«Agreed»	«Approved»
by the Academic Council of AU	by the Rector of Adam University
Protocol No 2	Assoc.Prof. Sirmbard S.R.
dated « <u>&& » 10 2021</u>	105199A CO
	« <u>22</u> » 10 2021

Mg+ a/1-00

School of Medicine Development Strategy of Adam University for 2020-2025

"Unity. Trust. Creation", approved by the Decree of the Jogorku Kenesh of the Kyr-

svz kasablie from 20.04.3618.39.2377-VI:

School of Medicine Development Strategy of Adam University for 2020-2025

The Strategic Development Plan of the School of Medicine Adam University (hereinafter - SM AU) is developed in accordance with national strategic and regulatory documents, according to national development priorities of the country, national and international priorities in the field of health and higher medical education, based on target educational markets, as well as on the basis of the Development Strategy of the UA, approved by Order № 87a/1-OD. from 17.09.2021.

On May 26-28, 2021 the Independent Accreditation and Rating Agency (IAAR) and Independent Accreditation Agency "Bilim-Standard" conducted the conformity assessment of basic educational program by specialty 560001 "General Medicine" (with 6 years of study) and the experimental curriculum on specialty "General Medicine" (with the standard term of study 5 years) to the standards of international primary program accreditation.

The strategy was amended in accordance with the recommendations of the external expert evaluation and updated regulatory documents.

The regulatory base for the development of a strategic plan

- 1. The Law of KR "On Education" dated 30.04.2003 (with amendments);
- 2. Law No. 6 of KR "On protection of health of citizens in Kyrgyz Republic" dated January 9, 2005;
- 3. Law of KR "On science and on the basis of the state scientific and technical policy" from 16.06.2017 № 103;
- 4. National Development Strategy of the Kyrgyz Republic for 2018-2040, approved by the Decree of the President of the Kyrgyz Republic from 31.20.18 № 221;
- 5. Program of the Government of the Kyrgyz Republic for the 2018-2022. "Unity. Trust. Creation", approved by the Decree of the Jogorku Kenesh of the Kyrgyz Republic from 20.04.2018 № 2377-VI;
- 6. Decree of the President of the Kyrgyz Republic No. 23 of February 8, 2021 "On urgent measures to develop the sphere of health care and improve the quality of life and health of the population in the Kyrgyz Republic";
- 7. The concept of digital transformation "Digital Kyrgyzstan 2019-2023", approved by the decision of the Security Council of the Kyrgyz Republic from $14.12.2018 \, \mathbb{N}_{2} \, 2$;

8. The Program of the Government of the Kyrgyz Republic on protection of public health and development of the health care system for 2019-2030 "Healthy person - prosperous country", approved by the Decree of the Government of the Kyrgyz Republic on December 20, 2018 № 600.

1. Analysis of external and internal factors affecting the development of SM AU

1.1. External factors

- **1.1.1.** The main external determinants of the strategic vectors of SM AU development at the new stage are:
 - a) Formation and development of digital economy;
- b) Globalization of educational space and internationalization of higher education;
- c) Changes of requirements for competencies and skills on national, regional and international labor markets;
- d) Intensification of competition in higher education at national and regional levels;
- e) Trends of development of health care system at national and international levels.
- **1.1.2.** The National Development Strategy of the Kyrgyz Republic for 2018-2040 is aimed on creating an environment for human development, disclosure of the potential of everyone who lives in our country, ensuring their well-being.

In 2040, the health care system is defined as accessible, quality, safe, using innovative approaches, focused on human needs, and the population of Kyrgyzstan has maximally improved health indicators.

The state will guarantee all citizens of the Kyrgyz Republic the provision of basic health care services, including information and communication, preventive, therapeutic and diagnostic services at the primary level of medical and sanitary care, as well as emergency and medical care in cases of emergency. The state plans to ensure significant progress in modernization, optimization and rationalization of the system of specialized inpatient care. A national network of modern hospitals of the future will be formed, provided with modern equipment, professional staff, updated approaches to financing.

The primary objectives of the mid-term phase are:

- Strengthening of primary health care services (Online counseling, telemedicine, etc. at the primary level of medical care will be developed);
 - Strengthening of maternal and child health care;
- Reduction of premature mortality from non-communicable diseases (A system of epidemiological surveillance of non-communicable diseases leading to premature death will be created. Diagnostic and preventive services, aimed at prevention and timely detection of cardiovascular diseases, diabetes, respiratory diseases, mental disorders will be developed in all regions. Organization and provision of mobile/transitory treatment and diagnostic services to the population living in hard-to-reach and remote, high-mountainous regions will become regular;)

- Renovation of the emergency medical care system;

- Creation of hospitals of the future (Hospitals with high financial risk, providing low-quality services, threatening the life and health of the population, will be optimized. Different and new types of inpatient services (nursing care, short-term care, etc.) will be developed in the context of optimization of inpatient care. Implementation of the plan of optimization of specialized inpatient care will be accompanied by introduction of reinvestment mechanisms and revision of mechanisms of financing of inpatient facilities, referral system).
- 1.1.3 Digital transformation will also seriously affect the healthcare sector: the development of a healthcare information system capable of providing unified and centralized data processing, information security, real-time access to information systems using efficient software products and integration with other information systems is envisaged.
- 1.1.4. In accordance with this, medical training models are significantly changing: students must acquire new skills and competencies that will enable them to live fully in the new digital reality and successfully develop their professional careers, contributing to health sector development programs.
- **1.1.5.** Educational programs in medical education must reflect and respond flexibly to changes in society:
- -The university should be considered an essential tool for research and practice;
- Educational and research programs must have a high degree of internationalization, and joint programs must be developed on the basis of strengthening international cooperation;
- The possibilities of digitalization should be used for creating new forms of training qualified medical personnel, creation and development of network university medical consortiums, new types of educational environment, allowing to provide a higher level of accessibility and quality of education in the training of medical personnel.
- 1.1.6. An important trend in the conditions of globalization and internationalization of modern higher education is increased competition in the market of higher medical education. The growth of competition is observed both at the national and international level.
- 1.1.7. The total number of medical personnel increased from 13938 to 14,207 from 2013 to 2020. At the same time, the availability of medical personnel varies between 22-23 per 10,000 populations and tends to decrease. The percentage of nursing staff in primary health care is 96.5%.

- 1.1.8. At the present time there are 23 institutions of higher education that prepare specialists in medical fields in the Kyrgyz Republic. Six of them are governmental and 17 are non-governmental. The total contingent is about 32000 students, of which 77% are foreign citizens, including citizens:
- Republic of India 14456,
- Republic of Kazakhstan 571,
- Russian Federation 668,
- Republic of Tajikistan 357,
- Republic of Uzbekistan 5174,
- Islamic Republic of Pakistan 9,725,
- citizens of other countries 835.
- 1.1.9. Over the past few years, universities in Kazakhstan and Uzbekistan have also been actively promoting exports of educational services in Central Asia, which could further increase competition in this segment of educational services.
- **1.1.10.** An important direction for ensuring sustainable development in various market segments for SM AU as well as for UA in general should be:
- Continuous investment in the development of the reputation and brand of SM AU;
- Diversification of educational products of medical education;
- Diversification of educational markets;
- development of cooperation for horizontal and vertical integration into network communities/consortia of educational service providers of various types (university-university, university-research organization, university-organization of secondary general or vocational education, university-organization of additional education, university-clinic, etc.), including active interaction based on digital interaction and virtual mobility.

1.2. Internal factors

- **1.2.1.** SM is a division of Adam University, one of the first and fastest-growing private universities in Kyrgyzstan.
- **1.2.2.** The university founded a new type of education in the Kyrgyz Republic based on the introduction of advanced educational technologies and broad international cooperation.
- 1.2.4. Significant potential of the university is developed in a series of important areas, including training on the basis of credit technology, the use of competence-based approach to the formation of educational programs, creation and development of quality assurance systems, introduction of procedures of independent accreditation in the Kyrgyz Republic, issuing the European Diploma Supplement, implementation of pilot PhD programs in the Kyrgyz Republic.

Since 2014, the University actively monitors and studies the latest eLearning educational technologies and is engaged in the transition to the large-scale use of information technology in the educational process, transforming a significant part of the educational and organizational activities in the digital format. The existing organizational structure of AU and SM AU as a whole allows to provide the development and implementation of digital innovations:

- The Educational Department and the IT Department keep the faculty and staff informed about new technologies and educational approaches, provide group training and individual counseling;

- resource support for the development of e-learning and blended learning programs and services is carried out taking into account the specific requirements that go beyond traditional training (purchase of equipment, development and implementation of software, training, etc.)

- The number of courses delivered in electronic and mixed formats with MOODLE support is approaching 100%. Content, assessment and feedback tools are constantly being updated and improved. Electronic tools WebEx, ZOOM are used for active work with students. A laboratory for creating video courses has been created. Since 2014, continuous professional development of the staff through a series of trainings, individual consultations with the involvement of foreign experts is carried out.

The university is one of the co-founders of the Kyrgyz Association for Distance Education (KADO), initiator of a number of conferences, seminars and roundtables aimed at the development of digital technologies in higher education.

The University in co-authorship with leading European universities has developed a teaching guide "E-learning. Guidance for use and implementation in universities", which was recommended by the Ministry of Education and Science of the Kyrgyz Republic for use by universities of the Kyrgyz Republic.

1.2.5. The most important competitive advantage of the University, which can be actively used by SM AU, is active cooperation with external partners.

The University has extensive partnerships with government agencies, employers, public organizations, as well as universities in Europe, Asia and the United States. Cooperation agreements have been signed with 34 foreign universities. Most of these universities have considerable experience in realization of medical education programs.

Institutional methodology for development and realization of double diploma programs (by the example of cooperation with Southwestern University Neofit-Rylski (Blagoevgrad, Bulgaria) and Baltic International Academy (Riga, Latvia) was elaborated.

During the period of the university more than 25 international projects have been implemented, which have had a significant impact on the sustainable development of higher education system (especially business and economic education) in the Kyrgyz Republic. The tools developed in these projects may be actively used for implementation of medical education programs at SM AU.

The university is an active participant in national and international associations and networks. The University is one of the first universities to sign the Great Charter of Universities. Today the University is a member of the International Association of Universities IUA, the Bologna Club of Russia and others, Asia Pacific Institute for Events Management, Association of Universities of the Kyrgyz Republic, the Kyrgyz Association for Distance Education (KADO), medical education programs are registered in the WHO.

SM AU actively cooperates with public and private clinics to implement the program (Tokmok General Medical Practice Center, OSO Cardiology Center, Sun-Light Medical Center and others).

1.2.6. At the same time, there are a number of serious constraints affecting the development of SM AU.

The presence of universities in the Kyrgyz Republic has already gained a position in the implementation of medical education programs in the national and international/regional markets, on the one hand, the presence of a number of universities in the Kyrgyz Republic and other Central Asian countries, considering medical education exclusively as a business project, reducing the value and credibility of the national diploma complicates the achievement of market niche for the GSOM UA.

There is a decrease in the level of school education, the level of knowledge in science disciplines, including chemistry and biology is seriously falling, which reduces the quality of graduates of the university.

The SM of AU is in the stage of development of new programs, which requires the development of its organizational structure and management system.

One of the most serious risks is the potential shortage of qualified personnel for SM AU. That is why it is necessary to work out a complex program of personnel potential development, including competitive salary, qualification improvement, research activity support and social support.

Attracting new faculty and staff for implementation of new programs requires additional efforts for training and professional development, especially in terms of using digital tools.

The promotion of the created educational programs of medical education requires significant infrastructural development: formation of new laboratories, clinical facilities, etc.

By 2025 SM AU should complete the formation of basic material and technical base, allowing to achieve education and research, recognized not only at the national, but also at the regional and international levels.

2. SM AU mission

Protection of public health and provision of adequate quality of medical care by training highly qualified specialists:

- complying with national and international standards in the field of medical education, capable of withstanding global challenges in health care;
- striving for constant personal improvement and professional advancement on the basis of scientific and innovative technologies;
- guided by high ethical standards in the performance of their professional duties;
- competitive and demanded on national and foreign labor markets.

3. Values and Benchmarks of SM AU

3.1. SM AU shares the corporate values of AdamUniversity in its operations.

- trust and respect;

- academic freedom and integrity;
- quality and the pursuit of excellence;
- partnership;
- innovativeness,

3.2. Also SM AU is focused on:

- care about public health, active participation in addressing issues of public health, disease prevention and environmental protection;
- formation, strengthening and development of traditions of GSOM UA in medicine, education and science;
- forming a system of corporate responsibility (teachers and students are one). Rating the results of each team member depending on the effectiveness and efficiency of the work;
- encouragement of social and creative activity of students, education of students as competitive professionals, as well as shaping of a personality with an active civil position, an attitude to healthy and safe behavior, and tolerant consciousness;
- creation of conditions for increasing the number of graduates of SM AU, who stay in the health care system.
- respect and observance of the rights of GSOM UA employees, creation of conditions for their professional and creative growth, material well-being, taking care of the employees who have finished their active labor activity;
- effective cooperation of the university with its graduates, improvement of their professionalism and training in the framework of further development of continuous medical education.

4. YA Principles of operation of the SM AU

- **4.1.** "SM is Territory of Quality" continuous improvement of the quality of SM activities to maintain competitiveness at the national and international levels.
- **4.2.** "Planning-action-evaluation-adjustment" planning of SM activity with determination of external and internal threat and risk that may lead to deviation from the planned results, as well as timely implementation of measures to minimize negative consequences and maximize the use of emerging opportunities.
- **4.3.** Flexibility the application of science-based, continuous educational innovation to meet the global challenges of health care.
- **4.4.** Partnership the involvement of stakeholders in the educational process, as well as an adequate response to the needs of consumers of educational services and the needs of employers for qualified personnel.
- **4.5.** Sustainability creating the conditions to provide equitable quality higher medical education and promoting the principles of sustainability at all levels of the educational process.

5. Purpose of the SM

The purpose of SM is the preparation of highly professional and competitive specialists-physicians:

- possessing universal and professional competencies that contribute to their social mobility and sustainability in the labor market;

- prepared for postgraduate training, with subsequent implementation of professional medical activity in their chosen field;

- oriented to the needs of the individual, society, and state as much as possible.

6. Strategic objectives for the period until 2025

- 6.1. Development of educational programs of medical education General Medicine (with 5 and 6 years of training) on the basis of innovative approaches in order to prepare competent competitive personnel, able to effectively solve problems in the field of health care at the national and international levels, including:
- monitoring labor market requirements, including national, regional and international aspects to identify the most in-demand skills and competencies that ensure the competitiveness of SM AU graduates at local and global levels;
- organization of advertising/recruiting activities;
- improvement of the content of medical education program modules with a focus on global, international and cross-cultural learning outcomes;
- implementation of medical education programs with active use of digital tools in synchronous and asynchronous format, digital simulators;
- improving the evaluation system using digital tools to ensure fair, reliable and valid evaluation results;
- promoting the creation of online communities for the development of collaborative learning, contact with outside experts, participation in scientific research, and connection with professional communities.
- development of support and counseling systems for students, including through online services and social networks;
- opening educational programs (additional education) to improve the quality of training of applicants.
- 6.2. Internationalization of medical education programs for increasing attractiveness for students from Kyrgyzstan and different countries of the world, including:
- study of requirements to competencies and skills of graduates in accordance with qualification systems of target educational markets;
- active involvement of foreign specialists from partner universities for cooperation in different formats (courses, guest lectures, master classes, scientific guidance, etc.) with active use of digital tools;

- involvement of foreign experts for external evaluation of both individual elements and educational programs as a whole;

- development of academic mobility of students and teachers (including edu-

cational, scientific purposes, professional development, etc.);

- optimization of international students' contingent;

- diversification of the countries of international students' recruitment;

- creation of a basis for the development of double degree programs.

6.3. Development of partnerships

The emphasis in the development of partnerships will be:

- development of connections and motivation system for mutually beneficial cooperation with national and international stakeholders (including the Ministry of Education and Science of the Kyrgyz Republic, the Ministry of Health of the Kyrgyz Republic, public organizations, medical organizations of various forms of ownership);
- development of interaction with universities, which already have partnership agreements with AU on medical education;
- support of already established activities, motivation of partners for further cooperation (including state bodies, clinics, social organizations, higher education institutions, donor organizations);
- searching for and establishing contacts both at the national and international levels;
- development of relations with schools, NGOs and colleges in order to attract talented youth for training in medical education programs.

- establishment of the Association of SM AU Alumni.

6.4. Scientific research activities

- determination of main directions of SM AU research activities
- development of partnerships, networking and internationalization of research;
 - establishment of publication activity;

- improvement of innovative and cross-disciplinary activities,

- creation of laboratory and clinical bases for scientific research of SM AU faculty and students.

Key research priorities: biosafety and biotesting of the environment, the relationship of the environment and health in accordance with the National Development Strategy of the Kyrgyz Republic until 2040.

6.5. Staff and student development

Development of staff potential is a prerequisite for stable and effective functioning of SM AU.

- development of effective personnel policy and the formation of a stable staff composition of new structural units of the University (management and research and teaching staff);
- attracting the most qualified managers, professors and teachers on the basis of individual contracts by creating attractive financial conditions and improving the system of staff motivation;
- improving the professional qualification requirements for the teaching staff (including foreign language requirements), administrative and managerial and educational support staff;
 - continuous professional development based on individual plans;
- improving the system of support for career and professional development, through master's programs, PhD programs, internships;
- attracting young staff and the creation and development of a school of pedagogical excellence in connection with the increasing number of young teachers;
- expansion of involving practitioners in educational and scientific activities using different formats (including on-line format);
 - support of research activity,
- involvement of foreign teachers using different formats (including online format);
 - improvement of social support for employees and students;
- formalization of programs of adaptation to the new academic environment for first-year students (including additional sections for international students - adaptation to the language, cultural, legal environment);
 - creating support for gifted students;
 - counseling for career development, training, and employment;
- organization of counseling for graduates on passing professional examinations.

6.6. Development of the management system

The evolution of SM AU as a structural unit implies the formation of the management structure, the formation of new subdivisions and job positions in accordance with the emergence/expansion of functions.

Accordingly, in the planned period the following will be carried out:

- improvement of quality management system to ensure the competitive advantage of SM at the national and international levels;
- conducting regular internal audits to confirm that the results of SM activities meet the established requirements of the quality management system;
- certification of quality management system according to ISO 9001:2015 to ensure work according to the principle "SM territory of quality";
- continuous adaptation of the organizational structure in accordance with the step-by-step expanding functions and priorities of activities;
- specification of powers and responsibilities, optimization of job descriptions of the personnel;
 - improvement of electronic management system and documentation;
 - improvement of monitoring system for all processes of SM AU;

- participation in national and international institutional accreditation of AU;

- primary program national and international accreditation of medical education programs.

6.7. Development of the material base

In order to support and implement educational programs based on innovative approaches, given the fundamentally new educational directions, the formation of a specialized material-technical base of SM AU is required. It will be carried out in

several stages.

1 stage (base) - equipping of modern campus with 7 computer classes with access to Internet, anatomical room with phantom and simulation technology, interactive anatomical table "Pirogov", physical, chemical, microbiological, biochemical, biochemical, Stages: physical, chemical, microbiological, biochemical, histological, physiological, cytological, medical, genetic laboratories, lecture-rooms for 750 seats, lecture-rooms for practical classes with corresponding equipment and visual aids - 2021. The 2nd stage (intermediate) - the development of Simulation Center and the formation of minimum own clinical base - 2022;

3 stage - development and realization of the project of full-scale university campus, including educational building for 5000 students, dormitory, university clinic, sport

campus - 2025.

7. The Risks

7.1. Social and political risks: risks associated with possible changes in the structure of public administration, state priorities and, as a consequence, changes in priorities in education, health and science.

Degree of influence - low, probability of threats - low.

Measures - consideration of risks in the formation of operational plans.

7.2. Organizational and legal risks: risks associated with changes in the regulatory framework, licensing and other requirements.

The degree of impact - high, the probability of threats - medium.

Measures - constant analysis of changes in the regulatory framework, active participation in the development of regulatory documents, active focus on international/regional indicators.

7.3. Economic and financial risks: deterioration of the economic situation in

the country, reduced solvency of students.

The degree of influence - high, the probability of threats - high.

Measures - diversification of funding sources, diversification of educational services and student contingent.

7.4. Sociocultural risks: decrease in the level of students' training, insufficient language, digital and other instrumental skills of applicants, intercultural risks among different groups of foreign students.

The degree of influence - high, the probability of threats - high.

Measures - intensification of work with secondary education organizations, identifying the most prepared students, increasing the average ORT score, organizing additional classes to improve instrumental skills.

7.5. Organizational and managerial risks: errors in marketing, personnel policy of the university, insufficient development of the material and technical base and digital resources.

The degree of influence - medium, the probability of threats - medium.

Measures - strengthening of analytical and prognostic component in planning, strengthening of monitoring and periodic external evaluation for correction of activities.