

«APPROVED»

**By the decision of the Board of
Directors of NJSC «West Kazakhstan
Marat Ospanov Medical University»
from March 31, 2021
minutes No. 2.**

**DEVELOPMENT PROGRAM
of non-commercial joint-stock company
«West Kazakhstan Marat Ospanov Medical University»
for years 2019 – 2023**

Aktobe, 2021

Introduction

The Development program of the non-commercial joint stock company «West Kazakhstan Marat Ospanov Medical University» for 2019 – 2023 years (hereinafter - the Development Program) is formed taking into account the need to implement a set of strategic objectives aimed at the further development of education, science and healthcare in the Republic of Kazakhstan.

The priorities of the state policy of the Republic of Kazakhstan in these areas are determined by:

- the provisions of the Law on Education;
- Message from the Head of State Kassym-Zhomart Tokaev to the people of Kazakhstan dated September 2, 2019;
- Strategic development plan of the Republic of Kazakhstan for the period until 2025;
- The State Program for the Development of Health of the Republic of Kazakhstan for 2020-2025;
- The State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025;
- Code of the Republic of Kazakhstan «On the health of the people and the healthcare system»;
- Strategic development plan of the Ministry of Healthcare of the Republic of Kazakhstan for 2020-2024.

These documents reflect the need to create a flexible and diversified system of higher and postgraduate professional education that meets the requirements of the labor market and the needs of the innovative economy, social modernization, ensuring the quality and accessibility of medical services, and effective human resource management.

1. Description of the organization's prospects taking into account the current state and long-term objectives.

Non-commercial joint stock company «West Kazakhstan Marat Ospanov medical university» (hereinafter the University) has passed through institutional accreditation with international participation (2019) and specialized accreditation (2016) of all educational programs of bachelor's and postgraduate education. The University has 5 educational and laboratory buildings, 3 clinical buildings and 5 student dormitories for 2100 places.

The University regularly participates in national rankings of demand for universities held in the Republic of Kazakhstan. So, in the ranking of the Independent Accreditation and Rating Agency (IARA) for 2019, the University entered the TOP-20 universities of the Republic of Kazakhstan. In 2019, the educational programs of the specialties «General Medicine» and «Dentistry» took 1st and 2nd places in the independent evaluation of the educational programs of Kazakhstani universities of the national chamber of entrepreneurs (NCE) RK «Atameken». The quality management system is certified according to ISO 9001-2015.



The University has a network of accredited University clinics: University Medical center, Family medicine clinic and Dental clinic.

747 teachers, including 551 on the staff have begun working at the university at the beginning of 2019-2020 academic year. At the University there are 43 theoretical and clinical departments implementing educational programs.

The decrease of the number of doctors of medical sciences and candidates of medical sciences in the share of the teaching staff (TS) is compensated by the increase of the number of PhD and Masters of medicine. In 2019, it is planned the graduation of 6 PhD students and 17 Masters of medicine.

Training is carried out in 5 specialties of the bachelor's degree: «General medicine», «Dentistry», «Pharmacy», «Nursing», «Public health», including training in the English language in the specialty «General medicine». Postgraduate training in 23 specialties are implemented in the residency, 4 specialties in the master's degree, 2 specialties of doctoral PhD.

Various educational, methodical and research innovations (PBL, TBL, CBL, etc.) are used for the educational process at the University. Modular educational programs have been developed for all specialties in accordance with the National qualifications framework, professional standards, Dublin descriptors and the European qualifications framework.

In order to develop the trinity of science, education and clinic, quality assurance, integration and continuity of educational programs of specialties is carried out on the basis of competence approach.

The automated information system «SIRIUS» is functioning, which made it possible to automate the management of business processes at the university based on information technologies: an electronic register, the development of a calculation methodology that provides ranking of grades, the MOODLE educational portal, an electronic student knowledge control system, an electronic library, a distance learning portal and etc. A transition has been made to the Documentolog electronic document management system, which allows automating the University's business processes.

The number of teaching staff with a certificate of English language proficiency level of B1 and above is increasing: in the academic year 2018-2019 - 63 (11.3%); in the 2019-2020 academic year - 123 (22.3%). In order to motivate mastery of a foreign language at the University, a monetary allowance is paid to the salary of teaching staff with an official certificate of IELTS 5.0 and higher, conditions are created for teaching employees a foreign language.

In the framework of the academic mobility program, teaching staff undergo internships and continuing education courses at the leading Kazakhstani and foreign universities, research centers. In 2019, the percentage of inbound and outbound academic mobility of faculty was 4.8% (in 2018 - 3.8%).

Cooperation in the field of medical science, education and practical health care with leading foreign universities is regulated by memorandums of understanding, treaties, and agreements on international cooperation.

The program of inviting visiting professors who conduct lectures and practical classes, workshops and provide practical assistance to the region's health care is



actively implemented. The share of foreign scientists and teachers working at the University in 2019 increased from 4.6% to 7.4%.

The library fund of the university is provided with educational, teaching and scientific literature in the state, Russian and English languages. The service «Web-based teacher's office» and «Virtual bibliographer» was created with the possibility of online ordering of the necessary article, book, UDC index, book provision, selection of subject references, etc.

E-lending from CSML named after I. M. Sechenov is available with the ability to make an order for the missing in the fund literature, article and thesis, etc.

The University cooperates in the field of medical science, education and practical health care with many leading foreign universities both on the basis of direct links and through various channels of international cooperation.

In 2019, under the Visiting-professors program, 40 professors from near and far abroad worked in the University: Russia, Kyrgyzstan, Lithuania, the United Kingdom, the United Arab Emirates, India, the Arab Republic of Kuwait, Poland, and the United States. As a result of the program, 6 joint research projects were launched, 14 articles were published in the scientific and practical journal «Batys Kazakhstan medical journal», included in the list of scientific publications recommended by the Committee for Education and Science Control of the Ministry of Education and Science of the Republic of Kazakhstan to publish the main results of scientific activity.

The University is a member of AMEE (Association of medical education in Europe) and AMSE (Association of medical schools in Europe).

As a strategic partner, K. Marchinkowski Medical University, Poznan, Poland (PUMS) was selected. In 2019, as part of a strategic partnership, a project is being implemented whose objectives are:

1. Improving the existing system of training medical specialists of the University:

- improving the educational process at the level of basic medical education
- increasing the capacity of the teaching staff of the University;
- development of the institutional scientific potential of the University.

2. Improving the educational process and educational programs in the disciplines «Clinical Pharmacology» and «Oncology: Oncological Laboratory Diagnostics».

A program of academic mobility of the University teachers and the university strategic partner has been developed. Scientists of the university strategic partner provide assistance in the creation of research laboratories by training employees and providing methodological support, followed by the introduction of the results of scientific research into clinical practice and the educational process.

The leading directions of master's and PhD projects have been determined: oncology, diseases of civilization, genetics, endocrinology, pharmacology, nutrition and metabolism. 4 professors of the strategic partner university were involved as scientific consultants for 5 PhD theses.

The faculty of the partner university is involved in lectures and seminars at all levels of training for clinical pharmacologists.



An educational program for residency in the specialties «Clinical Pharmacology» and «Oncology: Oncological Laboratory Diagnostics» is being developed.

Work in the direction of entering the foreign market of educational services is implemented through the recruitment of foreign students. Compared with the 2018-2019 academic year, in 2019-2020 academic year, the number of foreign students was 348 (10.0%) people: an increase of 2.5%.

An important direction in the educational process of higher education is the research activities of the University teaching staff.

In 2019, the University implemented 13 teachers research projects and 8 student research projects under the supervision of university-sponsored supervisors. The results of scientific studies of teaching staff are presented in the form of scientific and technical products, which are introduced into practical, scientific or educational activities.

Since 2018, key performance indicators (KPI) have been developed for employees of all departments and structural divisions, reflecting scientific and educational activities. The indicators are approved at the beginning of the calendar year, entered into the developed KPI maps, and based on the results of implementation, their achievement is monitored at the end of the year. Based on the results of achieving indicators for the main types of activities, a collegial decision establishes differentiated salary increases for employees.

The University is licensed to practice medicine and has three accredited University clinics:

1. Medical Center (hereinafter - MC) of the University. The total bed capacity is 304 beds, of which 94 beds are somatic (15 beds) and 210 beds are oncoprofile (60 beds). The clinic covers the need for medical care for 800 thousand people in the region. Today, the MC is defined as an integrated academic medical center and its services are widely available to the public. The priority areas of the clinic are the provision of specialized care for socially significant diseases (oncology) and high-tech medical services (cardiac surgery). In the framework of the state regionalization of the high-tech radiological service, the MC is the center of radiation oncology in Western Kazakhstan.

2. The Family Medicine Clinic (hereinafter referred to as KSM) is a structural unit of the University, serves the attached population and students of the University and provides primary medical care on the principle of "General Practitioner". Programs are being implemented for the early detection of diseases through screening studies: for the early detection of BSC; early detection of breast cancer; to detect cervical cancer, diabetes. The number of attached population by the end of 2019 was 15 193 people, of which adults - 11 860 people; children - 3333 people. The number of attached population per 1 GP is 1688 people, which is lower than the national indicator (1750 people).

3. Dental clinic provides the population with affordable licensed dental, diagnostic and consultative help; organization of the practice of students and learners of the university. Free dental care is provided to pregnant women by state order. Professors, associate professors, dentists of the highest category consult the patients.



The sources of the budget of the dental clinic are the income from the University, funds for the medical services provided to the population, as well as the implementation of the budget program «Providing primary health care to pregnant women». On the basis of the dental clinic specializations are conducted on an off-budget basis for dentists, dental mechanics.

2. The block of analytical and prognostic substantiation of the Development Program.

Despite the positive dynamics of the development of the university, there are a number of factors that reduce the competitiveness of the university at the international level: monopolization of the university, the lack of new specialties in undergraduate and postgraduate education; low number of educational programs in English, lack of adaptation of educational programs to the needs of foreign students; lack of educational programs accredited by international agencies.

Most teachers have poor experience and skills in conducting research at the international level with publishing results in international peer-reviewed journals, presenting reports at international conferences, cooperating with foreign colleagues or colleagues from other Kazakhstani universities in conducting joint research.

Despite the ongoing work to create conditions for teaching English, a low level of proficiency in the majority of teachers and staff in a foreign language remains.

The sources of the university's potential advantages in enhancing international competitiveness can be:

- experience of international cooperation (over 50 foreign partner universities, experience of participation in international cooperation programs of Erasmus +), including with European universities;

- passing institutional and specialized accreditations through an agency that is a member of the European Association for the Assurance of Quality in Higher Education;

- regular participation of the university in national ratings of educational programs;

- a strategic partner - K. Marcinkowski Medical University (Poland), which is one of the leading universities in the European space;

- the experience of attracting foreign scientists to work in a university, including on the position of top managers;

- the availability of a modern material and technical base, developed infrastructure, a network of university clinics, opportunities to expand the campus and equip laboratories, the availability of extra-budgetary funds in income with the prospect of growth.

Implementation measures will be:

- expansion of international and strategic partnerships with leading foreign medical universities and scientific schools;

- development of joint educational programs with the implementation of international standards for the training of specialists, their international accreditation;

- improving the material and technical base of university clinics, scientific laboratories, conducting clinical research, developing the market for biomedical research, promoting and commercializing the results of scientific research in healthcare.

There is a problem of attracting and retaining young specialists to work in a university, which is one of the reasons for the low contingent of students studying for master's and PhD doctoral programs.

There are problems in the development of human resources for healthcare in the Western region of Kazakhstan related to the shortage of personnel providing primary health care, an imbalance in the number of doctors, an excessive concentration of medical workers in large cities and a lack in rural areas, and an imbalance in personnel between levels of medical care (deficit at the level of primary health care and rural areas, surplus - at the hospital level).

So, the need for specialists in 2019 in the region amounted to 1235 people, of which: the need for city clinics - 816; in the village - 419 people. WK oblast is most in need - 370 people (243 - city / 127 - village) and Mangistau oblast - 277 people. (162 - city / 115 - village). The greatest need for medical personnel is noted in GP specialties (258 people), pediatricians (98 people) and obstetrician-gynecologists (87 people).

The graduation in 2019 amounted to 729 people: interns - 576; residents - 153 people. Of these, in «scarce» specialties: GP - 144 people, pediatricians - 90 people, obstetrician-gynecologists - 109 people. The employment of graduates was 100%; internships - 97.6%. Moreover, the overwhelming majority of residents express a desire to work in the city of Aktobe - 63 (41.2%) and in Atyrau - 17 (11.1%) people.

In 2019, 123 graduates were employed in rural health organizations: of these, 33 GPs; 14 pediatricians and 19 obstetrician-gynecologists. The largest number of young specialists is distributed in Aktobe oblast (37), Kyzylorda oblast (24) and WKO (22).

According to the data provided by the RHD as of December 1, 2019, the need for medical personnel in the regions of Western Kazakhstan in rural medical organizations is 371 people.

The greatest need for rural doctors is experienced by Mangistau (129), WKO (99) and Aktobe oblasts (80) people. The need for specialties is the same: GPs, pediatricians, obstetrician-gynecologists, anesthetists and specialists in definite fields.

Measures to implement these problematic issues will be:

- improving approaches to the analysis, forecasting and monitoring of human resources for health in the Western region of Kazakhstan;

- in order to reduce the imbalance in medical personnel between the village and the city, the joint efforts of the university and the MES in attracting and employing young specialists are necessary;

- the expansion of educational programs and specialties of residency, the introduction of international standards for the training of doctors, adapted to the needs of national health;

- improvement of the institute of clinical mentors, expansion of relations and contracts with organizations of practical health care in the region to obtain the clinical

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experience of interns and residents in hospitals under the appropriate supervision of clinical mentors;

- referral of future graduates to gain clinical experience in institutions of healthcare for future employment.

3. Mission of the Development Program.

Training on the basis of the trinity of education, science and clinic of highly qualified medical personnel in demand in the domestic and international labor markets.

4. Vision of the Development Program.

As a result of the implementation of the University Development Program:

- will become a leader among domestic universities in the level of training of medical personnel;

- expand the range of research and development in accordance with global challenges, prospects and trends of world medicine and pharmaceuticals;

- having a network of modern university clinics, it will apply the most advanced diagnostic and technologies in the treatment process, form and support a team of medical personnel professionals, develop and apply effective management, organization and quality control strategies for medical care in accordance with international best practices.

5. Strategic block of the Development Program.

The main challenges of the modern development of medicine and healthcare are breakthrough changes in medicine:

- increase life expectancy and its quality;
- accessibility and quality of medical care;
- diagnosis and treatment of diseases become personalized.

All this necessitates the development of the market of personalized medical services and medicines that ensure the growth of life expectancy, the receipt of new effective means of prevention and treatment of various diseases.

Under these conditions, there is an increasing need for unique specialists whose training in the framework of the existing classical model of medical education is not provided at the proper level. The training of modern medical personnel should go through the generation of new knowledge through research activities; advanced training of new personnel; concentration of talents and focus on the professions of the future; creation of new technologies and products.

An innovative model of training, focused on the profession of the future, should develop among graduates of over- professional competencies:

- broad interdisciplinary Outlook;
- planning of scientific research;
- project management;



- international integration, etc.

To achieve competitive positions in the national and international system of higher medical education, taking into account the sources of potential advantages, the following strategic initiatives are developed:

1) Development of educational Programs and technologies through effective cooperation with foreign leading universities and research centers, integration into the international educational space

2) The development of key competencies of the university staff, the growth of the quality of research and teaching staff.

3) Focusing the research potential of the university on current research areas, generating new knowledge through research activities.

4) Improving medical services by a network of university clinics, introducing new methods of diagnosis and treatment.

6. Ways to achieve the objectives of the Development Program.

Strategic direction 1: development of educational programs and technologies through effective cooperation with leading foreign universities and research centers, integration into the international educational space.

Within the framework of the strategic partnership, it is planned to jointly develop and introduce new programs in the specialties of Clinical Pharmacology, Oncology: Oncological Laboratory Diagnostics.

Leading areas of master's and PhD projects will be identified: oncology, civilization diseases, genetics, endocrinology, pharmacology, nutrition and metabolism. To this end, the faculty of the strategic partner university will be involved in lectures and seminars at all levels of preparation, as scientific consultants for PhD dissertations; joint online training programs (courses, cycles) for students will be developed.

Proposals will be developed on the organization of postdoctoral research activities of university teachers, including those based on leading foreign research centers.

Within the framework of the strategic and associated partnership, international standards for the training of health workers will be implemented, adapted to the needs of national health. The introduction of international standards at all levels of medical education and joint educational programs with leading foreign universities will help prepare competitive medical personnel. The implementation of integrated medical education programs will continue; training of doctors in the framework of residency programs implemented on the basis of the university own clinics and clinical bases in the region; according to the program of academic mobility - in scientific centers of the republic and leading foreign medical schools.

For the international promotion of educational programs, it is planned to modernize the center of practical skills by creating a modern virtual educational and clinical hospital with imitation of departments of a modern medical institution and passing the center of international accreditation in AMEE-ASPIRE. Accreditation of the University educational programs by international accreditation agencies will



provide international recognition of educational programs and will increase the number of foreign students.

It is planned to increase the number of educational programs in English as an integral condition for the university to enter the international market for educational services, introduce trilingual education programs and increase the language competencies of employees necessary for teaching academic disciplines and communicating with foreign students.

The development of innovative educational technologies is planned to be achieved through an increase in programs using distance education technologies (DET), expanding training opportunities based on digital technologies, the active introduction of SMART training, and the active digitalization of educational resources.

A systematic update of the curriculum will be carried out taking into account the requirements of employers, factors of socio-economic development of the country, the environment and other important relevant parameters. Work will begin on training qualified scientific and medical personnel in personalized medicine (bioinformatics, medical genetics, pharmacogenetics, etc.). For this, in the framework of strategic cooperation, educational programs for the master's program, doctoral studies and post-doctoral studies will be developed.

The system of continuous professional development of the University teaching staff and health workers of the region will be improved, harmonized with the certificate or license confirmation system. Further medical education programs will be improved in accordance with professional standards to acquire the necessary competencies.

Strategic direction 2: the development of key competencies of the university staff, the increase in the quality of research and teaching staff.

This direction is an integral component of the formation of educational programs and intellectual products of the University, ensuring international competitiveness, since it implies the formation of the most important element of the resource base - human capital.

The main mechanisms here are effective labor contracts, staff search, continuous training of faculty.

The main mechanisms here are effective employment contracts, personnel search, continuous professional training of staff.

To ensure the quality of the core competencies of the AS, the main tools will be:

1. Improving the personnel policy of the University, strengthening the role of HR management in areas based on the experience of Nazarbayev University:

- formation of the effective personnel reserve system;
- creation of the system of mentoring young teachers;
- formation of the system of internal certification of AS;
- definition of qualification requirements on the basis of pedagogical and professional competences;
- the introduction of the system of competitive replacement of management – Vice-rectors, deans, heads of structures.

2. The involvement of experts from the strategic partner university in the process of building the capacity of the University teaching staff, the development of a competency model for teachers with the criteria for a selection, employment, training system and assessment system for teachers.

3. The introduction of mechanisms for the systematic involvement of leading foreign teachers and researchers to work in a university based on established requirements and performance indicators.

4. Organization of English language courses for University staff, academic writing and professional communication skills. It is necessary to continue to work to promote the improvement of language skills of TS, subject to mandatory certification.

5. Improvement of the rating system of employees and academic staff on the basis of KPI - balanced performance of indicators in all major areas of the University (research, training and medical work).

6. Based on the experience of Duke University (USA) the development of the *system of trajectories of teaching staff (tracks)*, aimed at balancing the labor activity of AS between the main activities of the University. It is planned to allocate two types of teacher:

- academic teacher;
- researcher.

The work of the first type of TS will be focused, for the most part, on academic activities; the second type - on research and in a smaller part educational work. Balancing the direction of the work will be done by setting up the KPI of the relevant effective contracts.

7. Development of the quality of mobility system of teaching staff, the implementation of programs of international and domestic academic staff mobility in Kazakhstan in the form of internships, advanced training, professional retraining with mandatory monitoring of their effectiveness.

8. Development of the active participation of faculty in international conferences on priority research areas with the obligatory subsequent publication of abstracts in publications indexed in the Web of Science, Scopus database.

9. Involvement of young scientists in scientific and pedagogical work at the University through incentive mechanisms on the basis of contracts, including foreign training and internships.

10. Formation of system of University grants, including nominal, to stimulate participation in research projects of students, undergraduates and doctoral students.

Strategic direction 3: focusing the research potential of the university on relevant research areas, generating new knowledge through research activities.

Science is the driving force of the economy, the most important resource for the development of any country. It is universities that have a well-developed training system based on the inextricable unity of educational and scientific processes, possessing the necessary infrastructure, highly qualified managerial and scientific personnel, should become the central link in the processes of integration of education and science.

This direction will be implemented by:



1. Conducting a comprehensive assessment of long-term prospects and determining the directions of the university's research activities through an expert assessment of current international trends in medical science, identifying promising products and technologies in the framework of the university's research work;

2. Strengthening the role of the strategic partnership department with foreign universities and research centers in ensuring interaction with key partners of major research projects in order to promote innovative university services, search for partners with significant backlog in the priority areas for the university, and carry out joint fundamental and applied research;

3. Strengthening the role of the department of research activities management to support the commercialization of the results of intellectual activity of university employees through international patenting, attracting sources of financing for the development of the scientific and innovative environment of the university, which will ensure the flow of funding necessary to support the research activities of the university;

4. Creation of new and modernization of existing laboratories in the priority areas of research with the involvement of leading scientists in the leadership to conduct advanced research relevant in the context of the modern scientific agenda;

5. Improving the support system for scientific publications of AS in peer-reviewed scientific publications, stimulating publication activity, reimbursing expenses for publishing articles, for translating and correcting texts, learning the technique of publishing in peer-reviewed publications, and interacting with publishers;

6. Increasing the volume of income for financing science from scientific projects carried out within the framework of budget Programs, from agreements with business entities under the University's PAD, from the activities of research institutes, centers and international grants;

7. Widespread involvement of students, undergraduates and young scientists in research activities, including to the implementation of grant-funded RW with an appropriate wage;

8. Taking measures to attract private investment in the development of science, clinical research, conducting international and multicenter studies at the University. For the development of biomedical science, the potential of researchers will increase. A combination of scientific, educational and clinical activities will be encouraged by medical professionals. The topics and content of biomedical research, including in the framework of the master's program, PhD doctoral studies and post-doctoral studies, will be based on the priorities of the National Health System.

9. Solving the issues of protecting the intellectual property of university scientists with the co-authorship of title documents for the invention of students, undergraduates and doctoral students and the search for technology licensing opportunities, marketing research and the development of business models based on university developments.

Strategic direction 4: improving medical services by a network of university clinics, introducing new methods of diagnosis and treatment.

The priority directions of the university clinics are:

- providing timely and quality medical care;
- ensuring the availability of medical care;
- advanced training of medical personnel;
- introduction of new technologies for diagnostic and therapeutic processes.

The university will continue to strengthen its position as a leading clinical institution in the region.

Effective use of our own clinics will allow us to involve department staff in managing the clinical process, increase the number of clinical department teachers working in the Unified National Health System (hereinafter - the UNHS), increase the effectiveness of social partnerships with the professional medical community, and develop the institute of clinical mentoring.

Qualitative indicators of the University MC work will be a 1.5-fold increase in the number of surgical interventions in cardiac surgery and oncology, the target areas will be organ-preserving types of operations, minimal invasive surgery, and the development of «transparent» surgery.

According to the State Health Development Program on 2020-2025, measures will be taken to improve the effectiveness of management, prevention, diagnosis and treatment of socially significant diseases: oncology, cardiology.

The MC will give due attention to the development of palliative care and nursing care: people in need of such assistance will receive it due to the increase in the geographical and financial accessibility of services.

The procedure for assessing patient satisfaction with the quality of medical care with the involvement of independent experts will be improved, which will improve the quality of the independent examination. The objectivity of monitoring the quality of medical care will be enhanced through automation based on digitalization; An effective system for recording incidents and analyzing them with the adoption of corrective measures will be introduced.

In the activities of FMC, the implementation of the disease management program (hereinafter as the DMP) will continue with the expansion of the population coverage and the list of diseases in the DMP. DMP will allow patients to be involved in disease management through increasing knowledge about their illness and ways to maintain health, timely implementation by the patient of doctor's recommendations, including timely medication, diet control and other patient actions.

To coordinate and methodological support of medical organizations, a regional center for the best PHC practices will be created on the basis of FMC, which will develop and introduce new technologies in the provision of PHC services. The number of attached population per GP doctor by 2023 will be 1,550 people.

Using the scientific and methodological potential of the Family Medicine Center, family and general practitioners will provide services to patients of all ages. To support the work of district medical workers at the outpatient level at FMC, an active longevity school will be created. Based on modern evidence-based practice, a new rehabilitation model with an emphasis on the outpatient level will be introduced.

As part of the promotion of the «Healthy University» project, conditions will be created for students and teachers of the University to form a commitment to a healthy lifestyle: through the availability of a healthy diet and conditions for physical education.

To achieve the highest quality of clinical services, the development of medical tourism, the University plans to modernize and re-equip university clinics in the following areas:

- expansion of the area of FMC;
- allocation at the MC of premises for organizing a hotel for residing nonresident patients undergoing a diagnostic examination and a course of outpatient therapy.

The set high standards for the provision of medical services will be monitored by a quality assurance system.

7. Expected results from the Program implementation.

As a result of the implementation of the Development Program, the university will have new opportunities for the development of a project management system, forecasting and planning, human and financial and economic support, change management focused on increasing competitiveness, strategic planning, optimizing information technology, improving operational efficiency, improving financial efficiency functions.

The main results of the implementation of the Development program:

1) Integration into the international zone of higher education, effective cooperation with leading foreign universities, the development of educational programs for specialties, taking into account international academic standards, the principles of a modular competence approach, and the needs of the labor market.

2) The introduction of disciplines that develop the scientific competencies of students in the educational programs of specialties, improving the effectiveness of the program of visiting professors due to the effectiveness of joint scientific developments.

3) An increase in the share of foreign students studying by the main educational programs of the University. The increase of educational programs in English, trilingual education programs.

4) Improving personnel policy, ensuring academic mobility of teaching staff, advanced training of teachers and staff on the basis of leading foreign universities and clinics. Implementation of a system of internal certification of teachers, development and implementation of a career development model for teaching staff in categories of professional potential;

5) Integration of medical education, science and practical health care. Development of the market for biomedical research, a system for promoting and commercializing the results of scientific research in healthcare.

6) Increase of income volume for financing science from scientific projects carried out within the framework of budget programs, from agreements with business entities in the priority areas of the University development, from the activities of research institutes, centers and international grants.

7) The introduction of the Compulsory Social Health Insurance system (CSHI) will ensure that university clinics are jointly and severally liable for citizens, the state and employers, improve tariff policies, develop the health infrastructure based on public-private partnerships and modern information and communication technologies; - implementation of regional long-term plans for the development of health infrastructure; - development of corporate governance and modern management in the healthcare sector; - integration of all health information systems with the Integration platform; - improvement of material and technical equipment of medical organizations.

Handwritten signatures in blue ink.

Appendix 1
To Development Program of
non-commercial joint-stock company
«West Kazakhstan Marat Ospanov
Medical University»
for years 2019-2023

**Passport of Development Program of the non-commercial joint-stock company
«West Kazakhstan Marat Ospanov Medical University»**

Program Name	Development program of the non-commercial joint-stock company «West Kazakhstan Marat Ospanov Medical University» for 2019 - 2023 (hereinafter - NJSC «WKMOMU»).
Reasons for the development of the Program	1. Message from the Head of State Kassym-Zhomart Tokayev to the people of Kazakhstan dated September 2, 2019; 2. The state program for the development of healthcare of the Republic of Kazakhstan for 2020-2025; 3. The state program for the development of education and science of the Republic of Kazakhstan for 2020-2025; 1. 4. Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 25, 2018 No. 590 «On approval of the structure and rules for developing a program for the development of higher and (or) postgraduate education».
Program Developer	NJSC «WKMOMU»
Goal and objectives of the Program	The goal is to ensure the competitiveness of the medical education system of NJSC «Marat Ospanov WKMU» by introducing advanced educational programs and teaching technologies, performing scientific research at the international level, improving the activities of university clinics. Tasks: 1. The formation of programs and intellectual products that ensure the competitiveness of the university. 2. Strengthening international cooperation with foreign universities and research organizations. 3. The development of human capital, the formation of a qualified staff 4. Strengthening research activities. 5. Improving the activities of university clinics.
Dates and stages of implementation	Years 2019-2023
Sources of financing	Educational grants for students of the NJSC «WKMOMU» Funds of students receiving education on a paid basis. Research grants. Funds from other activities of the NJSC «WKMOMU» agreed with the antimonopoly body in the manner prescribed by law.

Appendix 2
To Development Program of
non-commercial joint-stock company
«West Kazakhstan Marat Ospanov
Medical University»
for years 2019-2023

**Target indicators
of the Development Program of the non-commercial joint-stock company
«West Kazakhstan Marat Ospanov Medical University»**

№ п/ п	Target indicators	un it	In the planning period, years				
			2019	2020	2021	2022	2023
The aim is to ensure the competitiveness of the medical education system of NJSC «WK MOMU» by introducing advanced educational programs and training technologies, performing research at the international level, improving the activities of university clinics.							
Task 1. Formation of educational programs and intellectual products that ensure the competitiveness of the university.							
1	Number of educational programs accredited by international agencies	uni ts	-	-	1	-	1
2	Percentage of graduates who successfully passed an independent examination the first time	%	100,0	100,0	No less 85,0	No less 85,0	No less 85,0
3	Percentage of internship graduates who successfully passed an independent examination the first time	%	98,6	100,0	No less 85,0	No less 85,0	No less 85,0
4	Percentage of foreign students in the total contingent of undergraduate students	%	10,0	11,5	14,0	16,0	18,0
5	Percentage of students studying in English	%	7,3	8,6	11,0	13,0	15,0
6	Percentage of university graduates who studied under the state educational order, were employed or entered the next level of education in the first year after graduation	%	98,7	100,0	No less 95,0	No less 95,0	No less 95,0

7	Percentage of students enrolled in master's and doctoral programs to the total student body	%	1,01	0,7	1,3	1,5	2,0
8	The proportion of nursing teachers (teachers who train specialists in the specialty «Nursing») with nursing education (academic bachelor's and / or master's degrees)	%	-	10,0	20,0	20,0	30,0
9	The proportion of students in trilingual training programs (in Kazakh, English and Russian)	%	-	10,0	15,0	20,0	25,0

Task 2. Strengthening of international cooperation with foreign universities and research organizations.

10	Percentage of the invited foreign professors, teachers and researchers in the total number of academic staff of the university	%	7,4	3,5	5,5	6,0	6,5
11	Percentage of students participating in the academic mobility program	%	5,8	2,3	2,5	3,0	3,5
12	Number of international scientific projects, including with foreign partners	units	2	2	2	2	2
13	Number of scientific grants / programs funded by the Ministry of Education and Science of the Republic of Kazakhstan, Ministry of Health of the Republic of Kazakhstan	units	1	1	3	3	3
14	Number of educational programs developed jointly with partner universities, including with a strategic partner	units	-	1	2	2	2

Task 3. The development of human capital, the formation of a qualified staff

15	The average level of employee satisfaction with work at the university	%	85,0	82,0	82,0	84,0	86,0
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16	The ratio of the average salary of a doctor to the average salary in the regional economy	%	-	1:1,01 1	1:1,00 1	1:0,99 1	1:0,98 1
17	The number of medical workers trained in the courses of advanced training and retraining	units	-	869	875	880	885
18	Staff turnover for all categories of employees in the university	%	16,5	15,6	15,5	15,0	14,5
19	The percentage of teaching staff under the age of 45 who speak English (having valid certificates TOEFL – 525, IELTS – 5.5, NTTs-B1, diploma of obtaining an academic degree at universities of foreign countries)	%	22,3	20,0	30,0	40,0	50,0
20	Percentage of academic staff participating in academic mobility programs	%	4,9	5,6	4,5	5,0	5,5

Task 4: Strengthening research activities.

21	Percentage of income from research in the total budget	%	1,7	1,0	1,7	1,9	2,0
22	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 faculty members	ratio	1 : 10	1 : 5	1 : 4	1 : 3	1 : 2
23	Average Hirsch index of TS based on Web of Science, Scopus	units	0,36	0,38	0,4	0,42	0,45
24	The number of clinical trials implemented at the university	units	1	1	2	3	3
25	The number of biomedical research conducted at the university	units	-	8	9	10	11

Task 5. Improving the activities of university clinics.



McLaird *Chen*

26	Number of attached population per GP	man	1688	1605	1620	1600	1550
27	The number of visits to the districts for the provision of organizational and methodological assistance to primary health care as a part of the MRE groups	absolute number	3	4	15	17	19
28	Coverage of DMP patients, among those on the clinical records of three nosologies (AH, DM, CHF)	%	32,2	61,4	65,0	70,0	75,0
29	Number of confirmed complaints and appeals	units	0	0	No more 5	No more 5	No more 5
30	The share of teaching staff of clinical departments working in the framework of the guaranteed volume of medical care and compulsory health insurance	%	15,0	34,1	35,0	45,0	55,0
31	Patient satisfaction with the quality of care	%	70,3	81,2	85,0	87,0	89,0
Task 6. Promotion of NJSC «WKMOMU» in the international ranking of universities and major medical educational centres							
32	Position in the ranking of the best universities according to QS (by subject)	Position	-	-	-	-	1000+

William AB

RK7

Developed by:

No	Full name	Position	Signature	Date
1.	Kurmangaliev K.B.	Head of Strategic Development Department		09.03.21
2.	Valiakhmetova R.B.	Head of Strategic Development subdepartment		09.03.21

Agreed:

No	Full name	Position	Signature	Date
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