To the Accreditation Council of the Eurasian Centre for Accreditation and Quality Assurance in Education and Healthcare 05/10/2024

#### REPORT

## OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE EVALUATION OF EDUCATIONAL PROGRAM 7M10102 "MEDICINE" OF

NJSC "ASTANA MEDICAL UNIVERSITY" FOR COMPLIANCE WITH THE ACCREDITATION STANDARDS OF EDUCATIONAL PROGRAMS OF MASTER'S SPECIALTIES IN HEALTH CARE

period of external expert evaluation: 03/27/2024-03/29/2024

#### CONTENT

1	List of symbols and abbreviations	2
2	Composition of the external expert commission	4
3	General part of the final report	6
4	Presentation of the Master's educational program 7M10102 "Medicine"	6
5	Information about previous accreditation	7
6	Brief description of the results of the analysis of the report on self-assessment of the master's educational program 7M10102 "Medicine" for compliance with the Accreditation Standards for educational programs of master's specialties in healthcare and conclusions on completion	7
7	Description of external expert evaluation and conclusion	8
8	Analysis of compliance with accreditation standards based on the results of an external evaluation of the master's educational program 7M10102 "Medicine"	10
9	Recommendations for improving the master's educational program 7M10102 "Medicine"	33
10	Recommendation to the Accreditation Council on Accreditation	33
	Annex 1. Quality profile and criteria for external evaluation and educational program of the master's program 7M10102 "Medicine"	34
	Annex 2. List of documents studied as part of the external expert evaluation	35

#### LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Description
AIS	Automated information system
CSA	Case Study Analysis
AC	Academic Council
LBC	Library and bibliographic classification
DB	Basic disciplines
UC	University component
MAC	Medical Advisory Commission
IRD	Internal regulatory documents
HEI	Higher education institution
SAC	State Attestation Commission
MSE on the	Municipal state enterprise on the right of economic management
REM	
SCES	State compulsory education standard
DET	Distance educational technologies
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Education
	and Healthcare
FG	final grade
IDP	Individual development plan
RS	Research School
CC	Component of choice
QAC	Quality Assurance Committee
CT	Comprehensive testing
CED	Catalog of elective disciplines
MOH	Ministry of Health
MCE	Mini clinical exam
MSHE	Ministry of Science and Higher Education
MOOC	Massive Open Online Courses
AMU	Astana Medical University
NJSC	Non-profit joint stock company
RA	Research activities
RI	Research Institute
RWMS	Research work of a master's student
NMH	National medical holding
NEP	New educational programs
STP	Scientific and technical programs
OHPE	Organization of higher and postgraduate education
PH	Public health
FCA	Final control assessment
GC	General competencies
EP	Educational program
TRE	Tolerance Rating Evaluation
OSCE	Objective Structured Clinical Exam
PD	Profiting disciplines
PGE	Postgraduate education
PC	Professional competencies

Academic	Academic staff
staff	
RK	The Republic of Kazakhstan
MC	Midterm control
LO	Learning outcomes
WC	Working curriculum
IAS	Internal Audit Service
IWMS	Independent work of a master's student
IWMST	Independent work of a master's student with a teacher
US	University Standard
UDC	Universal decimal classification
EMCD	educational and methodological complex of the discipline
LD	Logistics Department
AC	Academic Council
OD	Operations Department
CMAC	Central Medical Advisory Commission
CPDAA	Centre for Planning and Development of Academic Affairs
ETTC	Educational Technology Transfer Center
Emergency	Emergencies
EL	Electronic library
CBL	Case-based learning
PBL	problem-based learning
TBL	team-based training

#### 1. Composition of the External Expert Commission

In accordance with ECAQA Order No. 7 dated 03/05/2024, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct during the period March 27-29, 2024 external evaluation of the master's degree educational program in the specialty "7M10102 "Medicine" in the following composition:

No.	Status as part of the EEC	Full name	Academic degree/title, position, place of work/place of study, course, specialty
1	Chairman	KUZGIBEKOVA ALMA BOLATOVNA	Candidate of Medical Sciences, Professor of the Department of Childhood Diseases of NJSC "Medical University of Karaganda", Honorary worker of education of the Republic of Kazakhstan, winner of the medal V.G. Leibniz (2012), M. Pettenkofer (2014) of the European Scientific Society, Accredited independent expert in evaluating the quality of medical services
2	International expert	KULIKOV OLEG VILIEVICH	Candidate of Medical Sciences. Senior lecturer, expert auditor of the voluntary certification system of the Federal State Budgetary Institution "National Institute of Quality" of Federal Service for Surveillance in Healthcare. Member of the Scientific and Technical Council of the All-Russian Quality Organization and "RIA Standards and Quality" LLC. Member of the Expert Council of the journal "Quality Management in Medicine".
3	Academic expert	BOSHKAEVA ASYL KENESOVNA	Doctor of Pharmaceutical Sciences, acting Professor of the Department of Pharmaceutical and Toxicological Chemistry, Pharmacognosy and Botany of the NJSC "Kazakh National Medical University named after S.D. Asfendiyarov"
4	Academic expert	YERMUKHANOVA LYUDMILA SERGEEVNA	Candidate of Medical Sciences, Associate Professor, Head of the Department of "Public Health and Healthcare" of the NJSC "West Kazakhstan Medical University named after Marat Ospanov", Chairman of the Committee "Public Health" at the State Unitary Enterprise
5	Academic expert	KHISMETOVA ZAYTUNA ABDULKASIMOVNA	Candidate of Medical Sciences, Associate Professor, Head of the Department of Public Health of NJSC "Semey Medical University"
6	Academic expert	BRIMZHANOVA MARZHAN DIKHANOVNA	Doctor PhD, Advisor to the Rector of the Kazakhstan Medical University "HSPH" LLP. Doctor of the highest category in the specialty "Dermatovenereology"
9	Expert representative of practical healthcare	ZHANTURIEV BOLAT MEIRBEKOVICH	Candidate of Medical Sciences, DBA, Head of the Biological Testing Laboratory of the Testing Centre with Laboratories, Almaty Territorial Branch of the National Centre for

			Expertise of Medicines, Medical Devices and Medical Equipment of the Ministry of Health of the Republic of Kazakhstan		
10	Expert – representative of undergraduates	ASTRAKHANOV MAKZHAN RUSTEMULY	1st year master's student in specialty "Biology" of the Eurasian University named after L.N. Gumilyov		

The EEC report includes a description of the results and conclusion of an external evaluation of the master's educational program "7M10102 "Medicine" for compliance with the Accreditation Standards for educational programs of master's specialties in healthcare and conclusions (hereinafter referred to as the Accreditation Standards), recommendations of the EEC for further improving the approaches and conditions for the implementation of the above-mentioned educational program and recommendations for the ECAQA Accreditation Council on Accreditation.

## 2. General part of the final report 2.1 Presentation of the Master's educational program in the specialty "7M10102 "Medicine""

Name of organization, legal form of ownership, BIN	Non-profit joint-stock company "Astana Medical University", BIN 080940008218
Government	Ministry of Health of the Republic of Kazakhstan
Full name of the first manager	Nadyrov Kamalzhan Talgatovich
University foundation date	October 26, 1964 by decision of the Central Committee of the
	Communist Party and the Council of Ministers of the KazSSR
Location and contact details	The Republic of Kazakhstan,
	010000, Astana, Beibitshilik st., 49A
	Phone: +7(7172)539424
	E-mail: rektorat@amu.kz
	Official website: https://amu.edu.kz/
State license for educational	dated 03/19/2019, No. KZ93LAA00014823, code 7M101 in
activities in the magistracy (date,	the field of preparation "Healthcare"
number)	
Inclusion in the Register of	https://enic-kazakhstan.edu.kz/ru/reestr-op/analitika-1
educational programs of higher and	
postgraduate education of the	
National Center for the Development	
of Higher Education of the Ministry	
of Education and Science of the	
Republic of Kazakhstan	
Information about branches,	Not available
subsidiaries (if any)	
Year of commencement of the	Since 2010
accredited educational program (EP)	
Duration of training	Development period: 2 years
Total number of graduates since the	119 people (masters)
beginning of the EP implementation	
Number of master's students in the	A total of 48 master's students (1st year – 22 people; 2nd year
EP since the beginning of the current	- 26 people)
academic year	
Full-time teachers/	The total number of teachers is84, including full-time

part-time workers involved in the implementation of the educational program, incl. % sedate	teachers62, part-time teachers22  Degree, % - 100% (21-Doctors of Science, 5 Associate Professor, 19 Candidates of Science, 12 PhD, 7 Masters).  Sedateness, % - 70% (core disciplines in clinical departments
Website	- 100%) https://amu.edu.kz/
Instagram	https://www.instagram.com/amu_amu_official/?hl=ru
Facebook with active pages	https://www.facebook.com/MeduniverAstana/?locale=ru_RU

#### 2.2 Information about previous accreditation

The master's educational program 7M10102 "Medicine" of NJSC "Astana Medical University" was accredited by the Non-Governmental Institution "Independent Agency for Quality Assurance in Education (IQAA)" with a validity period: April 22, 2019 - April 19, 2024

https://amu.edu.kz/upload/iblock/79c/79cca9d156dac9d3cd63a71670e16751.pdf

# 2.3 Brief description of the results of the analysis of the report on self-assessment of the master's educational program "7M10102 "Medicine" for compliance with the Accreditation Standards of educational programs of master's specialties in healthcare and conclusions about completion

The report on self-assessment of the master's educational program 7M10102 "Medicine" (hereinafter referred to as the report) is presented on 240 pages of main text, 139 pages of annexes, electronic versions of 89 documents located at the link <a href="https://drive.google.com/drive/folders/1AKlc5KpwK\_45TJin8CZ7sVEMBDlb2ESL">https://drive.google.com/drive/folders/1AKlc5KpwK\_45TJin8CZ7sVEMBDlb2ESL</a>.

The report is characterized by completeness (this wording is included in the report section as an example, since an educational organization can be admitted to the external evaluation stage only if the self-assessment report has a complete form and completeness in terms of content) of answers to all 9 basic accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for self-assessment of the educational program provided to the educational organization by the accreditation centre - ECAQA, as well as internal consistency of information. The report is accompanied by a covering letter signed by the rector Nadyrov Kamalzhan Talgatovich, who confirms the accuracy of the quantitative information and information included in the self-assessment report.

The report contains a list of 9 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 is Raisova Karlygash Askerovna, dean of the research school.

Self-assessment of the educational program "7M10102 Medicine" was carried out on the basis of the order of the rector of the university No. 791-n/k dated December 27, 2023 "On self-assessment of the master's educational program 7M10102 Medicine".

All standards contain the actual practice of the university in preparing master's students in the specialty "7M10102 "Medicine", taking into account the start of admission of students in 2019-2020, reasoned data, examples of the implementation of the objectives of the educational program, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is quite complete and updated regarding the number of master's students, teachers, administration, information on selection and admission, learning outcomes, results of evaluation of knowledge and skills, educational resources and practical learning environment, practice bases, contractual obligations with partners (universities, associations), financial information, plans for the development and improvement of master's students training and timely completion of dissertation research.

The report is presented to ECAQA in a complete form, written in literate language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, tables and figures (diagrams, photographs) contain references in the text and are continuously numbered.

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

#### 3. Description of external expert evaluation

External expert work as part of the evaluation of the educational program "7M10102" "Medicine" was organized in accordance with the Guidelines for conducting external evaluation of educational organizations and educational programs of the ECAQA and in accordance with the program approved by the General Director of the ECAQA Sarsenbaeva S.S. and agreed with the rector of NJSC "Astana Medical University" (hereinafter referred to as the University) K.T. Nadyrov. Dates of visit to the organization: March 27-29, 2024

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

The sequence of the visit within 3 days is presented in detail in the Visit Program (hereinafter referred to as the program), which is located in the documentation of the accreditation centre. The program is evidence of the implementation of all planned activities within the framework of external expert evaluation.

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

- interviews with management and administrative employees 14 people;
- interviews with master's students 11 people, including foreign ones (*if applicable, write from which countries*);
  - study of the university website: <a href="https://amu.edu.kz/ru/infocenter/news/5108/">https://amu.edu.kz/ru/infocenter/news/5108/</a>
  - interviewing 27 employees, 19 teachers, 8 scientific supervisors;
  - survey of teachers and master's students 539 and 923, respectively;
- 1) observation of the training of master's students: attendance at 2 of practical classes of master's students of group 2022-M/23-M144-(2) on the topic: "Pregnancy and endocrine diseases (5 credits)", head of the Department of Obstetrics and Gynaecology No. 2 Iskakov Serik Sayatovich. The department is located at the address: Ryskulova 8, on the basis of the city multidisciplinary hospital No. 2, 4th floor and group 2022-M/34-M144-(2) on the topic "Radical correction of congenital heart failure" of the Department of Radiology named after Zh. Khamzabaeva. 1 lectures of group 2022-M/23-M144-(2) on the topic: "Modern approaches to the diagnosis and treatment of asthma", Department of Childhood Diseases with a course in Allergology, Immunology, Hematology and Endocrinology, head of the Department Morenko Marina Alekseevna, at the address: Tauelsizdik Avenue, 11/1, room 214.
- review of resources in the context of implementing accreditation standards: 3 bases of clinical training and scientific research were visited, including departments:
- Institute of Radiobiology and Radiation Protection, *Bakhtin Meirat Mukhametkarimovich*, Scientific Research Institute of Radiology named after Zh.Kh. Khamzabaev at NJSC "AMU". Source <a href="https://amu.edu.kz/ru/science/SRI-of-Radiology/12121/">https://amu.edu.kz/ru/science/SRI-of-Radiology/12121/</a>;
- Educational and microbiological laboratory of the Department of Microbiology and Virology named after Sh.I. Sarbasova NJSC "AMU". Source <a href="https://amu.edu.kz/ru/science/List-of-laboratories/10996/">https://amu.edu.kz/ru/science/List-of-laboratories/10996/</a> and <a href="https://amu.edu.kz/ru/departments/1999/">https://amu.edu.kz/ru/departments/1999/</a>;
- Department of Childhood Diseases with courses in allergology, immunology, haematology and endocrinology. At the address: Nur-Sultan, Tauelsizdik Ave. 11/1, 5th floor, base:

MSE on the REM "City Children's Hospital". Source <a href="https://amu.edu.kz/ru/departments/209/">https://amu.edu.kz/ru/departments/209/</a> and/or <a href="https://amu.edu.kz">https://amu.edu.kz</a>

• 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 departments (the list of documents studied is in **Annex 2**).

The team of the accredited organization ensured the presence of all persons indicated in the visit program and according to the lists of interview sites (Table 1).

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

No	Position	Quantity
1	Rector	1
2	Vice-Rector	4
3	Directors	2
4	Chairman of the Academic Council <i>Zhunusova A.B.</i>	1
5	Chairpersons of the quality assurance committees (QAC) of the EP "Medicine" - <i>Kulzhanova Sh.A.</i>	1
	Chairpersons of the QAC for master's and doctoral studies <i>Latypova N.A.</i>	1
6	Chairman of the local commission on bioethics <i>Rakhmetova Venera</i> Sametova	1
7	Chairman of the Committee on Scientific Affairs <i>Khamchiev Kureisch Mavlovich</i>	1
8	Dean of the Research School Raisova Karlygash Askerovna	1
9	Head of the Centre for Planning and Development of Academic Activities - Dosanova Asem Kalelovna	1
10	Chief specialist of the Educational Process Quality Audit Group - Shakhrukh Nazhimov	1
11	Kabdulina Gulzhan Bolatovna - Head of the Centre for Practice and Employment.	1
12	Center for International Cooperation - Bilan-Kotelnikova Liliya Ivanovna	1
13	Scientific supervisors	12
14	Teachers	529
15	Master's students	923
16	Representatives of practical healthcare	22
17	Master's graduates	19

On the last day of the visit to the organization, a meeting of EEC members was held based on the results of the external evaluation. A final discussion was held on the results of the external evaluation of the educational program, study of documents, results of interviews, talks, and questionnaires. Members of the EEC began drafting the final report of the EEC. Generalizations of the results of the external evaluation are made. The experts individually completed the "Quality Profile and criteria for external evaluation of the educational program "7M10102 "Medicine" for compliance with the ECAQA Accreditation Standards." There were no comments made by the members of the EEC (if there were any, please write). Recommendations for improving the educational program were discussed and the chairman Kuzgibekova Alma Bolatovna held a final open vote on recommendations for the ECAQA Accreditation Council for the accreditation period.

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

While conducting a survey of undergraduates, 59.7% rated the work of the External Expert Commission on Accreditation as positive, 16.58% as satisfactory. The majority of respondents (74.21%) believe that it is necessary to accredit educational organizations or educational programs.

According to 65.86% of teachers, the survey conducted by the ECAQA is useful for developing recommendations for improving key areas of activity of an accredited educational organization.

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

To obtain objective information on the expert evaluation of the accredited educational program, the following methods were used: interviews with management and administrative employees, interviews with students, employers, graduates, observation, study of the university website, interviews with employees of various structural divisions, teachers, surveys of teachers and undergraduates, review of resources in the context of meeting accreditation standards, study of educational and methodological documents both before the visit to the university and during the visit.

The team ensured the presence of all persons indicated in the visit program and according to the lists of interview sites.

Comfortable conditions were created for the work of the EEC, access to all necessary information and material resources, including supporting documentation, was organized.

As a result of the analysis of compliance with accreditation standards of the master's degree program 7M10102 "Medicine", it was revealed that the program complies with the requirements of the standards of the Eurasian Accreditation Center, but clarification of the provision of evidence base according to the above-described standards is necessary.

### 3. Analysis of compliance with accreditation standards based on the results of an external evaluation of the master's educational program "7M10102 "Medicine"

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

#### 1.1 Mission Statement, Goals and Learning Outcomes

The university has formulated the mission and goal of the educational program, which includes the training of qualified competitive specialists who are able to apply and develop advanced technologies in medical science, use and implement modern scientific achievements, have the necessary knowledge, practical skills and leadership qualities, meet modern requirements of practical healthcare and carry out scientific research and pedagogical activity in the system of higher medical education. This formulation is presented in an accessible form for undergraduates and employers and ensures the attractiveness of the educational program.

While implementing program activities, namely, based on the results of an interview with the first head of the organization, members of the advisory body (Academic Council, Quality Assurance Committee (QAC) of master's and doctoral educational programs), in interviews with teachers, compliance with the criteria of **standard 1.1** was established, so how the final learning outcomes contain both theoretical knowledge and the formation of analytical thinking (through the discipline/module "Biostatistics", "Organization and Management of Healthcare", "Fundamentals of Clinical Epidemiology and Evidence-Based Medicine"), communication skills (through the discipline/module "Psychology" management", "Fundamentals of teaching methodology in medicine", "Foreign language (professional)", "Pedagogy of higher education"). The educational program formulates the goals of developing practical skills through the development of such disciplines as "Fundamentals of teaching methodology in medicine", "Fundamentals of methodology of scientific research in medicine", "Fundamentals of clinical epidemiology and evidence-based medicine".

The university applies ethical approaches to teaching master's students. The experts familiarized themselves with the Code of Ethics for Students and Teachers (approved by Board Decision No. 28 of December 26, 2019). During a conversation with 4 master's students, experts were

convinced that they knew about this document and used it in their studies and communication with teachers and colleagues

#### 1.2 Participation in the formulation of the mission and final learning outcomes

All participants in the educational process know the mission of the educational program, took part in the formation of proposals for formulating the mission (clause 1.2), for example, the Departments of the NJSC "Astana Medical University" took part in the formulation of the Mission and the final learning outcomes; Head of the MSE on the REM "Multidisciplinary Medical Centre" in Astana - Ph.D. Tuleutaev M.Ye.; Deputy Director of the Scientific Research Institute of Radiology named after Academician Khamzabaev Zh.Kh. – Doctor of Medical Sciences, Professor Abdrakhmanova Zh. S.; Deputy Head of the State Institution "Central Hospital with Polyclinic of the Ministry of Internal Affairs of the Republic of Kazakhstan" - PhD, Tursynbet Ye.A. (Minutes 11.01.2023 No. 6). The last update of the mission was 01/11/2023 and, unlike the previous version, the current mission includes the training of qualified competitive specialists capable of adapting and developing advanced technologies in medical science.

Experts found that the mission of the educational program was brought to the attention of master's degree applicants, undergraduates, employers through the website, social networks, and information letters to medical organizations.

From interviews with master's students, it was established that before the start of classes, teachers inform about the mission and work plans of the university, and tell where to get the necessary information about the educational program, teachers, and training bases.

During visits to university departments, experts noted the strengths of the accredited educational program, including:

- Availability of a documented procedure for the development and monitoring of the educational program SU-MU-15-22 "Educational programs: development, updating and evaluation" <a href="https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP">https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP</a>.
- Participation of employers studying in the implementation of the EP at the stage of formation of the program mission and final outcomes
  - Clearly defined learning outcomes

The university has departments that are directly related to the master's educational program 7M10102 "Medicine", which can be noted as the best practice in education, namely the Research School.

During conversations with master's students and employers, experts, answers were received to the following questions: "Do you participate in formulating the mission and goals of the organization, educational program?", "What is the personal contribution of master's students to improving the educational program?" To these questions, undergraduates answered that they participate in the formation and selection of elective disciplines, and employers answered as follows: they participate in formulating the mission and goals of the organization and educational program through participation in conferences and congresses of the university.

#### 1.3 Institutional autonomy and academic freedom

To verify **standard 1.3**, a meeting was held with proctors *Koikov Vitaly Viktorovich* and *Zhunusova Aigul Bitimbaevna*. During the conversation, the experts asked clarifying questions, and the Vice-Rector's report confirmed that the University has autonomy in the development of educational programs, including the master's program in the specialty "7M10102". The program was developed by the staff of the department, reviewed and approved at a meeting of the QAC of master's and doctoral studies (*protocol No. 1 of October 26, 2023\_*).

The program development process is regulated by the document SU-AMU-15-22 "Educational programs: development, updating", <a href="https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP">https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP</a>).

The elective components were developed taking into account the opinions of master's students and representatives of practical healthcare. For example, electives in the field of medical information

technology were developed due to the need to be able to work with the IMIS (Integrated medical information system) platform.

When choosing a base for practical training, the choice was made in favour of the MSE on the REM "City Multidisciplinary Hospital No. 2" of the Akimat of Astana - a multidisciplinary medical and diagnostic institution (hospital), one of the largest in Astana, with a staff of more than 2000 employees, providing 24-hour emergency and routine medical care for more than 34,000 patients annually. Master's students are provided with all the necessary resources for preparing a dissertation research (library, access to international databases - see more in section 6.) There are the necessary staffs of teachers in the amount of 84 people to maintain a teacher: master's student ratio of 1:3.

#### 1.4 Program name and description

The results of studying the documentation demonstrate that the mission of the organization and the mission of the educational program "7M10102 Medicine", and the educational process is built in accordance with the State Compulsory Standards of Education and Laws and Statutory Instruments (LSI) in postgraduate education and healthcare.

Experts examined 31 pieces of documentation, including those directly related to the accredited master's program (see Annex 3 to this report).

To implement the educational program in the specialty "Medicine "7M10102", the organization's documents contain EMCD, which defines the goal, takes into account the integration of practical and theoretical components, and independent work. Compliance with state standards and standard requirements has been established.

Information is provided on teaching methods in master's programs, including the possibility of creating an individual training program if necessary. This is regulated by the university document: SU-AMU-15-22 "Educational programs: development, evaluation, updating." The internal regulatory document (IRD) of RI-AMU-18-20 "Requirements for the content, design and defence of a master's thesis" <a href="https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP">https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP</a> describes the evaluation policy, conditions for extending studies in master's degree, requirements for the dissertation.

Rules for admission to master's programs <a href="https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP">https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP</a>

During a visit to the university and interviews with staff, the commission was convinced that there is a documentation system that is transparent and accessible to all faculty and staff, and includes documents such as annual operating plans, annual reports, department regulations, contracts with teachers and undergraduates, and educational and methodological documentation (work program, work curricula, syllabuses, journals), assessment tools (checklists, statements), evidence, certificates and verifications. A review of the website showed that its pages contain documents necessary for master's students and contain information that is regularly updated.

Experts reviewed the strategic development plan of the university for the period 2022-2026, which includes 5 directions, including the direction for the development of postgraduate education: "Priority direction 1.2 "Expanding the range of educational programs taking into account the needs of the industry and related industries" <a href="https://amu.edu.kz/ru/about-university/">https://amu.edu.kz/ru/about-university/</a>

According to experts, this confirms the fulfilment of the accreditation standard and demonstrates the goals, objectives and prospects of the university.

While conducting a survey of 39 master's students (on the resource <a href="https://webanketa.com/">https://webanketa.com/</a>), out of 22 questions, a number were devoted to the quality of the educational process and educational program. It was found that 58% of undergraduates would recommend studying at the university to their acquaintances, friends, and relatives. And \_55.8\_\_% of respondents believes that educational program leaders and teachers are aware of students' problems related to learning. To the question "Do you think the university allows you to acquire the necessary knowledge and skills in your chosen specialty?" 66.9% of undergraduates answered positively, 33.4% are not sure about this.

The 539 teachers surveyed (21 survey questions) also answered that 70.8% were satisfied with the organization of work and workplace at the university, and 24.3% partially agreed with this

statement. Experts determined that the university has a healthy microclimate, since the director is quite accessible to both undergraduates and employees and responds promptly to requests. According to 74.3% of respondents, they have the opportunity to realize themselves as professionals in their specialty. Teaching experience is up to 5 years -0%, up to 10 years -12%, over 10 years -88%.

**EEC conclusions based on the criteria.** Comply with 5 basic standards: fully - 5.

#### **Standard 2: EDUCATIONAL PROGRAMME**

#### 2.1 Learning and teaching methods

For the effective implementation of the master's program in the specialty "7M10102" Medicine" at the supervising Research School, teaching methods such as CBL, PBL, TBL, SP, MCE and other active methods are used. The choice of these teaching methods is due to the fact that they are aimed at developing professional, intellectual and academic skills, and determines the practical component of the training of future specialists. Thus, the methods CBL, PBL, long-term clinical case (work at the patient's bedside), conducting/assisting during operations, mini-clinical examination (MCE), simulation technologies, OSCE are aimed at developing master's students' responsibility for their professional development and the development of independent skills

The university organizes training for master's students in scientific and clinical bases, where they form and develop practical skills such as Project-based learning, Research-based learning, and analysis from the perspective of evidence-based medicine. Standard of the University "Implementation of new educational technologies" SU-AMU-14-22 <a href="https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J">https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J</a>, approved by the decision of the University Board, minutes No. 02 of 01/24/2023.

By attending a practical lesson of group 2022-M/23-M144-(2) on the topic: "Pregnancy and endocrine diseases (5 credits)", head of the Department of Obstetrics and Gynaecology No. 2 Iskakov Serik Sayatovich, experts received convincing data that the training is carried out according to plan, before the start of classes, master's students answer tests, receive feedback from the teacher, and have the opportunity to improve their skills. The organization ensures compliance with ethical aspects in the implementation of the educational program, since experts have studied the code of ethics (approved by the Decision of the Board No. 28 of December 26, 2019) and during the interview the master's students responded that they were informed about the contents of this document.

(In a conversation with master's students, experts saw that the university promotes the development of practical competencies of master's students. At the same time, master's students deepen their theoretical knowledge and develop communication skills.

The training of master's students in the specialty "7 M10102"Medicine" is aimed at meeting the needs of practical healthcare. Therefore, the university provides a lot of opportunities and conditions for qualified training of specialists in the field of medicine.

Of the 39 master's students surveyed, 56.5% responded that teachers in the classroom use active and interactive teaching methods quite often, 36.5% believed that they rarely or sometimes.

#### 2.2 Development of academic skills

Experts received evidence that the educational program develops academic skills in master's students, including independent thinking, analytical skills, critical thinking, and decision-making skills. During a conversation with master's students, experts came to the conclusion that master's students can reason, are capable of perceiving information and have the communication skills necessary for a scientist-teacher-health specialist.

The experts got acquainted with the individual work plan of the master's student (IWPMS) Dauren Sergeevich Musin, which contains information about the disciplines completed, plans for completing the master's thesis, and a general plan for working on the master's thesis (<a href="https://drive.google.com/drive/folders/luupUYDdLKB5yiTQvvZi8ZQOsgTgWcTav">https://drive.google.com/drive/folders/luupUYDdLKB5yiTQvvZi8ZQOsgTgWcTav</a> ).

Teachers provide undergraduates with methodological and didactic materials, additional literature to prepare for classes, with which 60.6% are completely satisfied, 24.5% are partially satisfied, 34.6% are not familiar with this issue.

#### 2.3 Contents of the program, scope of application

There are documents containing requirements for the content of educational programs. Responsibility for the selection and implementation of innovations in the educational process lies with the Research School of NJSC "AMU".

The operational connection between program levels is provided by the research school and the specialized department.

During the training, a graduate of EP 7M10102 – "Medicine" masters skills and competencies that contribute to continuous professional education and lifelong development

While developing the master's program, the developers relied on professional medical literature.

Experts have established a clear continuity between the final outcomes of the previous training of master's students (prerequisites) and training in the master's program, as well as subsequent programs of continuous professional development. The university has developed 20 additional education programs (master's degrees), including for the specialties: Pharmacy, Epidemiology, Management, Nursing, etc. (https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/magistratura-dlya-postupayushchikh/obrazovatelnye-programmy/). Master's students are informed about this.

60.3% of teacher respondents believe that university students have a high level of knowledge and practical skills after completing the training program, and 24.6% partially agree with this.

The organization has entered into agreements with medical organizations (NJSC "Astana Medical University"; 2. MSE on the REM "City Multidisciplinary Hospital No. 2"; 3. RSE at the REM "National Scientific Centre of Traumatology and Orthopaedics named after Academician N.D. Batpenov", etc. etc.), including 1 foreign (Azerbaijan Medical University, Baku).

And to the question of the questionnaire "Is there enough time for practical training (supervision of patients, etc.)", 53.2% of undergraduates responded with complete agreement, 21.34% partially agreed, \_25.3% doubted. At the same time, 58.9% of master's students claim that after completing classes the teacher provides feedback (listens to your opinion, conducts a miniquestionnaire, works on mistakes).

#### 2.4 Research and grants

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

The educational program includes the scientific foundations and methodology of medical research ("Fundamentals of clinical epidemiology and evidence-based medicine" and "Fundamentals of methodology for scientific research in medicine", 6 credits each), including clinical research and clinical epidemiology (6 credits). While talking with master's students, experts learned that they use scientific data in their training and know the basics of evidence-based medicine. The teachers said that they teach master's students methods of critical evaluation of literature, articles and scientific data, and the application of scientific developments.

The university carries out 15 scientific and technical programs (STP), the results of which can become the basis for the research practice of master degree students. For example, "Development of an effective program for the prevention and treatment of cardiovascular complications in patients with liver cancer during chemotherapy using modern innovative technologies", "Radiation monitoring of the territory of oil production enterprises", "Comprehensive evaluation and improvement of the organization of outpatient care for patients with arterial hypertension", "Evaluation of radon safety of a secondary school in the village of Aksu, located near a radioactive waste storage facility and the development of measures to reduce the risk of exposure of students," "Prognostic value of determining

the level of high-sensitivity troponin in identifying early cardiovascular complications in patients with liver cancer receiving chemotherapy and chemoembolization," etc. .

While surveying master's students, it was found that the university has access to student participation in research work and 67.9% of people were completely satisfied with this, 20.5% were partially satisfied, and 11.5% were dissatisfied. Master's students should engage in research and in response to the questionnaire, 40.1% wrote that they are already engaged in research, 38.7% are planning to start, 16.8% are looking for a research topic, 4.5% are not engaged.

#### 2.5 Program structure and duration

The structure and content of the educational program "Medicine" are established in accordance with the requirements of the State Compulsory Education Standard of Higher Education (Order of the Minister of Health of the Republic of Kazakhstan dated July 4, 2022 No RK MOH-63) and include both basic disciplines and major disciplines

The duration of the program is 3600 hours (120 credits): of which theoretical training is 2520 hours (84 credits); Research work of Master's student (RWMS) – 720 hours (24 credits); Final certification – 360 hours (12 credits). The required components of the master's program are 1050 hours (35 credits). An elective component lasting 1470 hours (49 credits) and includes topics such as biostatistics, fundamentals of biostatistics, fundamentals of teaching methodology in medicine, organization and management of healthcare, basics of clinical epidemiology and evidence-based medicine, basic methodology of scientific research in medicine. For the entire period of study in the educational program "7M10102-Medicine", the allotted time for independent study of undergraduates is 1125 hours and is aimed at deepening and consolidating the master's knowledge, developing analytical skills on the issues of the academic discipline and mastering fundamental knowledge, professional skills, and research experience.

The program describes approaches to formative (current) and summative (final) assessment of a master's student. Feedback from master's students is provided regularly.

Providing feedback;

Upon completion of training, the master's student is issued a diploma of the appropriate type and is awarded the qualification academic degree "master", which corresponds to level 7 of the European Qualifications Framework, the requirements for completion of the program;

The procedure for extension and breaks of studies is described in the Regulations on Master's Degree Studies (PL-AMU-121-23), which was approved by the Decision of the Board of the NJSC "AMU". During the reporting period, 0 master's students in the specialty "7M10102-Medicine" took advantage of this.

For the successful implementation of the educational program in the specialty "Medicine", the organization has resources for organizing the evaluation of practical skills of master's student (training laboratories, simulation centres).

Practical training of master's students is carried out in the conditions of such medical organizations as Research Institutes, City Clinical Hospitals and Clinics of Astana. On average, one department has from 8 to 15 clinical sites, which guarantees that master's students will acquire skills in various aspects (research, supervision, examination, management, and teaching) of the chosen area of healthcare.

#### 2.6 Educational program development process

Management of the educational process, reflected in the self-assessment report (**Standard 2**) and general approaches to management were confirmed during a visit to the Centre for Planning and Development of Academic Affairs and the Research School and conversations with the head and staff. At the same time, verification of **standard 2** showed that all interested parties are involved in the process of developing the EP. The working group for the development of the EP consists of both representatives of Academic staff and representatives from potential employers. At the stage of discussion and approval, representatives from among the students participate at the departmental meeting and at the meeting of the QAC of the EP.

The EP review procedure is carried out throughout the entire process of program development and approval. For the purpose of reviewing, the EP is sent to representatives of potential employers

and educational institutions, including foreign ones. In the process of writing a review, reviewers indicate their suggestions and comments, which are necessarily taken into account.

The advisory bodies include representatives of students at all levels of education, including undergraduates, as members. Everyone has the right to make their own adjustments and suggestions if they are reasonably reasoned.

The experts got acquainted with the work of the departments and councils involved in the development of the master's educational program "7M10102" Medicine". A total of 4 meetings were held and during a cross-interview it was established that the University had developed the University Standard "Educational programs: development and updating" SU-AMU-15-22 <a href="https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J">https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J</a>, in accordance with which the department initiates the development and sends to the research school a list of the composition of the working group. Based on this request, the RS issues an order on the composition of the working group. Next, the working group forms a draft EP, which is discussed at the department, the QAC, agreed upon at a meeting of the AC and approved at a meeting of the SC.

The process of developing an educational program includes an evaluation of the needs for specialists (for example, the need for graduates of the "7M10102" Medicine" program), and the cost of training is 1,020,000 tenge (https://amu.edu.kz/upload/iblock/875/%D0%BF%D1%80%D0%B5%D0%B9%D1%81%D0%BA%D1%83%D1%80%D0%B0%D0%BD%D1%82%20%D0%B8%D0%B7%D0%BC%D0%B5%D0%BDD%BD%D1%88%D0%B9%207-8%20%D0%BD%D0%B0%20%D1%81%D0%B0%D0%B9%D1%82.pdf ).

The master's program was developed by the Research School of NJSC "AMU" and the Department of Radiology and Nuclear Medicine, discussed at the meeting of the QAC Protocol No. 4 of 04/07/2023 and approved by the Scientific Council of NJSC "AMU" Minute No. 7 of June 30, 2023. The Master's program has been reviewed by internal (<a href="https://drive.google.com/drive/u/0/search">https://drive.google.com/drive/u/0/search</a> ) reviewers, and the reviewers noted, that the program clearly formulated its objectives in the form of a set of general cultural, general professional and professional competencies in accordance with the requirements for the training of medical personnel in postgraduate educational organizations of the Republic of Kazakhstan and recommended for use in the educational process. Thus, the experts analysed the hierarchy and sequence of development and implementation of the master's program.

At the same time, to the question "Do representatives of master's students participate in the development of educational programs?", the experts received the following answer: "Yes, through the Council of Young Scientists" the activities of SMU are diagnostics and development of the scientific potential of master's and doctoral students, preservation and replenishment of intellectual potential on this basis AMU, stimulating the work of departments in organizing research work (hereinafter referred to as R&D), promoting the work of AMU to improve the quality of training of specialists with postgraduate education, further developing the integration of science and education (https://amu.edu.kz/ru/departments/5732/).

The surveyed master's students are fully satisfied with the schedule of classes (69.6%).

*EEC conclusions based on the criteria.* Compliant out of 21 standards (including 19 basic, 2 improvement standards): fully - 18/2, partially - 1/0, do not comply - 0/0.

#### Recommendation for improvement:

1) To strengthen connections with employers and healthcare organizations to improve the quality of educational programs.

#### **Standard 3: ASSESSMENT OF STUDENTS**

#### 3.1 Assessment methods

Monitoring and assessment of the knowledge of University students is carried out using a point-rating system. Checking the educational achievements of students is carried out by conducting midterm and final monitoring of progress in the form of an exam at the end of each discipline/module, intermediate and end-of-course assessment. Interim certification at the University is carried out in accordance with the work plan and academic calendar in accordance with the university standard "Planning the educational process at NJSC "Astana Medical University" SU-AMU-25-21 https://drive.google.com/drive/folders/1BwjCTdSE24mfNUoemCIGM\_8GEQL594cr

The "Academic Policy of NJSC "AMU" P-AMU-17-23 defines and approves the principles and methods used to evaluate undergraduates, including criteria for admission to exams, the number of exams, and the number of permitted retakes. The choice of certain methods for evaluating undergraduates is based on the university standard "Model for Evaluation of Educational Programs", decision Board approved by the of the dated January 12, 2024 https://drive.google.com/drive/folders/1BwjCTdSE24mfNUoemCIGM 8GEQL594cr.

To make the evaluation results of master's students available to external experts, they are posted on Google Drive <a href="https://drive.google.com/drive/u/0/home">https://drive.google.com/drive/u/0/home</a>.

Responsibility for the development of documents for the evaluation of master's students and the process of documenting the evaluation results is assigned to the Centre for Planning and Development of Academic Affairs. The approval of the form of end-of-course assessment is regulated in PL-AMU-13-21 "Regulations on the conduct of intermediate and end-of-course assessment of students" and is updated annually. This regulation is posted on the university website.

The results of the assessment of master's students are documented as follows: the assessment of the admission rating (hereinafter referred to as the AAR) is formed in the University's AIS module "Journal of Progress".

Students who score 50 points or more are allowed to take the final test. Students who do not score 50 points are not allowed to take the final test and are required to re-attend the course during the summer holidays for a fee.

The final assessment of educational achievements of students in a discipline/module includes the OPD and the Final Control Assessment (hereinafter referred to as the FCA). When calculating the final grade, the weight of each component is taken into account: the admission rating score is 60%, the end-of-course assessment score is 40%.

The objectivity and transparency of assessments and the grading process is ensured through an information system: the assessment results of each academic period are presented in the form of an examination sheet, a summary sheet, which is generated by the Platonus AIS.

The study of control and measurement tools showed that the university has implemented an appropriate assessment policy that allows for a comprehensive assessment of the educational achievements of master's students.

In order to implement the principles of academic integrity and transparency of the organization and control of the educational process, the University has an appeal system in accordance with the Academic Policy of NJSC "AMU" P-AMU-17-23

The instrumentation is peer-reviewed. The head of the Research School that additions and updates to the CIS are planned to be made, as a rule, before the start of the academic year.

#### 3.2 Evaluation system

The assessment of academic skills corresponds to the master's level, since methods such as **Formative assessment** are used, which is carried out regularly on the topic of the lesson, with scoring in pedagogical and electronic journals, **Summative assessment** is a type of assessment that is carried out at the end of the academic period, as well as the study of disciplines / module in accordance with the educational program with scoring in the electronic grade book.

The development of assessment methods and assessment format took into account their utility, which includes validity, reliability, acceptability and effectiveness. The developed assessment criteria are valid (the assessment objects correspond to the set goals of the academic discipline); developing (allows you to record what students can do and how they can improve their results); fair (all students

have equal opportunities to succeed); reliable (uniform agreed upon criteria or standards are used); effective (feasible, but does not take up much time from teachers and students); timely (feedback is constantly maintained.

The end-of-course assessment in a written format is carried out through encryption of students' work in classrooms and computer classes at the university according to the schedule under the supervision of the educational process quality audit group.

Assessment methods and results avoid conflicts of interest, because they are aimed at better compliance with the final learning outcomes, which is reflected in the Academic Policy of the university.

Until 2019, at all levels of education, knowledge assessment was in the form of current, midterm and end-of-course assessment. Since 2020, the assessment format at all levels of education is assessment of knowledge during midterm and final tests without issuing a daily assessment.

The experts inspected the resources for organizing the assessment of knowledge and practical skills, namely, teaching materials at the departments: Department of Microbiology and Virology named after Sh.I. Sarbasova (educational laboratory); auditoriums for practical training (simulation centre) of the Department of Obstetrics and Gynaecology No. 2 and the Department of Childhood Diseases with courses in allergology, immunology, haematology and endocrinology

The interviewed representatives of employers also indicated that the training of graduates corresponds to the modern development of medical practice and science. Employers said that they themselves participate in the evaluation of undergraduates, since they are included as reviewers of the CIS and the examination and appeal commission. But the educational organization did not provide systematic feedback to them. Employers believe that they want to see the strongest skills in master's graduates, such as critical analysis, reasoning logic, and knowledge for conducting research and evidence-based medicine.

#### 3.3 Feedback from undergraduates

The experts received information that each master's student provides feedback through individual and detailed written feedback (or oral feedback with a written report) after formative and summative assessments. QR questionnaires have been developed, and surveys are conducted regularly.

#### 3.4 Quality assurance of the assessment system

The organization evaluates the reliability and validity of evaluation methods by creating a structural unit "Educational Process Quality Audit Group", which organizes independent examinations by centralizing the end-of-course assessment in all disciplines in accordance with the examination schedule and attracting external experts - leading practical healthcare specialists, representatives with the Ministry of Health of the Republic of Kazakhstan and teachers of other medical universities as part of the State Attestation Commission during the dissertation defence procedure. This approach ensures validity, transparency, and independence of competency evaluation.

During a visit to the university, 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 YES, and these were mainly leading practical healthcare specialists, representatives of the Ministry of Health of the Republic of Kazakhstan and teachers of other medical universities as part of the state attestation commissions (SAC).

**EEC conclusions based on the criteria** correspond to 10 basic standards: completely -10.

#### 4.1 Admission and selection policy

The organization has a policy for the admission of master's students, which is called and posted on the university website in the section "Master's programs for applicants" (PR-AMU-04-23) <a href="https://amu.edu.kz/upload/iblock/cc6/cc6b818f460b686171afa18888430eb2.pdf">https://amu.edu.kz/upload/iblock/cc6/cc6b818f460b686171afa18888430eb2.pdf</a>, where the requirements and procedures are spelled out to ensure a transparent selection process for master's students.

The Vice-Rector, Chairman of the Academic Council and Dean of the research school spoke about the policy for admitting master's students. Approaches to the admission of master's students are based on the country's requirements and internal regulations, namely, the Law of the Republic of Kazakhstan "On Education"; - Law of the Republic of Kazakhstan "On Science"; - Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 "On approval of the Standard Rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education"; - The current legislation of the Republic of Kazakhstan and local acts of the University.

Thus, experts validated the data according to standard 4. In general, all criteria are met.

#### 4.2 Admission of master's students

The university has implemented a policy and process for admitting master's students based on their previous achievements, the principles of equality and objectivity. Admission of master's students is based on Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 "On approval of the Standard Rules for admission to study in educational organizations implementing educational programs of higher and postgraduate education", as well as internal regulations: rules for admission to master's programs, which spell out the requirements, procedure, providing a transparent selection process for master's students (PR-AMU-04-23), which are posted on the university website in the "Master's program for applicants" section <a href="https://amu.edu.kz/upload/iblock/cc6/cc6b818f460b686171afa18888430eb2.pdf">https://amu.edu.kz/upload/iblock/cc6/cc6b818f460b686171afa18888430eb2.pdf</a>.

In total, 22 people have been accepted since the start of the master's degree programs, including the accredited educational program 7M10102 "Medicine". In the current academic year, there are 22 master's students studying in the specialty "7M10102 "Medicine".

PR-AMU-04-23 describes the practice of admitting master's students with disabilities in accordance with the current laws and regulatory documents of the Republic of Kazakhstan. During the reporting period, no master's students with special needs were accepted.

#### 4.3 Support and counselling for master's students

For all questions of interest, students can contact the head of the School, the supervising vice-rector and the rector's blog. Each student within the EP, together with a supervisor, draws up an individual work plan, determined by a list of elective disciplines. The choice of topic takes into account the relevance of the issue within the research areas of the department.

All necessary information, including: class schedule, academic calendar, point-rating system, announcements, regulatory documents, reference book - master's student's guide, is posted on the University website <a href="https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/magistratura-dlya-obuchayushchikhsya/raspisanie-zanyatiy/">https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/magistratura-dlya-obuchayushchikhsya/raspisanie-zanyatiy/</a>. This ensures equal access for students to the necessary information, without regard to nationality, religion, state of residence, or socio-economic status.

The University operates a Student and Employee Service Centre, created to serve all categories of students, teachers and employees of the University with the aim of optimizing and automating processes in the provision of services on the "one office" principle, minimizing corruption risks, and transferring paper services to electronic format.

The University has help boxes and a helpline, which operate continuously and are one of the important types of socially significant services.

#### 4.4 Representation of master's students

Master's students are included in the work of advisory bodies to participate in the development, management and evaluation of educational programs, as well as other issues relevant to master's students. Master's students participate in decision-making in professional training and skills

development. For master's students there is motivation in the form of awards, participation in republican and international conferences, master classes and trainings, publication of joint scientific works, participation in scientific research conducted at the department and the University. The activity of master's students in the social and scientific life of the department, clinical base, at the University or beyond is encouraged when reviewing portfolio materials and upon admission to doctoral studies.

Each undergraduate to join the Council of Young Scientists can fill out an electronic application and send for consideration <a href="https://docs.google.com/forms/d/e/1FAIpQLScPuOLtgG3ChMzrkgqawQR3GI7XCLFvygkMwKGi8rF2HMEKZA/viewform">https://docs.google.com/forms/d/e/1FAIpQLScPuOLtgG3ChMzrkgqawQR3GI7XCLFvygkMwKGi8rF2HMEKZA/viewform</a>

#### 4.5 Requirements for master's students

Requirements for master's students regarding the completion of the program (projects, dissertation, practice, portfolio, transcripts, etc.) are described in the document IND RI-AMU-18-20 "Requirements for the content. design and defence of the master's thesis" https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP describes the assessment policy, conditions for extending master's studies, and requirements for completing a dissertation.

The experts were shown evidence of the development of research and critical analysis skills among master's students when attending classes.

#### 4.6 Indicators of progress and reasons for lag

Requirements for a master's student's progress are described in the Academic Policy of NJSC "AMU" P-AMU-17-23.

If there is academic debt and/or failure to complete the dissertation work within a certain time frame, the university has developed the document "(IND) RI-AMU-18-20 "Requirements for the content, format and defence of a master's thesis" <a href="https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP">https://drive.google.com/drive/folders/1ReZ144vTydgZKTfYy7sHJcEjlS8pjUVP</a>, which describes the assessment policy, conditions for extending studies in the master's program, requirements for the preparation of the dissertation", in order to predict such situations and help the master's student overcome them.

Recording of master's students' progress is carried out by the office registrar.

Master's students expelled - 0, on academic leave - 0 people.

*EEC conclusions based on the criteria.* Comply with 12 basic standards: fully - 11, partially - 1, do not comply - 0

#### Recommendation for improvement:

1) Development of joint programs or double-diploma educational programs in the Master's degree program "Medicine"

#### **Standard 5: ACADEMIC STAFF**

#### **5.1 Selection policy**

There are 84 employees in total, of which 62 are full-time teachers and \_\_22\_ part-time. The experts are familiar with the personnel policy (https://drive.google.com/drive/folders/1XpXc2BKAhRwcswuw12IzmBkP4cK0Lr-P). The personnel policy is carried out in accordance with the Labour Code of the Republic of Kazakhstan dated November 23, 2015 No. 414-M, the Code of the Republic of Kazakhstan "On the Health of the People and the healthcare system" dated September 18, 2009 No. 193-IV, the Law of the Republic of Kazakhstan "On Education" dated 2707.2007 No. 319 - III, the Law of the Republic of Kazakhstan "On Non-Profit Organizations" dated January 16, 2001 No. 142b, the Law of the Republic of Kazakhstan "On Joint-Stock Companies societies" dated May 13, 2003 No. 415, Charter of the NJSC "Astana Medical University".

The selection of personnel is carried out in accordance with the "Regulations on the competition for filling positions of Academic staff", approved on 05/08/2019. The entire selection is

structured in such a way as to ensure transparency and impartiality of choice: academic (diploma, certificate, CDP certificates) and practical (work experience, scientific degree, skills) skills are evaluated.

In recent years, close attention has been paid to ensuring an increase in the number of publications, including in ranking journals with an impact factor and participation in scientific and technical projects

While surveying teachers, it was found that the majority (70.87%) are completely satisfied with the organization of work and workplace at the university, but 24.30% are partially satisfied. At the university, teachers have the opportunity to engage in scientific work and publish the results of research work - 70.13% completely agree, 23.01% partially agree. 70.32% are completely satisfied with the work of the dean's office, every 4th (24.68%) are partially satisfied, and 5.01% are not satisfied to one degree or another. Satisfied with wages are 40.07%, those who disagree - 13.73%, undecided and did not answer one third - 30.43%.

#### **5.2** Commitment and staff development

At a meeting with the head of the HR department and during an interview with teachers, experts received information about approaches to developing the pedagogical competence of teachers, motivation to work with master's students, and the implementation of scientific leadership, which includes the Faculty Development Program of the NJSC "AMU" for 2017-2021 capacity development Academic staff was carried out according to a cumulative system in the context of 5 key competencies: effective teacher, researcher/scientist, communication skills, leader/organizer, and professional.

The experts received answers about the teacher training program, which is conducted annually and in the implementation of the educational program, 381 Academic staff were trained in 2022-2023. These events are funded by the university. An expert verified teachers' certificates on topics such as: "How to write and publish an article in a peer-reviewed journal?" (54 academic hours); "Methodology of scientific research"; "Cognitive and communicative methods of teaching non-linguistic subjects" (72 academic hours).

Experts have found that teachers initiate research topics for master's students, stimulate the need for additional training and independent work with literature and medical documentation

The research school ensures proper monitoring of the activities of teachers through the Platonus platform.

At the university there is an opportunity for career growth and development of teacher competencies - 74.9% of surveyed teachers responded, and 21.15% partially agreed with this. They studied in professional development programs - 54.1% more than 3 years ago, \_41.0\_% over 5 years ago and 4.83% answered "I don't remember when it was."

The university implements social support programs for teachers - 55.84% answered that "yes, there are such programs", 55.8% "I have already taken advantage of it", \_1.11% of respondents answered that there are no such programs, and 43.04% of respondents do not know about this.

#### 5.3 Number and qualifications of teaching and management personnel

Master's students in the specialty "7M10102" Medicine" are trained by Doctors of Science (21), Candidates of Science (19), and Doctors of Science (12). The ratio "master's student to teacher" is 3-1.

Master's students have supervisors (mentors) who help with the completion of their dissertation work. There are more than 19 scientific supervisors in total, who are presented in Table 5 - Main areas of scientific research in which Academic staff involved in the implementation of the accredited educational program.

#### **5.4 Administrative support**

The university sets as its important goal to create favourable conditions and opportunities for the effective development of teachers both in the professional and personal spheres: standards for the work of departments, KPIs, an adequate evaluation system and tangible and intangible ways to motivate employees for growth and increased efficiency have been created.

The university has created competencies for Academic staff to ensure successful teaching

activities for master's students, which cover all areas and components of the learning process: effective teaching at a medical university, evaluation and examination, research management, development of educational programs, communication skills, information and communication skills, language, corporate and professional skills.

All of these components are reflected in the main document for each teacher - an individual development plan (IDP), which reflects all the work of the teacher for the academic year for all types of work.

*EEC conclusions based on the criteria.* Complies with 7 basic standards: completely -7.

### Standard 6: EDUCATIONAL RESOURCES AND LEARNING ENVIRONMENT 6.1 Learning environment

A review of the resources showed that they correspond to the goals and objectives of educational activities, for example, the clinical bases of the Institute of Radiobiology and Radiation Protection, Bakhtin Meirat Mukhametkarimovich, Scientific Research Institute of Radiology named after Zh.Kh. Khamzabaev NJSC "AMU" were https://amu.edu.kz/ru/science/SRI-of-Radiology/12121/; Educational microbiological laboratory of the Department of Microbiology and Virology named after Sh.I. Sarbasova NJSC "AMU". Source https://amu.edu.kz/ru/science/List-of-laboratories/10996/ and https://amu.edu.kz/ru/departments/199/; Department of Children's Diseases with courses in allergology, immunology, haematology and endocrinology. At the address: Nur-Sultan, Tauelsizdik Ave. 11/1, 5th floor, base: MSE on the REM "City Children's Hospital". Source https://amu.edu.kz/ru/departments/209/ and/or https://amu.edu.kz, and employees of the educational organization ensure collegial and ethical relationships with medical staff, management of the clinical base to achieve the final results of master's students. A sufficient number of thematic patients, modern equipment is provided and demonstrates accessibility to students, and employees who simultaneously perform the roles of teachers and curators (mentors) provide highquality training in compliance with ethics and deontology. Before starting the corresponding discipline of the educational program, the undergraduate receives a syllabus from the teacher and knows what skills he must acquire and develop during his studies.

During a visit to clinical sites, where experts examined the resources, their compliance with training programs, and accessibility for teachers and master's students, how modern this equipment is and meets the needs of students and practical healthcare. The experts obtained evidence of compliance with standard 6, as well as validation of the self-assessment report information.

There is a library with a fund: As of 01/01/2024, the total library fund of the university is - out of 57,309 titles, 486,450 copies, of which: educational, academic and methodological literature - 363,471 copies (74.7%), scientific literature – 122,979 (25.3%). By language of publication: in the state language – 132,762 copies (27.3%), in Russian – 327,350 copies (67.3%), in a foreign language – 26,338 copies (5.4%).

The educational fund is formed in accordance with the profile of the university, the requirements of the Ministry of Science and Higher Education of the Republic of Kazakhstan and makes up the necessary share of the total fund: educational and academic literature - 13,052 copies; scientific literature - 2786 copies.

The fund of periodicals is 9,719 copies, the fund on electronic media (electronic textbooks) is 10,312 copies.

University students have access to virtual simulators "Botkin" and "Filatov" for training in internal and paediatric diseases (free access to these applications, via the active link <a href="https://www.geotar-med.ru/novosti/covid-19/distanczionnoe-obuchenie-vnutrennim-boleznyam-i-pediatrii-vmeste-s-virtualnyimi-paczientami.html">https://www.geotar-med.ru/novosti/covid-19/distanczionnoe-obuchenie-vnutrennim-boleznyam-i-pediatrii-vmeste-s-virtualnyimi-paczientami.html</a>) and free access for an unlimited number of simultaneous users is organized via the link: <a href="http://search.ebscoh-ost.com/">http://search.ebscoh-ost.com/</a>.

In open access on the portal <a href="http://dl.amu.kz">http://edu.amu.kz</a> in the "Library" section there are 12 electronic databases that provide access to all publications, including Academic staff and scientists of the university:

- 1. Epigraph <a href="https://elib.kz/search/">https://elib.kz/search/</a>
- 2. EBSCO http://search.ebscohost.com/
- 3. Books-up.ru <a href="https://www.books-up.ru/">https://www.books-up.ru/</a>
- 4. Pubmed https://www.ncbi.nlm.nih.gov/pubmed/
- 5. Web of Knowledge http://apps.webofknowledge.com/
- 6. NCBI https://www.ncbi.nlm.nih.gov/
- 7. Sciencedirect https://www.sciencedirect.com/
- 8. Scopus https://www.scopus.com/search/form.uri?display=basic
- 9. Springerlink https://link.springer.com/
- 10. Geotar-Media <a href="http://www.geotar.ru/">http://www.geotar.ru/</a>
- 11. Cochrane Library https://www.cochranelibrary.com/
- 12. Znanium.com <a href="https://new.znanium.com/">https://new.znanium.com/</a>

In order to validate the implementation of the self-assessment report data and obtain evidence about the quality of the programs, an interview was conducted with master's students in the specialty "7M10102 "Medicine". The experts asked questions about satisfaction with training, sufficient time for supervising patients, working with medical documentation in DAMUMED, satisfaction with teaching methods and qualifications of teachers, social and moral support for master's students in need, and availability of resources from international databases of professional literature. In general, master's students are satisfied with the training, assessment methods, and purposefully entered the university, because they believe that the university has good resources, image and international connections.

Master's students showed their commitment to the university, were active in answering questions from external experts, demonstrated their judgment in organizing training, evaluating their skills, advisory support, conducting research, and financing.

Experts studied the documents of master's students (IWMT, results of assessment of master's students, results of survey of master's students).

Students have free access to patients at clinical sites and all conditions for improving their practical skills - \_51.65% of teachers completely agree with this, \_13.6\_% partially agree, 34.9\_% found it difficult to answer.

An interview with \_539 teachers showed that there are both successes and problems in education management, depending on the specific base (admission of undergraduates to equipment, a sufficient number of case patients, time to maintain medical records, independent work).

#### **6.2 Information technology**

A policy has been introduced that is aimed at the effective use and evaluation of information, communication and distance technologies in the preparation of master's students. The site <a href="https://elib.amu.kz/">https://elib.amu.kz/</a> provides a single point of access to electronic information resources, a distributed electronic catalogue <a href="https://elib.amu.kz/ru/lib/">https://elib.amu.kz/ru/lib/</a>, electronic database, remote access database resources (<a href="https://elib.amu.kz/elektronnye-resursy/podpisnye-bazy-dannyh/">https://elib.amu.kz/elektronnye-resursy/podpisnye-bazy-dannyh/</a>), online services (online orders, EDD, online service, UDC, LBC), news feed and other services in two languages..

Business processes of library and information services for users are carried out using the automated integrated library system (AILS) "IRBIS 64+": Administrator, Acquisition, Cataloguer, Book lending, Book supply,

The university has been given access to the "Anti-Plagiarism program. University" manufactured by the Russian Federation (contract No. 080940008218/210298/00),

There is an IT department. The territory of the university is provided with the Internet and WI-FI.

For distance learning there is: the university's own platform for implementing the MOOC "Massive Open Online Courses of NJSC "AMU" - http://mook.amu.kz/.

To conduct research, write a dissertation, self-study and access to necessary information, master's students have access to international databases, including:

- The Web of Science (Clarivate Analytics)

  https://www.webofscience.com/wos/woscc/basic-search
  - ScienceDirect (Elsevier)- https://www.sciencedirect.com/
  - Scopus (Elsevier)- https://www.scopus.com- https://www.elsevier.com
  - ➤ Springer <a href="https://www.springer.com">https://www.springer.com</a>
  - **EBSCO**hostCinal- <a href="https://www.ebsco.com/products/ebscohost-research-platform">https://www.ebsco.com/products/ebscohost-research-platform</a>
  - Cochrane Library https://www.cochranelibrary.com/
  - ➤ Wiley Online library <a href="https://onlinelibrary.wiley.com/">https://onlinelibrary.wiley.com/</a>
  - ➤ Jaypee digital- <a href="https://www.jaypeedigital.com/home">https://www.jaypeedigital.com/home</a>
  - «Aknurpress»- <a href="https://aknurpress.kz/">https://aknurpress.kz/</a>
  - ➤ «IPRSmart» <a href="https://www.iprbookshop.ru/5858">https://www.iprbookshop.ru/5858</a>
    At the stage of renewal of access to the Elsevier database:
  - ➤ Clinical Key <a href="https://www.clinicalkey.com/student">https://www.clinicalkey.com/student</a>;

Complete anatomy - <a href="https://3d4medical.com/">https://3d4medical.com/</a>

**EEC conclusions based on the criteria.** Complies with 4 basic standards: fully -4.

#### Standard 7: MONITORING AND EVALUATING THE EDUCATIONAL PROGRAM

#### 7.1 Program monitoring and evaluation mechanisms

There is a program for monitoring educational activities, including the evaluation of "Evaluation of educational programs" (SU-AMU-82-23).

The adequacy of the existing educational environment is evaluated through the Educational Process Quality Audit Group, the Centre for Planning and Development of Academic Affairs, and the Quality Assurance Centre in accordance with the work plan developed and approved at the beginning of the academic year.

The results of the evaluation of the master's program are discussed at meetings of the University Academic Council, University Scientific Council, Quality Assurance Committees, meetings of schools/departments and working commissions.

The educational process quality audit group, under the leadership of the University Rector, performs the coordinating function of the internal system for evaluating the quality of education.

Frequency of evaluation of the master's degree program:

- planned (comprehensive);
- operational (control) inspection.

Planned (comprehensive) control

#### 7.2 Feedback from teachers and master's students

The university collects analyses and provides teachers and master's students with feedback on the quality of implementation of the educational program. The survey process was authorized for the convenience and efficiency of collecting information on the educational portal <a href="https://dl.amu.kz/">https://dl.amu.kz/</a>, thanks to which full coverage of the student population and electronic counting are possible.

The university has developed the Standard "Feedback Monitoring" SU-AMU-04-21 <a href="https://drive.google.com/drive/folders/1E5VIxFxXtDvMVcJFIvv0YfE17R74CeWA">https://drive.google.com/drive/folders/1E5VIxFxXtDvMVcJFIvv0YfE17R74CeWA</a>. Feedback to master's students from the teacher is provided during and at the end of each practical lesson, as well as in the process of assigning points to the evaluation rubrics.

Conclusions from the survey results:

- 1. Students of NJSC "AMU" demonstrate a high level of satisfaction with their studies at the university: 53% are completely satisfied, and 28% are partially satisfied with their studies at the university:
- 2. The most positive feedback was received on such aspects of the educational program as the quality of teaching and educational and methodological support of disciplines. Master's students are

satisfied with the quality of teaching. Master's students are least satisfied with the provision of educational and scientific equipment;

As the main recommendation, the master's students of NJSC "AMU" propose constant improvement of the material and technical equipment of the educational process, an increase in the volume of practical classes and a more active involvement of practitioners in the educational process, and increase funding for foreign internships.

Recommendations for improving the material and technical equipment of the EP:

- 1. Equipment upgrade: to analyse of the current state of technical equipment in classrooms and acquisition of modern equipment that meets the requirements of modern educational standards.
- 2.Introduction of information technology: to provide high-speed Internet access and wireless networks in all buildings of the educational institution

Recommendations for increasing the volume of practical classes at a university:

- 1. To include a wider range of practical tasks and projects in the EP, adapt them to modern labour market requirements
  - 2. Active cooperation with medical institutions to organize practical internships for students
- 3. Development of student exchange programs for more complete immersion in the real work environment
- 4. Constant monitoring of results in the form of evaluating the effectiveness of practical exercises with subsequent correction of their content
  - 5. Involvement of specialists with practical experience in the Academic staff

#### 7.2 Activities of master's students and graduates

In 2021, 27 master's students studied, 27 dissertations were defended on time. In 2022, 18 master's students studied, 18 dissertations were defended on time. There were no expelled master's students. Employment in 2020 was 100%, in 2021 - 87.5%, in 2022 - 100%.

The results of the analysis of master's students' activities (performance, dissertation defence) are provided by the Research School, which is responsible for admitting master's students, developing an educational program, and advising master's students.

The interview with 22 employers was conducted online and included questions such as: knowledge of the university's mission, participation in the development of the mission and proposals for the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of undergraduates, participation in the training of undergraduates through mentoring, providing the department and undergraduates with the necessary resources for practical training and the formation of clinical thinking, about the problems of interaction with departments and universities in general, 100% employment of master's graduates, etc.

**EEC conclusions based on the criteria.** Complies with 8 basic standards: fully -8.

#### **Standard 8: MANAGEMENT AND ADMINISTRATION**

#### 8.1 Management

The management of the University is a regulated vertical structure, with designated job responsibilities, performance indicators and the level of responsibility of individual employees and their managers, which is headed by the Board of Directors. The operational management of the university is carried out by the Board. The functions of management are determined by Regulations dated 07/08/2021 No. 403 and job descriptions.

The organizational structure was approved by the Board of Directors dated December 22, 2023 No. 12 and the changes affected medical schools, research institutes, and competency centres.

The Board, the Chairman of which is the Rector, includes 4 Vice-Rectors, a Financial Director and an Executive Director.

Each supervising vice-rector has his own structural units responsible for certain types of activities in accordance with the regulations on structural units. The changes are related to the need to optimize the structure to successfully achieve strategic goals. The structure of the university includes

an office of vice-rectors, 8 schools, 3 research institutes, and 60 departments, economic and auxiliary departments.

The academic management structure is represented by structural units that ensure the effective implementation of educational programs in all specialties: Centre for Planning and Development of Academic Affairs, Centre for Monitoring and Accounting for Students, Office of the Registrar, Centre for Transfer of Educational Technologies, Library. Each structural unit has developed and approved regulations and job descriptions for employees, provided for in the staffing table.

Several levels of collegial decision-making have been created: Academic Council, committees under the Academic Council, Scientific Council, University quality assurance committees, EP quality assurance committees; School Council, disciplinary councils, working commissions, document development working groups, student government council, student disciplinary council, elders, etc. The activities of each collegial body are regulated by the relevant Regulations, which indicate the powers and scope of issues under consideration and job descriptions.

The main administrative structural unit that implements the EP, as well as manages the educational, research, treatment and diagnostic activities of the departments and implements the training of students in the EP in question is the School. The University has 8 schools: School of Public Health and Management, School of Medicine, School of Dentistry, School of Paediatrics, School of Nursing, School of Pharmacy, School of Residency, Research School. Schools are united and supervised by departments; the assignment of departments to the School is carried out by order of the Chairman of the Board - the Rector of the AMU. The Dean directly manages the School. The school, regarding the type of activity, is subordinate to the vice-rectors for academic and clinical activities, as well as the vice-rector for scientific work and strategic development. The School's academic management system consists of the Academic Council and the Committee for Quality Assurance of Educational Programs. At the Schools there is a Committee for Quality Assurance of Educational Programs, which coordinates educational and methodological work by ensuring a competency-based approach in preparing graduates within the framework of the specialty's educational program.

#### 8.2 Program manager (dean's office/department)

According to the Organizational structure of NJSC "AMU", the general management of the master's program, monitoring and control of the implementation of master's programs is carried out by the vice-rector. <a href="https://drive.google.com/drive/folders/1MIRuyAFo\_NxwBaYR-sO\_17AWuovfVYNh">https://drive.google.com/drive/folders/1MIRuyAFo\_NxwBaYR-sO\_17AWuovfVYNh</a>. He reports to the Chairman of the Board - Rector. The Vice-Rector submits reports on the research and educational activities of master's students for discussion and approval at meetings of the Academic Council.

The organization of the educational process in the master's program is carried out jointly by the Research School and centres for academic work (centre for planning and development of academic affairs, centre for monitoring and recording students, centre for transfer of educational and distance technologies, office of the registrar), the responsible and major department.

The research school, together with the admissions committee, is planning admission to the master's program for the new academic year; carries out admission of master's students for training; advises master's students on issues of the educational process (meetings, individual consultations, provision of a master's guide, etc.); organizes self-government at the magistracy level; sending a master's student to study on academic mobility; provides information about the contingent of undergraduates to the Centre for Administrative Development; draws up draft Orders on the process of teaching master's students; organizes internships for master's students; organizes intermediate and end-of-course assessment of master's students.

An important component of transparency both at the level of teachers, administrative staff, and students themselves is the strengthening of academic integrity at NJSC "AMU", the main steps and procedures of which are enshrined in the Code of Academic Integrity, protocol No. 3 of January 24, 2020 K-AMU-01- 20 <a href="https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J">https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J</a>.

To the question of the questionnaire "Do the heads of the organization listen to your opinion regarding issues related to the educational process, research work, clinical work," 56.2% of teachers answered that they systematically, rarely, do not listen or do not know the answer, 43.96% noted

#### **8.3** Academic leadership (department)

The master's program in the specialty "7M10102 "Medicine" is implemented in 14 departments, graduating from: the department of neurology, cardiology, oncology, obstetrics and gynaecology No. 1, obstetrics and gynaecology No. 2, paediatric infectious diseases, infectious diseases and clinical epidemiology, family medicine No. 1, No. 2, No. 3, Surgical diseases with a course of angiosurgery and plastic surgery, internal diseases with courses of gastroenterology, endocrinology and pulmonology, eye diseases, childhood diseases with courses of allergy, immunology, haematology and endocrinology, childhood diseases with courses of cardio rheumatology and gastroenterology.

#### **8.4 Program management**

The academic leader (program leader) is Serik Sayatovich Iskakov - Candidate of Medical Sciences, Head of the Department of Obstetrics and Gynaecology No. 2. The employees have the appropriate qualifications: they have an academic degree of Doctor or Candidate of Sciences, an academic degree of Doctor of Science or Master of Science in scientific and pedagogical fields with work experience at least 5 years. In their work they are guided by the Regulations on Master's Degree Studies and job descriptions. Data on the professional training and professional experience of administrative personnel are posted in the relevant sections of the university website, reflecting the organizational structure of NJSC "AMU". <a href="https://amu.edu.kz/upload/images/struktura-012024.jpg">https://amu.edu.kz/upload/images/struktura-012024.jpg</a>

The rights, responsibilities and functional list of the highest bodies of the University are regulated by the Charter of NJSC "AMU" <a href="https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J">https://drive.google.com/drive/folders/1ZHW14NEJ0ZigUt9Ixj7Sbm-OlTJAdy2J</a>. The boundaries of responsibility and management in relation to the design of the educational program and its various components are determined within the framework of the following documents: Regulations on master's studies <a href="https://drive.google.com/drive/folders/1MIRuyAFo">https://drive.google.com/drive/folders/1MIRuyAFo</a> NxwBaYR-sO 17AWuovfVYNh , regulations on structural divisions

#### 8.5 Training budget and resource allocation

The main sources of formation of financial resources for the educational process at the university are:

- funds from the republican budget;
- funds from the provision of educational and other paid services;
- other income.

Financing from the republican budget is carried out on the basis of concluded agreements for the training of specialists with higher and postgraduate education and certificates of completed work, as well as contracts and certificates for the implementation of research work.

Every year, a commission under the leadership of the Chairman of the Board - Rector visits departments to determine the provision of material and technical equipment, training rooms, and working conditions.

Management and use of resources is administered by the Chairman of the Board - Rector of the University.

The material assets of the university are formed on the basis of the decision of the commission for reviewing applications for budget formation, and after agreement with the governing body, they are approved by the Board of Directors.

According to the Charter of NJSC "AMU", the University has an independent balance sheet, bank accounts, and can acquire property and personal non-property rights on its own behalf. The University's net income remains at its disposal and goes to the development needs of NJSC "AMU".

#### **8.6 Administration**

The governing bodies of NJSC "AMU" are: Board of Directors, Management Board. The size and composition of the administrative staff included in the structural divisions for operational

management are approved by NJSC "AMU" independently in accordance with the Charter. Thus, the determination of the staff of the internal audit service, the appointment of its head and members, and their term of office are carried out by the Board of Directors

The Chairman of the Board - Rector directly carries out the hiring and dismissal or transfer of employees. The administrative staffs are distributed in the form of relevant departments and their constituent directorates and departments.

 $\underline{https://drive.google.com/drive/folders/1D0eNc-2vJrfC\_m4-A5YUkgDajhn7IOEv}$ 

#### 8.7 Requirements and legal documentation

All activities in the field of training in the master's program of the scientific and pedagogical direction 7M10102 "Medicine" are organized in accordance with the regulatory requirements of the Government of the Republic of Kazakhstan, the Ministry of Education and Science of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan. This fundamental principle is demonstrated in the key documents of the University of the highest level (Charter, Regulations on the AC), as well as the Regulations on Master's studies, which contains section 1.1 describing the legal framework for its creation. Thus, the provision mentions 10 key state legislative documents from the level of Laws to Orders of Ministries. The situation must be brought to the attention of students. In addition, the guarantee of compliance with the principle of compliance with general state regulatory documents is demonstrated on the University's website in the section for applicants to master's programs

https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/rezidentura/rezidentura-dlyapostupayushchikh/ where, in addition to algorithms and information for admission to master's programs, links to relevant regulatory documents are provided.

#### 8.8 Review and approval process

A documented process of planning, discussing and updating the educational program in the specialty "7M10102 "Medicine") has been introduced, the responsibility for which lies with the Research School, everything is recorded in the minutes. The educational program is updated every 5 years.

Documentation of joint events with other educational organizations is carried out through the conclusion of memorandums and cooperation agreements. In total, \_\_\_agreements have been concluded with republican institutions and more than 10 agreements with foreign organizations and associations (Table 24 - **International cooperation**) in self-report. In particular, the master's program in the specialty "7M10102 "Medicine" is implemented in collaboration with the Azerbaijan Medical University in Baku, organizations abroad, where master's students undergo internships.

Admission of master's students is carried out on the basis of the rules for admission to master's programs <a href="https://amu.edu.kz/upload/iblock/5e3/5e3874618db295b6e6decf7d9243b0bf.pdf">https://amu.edu.kz/upload/iblock/5e3/5e3874618db295b6e6decf7d9243b0bf.pdf</a> NJSC "Astana Medical University".

During the opening of the master's program 7M10102 "Medicine" in the scientific and pedagogical direction at the NJSC "AMU" and to the present day, there have been no deductions from incoming complaints and applications.

The responsibility lies with the research school.

#### 8.9 Funding

The university has financial stability, which is ensured by the state order for the training of masters in the specialty "7M10102 "Medicine" and tuition on a paid basis (the cost of training is 1,013,900 million tenge per year). The cost of training is determined on the basis of the development plan of NJSC "Astana Medical University".

48 people are studying under government orders, 0 masters are studying on a paid basis. Sources of funding are medical and scientific activities: the state budget.

The organization of financial activities is carried out in compliance with the principles of legality, corporate ethics, accountability and transparency. Documents on the costs and expenses of the University for carrying out its main activities are published on the University website. The general publication of the implementation of the development plan of NJSC "Astana Medical University" for the fiscal year is also important for demonstrating financial stability. This document displays the

volume of revenues and expenses for specific budgetary and extra-budgetary programs, as well as the final profit of the University.

The University's income in 2020 was 6,659,617 thousand tenge, in 2021 - 7,750,457 thousand tenge, in 2022 - 9,498,317 thousand tenge.

The cash balances in the current account amounted to 236,355,586.83 tenge as of December 31, 2022.

The costs of purchasing equipment and replenishing the library stock in 2023 amounted to 543,295.93 thousand tenge, which is 8 times more compared to 2019.

#### 8.10 Financial management and integrity

A report on the financial, economic and business activities of the University for this Year and long-term work plans for the next year is heard by the Academic Council of the university. https://amu.edu.kz/upload/iblock/ecf/ecf46daf954139123f2d49314b21cc9e.pdf.

Directly subordinate and accountable to the Board of Directors is the Chairman of the Board -Rector of the university and the Internal Audit Service (https://amu.edu.kz/upload/iblock/340/34009a77205917d989fa0a2fad853515.pdf), which monitors and evaluates the financial and economic performance of the university, audit of risk management of the internal control system, execution of documents in the field of corporate governance and consulting order improve the organization's activities to (https://amu.edu.kz/upload/iblock/1cd/1cd8aa5af6680772dc0b8e578ff42c4d.pdf).

The total number of Academic staff is formed based on the average student-to-teacher ratio. The university's staffing schedule is approved annually for the academic year, taking into account changes in the number of students by type of specialty and other factors. While calculating the number, the university is also guided by the Acting Order of the Minister of Education and Science of the Republic of Kazakhstan dated August 7, 2009 No. 374 "On approval of financial standards for higher and postgraduate education." <a href="https://www.ektu.kz/MONRK/374.pdf">https://www.ektu.kz/MONRK/374.pdf</a>.

#### **8.11** Program information

Full information about the educational program is available at the Research School of the NJSC "AMU" and at the following departments: Department of Neurology, Cardiology, Oncology, Obstetrics and Gynaecology No. 1, Obstetrics and Gynaecology No. 2, Children's Infectious Diseases, Infectious Diseases and Clinical Epidemiology, Family Medicine No. 1, No. 2, No. 3, Surgical diseases with a course of angiosurgery and plastic surgery, internal diseases with courses of gastroenterology, endocrinology and pulmonology, eye diseases, childhood diseases with courses of allergy, immunology, haematology and endocrinology, childhood diseases with courses of cardio rheumatology and gastroenterology and posted on University (https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/), to be accessible to interested parties. There are various communication channels, including a website, social networks (Facebook, Instagram), leaflets and brochures containing reference information have been developed.

The website in three languages in the section "Master's programs for applicants" <a href="https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/magistratura-dlya-postupayushchikh/">https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/magistratura-dlya-postupayushchikh/</a> contains information for admission to the master's program.

*EEC conclusions based on the criteria.* Compliant out of 19 basic standards: fully - 18, partially -1, do not comply - 0

#### Recommendation for improvement:

1) To strengthen the academic mobility of undergraduates in the direction of "Medicine" (2nd year only 19.2%).

#### **Standard 9: CONTINUOUS RENEWAL**

The University initiates regular review procedures in the form of internal audits and external examination (accreditation, audits). Internal evaluation is carried out as part of self-assessment. Responsible department is Raisova Karlygash Askerovna, Dean of the research school.

Based on the results of the self-assessment of the master's educational program "7M10102 "Medicine", weaknesses were identified, such as: Expanding the opportunities for academic mobility of master's students; Traveling to foreign internships; Development of joint programs, however, the programs do not have the opportunity to be funded by grants from ministries; the situation is similar with double-degree EPs; Creation of a mechanism for commercialization of research and development results; Formation of modern mechanisms of student self-government and education of corporate ethics; Attracting a larger number of master's students for training, including at the students' own expense; Expanding the research base for scientific and innovative research, including through internal and external funding; commercialization of the results of scientific work.

The following opportunities for improvement of the training program have been identified:

- 1. Regular review of the mission and policies of the university depending on the changing needs of society, taking into account the development of scientific knowledge and changes in health care
  - 2. Continuous professional growth of teachers of master's programs
  - 3. Information support for research;
- 4. Conducting international, regional, interuniversity conferences and seminars on the basis of NJSC "AMU";
- 5. Expanding the range of innovative teaching methods and improving information programs in training
- 6. Further strategic partnership with practical healthcare to develop a competency-based model of a specialty graduate, development and implementation of EP based on feedback.
  - 7. Assignment of status National Research University.

Other internal evaluations of the educational program include threats, such as: a decrease in the allocation by the Ministry of Health of the Republic of Kazakhstan of the state order for the scientific and pedagogical master's program "Medicine"; Insufficient funding for scientific internships and academic mobility of undergraduates; Inconsistency of teaching staff and scientific supervisors with the requirements of the master's program; Pandemics, natural disasters.

The organizational structure of the university was updated on December 22, 2023 by the Decision of the Board of Directors of NJSC "AMU" No. 12.

Based on the results of external and internal evaluations, a program of corrective measures is developed. For example, based on the results of the previous accreditation of the program "7M10102 - Medicine" (IQAA Certificate "Independent Agency for Quality Assurance in Education" SA-A No. 0152\2 dated April 22, 2019), the university carried out: in accordance with the needs of society, approaches to development are being improved students' competencies; approaches to teaching and training methods are adapted, for example, through the participation of students in scientific projects; is discussed and revised annually based on the forecast needs of practical healthcare for specialists, the number of students; the university is working to increase the list of clinical sites; International cooperation has been established and agreements on cooperation in the field of healthcare, medical education and science have been signed with foreign medical universities, as well as universities in Kazakhstan. Responsibility for execution lies with the Research School of NJSC "AMU".

The university conducts research in postgraduate education, such as:

- 1. Scientific substantiation of preventive measures aimed at preserving and strengthening the health of students of NJSC "AMU";
- 2. Improving the diagnosis of medulloblastoma in children and adolescents based on the molecular genetic characteristics of the tumour in Kazakhstan;
- 3. Development and implementation of a screening system for determining uranium in urine to identify critical groups of the population living near uranium deposits of the Republic of Kazakhstan;
- 4. Development of a tool for comprehensive monitoring and ensuring the quality of education at the NJSC "Astana Medical University";

- 5. Improving medical and organizational measures aimed at increasing the duration of an active and healthy life;
  - 6. Scientific and Practical Centre for Tele radiology of Astana Medical University

Risk assessment in the educational process is carried out by the Student and Employee Service Centre, whose tasks include serving all categories of students, teachers and staff of the University in order to optimize and automate processes in the provision of services on the "one office" principle, minimizing corruption and other risks.

The following risks have been identified in relation to the master's program: financial and corruption, risk of reproductive health, risk of radiation exposure for students

The university conducts benchmarking and includes such advanced (top) universities as Seoul National University, School of Medicine; Azerbaijan Medical University, Baku; Hiroshima University; Necmettin Erbakan University; York University, Department of Philosophy, etc. As a result of benchmarking, innovative methods of managing the educational process (studying labour market demand), managing the master's educational program (choosing dissertation topics independently), and teaching methods (TBL, Project-based learning, e-learning, active learning methods, Project-based learning) were introduced into the educational process, analysis from the standpoint of evidence-based medicine, participation in scientific projects), methods for assessing master's students (through discussions, working with databases, articles, analysis of publications, discussion of patients).

Since the strategic partner of the university is the Azerbaijan Medical University, Baku, master's degree teachers can exchange experiences and undergo internships.

The University is committing resources to continuous improvement, as documented in the University's 2022-2026 Strategic Plans and 2024 Financial Plan (Budget).

*EEC conclusions based on the criteria.* Complies with 4 basic standards: fully -4.

#### **CONCLUSION:**

When conducting an external evaluation of the educational program, it was found that out of **90 standards** (including 88 basic standards and 2 improvement standards), 87 accreditation standards demonstrate full compliance, including 85 basic standards and 2 improvement standards. 3 improvement standards are partially met. No non-compliance with standards has been identified.

#### 5. Recommendations for improving the educational program "7M01002" Medicine":

- 1. To strengthen connections with employers and healthcare organizations to improve the quality of educational programs; (Standard 2)
- 2. Development of joint programs or a double-diploma educational program in the master's degree program "Medicine" (Standard 4)
- 3. To strengthen the academic mobility of master's students in the direction of "Medicine" (2nd year only 19.2%); (Standard 8)

#### 6. Recommendation to the ECAQA Accreditation Council

Members of the EEC came to a unanimous decision to recommend that the Accreditation Council accredit the educational program 7M01002" Medicine" of the NJSC "Astana Medical University", which complies with the Accreditation Standards of the educational programs of master's specialties in medicine and healthcare of medical educational organizations for a period of 5 years.

Full name	Signature
Chairperson	2/1
KUZGIBEKOVA ALMA BOLATOVNA	Deg 50
International Expert	
	2
KULIKOV OLEG VILIEVICH	Druel
Academic Expert	
BOSHKAEVA ASYL KENESOVNA	4
Academic Expert	O corres
YERMUKHANOVA LYUDMILA SERGEEVNA	-
Academic Expert	N
KHISMETOVA ZAITUNA ABDULKAMYMOVNA	- 12
Academic Expert	
BRIMZHANOVA MARZHAN DIKHANOVNA	
Expert employer	200
	WIN
ZHANTURIEV BOLAT MEIRBEKOVICH	
Expert representative of master's students	010
ASTRAKHANOV MAGZHAN RUSTEMULY	( Slawy)
Expert student representative	
AITPAY ARUAY KANATKYZY	NIB.
	any
	1
	dur

#### Приложение 1.

Профиль качества и критерии внешней оценки по стандартам аккредитации образовательной программы магистратуры по специальности «7М10102 - Мелицина»

Ооризс	овательной программы магистратуры по с				Оценка		
стандарт	Критерии оценки	БС/СУ*	Всего стандартов	Полностью соответствует	<b>Частично</b> соответствует	Не соответствует	
	МИССИЯ И КОНЕЧНЫЕ	5/0		5/0			
	РЕЗУЛЬТАТЫ						
	ОБРАЗОВАТЕЛЬНЫЕ ПРОГРАММЫ	19/2	21	18/2	1/0		
	ОЦЕНКА МАГИСТРАНТОВ	10/0	10	10/0			
	МАГИСТРАНТЫ	12/0	12	11/0	1/0		
	АКАДЕМИЧЕСКИЙ ШТАТ	7/0		7/0			
	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ, СРЕДА ОБУЧЕНИЯ, ДОСТИЖЕНИЯ	4/0		4/0			
	МОНИТОРИНГ И ОЦЕНКА ОБРАЗОВАТЕЛЬНОЙ ПРОГРАММЫ	8/0		8/0			
	УПРАВЛЕНИЕ И АДМИНИСТРИРОВАНИЕ	19/0	19	18/0	1/0		
	НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ	4/0		4/0			
	*БС – базовые стандарты/СУ – стандарты улучшения ИТОГО	88/2	90	85/2	3/0		

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

Наименования документов	Количество
Договора и консорциумы об образовательно-инновационной деятельности с работодателями.	3
Standard университета СУ-МУА-15-22 «Образовательные программы: разработка, обновление»	1
Анкеты по оценке качества преподавания	6
Протоколы заседания кафедр обсуждения результатов анкетирования с рекомендациями по улучшению процесса	6
Индивидуальный план работы магистрантов	5
Участие магистранта в определении перечня элективных дисциплин	2
Положение о Академическом Совете	1
План работы Акад. Совета	1
Отчет о результатах контроля реализации ОП всех уровней образования	1
Список ответственных лиц за внедрение НОТ на кафедрах в разрезе дисциплин ( <i>no 64 дисциплин</i> )	1
План посещения открытых занятий с применением НОТ	3
Standard Университета «Внедрение новых образовательных технологий» СУ-МУА-14-22	1
Рецензии на ОП (внутреннюю и внешнюю)	2
Договора с зарубежными научными центрами и университетами с приложением плана стажировки; Договор о взаимопонимании между Азербайджанским медицинским университетом и НАО МУА	48
Приказ № 1-н/қ от 03.01.2024 Магистранттарды шетелдік ғылыми тағылымдамадан өтуге жіберу туралы: Бегимова Гулмарал Алтынсариновна, Кожаназарова Азиза Джанбековна, Шуленова Айман Темиргалиевна 5-15.05.2024 аралығында	1
Договора с визитинг профессорами с приложением плана лекции/семинара	4
Сертификаты магистрантов об участии в образовательных или других мероприятиях, направленных на получение дополнительных знаний и навыков	17
Standard об аттестации профессорско-преподавательского состава и работников, Деятельность которых связана с организацией учебного Процесса. ПЛ-МУА-04-12	1
Положение о присвоении корпоративной награды «ЖАС ДАРЫН», ПЛ-МУ А-48-20	1
План взаимопосещаемости занятии ППС	6
Протокол заседания КОК об обсуждении результатов взаимопосещения занятии №6, 11.05.2023	1
Анализ результатов зимней экзаменационной сессии магистрантов 1-года обучения	1
План повышения квалификации работников НАО МУА <i>13/22</i> (внешний)	1
План мероприятий по обучению ППС по эффективным технологиям	1

преподавания (внутри ВУЗа) 24 тем на 2024 год	
Заявки - потребность симуляционного центра на 2024 год (на 28	1
наименовании)	
Закуп оборудовании для симуляционного центра (усиление	1
оснащенности + 22 ед. оборудования)	
Журналы ремонта и обслуживания оборудовании научных (5) и	2
учебных (8) лаборатории и симуляционных центров	
Журнал по технике безопасности для магистрантов, проходящих на	3
базах практическое занятие	
Отчеты о научно-исследовательской деятельности университета за	1
2021; 2022 и 2023 годы	

