

"APPROVED"
by decision of the Board of
Directors
NJSC "West Kazakhstan
Medical University named after
Marat Ospanov"
from November 10, 2023
Protocol № 11

DEVELOPMENT PROGRAM
OF NON-COMMERCIAL JOINT-STOCK COMPANY
"WEST KAZAKHSTAN MEDICAL UNIVERSITY
NAMED AFTER MARAT OSPANOV"
FOR YEARS 2024 - 2028.

Aktobe, 2023

Introduction

The concept for the development of higher education and science in the Republic of Kazakhstan for 2023 - 2029 is aimed at implementing a set of measures aimed at creating conditions for the development of higher education and science, allowing to concentrate all measures of state support into a single system and make the transition from full provision by the state to a mechanism, built on the principles of public-private partnership, a symbiosis of state interests in producing quality specialists.

Along with this, the country's educational institutions have been given the task of moving to advanced training of personnel for the national economy, including interrelated components: education, science and innovation and commercial processes.

New development program non-profit joint-stock company "West Kazakhstan Medical University named after Marat Ospanov" is aimed at creating favorable conditions for research activities, further strengthening the material and technical base, which will contribute to increasing the level of development of education, science and clinics, improving conditions for the development of students' abilities in conditions of advanced education and a changing healthcare system.

The structure of the Development Program of the Marat Ospanov NJSC WKMU for 2024-2028 includes: the name of the Program, the basis for the development of the Program, the name of the Program developer, the goal and objectives of the Program, terms and stages of implementation, target indicators of the Program according to Appendix 1.

1. Program Passport

Program name	Development program of NJSC "West Kazakhstan Medical University named after Marat Ospanov"
Basis for development	<ol style="list-style-type: none"> 1) Completion of the current development program of the Marat Ospanov West Kazakhstan Medical University for 2019-2023. 2) Code of the Republic of Kazakhstan dated July 7, 2020 "On the health of the people and the healthcare system"; 3) Law of the Republic of Kazakhstan dated July 27, 2007 "On Education" 3) Law of the Republic of Kazakhstan dated February 18, 2011 "On Science"; 4) National Development Plan of the Republic of Kazakhstan until 2025 (approved by Decree of the President of the Republic of Kazakhstan dated February 15, 2018 No. 636); 5) Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 No. 725 "On approval of the national project "Quality and affordable healthcare for every citizen" Healthy Nation"; 6) Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 No. 726 "On approval of the national project "Quality education "Educated Nation"; 7) Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 No. 727 "On approval of the national project "Technological breakthrough through digitalization, science and innovation"; 8) Strategic plan of the Ministry of Education and Science of the Republic of Kazakhstan for 2020-2024; 9) Strategic plan of the Ministry of Health of the Republic of Kazakhstan for 2020 - 2024; 10) Concept for the development of higher education and science in the Republic of Kazakhstan for 2023 – 2029 <p>Decree of the Government of the Republic of Kazakhstan dated March 28, 2023 No. 248.</p>
Goals and objectives of the Program	<p>Striving for excellence and high ethical standards in all areas of medical education, clinical practice and science. The development program of the NAO WKMU named after M. Ospanov is aimed at further changing the status of the educational organization by 2028 into the status of a research university.</p> <p>Tasks:</p> <ol style="list-style-type: none"> 1) Improving the training of specialists based on the integration of education, science and clinic

	<p>2) Focusing the research potential of the university on current areas of research, generating new knowledge through research activities</p> <p>3)Expansion of medical services by the University's own clinics, introduction of new diagnostic and treatment methods.</p> <p>4)Improving the university management system, infrastructure development</p>
Implementation period and stages	2024-2028
Sources of financing	Republican budget, extra-budgetary funds of the University, funds from sponsors

2. Analysis of the external environment and current situation

The Concept for the Development of Higher Education in Kazakhstan until 2029 (hereinafter - the Concept) is designed to ensure the autonomy of the organization of higher and postgraduate education (hereinafter - OVPO), attracting talent to universities, developing academic excellence with the creation of modern educational and scientific laboratories.

According to the ConceptThe system of higher and postgraduate education in Kazakhstan in the coming years will experience strong demographic pressures associated with high birth rates. By 2029, it is expected that there will be overload in higher education institutions, a shortage of qualified teaching staff (hereinafter referred to as teaching staff), a shortage of places in universities and dormitories, an increased relevance of the formation of modern infrastructure, and updating the laboratory facilities of educational institutions.

In this regard, the next priority stage in the development of NJSC “ZKMU named after Marat Ospanov” (hereinafter referred to as the University) is to improve the innovation and research infrastructure of the university, corresponding to the current stage of development of education, science and clinics; attracting talented youth, creating conditions for developing students' abilities in the advanced education mode.

Over the past 5 years, the activities of the non-profit joint-stock company “West Kazakhstan Medical University named after Marat Ospanov” have been carried out in the context of the Development Program for 2019-2023.

The university occupies a special place among medical universities in the country, being the only medical university in the Western region that trains highly qualified medical personnel in demand in the domestic and international labor markets.

The educational policy of the University was built in accordance with the tasks set by the Ministry of Science and Higher Education and the Ministry of Health of the Republic of Kazakhstan. In the national ranking of the demand for universities, the University became one of the leading leaders, showing the following results in 2022:

- in the general ranking “TOP-20” of universities of the Republic of Kazakhstan - 7th place;

- in the institutional ranking of universities of the Republic of Kazakhstan in the field of “Healthcare and Social Welfare (Medicine)” it took 1st place in educational programs of bachelor’s, master’s and doctoral degrees.

The university has 5 educational and laboratory buildings, 5 student dormitories with 2,100 beds. There is a conference hall named after A. Doszhanova for 700 seats with a modern library. Students have three of their own clinics at their disposal: the University Medical Center, the Family Medicine Clinic and the Dental Clinic. The university cooperates with the Association of Medical Education in Europe (AMEE), the Association of Medical Schools in Europe (AMSE), is included in the Directory of Medical Schools of the World Health Organization (WHO), in the UNESCO International Handbook of Universities, UNESCO).

Since one of the main tasks of modern universities is to support the development of the region, making it possible to solve socio-economic problems by providing training, including medical personnel, our university makes a significant contribution to the development of healthcare and medical services for the population of the western region of Kazakhstan.

Every year, the university receives mainly applicants from the Western regions: Aktobe, Atyrau, Mangistau, Kyzylorda, West Kazakhstan regions and their number increases every year, the number of grants from local executive bodies (grants from regional akimats) is growing. Career guidance work is being carried out with graduates of schools and colleges throughout the republic in a mixed format.

The university has a highly qualified teaching staff of 485 people, including: doctors of science - 24, candidates of science - 126, PhD doctors - 25, professors - 13, associate professors - 9. The number of teaching staff with an academic master's degree is 163 people. There is an increase in the number of personnel at the expense of PhD doctors. The number of young specialists with an academic master's degree in medicine and non-core disciplines is also increasing. The average age of teaching staff with academic degrees and titles is 58 years, the average age of AUP managers is 43 years.

The university implements a system of continuous education, which includes all levels of education: bachelor's, internship, residency, master's, and PhD doctoral studies. There is an interuniversity military department that trains reserve officers from among university students in Western Kazakhstan. Future military doctors are trained at the Faculty of Military Medicine.

International accreditation of educational programs is one of the key mechanisms for ensuring the quality of education. Currently, the University is implementing 43 educational programs of higher and postgraduate education, 38 (88.3%) of them are accredited, including 6 undergraduate programs, 7 master's programs, 3 doctoral programs, 27 residency programs, and 130 are also being implemented. educational programs of additional, formal and informal education.

The university implements 2 joint educational programs together with the partner university NJSC "Aktobe Regional University named after K. Zhubanov":

- "IT Medicine" in the field of training 6B06 "Information and communication technologies".

- "Clinical psychology" in the direction of training 6B031 "Social Sciences".

Double-diploma education is also being implemented jointly with the partner university of the Russian State University "Military Institute of the Air Defense Forces named after twice Hero of the Soviet Union T.Ya. Bigeldinov" in the educational program "General Medicine".

Medical education carries out a continuous process of studying modern achievements in the field of medicine - the transition to continuous integrated medical education (CIME) - interlevel education, where bachelor's, internship and specialized master's degrees are integrated, followed by residency and doctoral studies. Educational programs of continuous integrated medical education are being introduced: "Medicine", "Dentistry", "Pediatrics".

The university mainly trains specialists for the Western region of Kazakhstan. Consumers of educational services are all individual consumers interested in obtaining higher education: graduates of secondary educational institutions and medical colleges.

Medical personnel training is carried out at 4 faculties: Faculty of General Medicine, faculties of dentistry, pharmacy, nursing and public health, international medical faculty, postgraduate education, where More than 5,600 people are studying, of which 4,930 are bachelors and interns, 617 residents, 38 master's students and 32 doctoral students.

Upon completion of undergraduate educational programs, internship and residency, graduates undergo an independent assessment of graduates' knowledge. The results of an independent assessment of the knowledge of students studying over the past 3 years show a high level of training of graduates - 97.0%.

The main indicator of the quality of higher education is the employment of graduates. An analysis of the employment of university graduates over the past 5 years shows a consistently high percentage of employment of our graduates (from 99.0% in 2019; 99.5% in 2020; 98.6% in 2021; 97.8% in 2022). Graduates of the NJSC "ZKMU named after Marat Ospanov" are distributed mainly across 5 regions of Western Kazakhstan, according to the needs for medical personnel from the educational institution. Young specialists - university graduates are in demand in the labor market, not only in the regions of Western Kazakhstan, but also in the North Kazakhstan, Almaty, Dzhambyl, South Kazakhstan regions, the cities of Almaty, Astana and Shymkent.

According to the survey results, the percentage of satisfaction of surveyed employers with the quality of specialist training (practical and theoretical) compared to last year (92.8% in 2020/2021) increased by an average of 4.6% and amounted to 97.4%. Of these, 99.1% of respondents were satisfied with theoretical training; practical training – 95.6% of employers. Work is being carried out to improve the professional potential of doctors and medical personnel through the implementation of programs of continuous professional development and additional education, in accordance with the budget program 005 of the Ministry of Health of the Republic of Kazakhstan "Advanced training and retraining of personnel of state healthcare organizations," as well as on the basis of agreements with medical organizations. In total, 3,204 doctors and 537 medical specialists have been trained over the past three years.

Since 2021, the Center for the Improvement of Nursing has been operating, which is one of the final results of the implementation of the international project ProInCa "Promoting the innovative potential of higher education in the field of nursing." The main objective of the center is the development and improvement of nursing practice based on evidence with the introduction of scientific principles for obtaining evidence. Currently, the center has created an information base of nurses in the Aktobe region and other regions of the Republic of Kazakhstan.

One of the priority directions of the University is integration into the international system of higher medical education, creating mutually beneficial relationships with scientific and medical organizations. International activities are carried out within the framework of long-term partnerships with medical universities around the world, and interdepartmental communication with partner universities is growing. This was facilitated by Kazakhstan's accession to the Bologna Declaration.

The university strives to become a center for the export of educational services for students from near and far abroad. On international medical faculty The number of foreign students increases annually: from 412 people in 2019 to 650 in 2022.

During the period 2016-2021. As part of the implementation of the activities of the State Health Development Program "Densaulyk", the University collaborated with Poznan University of Medical Sciences (hereinafter referred to as PUMS), where the priority direction was to improve the system of training specialists in the field of oncology and clinical pharmacology. As part of the cooperation, over 130 teaching staff completed training courses to improve their qualifications, and educational programs in the disciplines "Oncology: Oncological laboratory diagnostics" and "Clinical pharmacology"

were improved, 37 people from the scientific staff of the University passed training on the basis of PUMN, 22 articles were published in peer-reviewed journals, 7 scientists were engaged as scientific consultants to conduct research within the framework of the PhD doctoral program.

As part of the academic mobility program, activities are carried out jointly with partner universities. Over the past 3 years, the number of teaching staff participating in academic mobility programs was 82 people, of which 47 people – in neighboring countries, 28 people – in foreign countries. The academic mobility program for students in medical universities in Kazakhstan, universities in the near abroad (Russia, Georgia, Ukraine, Kyrgyzstan, Uzbekistan, Azerbaijan, etc.) and abroad (Medical University of Plovdiv, Bulgaria, Brandenburg University of Cottbus-Senfthenberg, University of Cologne, University of Laquila, University of Florence, University of Ljubljana, University of Florence). Since 2021, the total number of students participating in the academic mobility program has been about 500 people.

An integral part of the internationalization of the University's education is the attraction of highly qualified foreign professors with high rates of publication activity in the field of medical science. This provides the opportunity to transfer innovative medical technologies, best practices, joint publications in high-ranking publications, organize scientific internships, and scientific consultation for doctoral students. Every year, as part of the development plan, a program for inviting visiting professors is carried out at the expense of the University's own funds. There is a close interdepartmental connection with universities in the near abroad (Russia, Uzbekistan, Kyrgyzstan, Azerbaijan) and far abroad (Holland, USA, Lithuania, Iran). Since 2019, 138 foreign specialists have conducted classes and master classes for students and teaching staff.

Research work at the West Kazakhstan Medical University named after Marat Ospanov is carried out in the following scientific areas:

- clinical medicine research;
- research in theoretical and experimental medicine;
- medical education research;
- research on psychological, pedagogical and complex problems of social sciences.

The University carries out scientific projects under program-targeted, grant funding from the Ministry of Health/Ministry of Education of the Republic of Kazakhstan and intra-university funding. There has been a steady increase in the number of scientific projects financed by the Ministry of Health/Ministry of Education of the Republic of Kazakhstan, so if in 2020 there were 2, then in 2022 - 9. To develop the scientific potential of teaching staff, scientific projects are financed from the University's own funds. Today, the total number of teaching staff involved in the implementation of scientific projects averages 29%. The university participates in clinical trials of medicines.

There is an increase in the publication activity of teaching staff and young scientists in Web of Science and Scopus publications. There is an increase of 1.7 times and citations of teaching staff publications according to Web of Science and Scopus: in 2020 – 1509, in 2022 – 2644. The number of employees with an H-index of 3 or more is growing.

There is a scientific and practical center (hereinafter referred to as SPC), the main goal of which is to organize and conduct, in conjunction with the university departments, research on current issues of medical and biological problems; providing assistance to students, undergraduates, doctoral students, teaching staff in conducting scientific

research. The SPC includes scientific laboratories: molecular genetics, sanitary and hygienic, molecular biology laboratory and cell laboratory; there is a vivarium for keeping various types of laboratory animals necessary for carrying out research work.

Being an educational and scientific structural unit, the departments of the University provide educational, methodological, scientific research work, create temporary scientific teams, and are part of the faculties that train scientific personnel within the framework of master's and PhD doctoral studies.

Since 2004, the Marat Ospanov West Kazakhstan Medical University has been publishing a quarterly scientific and practical journal, West Kazakhstan Medicinal Journal, with a thematic focus on medicine, pharmacy and medical education. The journal publishes both Kazakh authors and scientists from near and far abroad. Scientific and practical articles are distributed under the headings “Methodological article”, “Original article”, “Review article”, “Medical education”, “Clinical case”, “Student corner”. The journal is indexed in the Russian Bibliographic Database scientific publications (RSCI).

The educational environment for clinical training is provided by 3 of the University's own clinics, with regional clinical bases in the regions of Western Kazakhstan and the Kyzylorda region. 29 clinical departments at all levels of education implement the educational process and clinical activities of the University. The priority area of activity of clinical departments is the provision of advisory assistance to practical healthcare in the relevant profile. In recent years, the number of clinical sites of the University has grown from 98 to 130. Practical health care employees are steadily recruited as part-time teachers.

The total bed capacity of the Medical Center (hereinafter referred to as the MC) of the Marat Ospanov NJSC ZKMU is 364 beds, of which 119 beds are somatic (15 DS) and 230 beds are oncology, 15 are day hospitals. The clinic covers the medical needs of over 900 thousand people in the region. Today, MC is designated as an integrated academic medical center and its services are widely available to the public. The priority areas of the clinic's work are the provision of specialized care for socially significant diseases (oncology) and high-tech medical services (cardiac surgery). The MC has clinical departments with training rooms: general surgery, oncology, internal medicine No. 2, clinical diagnostics and visual diagnostics, ambulance, resuscitation and anesthesiology, neurology, ENT diseases.

The Family Medicine Clinic (hereinafter referred to as FMC) is a structural unit of the University, serves the attached population and students of the University and provides primary medical care on the “General Practitioner” principle. Programs are being implemented for the early detection of diseases through screening studies: for the early detection of CSD; early detection of breast cancer; to detect cervical cancer and diabetes. The number of attached population is 16,000 people, of which 12,383 are adults; children – 3534 people. The number of attached population per GP is 1,768 people.

The dental clinic is the educational and clinical base of the Faculty of Dentistry. The clinic provides the population with accessible licensed dental, therapeutic, diagnostic, and advisory care; organizes internships for university students and trainees. Free dental care is provided to pregnant women under government orders. “At the dental clinic, specializations are carried out on an extra-budgetary basis for dentists, dentists, and dental technicians. Medical work is performed by both clinic doctors and department assistants during the educational process together with students and intern doctors.

The current stage of the University's functioning is characterized by the presence of competitive advantages and accumulated significant potential, but there are obvious problems that hinder its progress. Thus, the academic and scientific potential of the University does not fully correspond to the strategic objectives of the development of higher and postgraduate education, science and clinics. Educational programs require further updating in accordance with the priority directions of state policy in the field of health care.

The material and technical infrastructure requires modernization to conduct scientific research; the level of digitalization and the introduction of modern technologies in all areas does not fully contribute to the successful development of the University. It is necessary to invest in the further development of education, science and clinics, and strengthen the material and technical base.

3. Mission -continuous improvement of the University's contribution to the development of Kazakhstan, through the training of highly qualified medical personnel based on the trinity of education, science and clinic

Vision –a medical university that is recognizable and open at the international level in terms of the quality of training of medical specialists and achievements, striving to transform into the status of a research university, whose activities are aimed at developing society, improving health and improving the quality of life of the population of the Republic of Kazakhstan.

PurposeThe development program is the pursuit of excellence and high ethical standards in all areas of medical education, clinic and science. The development program of the NAO WKMU named after M. Ospanov is aimed at further changing the status of the educational organization by 2028 into the status of a research university.

University values

- Academic quality
- Academic Honesty
- Preserving tradition
- Professionalism and soft skills
- Innovation and generation of new trends
- Ethical and responsible attitude towards the world

4. Strategic block of the Development Program

Objective 1. Improving the quality of training of specialists based on the integration of education, science and clinic

According to the “Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023 – 2029,” the system of higher education and science will have to go through the next stage of transformation with an emphasis on key elements that increase its competitiveness. The implementation of the policy for the development of higher education until 2029 is aimed at ensuring the autonomy of higher education institutions, eliminating the shortage of teaching staff, strengthening the material and technical base, attracting talent to universities and scientific institutes, increasing the level of knowledge and competencies, improving modern educational programs of higher educational institutions based on developing technologies and economics future taking into account global competencies.

At the same time, the University sets a priority to ensure the quality of training of specialists through the introduction of integrated medical education, taking into account the vertical and horizontal integration of disciplines. Educational programs are being transformed taking into account the transition to NIME:

- creating an effective educational environment based on updating educational programs with an emphasis on the needs of the industry;
- widespread development of innovative educational technologies (CBL, RBL, D-PBL, integrated learning, project-oriented learning, simulation learning, learning with IT technologies: augmented reality methods);
- ensuring compliance of the existing infrastructure, resources, teaching staff with the volume of students admitted annually, taking into account the necessary resources of the University;
- modernization of infrastructure, its expansion, including by increasing training space, attracting qualified personnel;
- development of EP with a shortened training period: healthcare and pharmacy;
- creating conditions for inclusive education as part of the implementation of the EP;
- expansion of the range of educational programs of postgraduate education (residency, master's programs);
- expansion of educational programs for additional formal and informal education of practical healthcare specialists;
- management training program for various levels of management of the national health care system, including MBA programs;
- development of joint educational programs with leading foreign and domestic higher education institutions (NU).

In the field of international cooperation it is provided:

- expanding the number of foreign students and the range of educational programs available for study in English;
 - identification of the University's strategic partner among leading foreign universities and research centers that influence the University's ranking;
 - creating conditions for the launch of joint, including double-degree, educational programs with leading foreign universities and Nazarbayev University;
 - expanding the geography of the academic mobility program for students and teaching staff at leading foreign universities using a mixed format;
 - improving the quality of consulting for academic mobility programs, including through informatization and digitalization of the service (online consultant, automation of document acceptance), creating a database of academic mobility participants with feedback;
 - increasing the language competence of teaching staff, AUP and students of the University.
 - development of international cooperation in the research field, including organization and holding of international scientific conferences, seminars, round tables.
- Youth Policy University**A. The goal of the University's youth policy is the active involvement of students: from applicants to department assistants, in educational and scientific activities. In this case, the priority areas are:
- creation of a sustainable system for attracting the best school graduates and students of medical universities of the Republic of Kazakhstan to the University;

- involvement of young people in research activities, education of medical researchers through a mentoring system;
- development of a corporate spirit of solidarity through the holding of sports competitions to form and strengthen team spirit;
- development of entrepreneurial skills among students (promoting the creation of start-ups).

Objective 2. Focusing the university's research potential on current areas of research, generating new knowledge through research activities

The university's research activities will be integrated and ensure the transfer of new knowledge into the educational process, producing highly qualified personnel with a high level of research and practical skills. In this direction the following tasks will be solved:

1. Conducting research on current scientific topics (including strategic projects, grants from the Ministry of Education and Science and the Ministry of Health of the Republic of Kazakhstan). Based on the priority areas of the Ministry of Science and Higher Education of the Republic of Kazakhstan and the Ministry of Health of the Republic of Kazakhstan in the field of health protection and taking into account the research potential of the University, the following priority areas have been identified: oncology, proteomics and cellular technologies, pharmacogenetics, personalized medicine. A special place will be given to interdisciplinary scientific research carried out at the intersection of sciences. The above areas will become the basis of the University's strategic projects.

2. Creation of a system of intra-university projects to attract leading domestic and foreign researchers to carry out scientific research.

3. WITHcreating new and modernizing existing laboratories to conduct cutting-edge research relevant to the modern scientific agenda. The construction of a new building for the Scientific and Practical Center with modern equipment and a vivarium will make it possible to carry out scientific projects at a higher level, introduce scientific results into the educational process and clinical activities, as well as expand the opportunities for students to master practical skills, improve the quality of research practice of undergraduates, doctoral students and residents . This, in turn, has strengthens personnel potential and the possibility of retaining scientific youth at the university. The construction of a new building with modern equipment and a vivarium will allow the university to participate in preclinical research and create a bank of biological material and cellular biomaterials.

4. Increasing the level of student science as a resource for the innovative potential of university development. To increase the number of students involved in research activities, the university plans to increase the amount of funding for student research projects. It is planned to collaborate between students and young scientists of the university with scientifically active students and young scientists from Kazakhstan and foreign universities.

5. Creation of a commercialization officeto support the commercialization of the results of intellectual activity of university employees through international patenting, attracting sources of funding for the development of the scientific and innovative environment of the University, which will ensure the influx of funding necessary to support research activities.

6. Unincreasing the volume of science funding income from scientific projects carried out within the framework of budget programs, from agreements with economic entities under the University's commissioning activities, from the activities of research institutes, centers and international grants.

7. The entry of the university's WKMJ journal into peer-reviewed databases is one of the important factors for successful development university science, which will attract the attention of a wider range of authors and readers and realize the university's desire to consolidate with authoritative communities to promote science to the international level. In this regard, it is planned to develop a website for the WKMJ journal that meets the requirements of KSNIV, and to include invited visiting professors in the mandatory KPI indicators of departments for publishing articles in WKMJ. In addition, it is planned to expand the base of the journal's reviewers, including foreign ones with publications in the international databases Scopus or Web of Science, to promote the journal in international databases, to invite specialists and expert consultants from the Scopus database to conduct training seminars with the editors of the journal.

8. Research in the field of medical education is aimed at deepening knowledge and understanding of the essence of learning and teaching. Such research makes significant contributions to understanding the learning process and the importance of evidence in educational decision making.

Main areasscientificdevelopments include:

- fundamental research in the acquisition of medical knowledge,
- problem-based learning,
- assessment of training effectiveness,
- continuing education and assessment of practicing physicians (licensing and certification).

9. Creation of an endowment fund, which will significantly increase the University's budget and attract funds for the implementation of major scientific and educational projects, invite famous scientists, pay scholarships to gifted students and stimulate university employees conducting active scientific work.

Task 3. Expanding medical services through the University's own clinics, introducing new diagnostic and treatment methods.

The presence of its own University clinics, regional clinical bases in the regions of Western Kazakhstan and the Kyzylorda region, the presence of scientists and highly qualified doctors on its staff allows us to consider the University as a medical cluster, working at the intersection of education, science and clinic. To this end, the following set of tasks will be solved:

- participation in the implementation of the national project "Quality and affordable healthcare for every citizen "Healthy Nation", a comprehensive program to combat cancer diseases of the KazNIIOiR;

- development of personalized medicine, aimed at the widespread introduction of innovative diagnostic and treatment methods into the clinical practice of University clinics, expansion of the volume of HTMU, introduction of highly specialized treatment methods;

- development of a practical skills center;

- Anduse of cell technologies in oncology and cardiology;
- expansion of profiles and range of medical services in KSM;
- development of protocols for family doctors GPs.

Objective 4. Development of human capital, improvement of the management system and financial support of the University's activities

At the moment, the Kazakhstan policy of the specialist training system is aimed at a model of advanced staffing. Universities will be a key link in building this model. To implement this direction, an effective personnel policy is needed to ensure the transformation of the university. Therefore, this requires solving the following problems:

- improving the image of the University as a potential employer;
- formation of an effective corporate culture that allows the use of human resources to implement the University's strategy;
- creation of a motivational zone for employees based on:
 - gradual increase in wages, introduction of a system of additional payments and incentives for achieving KPIs;
 - creating favorable working conditions (scientific organization of work, equipping workplaces, etc.)
- improving mechanisms for assessing the qualifications and effectiveness of University employees, including based on key performance indicators;
- introducing a mechanism for a phased (fragmented) redistribution of teaching staff load in order to create conditions for the implementation of research work (from 2025);
- development of a system of continuous professional development of employees with the possibility of objective assessment and forecasting of their professional and supra-professional competencies;
- attracting highly qualified foreign employees to conduct teaching and research activities;
- control of the involvement of teaching staff in scientific activities and in the organization of scientific activities of students;
- building a career trajectory for young teaching staff through the development of individual development programs.

All these measures will become the basis for professionalism, digital maturity, and improving the quality of human capital, especially teaching staff and students.

Improving the university management system,infrastructure development.The effective management system of the University characterizes it as a potential employer in the labor market. The main planned changes in the University management system will be aimed at improving the organizational and management structure of the University by optimizing management processes, namely:

1. A combination of traditional and project approaches in managing the University. The mechanism of such transformation can significantly increase the University's efficiency and quality indicators. The project management model will be implemented through the creation of project offices.

2. Digital transformation or the use of digital technologies to automate management activities. Within the framework of this direction, the following set of tasks will be solved:

- development of service infrastructure to support educational, research, innovation, and management activities of the University;
- increasing the level of digital competencies of University employees;
- active use of modern digital channels for promoting the University in new markets for scientific and educational services;
- creation of a digital campus to create comfortable conditions for students and employees.

To enhance the development of the corporate brand, social platforms (multilingual website) will be widely used.

3. The financial stability of the University is determined by income from the educational and medical services provided. An important role in this direction is played by the financial base, which ensures the stable operation of the entire University system in case of temporary difficulties. The financial sustainability of the University will be aimed at mobilizing internal resources, increasing extra-budgetary income, and developing scientific, educational and medical activities. In this direction the following tasks will be solved:

- increasing the share of extra-budgetary income from educational activities (expanding additional education programs and improving their quality);
- increasing the share of income from University clinics (improving the quality of medical care provided, expanding the range of clinic services);
- increasing financial autonomy.

5. Expected results.

The implementation of the program will help improve the quality of education, science and clinics. The introduction of project management to manage the University's own activities will help identify areas for further improvement of the process.

By providing training for medical personnel in Western Kazakhstan, the University will make a significant contribution to the formation of the country's human potential.

By the end of the Development Program, the University will be able to transform into an educational organization with research status.

The action plan for the implementation of the University Development Program for 2024-2028 is given in Appendix 1 to this program.

Section 6. Resources.

Budget programs

Budget programs - 1	Budget programs – 2 (MoH)	Budget programs – 1 (MES)
067-100 "Providing the population with medical care within the framework of the Unified National Health Care System"	006 "Training of specialists with higher and postgraduate education and provision of social support to students"	217-102 "Development of science. Grant funding for scientific research"
	005 "Advanced training and retraining of personnel of state healthcare organizations"	

Development program of NJSC "ZKMU named after Marat Ospanov" for 2024-2028.

No.	Target indicators	Ye di z	Fact 2022	2023	2024	2025	2026	2027	2028	
Objective 1. Improving the quality of training of specialists based on the integration of education, science and clinic										
1	Position in the ranking of the best universities according to QS (by subject)	%	-	-	-	-	-	-	1000+	
2	Proportion of residency graduates who successfully passed an independent examination on the first try	%	99.5	85	86	87	88	89	90	
3	Proportion of internship graduates who successfully passed an independent examination the first time	%	100	85	86	87	88	89	90	
4	Share of foreign students in the total number of students enrolled in undergraduate programs	%	16.4	18	19	20	21	22	23	
5	The share of university graduates who studied under the state educational order, were employed and entered the next level of study in the first year after graduation	%	100	97	97.5	97.7	98	98.5	98.7	
6	Share of students in master's and doctoral programs to the total student population	%	1.3	1.5	1.7	1.9	2.1	2.3	2.5	
7	The share of invited foreign professors, teachers and researchers in the total number of full-time teaching staff of the university	%	5.8	6.5	7	7.5	8	8.5	9	
8	Share of students who took part in the academic mobility program	%	3.0	3.5	4	4.2	4.4	4.6	4.8	
9	The number of joint educational programs developed and implemented with partner universities, including those with the participation of a foreign university	un its	With the issuance of a double diploma	-	1	1	1	1	2	
			Without issuing a double diploma	-	2	3	3	3	4	4
10	The percentage of full-time teaching staff of the University who speak English (with valid certificates: TOEFL –	%	Total	9.6	10	12	13	15	17	19
			Under 45 years of age	eleven	16.5	18	22	26	thirty	35

No.	Target indicators		Ye di z	Fact 2022	2023	2024	2025	2026	2027	2028
	460 and above, TOEFL IBT – at least 46 and above, IELTS – 5.0 and above)									
elev en	Share of teaching staff participating in academic mobility programs from the total number of full-time teaching staff		%	5.8	6	6.5	7	7.5	8	8.5
Objective 2. Focusing the university’s research potential on current areas of research, generating new knowledge through research activities										
12	Number of ongoing international scientific projects		un its	-	-	1	1	1	2	2
13	Number of clinical studies carried out at the university		%	-	-	2	3	3	4	4
14	Number of scientific grants / PCF financed by the Ministry of Education and Science of the Republic of Kazakhstan, the Ministry of Health of the Republic of Kazakhstan		%	8	8	8	9	10	10	12
15	Share of income from scientific activities in the total budget		%	0.9	2	2.2	2.4	2.6	2.8	3
16	The ratio of the number of articles published over the past five years in international ranking journals indexed by Web of Science or Scopus to the number of full-time teaching staff		attitude	1:3	1:2	1:2	1:2	1:1.5	1:1.5	1:1.3
17	Average PPP H-index based on Web of Science, Scopus		un its	0.5	0.52	0.55	0.57	0.60	0.62	0.64
18	Amount of expenditures on science from the University’s own funds (million tenge)		million	98	138	140	142	144	146	148
19	Activities of the endowment fund for sustainable development of the university		un its	-	-	-	1	-	-	-
20	Share of full-time teaching staff involved in research activities from the total number of full- time teaching staff	Total	%	thirty	33	36	39	42	45	48
		Including young researchers (up to 40 years old) of the total number of researchers		22	24	27	29	32	34	37
21	Proportion of doctoral graduates who successfully defended	within one calendar year	%	28	thirty	32	34	36	38	40

No.	Target indicators		Ye di z	Fact 2022	2023	2024	2025	2026	2027	2028
	themselves completing doctoral program	after their second calendar year		50	60	64	68	72	76	80
Objective 3. Expansion of medical services by the University's own clinics, introduction of new diagnostic and treatment methods.										
22	Implementation of HTMU in a university clinic		un its	-	-	2	4	4	5	6
23	Increase in the proportion of primary malignant neoplasms detected at stages 0-1 (early diagnosis level)		%	17.4	25.6	26.2	26.8	27.4	28.0	28.6
24	Coverage of health care services for patients undergoing dynamic observation for three nosologies (AH, DM, CHF)		%	59.1	59.5	60	61	62	63	65
25	Patient satisfaction with the quality of medical care		%	86.1	86.2	86.5	87	87.3	87.6	88
Objective 4. Development of human capital, improvement of the management system and financial support of the University's activities										
26	The share of teaching staff of clinical departments working within the framework of the guaranteed volume of medical care and compulsory medical insurance		%	24	55	60	62	64	66	68
27	The ratio of the average monthly salary of teaching staff to the average monthly salary in the republic		attitude	-	0.85	0.95	1.05	1.15	1.25	1.35
28	The share of employees who have completed PC training, internships, and master classes abroad	teaching staff	%	-	1.7	2.5	3	3.5	4	4.5
		AUP		-	5	6.5	7	8.5	11.5	13
29	Number of medical workers who have completed training courses and certification courses		un its	665	885	890	895	900	905	910
31	Development of investment projects for the modernization of the University		un its	-	-	2	2	1	2	2
32	The share of women holding leadership positions in structural divisions of the organization		%	thirty	35	35	37	39	40	42

7. Decoding abbreviations

NJSC "ZKMU named after Marat Ospanov"	Non-profit joint stock company "West Kazakhstan Medical University named after Marat Ospanov"
TS	Teaching staff
AMS	Administrative and managerial staff
OHPE	Organization of higher and postgraduate education
CIME	Continuous integrated medical education
HMB	The health management body
AMW	Average medical workers
MHRK/MSHE	Ministry of Health/ Ministry of Science and Higher Education of the Republic of Kazakhstan
SPC	Scientific and practical center
RSCI	Russian Science Citation Index
MC	Medical Center
CLD	Clinical laboratory diagnostics
FMC	Family Medicine Clinic
DCS	Diseases of the circulatory system
PDD	Priority direction of development
CQASHE	Committee for Quality Assurance in Science and Higher Education
HMS	High-tech medical services
GP	General Practitioner
RSI	Republican State institution
PUMS	Poznan University of Medical Sciences
PH	Public health
HEI	higher education institution
DH	day hospital
EP	Educational program
SRI	Scientific Research Institute
KSRIOR	Kazakh Scientific Research Institute of Oncology and Radiology

