



EDUCATION PROGRAM

Educational program code: 7M10105
Name of the educational program: Medical and preventive care
Level of the educational program: Magistracy (specialized track)

Shymkent, 2025 y.

The educational program 7M10101 «Medicine» was developed by the members of the Academic Committee of educational programs at the master's and doctoral levels

Chairman of the AC OP for Masters and Doctoral levels

K.K.Orynbasarova

Protocol № 8 25 03 2025y.

Agreed with the employer:

Deputy Head of the Department of Quality Control and Safety of Goods and Services of the Turkestan Region, Ph.D.



A.R. Akhmetov

RSE at the EMO «National Center of Expertise» for the Turkestan region of the Committee for Sanitary and Epidemiological Control of the Ministry of Health of the Republic of Kazakhstan, Candidate of Medical Sciences



A.U. Abdrazakov

A. Director of the Branch of the RSE under the REM "National Expertise Center" of the Committee for Sanitary and Epidemiological Control of the Ministry of Health of the Republic of Kazakhstan, "Disinfection Center of Shymkent City"



S.M. Saparova

Approved by the Methodological Council

Vice-Rector for Academic Affairs

M.Y. Anartaeva

Protocol № 9 of 02 05 2025y.

Approved by the Academic Council

Protocol № 13 of 02 05 2025y.





Passport of the educational program

1. Mission of the educational program: Training of competitive, highly qualified personnel for healthcare organizations capable of effectively implementing the sphere of ensuring the sanitary and epidemiological well-being of the population.

2. The purpose of the educational program: Training of highly qualified specialists capable of comprehensively solving problems in the field of epidemiology of infectious and non-infectious diseases, as well as ensuring the sanitary and epidemiological well-being of the population.

3. Rationale for the educational program: Demand in the labor market: the educational program is focused on healthcare professionals who are able to conduct scientific research and implement organizational and management technologies to solve complex problems of protecting public health and developing an effective healthcare system in Kazakhstan.

4. Professional standard on the basis of which the educational program has been developed:

Regulatory documents for the development of an educational program

- Order of the Minister of Science and Higher Education of the Republic of Kazakhstan «On Approval of State Compulsory Standards of Higher and Postgraduate Education» dated July 20, 2022 No. 2.
- Order of the Minister of Health of the Republic of Kazakhstan «On Approval of State Compulsory Standards for the Levels of Education in the Field of Healthcare» dated July 4, 2022 No. KR DSM-63.
- Order of the Minister of Education and Science of the Republic of Kazakhstan «On Approval of the Rules for the Organization of the Educational Process on Credit Technology of Training in Higher and (or) Postgraduate Education Organizations» dated April 20, 2011 No. 152.
- Law of the Republic of Kazakhstan «On Education» dated July 27, 2007 No. 319-III (as amended on 04.07.2022)
- Order of the Minister of Education and Science of the Republic of Kazakhstan «On Approval of the Model Rules for the Activities of Higher and Postgraduate Education Organizations» dated October 30, 2018 No. 595 (as amended on 29.12.2021)
- «Regulations on the Procedure and Procedures for the Development of Educational Programs» of JSC «SKMA» dated 29.04.2024.
- Internal regulatory documents of JSC «SKMA»



5. The field of professional activity: Health care organizers; heads of state and non-state medical and non-medical institutions. Health care organizers; heads of state and non-state medical and non-medical institutions.

6. The object of professional activity: Healthcare management organizations, healthcare and social security organizations.

Types of professional activity:

- organizational and managerial;
- scientific and research activities.

General information

№	Characteristics of the EP	Data
1	Registration Number	7M10100129
2	Code and classification of the field of education	7M10 Health care
3	Code and classification of the field of study	7M101 Health care
4	Group of Educational Programs	M145 Medical and preventive care
5	Code, name of the educational program	7M10105 Medical and preventive care
6	Type of EP	Current EP
7	ISCED level	
8	NQF level	7
9	IQF Level	7
10	Distinctive features of the EP	No
	Partner University (JEP)	-
	Partner University (DDEP)	-
11	List of competencies	Key competencies of the graduate of the program:



		<p>KC1 Approaches and methods in the field of sanitary and epidemiological provision of public health.</p> <p>KC2 Population health and its physical, radiological, chemical and biological-environmental determinants.</p> <p>KC3 Health promotion: health education, health protection and disease prevention.</p> <p>KC4 Positions on professional Ethics.</p>
12	Learning Outcomes	<p>LO1 Able to assess and analyze the epidemiological situation and the factors that determine it, based on accounting and reporting documents provided by state and industry statistics.</p> <p>LO2 Using digital technologies and artificial intelligence, it is able to conduct a retrospective and operational epidemiological analysis of the morbidity of the population and formulate an epidemiological diagnosis.</p> <p>LO3 Conducts scientific and practical work on the assessment of the sanitary and epidemiological state of surveillance facilities, the effectiveness of anti-epidemic measures, the organization and conduct of state sanitary and epidemiological surveillance.</p> <p>LO4 When solving professional tasks, it interacts with state authorities, medical and preventive institutions and other institutions that deal with issues of sanitary and epidemiological welfare and public health protection.</p> <p>LO5 Demonstrates the knowledge and skills of an applied nature in research, professional activities in the field of epidemiology and sanitary and epidemiological welfare of the population.</p> <p>LO6 Able to carry out management activities in the interests of sanitary and epidemiological welfare of the population. Effectively interacts with the public and colleagues using professional communications and observing the principles of</p>



		<p>process, the environment and living conditions of the population.</p> <p>LO8 Demonstrates the skills of epidemiological examination of the focus, determine its boundaries, identify the source of the pathogen of infection, transmission routes and make a plan of measures aimed at localization and elimination of the epidemic focus.</p> <p>LO9 Plans and conducts preventive and anti-epidemic measures for various groups of infectious and non-communicable diseases to prevent their epidemic and pandemic spread using communications and digital technologies.</p>
13	Form of study	In-person
14	Language of instruction	Kazakh, Russian
15	Amount of loans	60
16	Degree Awarded	Master of public health in the educational program 7M10105 «Medical and preventive care»
17	Duration of training	1 year
18	Availability of an appendix to the license for the direction of personnel training	KZ36LAA00011387 (018)
19	Availability of EP accreditation	Yes
	Name of accreditation body	Independent Agency for Accreditation and Rating (IAAR)
	Accreditation Certificate No., Accreditation Validity Period	№AB 4365, 10.06.2022y. – 09.06.2027y.
20	Information about disciplines	Annex 1.2



Annex 1

**Matrix of correlation of learning outcomes in the educational program as a whole
with the competencies being formed**

	LO1	LO2	LO3	LO4	LO5	LO6	LO7
KC1							
KC2							
KC3							
KC4							

Annex 1.2

Competency attainability/learning outcomes matrix

№	Name of the discipline	A brief description of the discipline	Cycle (BD, PD)	Component (UC, OC)	Number of credits	Generated LO (Codes)
The cycle of basic disciplines					10	
Mandatory / University component					6	
1	Management in Healthcare (Management, psychology of management)	Purpose of discipline: The purpose of the discipline is to develop the knowledge and skills necessary for effective management of healthcare organizations, with an emphasis on the psychological aspects of interaction between managers and subordinates, as well as the influence of psychology on managerial decision-making and organizational culture. Discipline content: Management systems, planning, SWOT analysis and forecasting. Management processes: setting goals and assessing the situation, making managerial decisions. The mechanism of management in healthcare. Digitalization of healthcare. Fundamentals of psychology in the context of management. Psychological aspects of leadership and motivation.	BD	UC	3	LO2 LO3 LO5

2	Foreign language (professional)	Purpose of discipline: The purpose of the discipline is to develop professional and communicative competence that ensures the ability to effectively use a foreign language in research, educational, clinical, pharmaceutical and international activities, as well as for further professional growth and participation in the global pharmaceutical community. Formation of the ability to analyze and interpret specialized texts, conduct business correspondence and participate in professional discussions.	BD	UC	3	LO6
	Optional component				4	
3	Ethics and methodology of scientific research	Bioethical norms. Ethical aspects of medical services. Conducting scientific research in the field of epidemiology and sanitary and epidemiological welfare, integrating research results into practice. Research problems related to the theoretical foundations and practical applications of bioethics in healthcare. The methodology of scientific research. Methods, forms, structural components and the problem of scientific research novelty. Using digital technologies and artificial intelligence, to conduct a retrospective and operational epidemiological analysis of the morbidity of the population and formulate an epidemiological diagnosis.	BD	OC	4	LO2 LO3



4	Disinfection of the population	Place of disinfection in the system of anti-epidemic measures. Types of disinfection: preventive, focal (current, final). Disinfection method. The main groups of chemicals used as disinfectants. Organization of disinfection and sterilization. Disinfection provision of the population as a subsystem in the system of anti-epidemic services. Organizational structure. Organization of disinfection measures in epidemic centers at home, in children's and adolescent institutions. Organization of disinfection and sterilization in a medical and preventive institution.	BD	OC	4	LO7 LO8
Cycle of profile disciplines					25	
University component					5	
5	Sanitary and epidemiological control of infectious and parasitic diseases	Epidemiological features of the main infectious diseases of humans. Current sanitary and epidemiological control over subordinate facilities for the prevention of infectious diseases and especially dangerous infections. Statistical methods of analysis. Laboratory diagnostics. Examination of the epidemiological focus. Sanitary and parasitological studies of environmental objects soil for identification of causative agents of parasitic diseases. Organization and implementation of preventive and anti-epidemic measures in the centers of infectious and parasitic diseases. Epidemiological analysis of the infectious and parasitological situation in the Republic of Kazakhstan.	PD	UC	3	LO1 LO2 LO7 LO8 LO9

6	Epidemiological surveillance of non-communicable diseases	Modern problems of epidemiology, and their importance in protecting the health of the population. Specifics of non-infectious pathology. Conducting state sanitary surveillance to prevent non-communicable diseases of the population, with the influence of adverse factors. Organization and carrying out of sanitary-hygienic, sanitary-technical, sanitary-anti-epidemic and medical-preventive measures in order to preserve the health of the population and improve living, working and recreation conditions. Epidemiological, etiological features, risk assessment and prevention of some important chronic diseases: cardiovascular, oncological and chronic obstructive pulmonary diseases, etc.	PD	UC	3	LO1 LO7 LO8 LO9
7	Industrial practice	Consolidation of theoretical knowledge acquired during the training process, acquisition of practical skills, competencies and experience in professional activities in public health, as well as development of best practices.	PD	UC	10	LO3 LO8
Optional component					10	
8	Environmental epidemiology	Current problems of medical and environmental safety of the population. International and national programs in the field of environmental epidemiology. Principles and methods of ecological and epidemiological research. Comprehensive study of the "environment – human health" system. Biomonitoring. The concepts of health risk and environmental risk. Development of measures to	PD	OC	4	LO1 LO2 LO5 LO9

		overcome environmental situations associated with public health risks. Environmental health indicators. Conducting a retrospective and operational epidemiological analysis of the morbidity of the population using digital technologies and formulate an epidemiological diagnosis.				
9	Epidemiology of emergency situations	Classification of extreme situations. Immediate and remote sanitary-hygienic and epidemiological consequences of disasters. Medical and tactical characteristics of epidemic foci of infectious diseases in emergency areas. Four main stages in the activity of the sanitary and epidemiological service in the organization of anti-epidemic measures in the event of an extreme situation. Features of organizing and conducting anti-epidemic measures in areas of natural disasters, technological disasters, social upheavals, radiation and biological damage, and others. Tasks and organization of sanitary and epidemiological intelligence. Prevention of the introduction and removal of infections in the zone of extreme situations.	PD	OC	4	LO1 LO4 LO8 LO9
10	Immunoprophylaxis	Organization of immunoprophylaxis. Calendar of preventive vaccinations, its justification. Registration and selection of contingents to be vaccinated. Procedure for planning vaccinations. Conditions of transportation and storage of bacterial preparations - "cold chain". Calculation of the grafting material. The conditions of immunization. Decontamination of	PD	OC	5	LO2 LO9



		tools. Accounting and reporting documentation. Post-vaccination complications and the procedure for their investigation and prevention. The role and tasks of the advisory offices of immunoprophylaxis and compliance with the principles of inclusion. Epidemiological surveillance of the state of immunoprophylaxis. Conducting a retrospective and operational epidemiological analysis of immunoprophylaxis using digital technologies				
11	IR- management in the state sanitary and epidemiological service	Substantiation and formation of the management goal on the issues of sanitary and epidemiological well-being of the population, prevention of infectious and non-infectious diseases. Management decisions when planning and organizing the implementation of measures that ensure the sanitary and epidemiological well-being of the population. Organization and evaluation of the effectiveness of preventive measures to ensure the sanitary and epidemiological well-being of the population. Evaluation of the effectiveness of the epidemiologist using indicators of performance, efficiency and operational activity. Working in healthcare information systems	PD	OC	5	LO2 LO6 LO9
	Experimental research work				13	
12	Experimental research work of a student, including an internship and	It is based on modern achievements of science, technology and production and contains specific practical recommendations and independent solutions to management problems. Performed using advanced			13	LO1 LO2 LO3 LO4 LO5 LO6 LO7 LO8



	the implementation of a master's project	information technologies; Contains experimental and research (methodological, practical) sections.				LO9
		Final examination			12	
13	Design and defense of a master's project	Assessment of learning outcomes and key competencies achieved upon completion of the master's degree program.			12	LO1 LO2 LO3 LO4 LO5 LO6 LO7 LO8 LO9
		TOTAL			60	