of pedagogical competencies and control over the advanced training of the teaching staff is carried out by the HR department. All departments and teaching staff are sent an information letter about the upcoming AT course in accordance with the plan for advanced training of the University teaching staff.

Training events are held both within the University and with the invitation of foreign lecturers. The expert checked the certificates of teachers on such topics as "Pedagogical mastery as a component of pedagogical science", "Development of communication skills and abilities of teachers", "Basic cardiopulmonary resuscitation in adults and children".

The wage fund for the "Residency" program for 2024 amounted to 80,321.8 thousand tenge, taxes and deductions - 8,974.9 thousand tenge. Planning of the University's current expenses is carried out in accordance with the financial standards for higher education, approved by the order of the Ministry of Healthcare of the Republic of Kazakhstan No.474 dated June 14, 2004 "On approval of the standards for calculating the cost of tuition for one student, postgraduate student, clinical resident (master's student) in higher medical educational institutions within the country under a state order."

Experts have found that teachers initiate research topics for residents, stimulate the need for additional training and independent work with literature, medical documentation. The University participates in the "Healthy Universities" project. The goal of this project is to integrate the principles of a healthy lifestyle into the structure and educational process of universities by forming a responsible attitude to health and lifestyle among students, teaching staff and community.

On September 23, 2022, KMU "HSPH" held the International Congress "Global Health", dedicated to the 25th anniversary of the founding of the university and the signing of the Agreement between the WHO Regional Office for Europe and the Ministry of Healthcare of the Republic of Kazakhstan.

The event was held with the participation of teachers, representatives of WHO, the Senate of the Republic of Kazakhstan, the Ministry of Healthcare of the Republic of Kazakhstan, the Local Administration of Almaty, the National Center for Public Healthcare, the Social Health Insurance Fund, the Consulate of the People's Republic of China, medical universities, practical healthcare of the Republic of Kazakhstan, as well as leading experts from near and far abroad.

One of the key factors in improving the quality of training of medical personnel ready for independent practical work is the use of innovative teaching methods in pedagogical activity, as a result of continuous improvement of the pedagogical competencies of the teaching staff of the University. To improve the effectiveness of training for residents of the Kazakh Medical University "HSPH", classes will be conducted using new educational technologies aimed at their active participation in the educational process.

Achievement of the goals of the final learning outcomes is carried out through the development and assessment of general and special competencies of students:

- knowledge and understanding in the studied area (applied teaching and assessment methods: CBL, TBL, D-PBL, illustrative practical classes, e-learning technologies - videos, video lectures, work on the MOODLE platform);
- practical skills (applied teaching and assessment methods: TBL, D-PBL, long-term clinical case (work at the patient's bedside), simulation technologies, standardized patient, etc.);
- communication skills (applied teaching and assessment methods: TBL, facilitatorship, according to the Kolb model, etc.);
- scientific research skills (applied teaching and assessment methods: analysis from the standpoint of evidence-based medicine, facilitation, updating the IWR with a focus on the future specialty);
- general education (development of language competencies) - all technologies;
- social and ethical (applied teaching and assessment methods: analysis through an integrated clinical symposium and conferences of medical errors);
- economic and organizational and managerial (applied teaching and assessment methods: E-learning technologies).

The ratio between the number of teaching staff and the number of residents is 1:3, which enables close personal interaction and monitoring. One of the tasks of improving clinical training of personnel is the introduction of mentoring.

In the educational organization, there is an opportunity for career growth and development of teacher competencies - 91.89% of the surveyed teachers answered, and 13.51% partially agree with this. Studied in advanced training programs - 35.14% during the current year, 62.16% from 1 to 5 years ago, 2.7% over 5 years ago.

The organization implements social support programs for teachers - 56.76% answered that "yes, such programs exist", 0% - "I have already used this", 10.81% of respondents answered that there are no such programs, and 32.43% of respondents do not know about this.

Conclusions of the EEC by criteria. Compliance out of 8 standards (including 7 basic and 1 improvement standard): fully - 7, partially - 1, do not comply - 0.

Recommendations for improvement:

- 1) To provide ongoing training in pedagogical competencies for clinical mentors (Standard 5.2.2).

Standard 6: EDUCATIONAL RESOURCES

6.1 Material and technical support and equipment

To carry out professional training of resident physicians in the specialty 7R01107 "Adult and pediatric cardiology", KМУ "HSPH" has a sufficient and appropriate material and technical resource, information resources, educational and information technologies, resources for clinical training of residents and for conducting scientific research.

The material and technical resource of the University includes: lecture halls, classrooms, a library/coworking center, an educational and clinical center with simulation rooms, computer labs, a dormitory, a fitness room, a coffee shop, a medical office, clinical sites - multidisciplinary clinical hospitals in Almaty and the regions of the Republic of Kazakhstan.

Based on the Law of the Republic of Kazakhstan "On Education" and the Order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020 No.KR DSM-304/2020 "On approval of the provisions on the clinical site, the clinic of the organization of education in the field of healthcare, the university hospital, the residency base, the integrated academic medical center and the requirements imposed on them", cooperation agreements were concluded between LLP KMU "HSPH" and leading medical institutions of Almaty and the regions of the Republic of Kazakhstan. The clinics are equipped with modern medical equipment, apparatus and laboratories of a modern type. In total, LLP KMU "HSPH" has 73 agreements with clinical sites, both public and private. The clinical sites are multidisciplinary hospitals, which allows expanding the practical horizons of resident doctors in related specialties. Based on the cooperation agreement, the Department of Therapy with Courses of Gastroenterology, Psychiatry, Medical Rehabilitation and Gerontology is based at the following clinical sites: State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital".

The Library of the Kazakhstan Medical University "HSPH" is one of the most important divisions of the university, which is a scientific and information institution, a support base for the educational, educational-methodical and scientific process for training qualified specialists in the field of healthcare.

The library fund is equipped with educational, educational-methodical, scientific, reference literature. Additional sources of acquisition are books received as a gift from the teaching staff of the university and from other organizations.

The library operates on the automated library and information system "KABIS", which meets international standards. There is an electronic catalog (EC), which reflects all scientific and educational literature in the state, Russian and foreign languages, dissertations and abstracts are introduced. The electronic catalogue forms the databases "Book Fund", "Readers' Card Index" and "Electronic Resources and Articles".

The Ministry of Science and Higher Education, in order to create favorable conditions for the formation of a single scientific and information space, providing students, researchers of universities and research institutes with electronic resources, provides free centralized access to foreign information resources.

The University has signed an agreement with Wiley Online, one of the largest international academic publishers publishing full-text scientific resources in all areas of modern science and knowledge. In addition, an agreement was signed with the electronic libraries: "Student Consultant" (www.studentlibrary.ru) and "Doctor Consultant" (www.rosmedlib.ru), which allows residents to effectively study materials. One of the criteria for evaluating the library is free user access to electronic resources and high-quality replenishment of the electronic library. Work has been intensified to digitize the traditional fund and place publications in the electronic library.

The library structure includes 1 reading room combined with a subscription, the number of seats is 20, the total area of the library is 92.8 sq.m., equipped with computers connected to a local network and having access to the Internet.

LLP KMU "HSPH" provides full free access for students to electronic databases. There is remote access to the electronic catalog of the library. Residents will undergo initial registration via the IP address of LLP KMU "HSPH", thus acquiring a login and password for remote access to the electronic resources of the university, such as Wiley. Residents are aware of this.

Before the start of the relevant discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he/she should acquire and develop during the period of study in the residency.

Every year, the university allocates significant funds for the expansion and modernization of the material and technical resource in order to implement the mission, policy and goals. Most computer classes are equipped with modern technology of the latest generation, according to the long-term plan for informatization, it is being modernized and updated, taking into account the modern development of information and communication technologies. Availability of modern electronic document management and an electronic platform for the implementation of the educational, scientific process of the educational institution. Resources that ensure the informatization of education and University management.

Availability of educational, methodological and scientific literature on general educational, basic and specialized disciplines of educational programs, including in the state language and the effectiveness of its use; renewability of literature collections in accordance with the standards defined by the qualification requirements for licensing. Availability of educational literature on electronic media, the share of electronic educational materials in the total volume of library resources; electronic textbooks developed by university teachers, purchased. Their compliance with the qualification requirements for licensing. Availability of electronic textbooks, the electronic reading room collection, educational TV, etc. for students. Availability of electronic catalogs in the library and their availability on the Internet (Intranet); support for students, teaching staff and employees in accessing modern databases (Scopus, Thomson Reuters, etc.). The number of annual subscription publications on the university profile (domestic and foreign). A survey of teaching staff and students regarding the compliance of technical teaching aids with modern requirements is carried out once a year - during the preparation of the procurement plan. The procurement plan for technical teaching aids is formed on the basis of applications from university departments. Today, all departments have projectors, laptops and new generation computers. Every year, it is planned to update the computer equipment at the university. The dynamics of development of material and technical resources and the effectiveness of using the assessment results for adjustment in planning and budget allocation are assessed regularly. The analysis of the implementation of the income and expenditure budget for the current year is carried out quarterly.

The necessary funds are provided for the development of the material and technical resource and uninterrupted operation: acquisition of fixed assets (computers, laptops, printers, interactive whiteboards) in the amount of 11,469.1 thousand tenge, educational literature and intangible assets (textbooks, books, subscription to electronic databases) in the amount of 10,814.7 thousand tenge,

6.2 Clinical sites

Based on the cooperation agreement, the department of therapy with courses of gastroenterology, psychiatry, medical rehabilitation and gerontology is based on the following clinical sites: State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital", "Scientific Center of Pediatrics and Pediatric Surgery", "Center for Perinatology and Pediatric Cardiac Surgery". Residents under the supervision of teaching staff and mentors, supervise newborn patients in the neonatal intensive care unit and the neonatal nursing unit; are on call in the maternity unit and provide consultations to newborns up to 28 days of life in the following departments: neurology, nephrology, hematology, cardiology, endocrinology, gynecology, stroke center, neurosurgery, anesthesiology, resuscitation and intensive care unit and other departments.

At the clinical sites, residents supervise and are on call, under the supervision of the heads of the neonatal departments and the neonatal resuscitation intensive care unit. At all clinical sites, residents are allowed into all divisions of the clinics under the guidance of clinical mentors.

Thus, at the clinical sites, at the level of inpatient care, patients with common and rare vascular diseases undergo diagnostic procedures, therapy selection and emergency care, which meets the requirements for residency training in the specialty 7R01107 "Adult and Pediatric Cardiology". The number of specialized patients at the department's clinical sites is sufficient for training, there is a variety of nosological forms of diseases, which fully meet the requirements of the EP for residency training in the specialty 7R01107 "Adult and Pediatric Cardiology". The clinical sites used for residency training in the specialty 7R01107 "Adult and Pediatric Cardiology" are equipped with

modern diagnostic equipment presented in Section 6.2 of the self-assessment report. The experts saw all the equipment and confirmed its availability.

The Department of Therapy with Courses in Gastroenterology, Psychiatry, Medical Rehabilitation and Gerontology has 3 classrooms with a total area of 45 sq.m., a lecture hall with a total area of 36 sq.m. and 1 office of the head of the department, with an area of 20 sq.m., at the main clinical site - the State-owned utility Enterprise based on the Right of Economic Management "Central City Clinical Hospital". During training, resident doctors will have the opportunity to work in the rooms of functional and radiation diagnostics and operating rooms at clinical sites, which are equipped with modern diagnostic and operating equipment and clinical laboratories. It also has 3 computers, 1 laptop, 3 printers, 1 projector.

During the period of training in residency, learners have the opportunity to master theoretical and practical skills in the field of vascular diseases and related specialties, with the ability to provide medical services in a clinic, hospital, at the stage of the emergency room, emergency care. Experts have established that cardiology residents have access to surgical patients, as well as to laboratory, instrumental necessary research methods, operating rooms, are on call in the hospital, in the emergency room under the supervision of the teaching staff and mentor/responsible doctor.

The outpatient stage of training is carried out in the city polyclinic No.9, which is the largest clinic of primary medical care, equipped with modern equipment and information, communication technologies.

The training rooms are designed for 6 to 10 seats, and are located in the buildings of clinical sites, which are fully equipped for lectures and seminars, in which there is the necessary cabinet furniture, multimedia equipment, a computer/laptop.

In order to validate the implementation of the self-assessment report data and obtain evidence of the quality of the programs, interviews were conducted with residents. The experts asked questions about satisfaction with training, sufficient time for patient supervision, work with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents who need it, participation in "Journal Clubs", availability of resources of international databases of professional literature. In general, residents are satisfied with training, assessment methods, and purposefully entered this organization, as they believe that the educational organization has good resources, image and international connections, residents actively participate in patient management, but so far under the strict supervision of mentors, and also actively participate in international events.

The KMU "HSPH" has a Clinical and Educational Center (hereinafter - CEC), the activities of which are aimed at training and independent assessment of clinical skills of students on simulating devices, mannequins and virtual simulators. During the academic year, residents will study at the CEC according to the schedule, where they will practice and improve their practical skills.

The educational and clinical center is located in the main building of the KMU "HSPH" and occupies an area of 84.6 sq.m, which includes 3 simulation rooms. The total amount of equipment in the CEC is 86 units. Residents of the educational program in the specialty 7R01107 "Adult and pediatric Cardiology" can practice practical skills.

Work at the above-mentioned clinical sites promotes effective independent work of the resident, and is aimed at mastering professional competencies: be ready to effectively and professionally provide medical care to the population; taking into account physical, psychological, social factors; solve patient problems and make decisions based on the principles of evidence-based medicine; be able to apply scientific achievements in medicine; implement modern treatment and diagnostic technologies in their professional activities; demonstrate appropriate communication skills, observing the principles of medical ethics when communicating with the population, interacting with colleagues, employees of social services; apply management principles to the organization and implementation of medical care to the population; have teamwork skills and leadership qualities; be able to teach others and improve their knowledge and skills throughout their professional activities.

Cardiology residents regularly take part in organizing and holding annual events dedicated to the diagnosis and prevention of the most socially significant diseases.

Compliance of medical centers, clinics and polyclinics with the requirements for clinical sites of KMU "HSPH" is analyzed based on the results of internal and external audits, portfolio analysis and assessment, resident and teaching staff reports and departmental control.

6.3 Information technologies

KMU "HSPH" implements a policy on the effective use of information and communication technologies. In the work of information and communication technologies, LLP KMU "HSPH" is guided by the Law of the Republic of Kazakhstan "On Informatization" dated November 24, 2015 under No.418-V LRK. All conditions have been created for teachers and students to use information and communication technologies at the university and beyond.

There is a software and hardware base and computer equipment connected by a single corporate wired and wireless local area network, with Internet access. The connection of computers to the Internet is 100%. Internet connection speed: outgoing channel 200 Mbit/s, incoming channel 200 Mbit/s. The connection speed in the corporate network is 200 Mbit/s. Within the University, data exchange is carried out through the University server. There are 2 computer classes, including lecture halls with multimedia equipment. All clinical departments located in medical institutions of the city have access to Internet resources.

General information about the activities of the University is posted on the official website <https://ksph.edu.kz/> in 3 languages. The University is provided with a Wi-Fi zone.

To implement the educational process and methodological work, resources for training and support of students have been created and attracted: the educational process management system AIS "Platonus", the educational portal "Moodle". The AIS "Platonus" uploaded syllabuses of disciplines for all educational programs, teachers give grades for formative and summative assessment.

KMU "HSPH" provides free access to national and foreign databases (DB) in the field of medicine for students and teachers: Wiley Online Library <https://onlinelibrary.wiley.com/>, Cochrane library <https://www.cochranelibrary.com/>, the "Web of Science" Platform <http://apps.webofknowledge.com/>, the "Scopus" DB www.scopus.com, the "Sciencedirect" DB www.sciencedirect.com, Springer Link (Springer) <https://link.springer.com/>.

In accordance with the Order of the Minister of Healthcare of the Republic of Kazakhstan dated July 4, 2022 under No.KR DSM-63 "On approval of state mandatory standards for levels of education in the field of healthcare", the departments implementing educational activities of the residency in the specialty 7R01107 "Adult and pediatric cardiology" have developed syllabuses that are uploaded to the AIS "Platonus", to which residents have access.

Residents-cardiologists are provided with full access to all library resources in both printed and electronic form. For independent work, residents are provided with electronic resources of the library, including purchased electronic and multimedia textbooks, training programs, as well as subscription databases.

The library collection contains the necessary educational, educational-methodical and scientific literature on specialties, in accordance with the established qualification requirements for licensing, accreditation and certification of educational activities.

6.4 Clinical Teams

The clinical sites of the cardiology residency program are clinical hospitals providing highly specialized neonatal care. This fact guarantees that cardiology residents will gain experience working in multidisciplinary teams of specialists. Cardiology residents learn teamwork skills during joint rounds and consultations with professors and associate professors of departments/courses of otorhinolaryngology, maxillofacial surgery, heads of departments and resident physicians; during examinations and consultations of patients; when conducting diagnostic and therapeutic manipulations together with physicians in various treatment and diagnostic departments of the hospital, during watch.

The training program for the specialty 7R01107 "Adult and Pediatric Cardiology" in teamwork skills and effective interaction with other healthcare specialists includes direct work of residents with a

clinical mentor in all areas of the clinical site. Cardiology residents constantly collaborate with specialists from related and other fields of healthcare (cardiologists, pulmonologists, nephrologists, surgeons, gastroenterologists, endocrinologists, etc.), gaining experience working in a multidisciplinary team.

Training in an interdisciplinary/interprofessional team is based on the principles of membership, integration and teamwork skills, which helps each resident physician think effectively in various difficult situations. Working in a team of various specialists allows one to learn not only the collegiality necessary for further work, but also significantly increases the knowledge of residents in related specialties; allows one to assess the role of a leader in a team and teaches managerial skills that are necessary in the practical daily work of a physician.

Training of cardiology residents in clinics providing emergency care for various pathologies provides a unique opportunity to train resident doctors to work in a team with specialists of other profiles: surgeons, obstetricians and gynecologists, cardiologists, pulmonologists, gastroenterologists, nephrologists, hematologists, resuscitators, functional and radiation diagnostics doctors, neurologists and others.

In the questionnaire, residents noted that they have free access to patients at clinical sites and all the conditions for improving their practical skills - 97.3% of teachers completely agree with this, 2.7% partially agree, 0% found it difficult to answer.

6.5 Medical scientific research and achievements

One of the important aspects of the scientific activity of KMU "HSPH" is the development of new technologies and the introduction of medical science achievements into healthcare practice and the educational process. Involving resident physicians in research projects carried out as part of the educational program will develop researcher qualities in students and teach them research methods and skills used in modern scientific practice. The implementation of these strategies is ensured by a whole range of activities carried out within the classroom and extracurricular components of the EP when studying both compulsory and elective disciplines. Residents of the specialty 7R01107 "Adult and Pediatric Cardiology" will participate in research projects, performing elements of research work.

In the syllabuses of the disciplines of the program for the specialty 7R01107 "Adult and Pediatric Cardiology", the research-based learning method (RBL) is designated as a form of independent work of residents. It includes the preparation of abstracts and presentations based on the analysis of international databases of scientific research; use of library and online classroom resources for independent study of monographs, other literary sources and scientific publications on topical issues of internal organ diseases. Based on the results of the conducted scientific research, residents organize conferences on problematic topics in otorhinolaryngology.

KMU "HSPH" creates all the conditions and encourages students to participate in scientific research work. The conduct of research by residents helps to consolidate theoretical knowledge and practical skills, as well as use their creative potential to solve urgent problems of healthcare. Scientific supervision is carried out by all teaching staff who have academic degrees and experience in conducting scientific research. The research of resident doctors is included in the educational process and is carried out during non-lesson hours in the form of IWR and IWRCM.

Residents independently conduct patient surveys as part of scientific research work, report and receive permission to conduct research from the Local Ethics Commission.

Cardiology residents independently search for and analyze scientific literature within the framework of the research-based learning method (RBL). This method allows to study clinical research and epidemiology of the main pathologies of internal organs, which serves as a scientific basis and methodology for medical research and improvement of clinical practices.

An important area of encouraging scientific research is also the participation of residents in clinical conferences of various levels and webinars, which contributes to the acquisition of additional clinical and scientific knowledge and skills.

KMU "HSPH" annually holds the International Scientific and Practical Conference of Young Scientists, where the acquired knowledge and skills can be used to prepare reports and publications.

An interview with teachers of the cardiology course showed a two-way relationship between the university and clinical sites, where all conditions for training residents have been created in the clinical sites, both in the practical direction and in scientific research work (permission of residents to equipment, a sufficient number of issue-related patients, time for maintaining medical records, independent work).

6.6 Expertise in the field of education

At the stage of developing an educational program (EP), the university team adheres to general mechanisms in planning, implementing and assessing the EP, such as identifying current and future market needs, analyzing the personnel training market, analyzing the capabilities of the university for implementing the EP, creating a working group to develop the EP. When designing the EP, importance is given to the formulation of learning outcomes, identification of professionally significant competencies, design of methods and means of assessing learning outcomes, determination of resource needs for the implementation of the EP.

The program for assessing the EP includes measures to monitor the compliance of the educational program goals with the development objectives of the professional field, proper implementation of the educational program of postgraduate education in the process of training and knowledge control and the availability of conditions for the implementation of the educational program; systematic collection of information in order to determine the value and quality of the program, as well as actions to improve training. The program for assessing the educational program 7R01107 "Adult and Pediatric Cardiology" is aimed at achieving a new quality of education, developing innovations in teaching technology, developing human resources and a new cultural and educational environment, modernizing educational laboratories and clinical sites, technical training tools, interacting with partners and improving the organizational structure of university management.

The program 7R01107 "Adult and Pediatric Cardiology" is regularly studied and evaluated through feedback from residents, teaching staff and employers, as well as by analyzing the academic achievements of residents. Resident surveys are used as feedback for events and corrective action plans to improve the educational program.

At the same time, the process of residents' perception of the program, mastering the program, the degree of change in residents' behavior and the achievement of educational objectives are analyzed.

In order to develop skills in expert assessment of the educational program for residency and to develop the interest of employees and teachers in conducting research in the field of postgraduate education, advanced training of the teaching staff of the departments teaching disciplines in cardiology is regularly carried out.

Periodic assessment of the activities of the KMU "HSPH" management is carried out by:

- analyzing and forming reports and plans;
- conducting internal audit and self-assessment;
- analyzing the implementation of the university's strategic goals;
- analyzing the university's risks;
- the work of internal and external commissions.

Heads of administrative divisions report at meetings of the operational meeting and at the Academic Council. Vice-rectors' reports are heard at meetings of the Academic Council. The rector reports at an extended meeting of the University Academic Council.

6.7 Training in other institutions

One of the main processes of the Bologna Declaration and one of the important aspects of the integration of Kazakhstani universities and science into the international space is academic mobility.

To implement exchange programs at the international level, the University has concluded Memorandums and agreements on cooperation with universities in Russia, Turkey, Uzbekistan, Kyrgyzstan, Belarus, etc.

Academic mobility at the national level is also carried out on the basis of the concluded memorandum with KazNMU named after S.D. Asfendiyarov.

To ensure academic mobility of students and recognition of educational programs (all levels and forms of higher and postgraduate education) in the European educational space, it is necessary to recalculate Kazakhstani credits into ECTS credits. The European Credit Transfer and Accumulation System (ECTS) compares and transfers the academic disciplines mastered by students (with credits and grades) when changing their educational trajectory, educational institution and country of study. An academic credit within the ECTS measures the labor intensity of studying a discipline, both in the classroom and during independent work. Credits for disciplines completed at a foreign university are transferred based on a transcript, according to the Bologna system in Kazakhstani and European universities 1 credit equals 30 hours. The workload of one Kazakhstani academic credit (30 academic hours) corresponds to 1 ECTS credit (25-30 academic hours) in accordance with the order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 under No.152 "On approval of the Rules for organizing the educational process using credit technology of education".

During the opening and development of KMU "HSPH", close professional relations have been established with a number of international organizations, primarily with the World Health Organization (WHO). The Kazakhstan School of Public Healthcare (SPH) was initially established in 1997 in accordance with the Agreement between the WHO Regional Office for Europe and the Ministry of Healthcare of the Republic of Kazakhstan and maintains cooperation to this day. The University holds the International Congress "Health for All" with the participation of WHO representatives, representatives of the Ministry of Healthcare of the Republic of Kazakhstan, leading local and international experts.

KMU "HSPH" is a member of 5 leading international associations:

1. Asia-Pacific Academic Consortium for Public Health «APACPH»
2. Association of Schools of Public Health in the European Region «ASPHER»
3. International Union for Health Promotion and Education «IUHPE»
4. Organization for PhD Education in Biomedicine and Health Sciences in the European System (ORPHEUS)
5. The European Public Health Association

Currently, negotiations are underway with universities in Russia and Uzbekistan to implement joint EPs in the specialties of "Public Healthcare" and "Medicine", with the subsequent possibility of opening representative offices or branches of LLP KMU "HSPH" at partner universities. There is also a joint two-degree EP "Administration in Healthcare", "Management in Healthcare" with the Higher School of Economics and Innovation (Lublin, Poland).

Agreements have been signed with the Strategic Partner - Shenzhen University, PRC. At the moment, a Memorandum of Mutually Beneficial Cooperation has been signed with it.

Currently, 40 scientific centers, research institutes, large clinics and outpatient clinics of the Republic of Kazakhstan are the bases for pedagogical, professional and research practices of LLP KMU "HSPH". Agreements have been concluded with 54 organizations that are clinical sites of LLP KMU "HSPH".

Conclusions of the EEC by criteria. Compliant with out of 18 standards (including 11 basic and 7 improvement standards): fully - 16, partially - 2, do not comply - 0

Recommendations for improvement:

- 1) To integrate simulation learning technologies into the educational program (Standard 6.2.2).
- 2) To expand cooperation with national and international educational and scientific organizations to exchange experiences between teachers and residents (Standard 6.7.3).

Standard 7: EDUCATIONAL PROGRAM ASSESSMENT

7.1 Monitoring and assessment mechanisms

Monitoring of the educational program includes a system of external assessment, which ensures transparency of the process and results:

- monitoring the provision of the educational process with the necessary resources (clinical sites, teaching staff, clinical mentors, educational literature, classroom fund, equipment, etc.);
- monitoring the compliance of the curriculum with the requirements of state educational standards;
- monitoring the compliance of the content of resident training with the requirements of state educational standards, qualification requirements for specialists, professional standards, trends in the development of science and medicine;
- monitoring feedback from stakeholders on the quality of the content of the educational program,
- monitoring the academic performance of residents, progress in mastering the competencies defined in the program.

An annual analysis of the educational program will allow the educational organization to make adjustments and improve the content. Initially, the educational program underwent internal review at a meeting of the department and the methodological council of the HSPH, an external review of the cardiology program was received from employers and a Kazakhstani university, where it was noted that the program meets the requirements of "On approval of state mandatory standards for levels of education in the field of healthcare". Subsequently, the residency program was approved at a meeting of the Educational and Methodological Council (minutes No.2, 20.04.2023).

Regular assessment of the quality of the educational program in the specialty 7R01107 "Adult and Pediatric Cardiology" at KMU "HSPH" is carried out on the basis of the analysis of curricula, catalog of elective disciplines, schedules, individual plans of students, internal regulatory documents governing the implementation of educational programs, surveys of students and employers, by means of MCC and intra-university control during visits to open classes, lectures and other types of activities of the teaching staff to assess teaching methods and assess the knowledge of students. The specialized department is responsible for the formation of resident competencies in specialized disciplines, the quality of teaching and updating the content of educational programs in accordance with the development of science and medicine.

Educational programs undergo the procedure of annual monitoring of the quality of implementation at a meeting of the department with the participation of students and employers. The teaching staff of the department, in order to harmonize the content of educational programs with similar educational programs of leading foreign and Kazakhstani universities, identify and analyze educational programs of other universities. Based on the results of such activities, the university enters into cooperation agreements with universities in neighboring and distant countries.

When assessing the program, the goals and objectives of training, the final learning outcomes (through resident assessment, independent examination) are taken into account. The process of implementing the educational program is assessed through feedback from residents and teachers and the achievements of graduates. The residency department and teachers constantly monitor the development of the educational program by residents. For each discipline, an analysis of the academic performance of residency learners is carried out by teachers of the departments conducting classes in the residency. The results of residents' examinations in each discipline are discussed at department meetings. The specialized departments and the residency department carry out work to collect feedback from residents to determine their level of satisfaction with the content of the educational program, the organization of the educational process in the form of a questionnaire after the end of each discipline, monitoring of appeals to the blog of the head, vice-rector, rector. The university has a feedback box, where residents can incognito leave their suggestions, wishes and complaints.

For example, a survey of first-year residents was conducted on September 23, 2022, at the International Congress "Global Health". It was found that residents are actively involved in the process of providing medical care at clinical sites, have access to mastering practical skills according to the final learning outcomes, all residents have a portfolio, which also reflects their achievements, and activities in research and socially significant events of the university and clinical sites.

The teaching staff participates in all stages of assessment through discussions at the department, advisory bodies, gets acquainted with the results of the survey of students, with the feedback of clinical mentors and representatives of clinical sites. Residents participate in all stages of assessment through questionnaires, familiarization with the results of the questionnaire, participation in advisory bodies.

The assessment of approaches to the admission of residents is carried out by analyzing the results of entrance examinations and the relevant regulatory legal documents. The selection and compliance of teachers and teaching methods is also carried out through feedback from residents. For this purpose, a new structure, “the Department of Methodology and Quality Assessment”, was organized at the university in June 2024. For example, the results of the survey of residents in 2024 showed that teachers and mentors were given a high rating for the quality of teaching. The assessment of methods for evaluating the knowledge and skills of residents is carried out using the CME, practical tasks and simulations, and demonstrates sufficient reliability and validity. The adequacy and quality of educational resources is assessed by monitoring and analyzing resident feedback and shows that the library collection, access to electronic resources and clinical sites meet the modern requirements of neonatal practice. This was confirmed during a visit to the practice base: State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital", Almaty.

In the process of assessing the quality of educational programs of residency, it was found that along with the achievements: high quality of teaching and mentoring, good material and technical resource, clinical practice base, there are a number of problems, such as: to strengthen feedback with students in order to promptly make changes to the educational process in accordance with their needs and expectations; to improve the system of planning and informing residents about the schedule of lectures, classes and practices; to develop internship programs in specialized hospitals and foreign practices to increase the competitiveness of residents.

7.2 Feedback of teachers and residents

The educational organization plans to collect feedback from teachers, residents and employers on a regular basis. The university uses the rector's blog for feedback from teachers and residents, where students and university staff receive answers to their questions about the terms of the educational program.

The feedback results are analyzed and also discussed at department meetings, which helps to assess the current needs of students and teachers and allows developing plans to further improve the quality of graduate training.

In December 2024, a questionnaire form was sent to employers. The questionnaire contains 9 questions and they are devoted to assessing the satisfaction of employers with the professional training of KMU "HSPH" graduates. *The results of the employer survey conducted in 2024 indicate the need to strengthen the practical focus of the educational process, while over 71% of employers are satisfied with the theoretical and practical training of residents; employers are ready to participate in teaching specialized disciplines; In addition to professional knowledge, employers recommend (66%) to develop communication skills, teamwork and other personal qualities.*

The survey of residents was conducted in December 2024, including 8 questions and is devoted to the following topics: how satisfied are residents with the quality of theoretical and practical training, how a resident evaluates the quality of teaching and mentoring, whether the resident is satisfied with the conditions of the educational process, practice bases and others. The survey results revealed the strengths of the educational process, 56% of respondents answered that they are completely satisfied with the material and technical and clinical sites. 12% noted the need to strengthen them. The majority of respondents rated the residency program as the highest score (75.4% (5 points) and 16.9% (4 points). Satisfactory scores (3 points) were given by 5.6% of survey participants. In open-ended questions of the survey, residents voiced ideas for expanding practical opportunities, including field practices, trainings and internships. They expressed interest in programs that promote the development of teamwork with colleagues from other specialties. After completing the residency, all graduates are included in the Book of Graduates, where their career growth and achievements will be tracked; if necessary, KMU "HSPH" provides support in continuing professional education.

7.3 Results of residents and graduates

The results of residents and graduates are indicators of the quality of educational programs. Each student can see the results of their academic performance in their personal account in the AIS Platonus, accordingly, the resident can monitor and track their academic performance. The syllabuses and working curricula reflect final learning outcomes. An important role in assessing the educational program is played by monitoring the achievement of final learning outcomes by residents.

Analysis of midterm, and later final, certification of graduates by specialty will be discussed annually at department meetings with the participation of the Residency Department and the Academic Council. This mechanism will allow timely and relevant adjustments to the educational program in cardiology.

Monitoring of academic performance and attendance is carried out by departments according to the class schedule, with data being recorded in an electronic journal; in the absence of students in classes, the Residency Department is informed by submitting an attendance report. The Residency Department monitors based on the results of formative assessment within the discipline topics (described in detail in the syllabus) and midterm and final certification.

Data from expert and employer opinions on the quality of clinical training of residents is currently difficult, since there are no graduates of this program yet.

Since the entire process of training and monitoring of residents is concentrated in the Residency Department, then the result of the assessment of the clinical practice of residents is carried out on the basis of the results of the formative assessment within the discipline topics (described in detail in the syllabus) and in the future it is planned to monitor the results of the midterm and final certification.

7.4 Involvement of stakeholders

The educational organization has approaches to the involvement of teachers and residents in the assessment of the educational program and monitoring of its implementation.

The Department of Residency collects feedback from residents, teachers, including teachers of related disciplines on the assessment and optimization of the content of the educational program in the form of a survey, questionnaire. A questionnaire of students is carried out by the Department of Residency after the completion of each discipline. For this, the questionnaire "Teacher through the eyes of a student" is used. The revision of the EP is carried out annually at department meetings, in which all the teaching staff participate.

To improve the program, the results of the Independent Assessment of the NCIE and midterm certification are used, the results will be discussed at department meetings, based on the results of which decisions are made to improve the EP and the educational process.

Thus, the teaching staff participates in all stages of the assessment through discussions at the department, advisory bodies, familiarization with the results of the questionnaire of students, with the feedback of clinical mentors and representatives of clinical sites. Residents participate in all stages of the assessment through questionnaires, familiarization with the results of the questionnaire, participation in advisory bodies. The results of the assessment of the educational program will be announced at meetings of the EMC and the Academic Council.

Thus, on the recommendation of the EEC, it is planned to include residents in the advisory bodies of the university, since during interviews with residents it was revealed that they do not participate enough in planning the assessment of the program through collegial bodies, where residents could participate in the discussion of all issues of the educational process.

Interviews with 7 employers were conducted online and included questions such as: knowledge of the university mission, participation in developing 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 training residents through mentoring, providing the department and residents with the necessary resources for practical training and the formation of clinical thinking. During a visit to the practice base of cardiology residents, a meeting was held with the deputy director of the State-owned utility enterprise based on the Right of Economic Management "Central City Clinical Hospital" Abenova A.T. The visit to the clinic made a positive impression. The deputy head of the clinic

emphasized the growing need for qualified cardiologists and the importance of training young specialists. She expressed her readiness to provide comprehensive support to residents throughout the entire period of training and contribute to their professional growth.

The Central City Clinical Hospital has modern equipment (CT, MRI), qualified personnel (a high percentage of doctors with degrees and medical categories), a friendly atmosphere, training rooms and innovative approaches to treating patients. This clinic pays great attention to the training of young specialists, the readiness of the clinic to train residents, which is an important contribution to the development of the cardiology service.

7.5 Procedure for approving educational programs

The educational organization has a system for documenting the educational process, including approval of the educational program, which includes the following: the educational program "Neonatology" is approved based on such criteria as the relevance of the program content, ensuring the quality of education, accessibility for students with disabilities and the achievement of the final learning outcomes, according to the State Compulsory Educational Standard, Standard Curriculum, Working Curriculum. The stakeholders involved in the approval of the educational program are: employers, the Association of Obstetricians-Gynecologists and Neonatologists of Kazakhstan, teaching staff, residents, graduates, administrative and managerial personnel and the department of methodology and quality assessment of the educational program. During a face-to-face meeting with a representative of the Department of Methodology and Quality Assessment of the EP, it was announced that each program had undergone internal and external examination, and in connection with changes in the final learning outcomes in the EHEA register, a plan for revising all EPs has been developed. The main document is the Regulation on Academic Policy, which reflects the methods of validation and assessment of the reliability of the EP.

A system for monitoring the quality and compliance of clinical sites, material and technical equipment and educational resources has been developed and implemented, which includes the following: regular inspections of clinical sites, assessment of material and technical equipment, analysis of learning outcomes, surveys of students and teachers, comparison with similar programs and adjustment of the program based on the data obtained.

According to order No.157 of the Ministry of Healthcare of the Republic of Kazakhstan, the University uses medical and preventive institutions of the city as a clinical site on the basis of agreements. According to these agreements, clinical sites are jointly and severally liable for the quality of training future specialists, providing departments with high-quality educational facilities, ensuring access to patients and modern diagnostic equipment.

Conclusions of the EEC by criteria. Comply with 10 standards (including 7 basic and 3 improvement standards): fully - 10, partially - 0, do not comply - 0

Standard 8: MANAGEMENT AND ADMINISTRATION

8.1 Management

Residency training in EP 7R01107 "Adult and Pediatric Cardiology" is conducted in accordance with the requirements of such regulatory rules regarding the admission of residents as the requirements for the level of training of residency graduates in 7R01107 "Adult and Pediatric Cardiology", are formulated in the EP in accordance with:

- The Law of the Republic of Kazakhstan "On Education" dated June 27, 2007 No.319-III;
- Code of the Republic of Kazakhstan "On Public Health and the Healthcare System" dated July 7, 2020 No.360-VI LRK;
- Order of the Minister of Healthcare of the Republic of Kazakhstan dated July 4, 2022 No.KR DSM-63 On approval of state mandatory standards for levels of education in the field of healthcare;
- Order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No.152 On approval of the Rules for organizing the educational process using credit technology of education;

- Academic policy of LLP KMU "HSPH".
- Rules for admission to the residency of LLP KMU "HSPH".

Assessment of knowledge and skills is carried out on the basis of the Order of the Minister of Education and Science of the Republic of Kazakhstan dated March 18, 2008 No.125 "On approval of the Model rules for conducting formative assessment of academic performance, midterm and final certification of students for organizations of secondary, technical and vocational, post-secondary education" and the Academic Policy of KMU "HSPH". To implement the educational program, the educational organization has an organizational structure in which the educational sector is represented by collegial bodies (EMC, AC) and structural divisions (DR, departments) (link: <https://ksph.edu.kz/structure/>). The highest governing body of KMU "HSPH" is the Academic Council. The educational process of the residency is supervised by the vice-rector for clinical activities, to whom the DR is subordinate (link: [DR business process](#)).

The key structural unit responsible for training students in residency in the specialty 7R01107 "Adult and Pediatric Cardiology" is the Department of Therapy with courses in gastroenterology, psychiatry, medical rehabilitation and gerontology, which is directly responsible for the accredited educational program. The experts were unable to review the documents on the completion of resident training, due to the first year of resident training. A certificate of completion of residency will be issued to residents who have completed training in the educational program of residency and successfully passed the final certification, and then the qualification of "doctor" in the corresponding specialty 7R01107 "Adult and Pediatric Cardiology" is assigned and a certificate of completion of residency is issued free of charge. During a meeting with the Residency Department, it was revealed that it is in direct, close contact with residents, supervises the organization of the educational process, controls and monitors clinical sites and departments. According to the survey of residents, positive feedback was heard about the work and interaction of the residency department with residents.

The quality assurance program for postgraduate education has been developed, implemented and certified by the quality management system. The quality policy has been communicated to all employees, all team members, including management, have committed themselves to participate in the development, maintenance and quality assurance and approved by the Department of Strategic Development and Quality Management System (dated 15.01.2024). The Department of Strategic Development and Quality Management System (hereinafter referred to as DSD and QMS) took part in the development of the program. DSD and QMS participates in the development and promotion of an effective quality management system for all types of university activities based on the requirements of the International Standard ISO 9001-2015, plays an important role in ensuring quality assurance and transparency of the education system and passing accreditation. Transparency of the management and decision-making system is ensured by posting information on the website of the KMU "HSPH".

8.2 Academic Leadership

The responsibilities and obligations of the management and staff for postgraduate medical education in the specialty 7R01107 "Adult and Pediatric Cardiology" are defined, which is the specialized department of therapy with courses in gastroenterology, psychiatry, medical rehabilitation and gerontology and are enshrined by internal regulatory documents (link: [Guide to the development of the EP](#)) and the minutes of the meeting of the department "Pediatrics with a course in neonatology", No.9 dated May 5, 2023. Transparency of management and decision-making in the educational process is ensured by posting information on the website of LLP KMU "HSPH", which is reflected in the document Academic Policy of LLP KMU "HSPH" (link: [Academic Policy of LLP KMU "HSPH"](#)).

The educational organization evaluates the management of the educational process and employees in relation to the achievement of the residency program mission, the expected final learning outcomes by conducting feedback with residents and teachers (see Section 7.2 of the report), conducting certification based on the document on monitoring, analysis and assessment of educational programs (link: [Regulation on monitoring and assessment of the EP](#)).

The assessment of the quality of the educational program by stakeholders includes: assessment by students of the pedagogical activity of the teaching staff involved in the implementation of the

educational program; an annual survey of students' satisfaction with the quality of educational services; a questionnaire for employers on the quality of training of graduates of LLP KMU "HSPH"; an annual collection and analysis of the results of graduate employment is planned.

To the question of the questionnaire "Do the organization's heads listen to your opinion regarding issues related to the educational process, research and clinical work?", 78.3% of teachers answered that they do so systematically, 13.5% answered "sometimes". To the question of the questionnaire "Do you think that this survey is useful for developing recommendations for improving the key areas of your organization's activities?", 83.8% of teachers answered that they agree, 16.2% answered "sometimes".

8.3 Budget for education and resource allocation

The unit responsible for planning and distributing funds in residency programs is the Department of Economics and Finance; Department of Digitalization and Technical Support; Administrative Department. Determining the budget of the university and the university management structure is the responsibility of the first head of the university - the Rector. To manage financial issues, the university has a position of Commercial Director, its powers and duties are defined in the job description.

The range of duties, responsibilities and powers are reflected in the job descriptions of the Department of Economics and Finance, approved on October 7, 2022.

A financial plan is drawn up annually, including a target budget for education, which is 1676.6 thousand tenge for 2024. In 2024, the plan provides for an increase in the revenue side of the budget compared to the expected execution for 2022, 2023 by 114%. For the long-term period until 2025, an annual steady increase in revenue is also predicted. Planning the budget of LLP KMU "HSPH" for the current year is carried out by developing and approving an estimate of income and expenses.

The financial plan corresponds to the strategic plan for the period 2020-25. The share of funding for residency programs, taking into account the expansion of residency specialties, cannot currently be determined in dynamics, since the educational program in cardiology has been implemented for six months. In the structure of expenses, the largest share is occupied by expenses for paying salaries to employees under "the Residency" program - 80,321.8 thousand tenge. During a meeting with employees of the financial sector, experts found out that LLP KMU "HSPH" plans the budget according to the applications received from the departments, forms the need to ensure the educational process and makes a decision on the provision system (purchase).

The salary fund for "the Residency" program is 80,321.8 thousand tenge, the scholarship fund is 1,477.5 thousand tenge (scholarship for 3 residents for 4 months of 2024). At the meeting with residents, it was announced that the university, in order to motivate and support residents, reimburses the cost of cellular communications to 88 residents and for 4 months of 2024, this amounted to 1,056.0 thousand tenge.

A financial report is provided annually, which is approved at a meeting of the Academic Council and is compiled according to international financial reporting standards (IFRS), in accordance with the Law of the Republic of Kazakhstan dated February 28, 2007 No.234 - 111 "On accounting and financial reporting", accounting policies, the order of the Ministry of Finance of the Republic of Kazakhstan dated May 23, 2007 No.185 "On approval of the standard chart of accounts for accounting", other regulatory acts in the field of accounting and demonstrates, among other things, the distribution of educational resources in accordance with the needs and coverage of all types of expenses of LLP KMU "HSPH" for the implementation and development of the residency program.

8.4 Administration and Management

Administration and management of the educational process is carried out in accordance with the organizational structure, which is agreed upon with the general meeting of participants and approved by the Rector. There is a corresponding administrative (46 people) and teaching (111 people) staff, including the management: The Rector is responsible for the educational process. The Residency Department oversees the planning and organization of the educational process of residency learners, in accordance with the norms and requirements of the current legislation of the Republic of Kazakhstan; ensures a systematic approach to the development, approval, monitoring and assessment of educational

programs for residency, updates internal regulatory documents on educational activities and timely approval of educational and methodological documentation.

In order to effectively manage the educational process, the employees of the Residency Department underwent advanced training in 2024 on the topics: "Pedagogical Mastery as a Component of Pedagogical Culture", "Development of Communication Skills and Abilities of Teachers", "Basic Cardiopulmonary Resuscitation in Adults and Children".

The experts found that the quality management system was implemented in 2022 and includes regular internal and external audits, including those that support the residency program processes. According to the approved schedule, the QMS conducts internal audits in all structural divisions of the university. Every year, the quality management system is subject to an external inspection audit. In accordance with regulatory documents, the activities of the KMU "HSPH" are checked and a report is drawn up. Based on the approved documents, the Quality Manual, the Strategic Development Plan, the annual report and the external audit report of the QMS, an analysis of the university's activities is carried out annually by senior management.

The Department of Strategic Development and Quality Management System is responsible for the implementation and monitoring of the QMS.

The teachers are aware of the QMS, which is confirmed during their interviews. The main documents of the QMS are the following: Quality Manual QMS-RpK-7.5.1/01-2022, approved by the Quality Council dated 31.10.2022, protocol No.5, defines the Policy and Objectives of the KMU "HSPH" in the field of quality and describes the quality management system developed to implement this policy (link: [Quality Policy](#)).

Assessment of the administration and management of the educational process as a whole and the educational program of residency in the specialty 7R01107 "Adult and Pediatric Cardiology" is carried out by surveying faculty and staff of the university in order to study the satisfaction of the needs and expectations of consumers on a regular basis by departments and divisions, and the results demonstrate such achievements as high satisfaction of residents with the quality of educational programs, availability of educational materials and the effectiveness of interaction with teachers. The results also indicate a positive assessment of the organization of the educational process, including practical training and scientific activities, which was confirmed during a meeting with residents and teachers, that learners have a direct interest in the implementation of the educational program. They regularly participate in surveys, for example: the questionnaire "Teacher through the eyes of students" and other questionnaires, including questions about the expectations and actually obtained competencies of students, about the environment for implementing the educational program, the availability of information resources and conditions, which is subsequently taken into account when monitoring the residency program.

8.5 Requirements and regulations

The educational organization complies with the recommendations of national authorized bodies, including the Ministry of Science and Higher Education of the Republic of Kazakhstan and the Ministry of Healthcare of the Republic of Kazakhstan. Thus, in accordance with the classifier of residency specialties (On approval of the Classifier of areas of training personnel with higher and postgraduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No.569). The choice of residency specialty is regulated in accordance with the Code of the Republic of Kazakhstan dated July 7, 2020 No.360-VI LRK "On Public Health and the Healthcare System", the order of the Minister of Healthcare of the Republic of Kazakhstan dated December 15, 2020 No.KR DSM-270/2020 "On approval of the rules for placing a state order, admission to study and training of medical personnel in residency" <https://adilet.zan.kz/rus/docs/V2000021802>, the order of the Minister of Healthcare of the Republic of Kazakhstan dated May 25, 2021 No.KR DSM - 43 "On approval of the list of medical specialties of residency programs" <https://adilet.zan.kz/rus/docs/V2100022844>. The rules for admission to residency, the Academic Policy are developed in accordance with the Code of the Republic of Kazakhstan dated July 7, 2020 No.360-VI LRK "On public health and the Healthcare system", the order of the Minister

of Healthcare of the Republic of Kazakhstan dated December 15, 2020 No.KR DSM-270/2020 "On approval of the rules for placing a state order, admission to study and training of medical personnel in residency" <https://adilet.zan.kz/rus/docs/V2000021802>, the Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023-2029 <https://adilet.zan.kz/rus/docs/P23000000248>.

At the beginning of the 2024-2025 academic year, training is provided in 27 residency specialties. Of these, 5 programs were accredited in 2024, and 9 more educational programs are currently being accredited. All educational programs are provided with the relevant educational and methodological documents and teachers.

Representatives of practical healthcare actively participate in the development and improvement of residency programs. The university administration reported that for the effective planning and implementation of residency programs, representatives of practical healthcare, students and teachers involved in the implementation of residency programs are included in the advisory bodies (meetings of departments, EMC, Academic Council). The employers confirmed that each of the listed representatives has the right to vote when making changes, suggestions and comments to the educational process of residency, as well as the right to vote when approving educational programs for residency. The involvement of practical healthcare in the formation of educational programs for residency and their high-quality implementation is reflected in the fulfillment of the terms of contracts with medical organizations.

Representatives of medical organizations, employers, noted that clinical sites and employees involved in training contribute to the improvement of professional training in clinical areas.

When developing educational programs, a mandatory condition is to take into account the needs of stakeholders, in particular, employers: the level of acquired theoretical knowledge and skills must correspond to the needs of the practical healthcare system.

The university administration reported that in order to monitor the needs of employers, the KMU "HSPH" regularly organizes the event "Open Day", which brings together representatives of practical healthcare and allows for meetings of the university management with the heads of medical organizations. Employers confirmed that such events help identify existing advantages and problems of training in residency specialties and promptly develop action plans to eliminate deficiencies.

In order to ensure the connection of the educational program with the needs of the healthcare system of the Republic of Kazakhstan, KMU "HSPH" maintains constant and effective communication with practical healthcare organizations and employers, for which purpose the Employers' Council functions. Information on the activities of the Employers' Council, provided by the university administration, confirms that the Council is an effective mechanism for ensuring that educational programs meet the needs of practical healthcare. In general, it can be noted that KMU "HSPH" has created conditions for effective interaction with employers and taking into account their needs in the development and implementation of residency educational programs.

Conclusions of the EEC by criteria. Comply with 11 standards (including 8 basic and 3 improvement standards): fully - 11, partially - 0, do not comply - 0

Standard 9: CONTINUOUS IMPROVEMENT

The procedure for updating the organizational structure is carried out by the KMU "HSPH" with the aim of continuously improving the postgraduate educational process in accordance with the best practices of global educational management, taking into account the needs of practical healthcare of the Republic of Kazakhstan, which is in the process of reform, regularly initiates a review and update of the process. In the process of training residents and the changes introduced into the Professional Standard, it is planned to make updates to the program of the specialty 7R01107 "Adult and Pediatric Cardiology".

Updates are made by listening to the results of the midterm certification, reports and assessments of the practice of residents, and in the future, it is planned to analyze the results. By final certification

of residents, based on the results of which, the obtained conclusions will be announced and accompanied by the development and adjustment in syllabuses, the list of literature will be supplemented, contracts will be concluded with new clinical sites.

KMU "HSPH" is a leading school of Public Healthcare, therefore, for the 2025-26 academic year, it is planned to introduce additional electives on improving knowledge of the scientific foundations and methodology of medical scientific research, in the process of mastering the core disciplines of the mandatory component and the elective component through the IWR (teacher's assignments), topics on biostatistics, evidence-based medicine and methods of scientific research will be introduced, the results of which are planned to be presented at the Council of Young Scientists and Clinicians, and reflected in articles, collections of publications, conferences and congresses, in scientific projects.

Each resident is engaged in scientific activities under the scientific supervision of a clinical mentor/teacher of the specialized department. In the first year of training, the resident selects a topic for scientific research and carries out scientific research during the training period (for example, "New technologies for nursing premature babies"), which was presented in the protocol during a visit to the supervising department at the clinic. Attention is paid to the development of teamwork skills and interdisciplinary problem solving in residents, which is extremely important for effective interaction with colleagues and patients.

To support the teaching staff and students in organizing scientific research, the Department of Science and Consulting, the library, the local ethics committee, the scientific and practical journal "Medicine, Science and Education" provide assistance in publishing scientific results in leading domestic and foreign publications and promote the commercialization of the results of scientific work.

By involving residents in research projects, they are encouraged to become researchers and scientists in the field of healthcare and medicine. The Council of Young Scientists was organized at KMU "HSPH" to promote the development of the potential of young scientists and the search for grant support.

The educational organization plans to allocate resources for the continuous improvement of the educational process and support of residents.

Sociological research is conducted for the targeted improvement of the educational process, including a study of the psycho-emotional state of 1st-year residents, the study showed that among the learners there are both positive aspects and significant risks related to the emotional state of residents and their involvement in the educational process. Most learners demonstrate resistance to stress, strive to maintain a friendly atmosphere and are confident in their ability to cope with emotional difficulties, and literature on postgraduate medical education is also studied ("Student Consultant" (www.studentlibrary.ru) and "Doctor Consultant" (www.rosmedlib.ru)). In the process of such analysis, approaches to teaching in residency were revised, and methods such as Case-Based Learning (CBL), research-based learning (RBL) were introduced. Residents' participation in seminars, trainings and advanced training programs will help young doctors stay up to date with modern practices and successfully adapt to changes. In 2024, the University held the international congress "Global Health", where residents participated with reports and publications, which is confirmed by certificates of participation of residents presented in the portfolio. Residents, according to their specialties, additionally take advanced training courses (for example: "Bullying - causes, forms, prevention"). The presence of modern equipment, simulation rooms and clinical sites at KMU "HSPH" allows for practical training at a high level.

KMU "HSPH", constantly improving its organizational structure and management principles, not only effectively adapts to changes, but also creates a sustainable educational environment that meets the needs of all stakeholders. This is a key factor in the successful development of the university and improving the quality of training medical specialists.

Conclusions of the EEC by criteria. Compliant with 2 standards (including 1 basic and 1 improvement standard): fully - 2, partially - 0, do not comply - 0.

CONCLUSION: during the external assessment of the educational program, it was found that out of 114 standards (including 82 basic standards and 32 improvement standards), 107 accreditation standards demonstrate full compliance, including 76 basic standards and 31 improvement standards. 6 basic standards and 1 improvement standard are partially fulfilled. No non-compliance with standards was found.

Considering that the primary accreditation of the educational program in the specialty 7R01107 "Adult and Pediatric Cardiology" is being carried out, 2 first-year residents are studying, it is planned to admit residents in 2025 not only on a fee-paying basis, but also under a state order (in case of a positive decision on accreditation).

In compliance with the requirements of the Law on Education of the Republic of Kazakhstan, the university initiated specialized (program) accreditation with the number of students of 5 residents. Therefore, the tasks of the external expert commission included assessing the quality of the organization of training in cardiology, readiness to accept a larger number of residents. The experts studied the existing principles and approaches to the training of residents, mechanisms for ensuring quality and managing the educational program of residency. The experts specifically studied the organization of training in the specialty 7R01107 "Adult and Pediatric Cardiology", including documentation, teaching staff, educational resources and other important issues related to compliance with accreditation standards.

The experts came to the conclusion that along with the achievements in the training of residents, including the expected effectiveness of training in the accredited educational program 7R01107 "Adult and Pediatric Cardiology", there are a number of recommendations that the university must implement within the 1-2 quarters of 2025.

5. Recommendations for improvement of the educational program of residency 7R01107 "Adult and Pediatric Cardiology" of the LLP Kazakh Medical University "HSPH":

- 1) To introduce scientific foundations and methodology of medical research into the educational program "Adult and Pediatric Cardiology" (Standard 2.2.1).
- 2) To document the assessment of the reliability and validity of control and measuring equipment for the purpose of their continuous improvement (Standard 3.1.4).
- 3) In the organizational structure of the university, to determine a division or person responsible for implementing activities on career planning, employment and monitoring of graduates of residency programs (Standard 4.3.3).
- 4) To increase the representation of residents in advisory bodies (Standard 4.4.1).
- 5) To provide ongoing training in pedagogical competencies of clinical mentors (Standard 5.2.2).
- 6) To integrate simulation training technologies into the educational program (Standard 6.2.2).
- 7) To expand cooperation with national and international educational and scientific organizations for the exchange of experience between teachers and residents (Standard 6.7.3).

5. Recommendation to the ECAQA Accreditation Council

The EEC members established the compliance of the educational program of the residency in the specialty 7R01107 "Adult and pediatric cardiology" with the Accreditation Standards and came to a unanimous opinion to recommend that the ECAQA Accreditation Council accredit this program for a period of 5 years.

6. Recommendation to the ECAQA Accreditation Council

The EEC members came to a unanimous opinion to recommend that the Accreditation Council accredit educational program **7R01107 "Adult and pediatric cardiology" of LLP Kazakhstan Medical University "HSPH"** for a period of 5 years.

Chairperson of EEC	KUDABAYEVA KHATIMYA ILYASSOVNA	/signed/
International expert	SHEPPLI YELENA VLADIMIROVNA	/signed/
Academic expert	ZHUMALINA AKMARAL KANASHEVNA	/signed/
Academic expert	BOZHBANBAYEVA NISHANGUL SEITBEKOVNA	/signed/
Academic expert	BAGIYAROVA FATIMA ARYSTANOVNA	/signed/
Academic expert	AKHMETOVA ALMIRA KALIKAPASSOVNA	/signed/
Academic expert	KARIBAYEVA DINA ORYNBASSAROVNA	/signed/
Academic expert	ZHAKENOVA SAIRA SAKHIPKEREYEVNA	/signed/
Academic expert	KABILDINA NAILYA AMIRBEKOVNA	/signed/
Academic expert	ZHANASPAYEVA GALIYA AMANGAZIYEVNA	/signed/
Employer expert	KUNAYEVA GULBANU DZHANABAYEVNA	/signed/
Resident expert	BEKENOVA ASEMKUL BERIKOVNA	/signed/

6. Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать образовательную программу **7R01107 «Кардиология взрослая, детская» ТОО Казахстанский медицинский университет «ВШОЗ»** на период 5 лет.

Председатель ВЭК КУДАБАЕВА ХАТИМЯ ИЛЬЯСОВНА



Международный эксперт ШЕПЛИ ЕЛЕНА ВЛАДИМИРОВНА



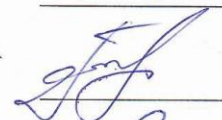
Академический эксперт ЖУМАЛИНА АКМАРАЛ КАНАШЕВНА



Академический эксперт БОЖБАНБАЕВА НИШАНГУЛЬ СЕЙТБЕКОВНА



Академический эксперт БАГИЯРОВА ФАТИМА АРЫСТАНОВНА



Академический эксперт АХМЕТОВА АЛЬМИРА КАЛИКАПАСОВНА



Академический эксперт КАРИБАЕВА ДИНА ОРЫНБАСАРОВНА



Академический эксперт ЖАКЕНОВА САЙРА САХИПКЕРЕЕВНА



Академический эксперт КАБИЛДИНА НАЙЛЯ АМИРБЕКОВНА



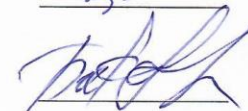
Академический эксперт ЖАНАСПАЕВА ГАЛИЯ АМАНГАЗИЕВНА



Эксперт-работодатель КУНАЕВА ГУЛЬБАНУ ДЖАНАБАЕВНА



Эксперт-резидент БЕКЕНОВА АСЕМКУЛ БЕРИКОВНА



Профиль качества и критерии внешней оценки образовательной программы (обобщение)

Standard	Критерии оценки	Количество стандартов	БС*/СУ	Оценка		
				Полностью соответствует	Частично соответствует	Не соответствует
1.	МИССИЯ И КОНЕЧНЫЕ РЕЗУЛЬТАТЫ	14	9/5	9/5	0	0
2.	ОБРАЗОВАТЕЛЬНАЯ ПРОГРАММА	22	19/3	18/3	1	0
3.	ОЦЕНКА РЕЗИДЕНТОВ	9	6/3	5/3	1	0
4.	РЕЗИДЕНТЫ	20	14/6	12/6	2	0
5.	АКАДЕМИЧЕСКИЙ ШТАТ/ПРЕПОДАВАТЕЛИ	8	7/1	6/1	1	0
6.	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ	18	11/7	10/6	2	0
7.	ОЦЕНКА ОБРАЗОВАТЕЛЬНОЙ ПРОГРАММЫ	10	7/3	7/3	0	0
8.	УПРАВЛЕНИЕ И АДМИНИСТРИРОВАНИЕ	11	8/3	8/3	0	0
9.	НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ	2	1/1	1/1	0	0
		114	82/32	76/31	114	

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

№	Наименование документов	Дата утверждения
1	ПРАВИЛА РАЗРАБОТКИ ОБРАЗОВАТЕЛЬНЫХ ПРОГРАММ ТОО КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ»	06.02.2023
2	ПРАВИЛА ПРИЕМА В РЕЗИДЕНТУРУ	29.08.2024
3	ПОЛОЖЕНИЕ О РЕЗИДЕНТУРЕ	29.08.2024
4	ПОЛОЖЕНИЕ ОБ ОРГАНИЗАЦИИ СИСТЕМЫ ОПЛАТЫ И СТИМУЛИРОВАНИЯ ТРУДА ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ»	02.02.2023
5	ПОЛОЖЕНИЕ ОБ АКАДЕМИЧЕСКОЙ МОБИЛЬНОСТИ ОБУЧАЮЩИХСЯ КМУ «ВШОЗ»	29.08.2024
6	ПОЛОЖЕНИЕ О ПРИЕМНОЙ КОМИССИИ КАЗАХСТАНСКОГО МЕДИЦИНСКОГО УНИВЕРСИТЕТА «ВШОЗ»	29.08.2024
7	ПОЛОЖЕНИЕ О ПЕДАГОГИЧЕСКОЙ НАГРУЗКЕ ППС КМУ «ВШОЗ»	29.08.2024
8	ПОЛОЖЕНИЕ О МОНИТОРИНГЕ И ОЦЕНКЕ ОБРАЗОВАТЕЛЬНЫХ ПРОГРАММ ТОО КАЗАХСТАНСКОГО МЕДИЦИНСКОГО УНИВЕРСИТЕТА «ВШОЗ»	29.08.2024
9	ПОЛОЖЕНИЕ О МОНИТОРИНГЕ И ОЦЕНКЕ ОБРАЗОВАТЕЛЬНЫХ ПРОГРАММ ТОО КАЗАХСТАНСКОГО МЕДИЦИНСКОГО УНИВЕРСИТЕТА «ВШОЗ»	21.04.2023
10	ПОЛОЖЕНИЕ О КЛИНИЧЕСКОМ НАСТАВНИЧЕСТВЕ	29.08.2024
11	ПОЛОЖЕНИЕ О ДОКТОРАНТУРЕ	29.08.2024
12	ПОЛОЖЕНИЕ ДЕПАРТАМЕНТА МАГИСТРАТУРЫ И ДОКТОРАНТУРЫ	02.09.2024
13	НОРМЫ ВРЕМЕНИ ДЛЯ РАСЧЕТА ОБЪЕМА УЧЕБНОЙ НАГРУЗКИ, ВЫПОЛНЯЕМОЙ ПРОФЕССОРСКО-ПРЕПОДАВАТЕЛЬСКИМ СОСТАВОМ КМУ «ВШОЗ» НА 2024-2025 УЧЕБНЫЙ ГОД	29.08.2024
14	КАРТА БИЗНЕС-ПРОЦЕССА ДЕПАРТАМЕНТА РЕЗИДЕНТУРЫ	31.10.2024
15	АНАЛИЗ УДОВЛЕТВОРЕННОСТИ РАБОТОДАТЕЛЕЙ ВЫПУСКНИКАМИ ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ» ЗА 2023 ГОД	25.12.2023
16	АКАДЕМИЧЕСКАЯ ПОЛИТИКА ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШ ОЗ»	29.08.2024
17	ПОЛОЖЕНИЕ ОБРАЗОВАТЕЛЬНАЯ ПРОГРАММА: РАЗРАБОТКА И ОБНОВЛЕНИЕ	29.08.2024
18	СТРАТЕГИЧЕСКИЙ ПЛАН ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ» НА 2020-2025 ГОДЫ	27.02.2020
19	ПЛАН-ГРАФИК ПРОВЕДЕНИЯ ВНУТРЕННИХ АУДИТОВ НА 2024 ГОД	16.09.2024
20	ДОКУМЕНТИРОВАННАЯ ПРОЦЕДУРА	31.10.2022

	УПРАВЛЕНИЕ РИСКАМИ	
21	ДОКУМЕНТИРОВАННАЯ ПРОЦЕДУРА АУДИТЫ	31.10.2022
22	ДОКУМЕНТИРОВАННАЯ ПРОЦЕДУРА АНАЛИЗ СО СТОРОНЫ РУКОВОДСТВА	31.10.2022
23	АНАЛИЗ УДОВЛЕТВОРЕННОСТИ РЕЗИДЕНТОВ ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ» КАЧЕСТВОМ ОБРАЗОВАТЕЛЬНЫХ УСЛУГ НА КОНЕЦ 2024 ГОДА	06.12.2024
24	АНАЛИЗ УДОВЛЕТВОРЕННОСТИ РАБОТОДАТЕЛЕЙ ВЫПУСКНИКАМ ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ» ЗА 2024 ГОД	30.12.2024
25	ПОЛОЖЕНИЕ ДЕПАРТАМЕНТА ЭКОНОМИКИ И ФИНАНСОВ	
26	ДОЛЖНОСТНАЯ ИНСТРУКЦИЯ ГЛАВНЫЙ БУХГАЛТЕР ДЕПАРТАМЕНТА ЭКОНОМИКИ И ФИНАНСОВ	07.10.2022
27	ДОЛЖНОСТНАЯ ИНСТРУКЦИЯ ВЕДУЩИЙ БУХГАЛТЕР ДЕПАРТАМЕНТА ЭКОНОМИКИ И ФИНАНСОВ	07.10.2022
28	ПОЛОЖЕНИЕ О СИСТЕМЕ КЛЮЧЕВЫХ ПОКАЗАТЕЛЕЙ ЭФФЕКТИВНОСТИ ТОО «КАЗАХСТАНСКИЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ «ВШОЗ»	06.09.2024
29	ПОЛОЖЕНИЕ ДЕПАРТАМЕНТА МЕЖДУНАРОДНОЙ ДЕЯТЕЛЬНОСТИ	07.10.2022