

JSC «SOUTH KAZAKHSTAN MEDICAL ACADEMY»

«APPROVED» by
Rector of JSC «SKMA»
Professor Rysbekov M.

« 31 »

2024

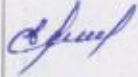

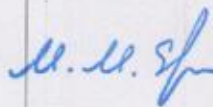


SOUTH KAZAKHSTAN
MEDICAL
ACADEMY


EDUCATIONAL PROGRAM OF RESIDENCY
7R01130
«PEDIATRICS»

Shymkent, 2024 y.

The educational residency program «Pediatrics» was developed on the basis of the order of the Minister of Health of the Republic of Kazakhstan dated January 25, 2024 No. 46 «On approval of professional standards in the field of healthcare».

Position	Full name	Signature
Developed by		
PTS of the Department of Pediatrics-2		
Head of the Department , PhD	G.E. Bektenova	
C.M.S , assistant professor	Zh.K. Zhumabekov	
Assistant	K.R. Karsybayeva	
Practical healthcare representative		
Head of the Regional Children's Hospital	A.M. Dosanova	
Resident of RE «Pediatrics»	A.Zh.Serikbay	
Minutes of the department meeting № <u>6</u> from « <u>25</u> » « <u>01</u> » 202 <u>4</u> y.		
Discussed at the meeting of the Committee of Educational Programs of the Residency in Pediatric profiles		
Chairman of the Educational Programs Committee		
№ <u>5</u> from « <u>26</u> » « <u>01</u> » 202 <u>4</u> y.	G.E. Bektenova	
Approved by the Clinical Council.		
Chairman of the Clinical Council		
№ <u>8</u> from « <u>29</u> » « <u>01</u> » 202 <u>4</u> y.	Zh.A. Kauzybay	
Approved by the First Vice-Rector		
First Vice-Rector		
№ ___ from « <u>30</u> » « <u>01</u> » 202 <u>4</u> y.	M.M. Esirkepov	
Approved by the Academic Council		
№ <u>14</u> from « <u>31</u> » « <u>01</u> » 202 <u>4</u> y.		



ONTÜSTIK QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Cathedra of Pediatrics-2	044-68/9 3 page. from 11
Educational program 7R01130 «Pediatrics»	

Passport of the educational program

1. The mission of the educational program:

To be recognized as a leader in the field of training highly specialized, competitive pediatricians.

2. The purpose of the educational program:

Training of a qualified pediatrician with a system of universal, professional competencies, capable and ready for independent professional activity in primary health care; specialized, including high-tech, medical care; emergency, including specialized, medical care; palliative care.

3. Justification of the OP:

Pediatrics is a branch of medicine dealing with childhood diseases and the care of healthy and sick children of any age under the age of eighteen. The term "pediatrics" has Greek roots: pais (paidos) - child and iatreia - treatment. Pediatrics is an independent field of medical science that studies the patterns of child development, causes, pathogenesis, clinical manifestations, treatment and prevention of childhood diseases.

The protection of children's health is one of the most urgent and most significant problems of public health, the state and society. This is determined by the fact that the health of the child population is not only an integral indicator of the quality of children's health, but also forms the fundamental basis for the formation of the health potential of adult members of society. First of all, maintaining the level of children's health at the proper level is one of the key factors and conditions for the successful economic development of the state, to preserve the stability and social security of society.

Healthy children are the key to the prosperity of the state. Accordingly, the issues of preserving and strengthening children's health, reducing morbidity, infant and child mortality, and disability should be the main tasks of modern medicine.

The main task of pediatrics is to preserve or return (in case of illness) the child's state of health, allowing him to fully realize his innate life potential. The need for pediatricians in the Republic of Kazakhstan at all levels of medical care is very high. According to the Ministry of Health, as of January 1, 2023, the need for pediatricians amounted to 209 full-time units.


4. The educational program is developed on the basis of:

- Order of the Minister of Health of the Republic of Kazakhstan dated 07.04.2022 No. KR DSM-63 "On approval of state mandatory standards for levels of education in the field of healthcare";
- Professional standard "Pediatrics" (Order of the Minister of Health of the Republic of Kazakhstan dated January 25, 2024 No. 46 "On approval of professional standards in the field of healthcare".
- On Amendments and additions to the Order of the Minister of Health of the Republic of Kazakhstan "On approval of the list of medical specialties of residency programs" dated May 25, 2021 No. KR DSM - 43 and "On approval of standard training programs in medical and pharmaceutical specialties" dated January 9, 2023 No. 4. (Order of the Minister of Health of the Republic of Kazakhstan dated 10 November 2023, No. 164).

The need of medical organizations for pediatricians is the justification for the discovery and the need to train pediatricians, primarily at the regional level, taking into account the main strategies and programs for the development of the health system at the international, national and regional levels in order to increase the level of medical care for children.

5. The field of professional activity. Healthcare

6. Objects of professional activity. Medical organizations providing inpatient and outpatient care, healthcare systems of the Republic of Kazakhstan

ОНТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Cathedra of Pediatrics-2		044-68/9
Educational program 7R01130 «Pediatrics»		4 page. from 11

General information

1	Registration number	7R09100113
2	The code and classification of the field of education	7R01 Healthcare (medicine)
3	The code and classification of training areas	7R011 Healthcare
4	Group of educational programs	R030 Pediatrics
5	Code, name of the educational program	7R01130 "Pediatrics" (residency)
6	Type Op	Updated educational program
7	ISCED level	7
8	The level of the NRK	7
9	ORC Level	7
10	Distinctive features of the OP	no
	Partner University (SOP)	
	Partner University (SOP)	
11	List of competencies	<p>CC 1 is able to comply with the principles of management in the field of child health protection in medical organizations and their structural divisions.</p> <p>CC2 is able to carry out effective communication with patients and their relatives, involving them in discussion and participation in the process of diagnostic and therapeutic and preventive measures.</p> <p>CC3 is able to carry out dynamic monitoring of healthy and sick children (newborns) in pediatric preventive institutions.</p> <p>CC4 is able to conduct a clinical examination of an infectious, non-infectious patient and make a clinical diagnosis in accordance with modern clinical protocols.</p> <p>CC5 is able to assess the potential risks of therapy in pediatrics, prescribe treatment according to evidence-based practice and determine its effectiveness.</p> <p>CC6 is able to organize and carry out a set of early rehabilitation measures for major childhood diseases.</p>
12	Learning outcomes:	<p>LO1 Able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all levels of care for patients with diseases of the nervous system.</p>

		<p>LO2 Able to effectively interact with the neurological patient, his environment, and healthcare professionals in order to achieve the best results for the patient</p> <p>LO3 Able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical neurological care.</p> <p>LO4 Able to act within the legal and organizational framework of the health system of the Republic of Kazakhstan with a degree in Neuropathology, including children, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the nation's health promotion policy</p> <p>LO5 Able to formulate adequate research questions, critically evaluate professional literature, effectively use international databases in their daily activities, participate in the work of the research team</p> <p>LO6 Able to study independently and train other members of the professional team, to actively participate in discussions, conferences and other forms of continuous professional development in the field of neurology.</p>
13	The form of study	is full-time
14	The language of instruction	<i>Kazakh and Russian</i>
15	Volume of loans	140
16	The duration of the training:	2 year
17	Degree awarded, qualification	Doctor-pediatrician
18	Availability of an appendix to the license for the direction of training	KZ 22BFA00167288
19	Availability of OP accreditation	Have
	Name of the accreditation body	<i>IAAR</i>
	The validity period of the accreditation	№ KZ73LAA00011788. 27.05.2021r.-26.05.2026r.
20	Information about the disciplines	Application 1.2

Application 1.1

The matrix of correlation of learning outcomes according to the educational program as a whole with the competencies being formed

	LO1	LO2	LO3	LO4	LO5	LO6
KK1	+	+	+			
KK2		+		+		
KK3			+		+	
KK4				+		
KK5					+	
KK6						+

Application 1.2

Matrix of achievability of competencies/learning outcomes

№	Name of the discipline	A brief description of the discipline	Cycle	Component	Number of credits	Formed LO
1	Children's diseases in the hospital.	Diseases of young and older children: diagnosis, differential diagnosis, treatment, prevention of typical and rare, difficult-to-diagnose diseases by sections, including all sections issues of oncological diseases, evidence-based medicine. The doctor's tactics in case of emergency conditions at the prehospital stage is diagnosis, prevention of complications of the underlying disease. Clinical protocols of the Ministry of Health of the Republic of Kazakhstan on nosology.	SD	RC	70	LO1 LO2 LO3
2	Childhood infections.	Children's infections Regulatory documents in the Children's Infectious Diseases Service of the Republic of Kazakhstan. Clinical and laboratory diagnostics, tactics, treatment and prevention of infectious diseases in children: acute intestinal infections, viral hepatitis, airborne infections, parasitoses, etc. Features of the course in children of the first year of life. Evidence-based medicine in pediatric infectious diseases. IVBDV in childhood infections. Coronavirus infection (COVID-19) in children. Quarantine measures in children's institutions.	SD	RC	6	LO1 LO2 LO3
3	Intensive care in pediatrics.	Diagnosis, etiopathogenetic treatment and intensive therapy of syndromic disorders and critical conditions in children. Monitoring of children's vital functions. Calculation of infusion-transfusion therapy, correction of electrolyte disorders, coagulological potential and blood gas composition in children. Intensive care and intensive care for critical conditions in newborns and children according to WHO programs. The basic principles of antibacterial therapy.	SD	RC	12	LO1 LO2 LO3 LO4
4	Neonatology	Organization of neonatal services in the Republic of Kazakhstan. Principles of organization and operation of neonatal pathology departments. Evidence-based medicine in neonatology. Determination of the method and scope of examination	SD	RC	6	LO1 LO2 LO3

		of the newborn. The Apgar scale. Determination of management tactics in accordance with established protocols and standards. Differential diagnosis, substantiation of the clinical diagnosis, and the appointment of adequate therapy.				
5	Pediatric surgery.	General principles of the organization of surgical care for children in the Republic of Kazakhstan. Modern highly specialized methods of diagnosis and treatment of: malformations of the gastrointestinal tract, atresia of the esophagus and rectum, acute surgical diseases of the abdominal cavity, malformations of the urinary system, purulent-inflammatory diseases of the soft tissues of newborns, osteomyelitis in children, congenital hip dislocation, muscular torticollis, congenital clubfoot.	SD	RC	6	LO1 LO2 LO3
6	Pediatric phthiology.	Diagnostic algorithm for tuberculosis. Principles of clinical examination. Laboratory, instrumental, surgical research methods. Methods of X-ray examination, their informative value for the diagnosis of tuberculosis. Differential diagnosis of tuberculosis. DOTS protocols. Policy documents. Principles of treatment: duration, continuity, continuity, combination, controllability, stages of tuberculosis treatment. Anti-tuberculosis drugs. Basic and reserve drugs. Side effects and their elimination. Prevention of tuberculosis.	SD	RC	4	LO1 LO2 LO3
7	Outpatient pediatrics.	Organization of outpatient care for children in the Republic of Kazakhstan. Regulatory legal acts and documentation in primary health care organizations (PHC). Maintaining accounting and reporting documentation in outpatient clinics. Evidence-based medicine in outpatient clinical practice. Organization of dispensary supervision of a healthy child. Screening program. Organization of dispensary supervision of children at risk. The physiological basis of immunoprophylaxis.	SD	RC	14	LO2 LO3 LO4
8	Emergency medical care.	Organization of emergency and emergency medical care for children. Evidence-based medicine. Principles of emergency care for children. Diagnosis and emergency medical care for threatening conditions in children. Errors in the provision of emergency care and	SD	RC	12	LO3 LO4

		their prevention. The algorithm of diagnosis and emergency care for emergency conditions in cardiology, pulmonology, gastroenterology, nephrology and hematology.				
9	Pediatric dermatovenerology.	Types of dermatovenerological institutions and their main tasks. Dispensary monitoring of patients with skin and venereal diseases. Eczema. Dermatitis. Profdermatoses. Pyoderma. Scabies. Dermatophytosis. Mycoses. Epidermomycosis. Epidermophytia. Diffuse connective tissue diseases: lupus erythematosus, scleroderma, dermatomyositis.	SD	RC	4	LO1 LO2 LO3
10	Functional diagnostics in pediatrics.	General issues of organizing the work of functional diagnostics rooms. Standards for the scope of examination of functional diagnostics in pediatrics. Indications, contraindications for functional diagnostics in children of different ages. Mastering methods in children: ECG, ECHO CG, transesophageal ECHO CG, spirometry, functional diagnostic tests with physical activity, gas mixtures.	SD	RC	4	LO 2 LO 3 LO 5
11	Modern aspects of dietary prophylaxis and diet therapy in pediatrics.	Organization of medical nutrition service in Kazakhstan. Methods for calculating the amount of nutrition for children of the first year of life. Principles and techniques of artificial feeding. Mixed feeding. Therapeutic nutrition for diseases of young children. Diet therapy and dietary prophylaxis of food allergies. Dietary correction of intestinal microbiocenosis disorders. The menu is for children of different ages on natural and artificial feeding.	SD	RC		LO 2 LO 3 LO 5
12	Clinical and laboratory diagnostics in pediatrics.	The clinical significance of the study of blood gases, acid-base state, water-electrolyte metabolism in various pathological conditions and diseases in children. Features of interpretation of the results obtained on the hematology analyzer. The clinical significance of a general urinalysis. Changes in indicators for various pathological conditions and diseases in children's practice. Laboratory diagnostics of emergency conditions. The main biomarkers of emergency conditions.	SD	RC		LO 2 LO 3 LO 6
13	Clinical immunology	Specialized and highly specialized care	SD	RC		LO 1

	and allergology in hospital.	for children with allergic and immunological diseases. Modern ideas about allergic diseases of the respiratory tract, gastrointestinal tract, skin; indications for contraindications to non-specific methods; principles of immunotherapy for immunodeficiency conditions, laboratory methods for diagnosing immunity.				LO 2 LO 3
14	Management of scientific research	The discipline forms knowledge in the field of studying the rules of scientific research methodology, skills in choosing the methodology of analytical and experimental scientific research, determining the objects and errors of scientific research, skills in working in a research group on planning, organizing, conducting and formatting scientific research, compiling scientific papers with the analysis of literary sources.	SD	RC		LO 5 LO 6
	Total:				138	
	Final certification:				2	
	Total:				140	

The matrix of achievement of LO by various teaching methods and assessment methods

Learning outcomes	Teaching and learning methods	
LO1 is able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice in providing medical care in pediatrics.	Analysis of the material, feedback from the resident	Modeling situations and maintaining medical records
LO2 is able to effectively interact with the child, his environment, and healthcare professionals in order to achieve the best results for him.	A reflective diary	Maintaining medical records
LO3 is able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care.	Supervision of clinical work	
LO4 is able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in pediatrics to provide basic assistance in emergency situations, work as part of inter-professional teams to implement a policy of strengthening the health of the nation.	Supervision of clinical work	Maintaining medical records
LO5 is able to formulate adequate research questions, critically evaluate	"Magazine Club"	Writing theses, articles Public appearances

professional literature, effectively use international databases in its daily activities, and participate in the work of the research team.		
LO6 is able to study independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development.	Observation	

The matrix of compliance with LO assessment methods

LO	Assessment methods	
LO1. Is able to formulate a clinical diagnosis, prescribe a treatment plan according to the clinical protocols of diagnosis and treatment of the Ministry of Health of the Republic of Kazakhstan and evaluate its effectiveness based on evidence-based practice at all levels of medical care in pediatrics.	Testing Oral interview	Essay (short and long) The short answer
LO2. Is able to effectively interact with the child, his environment, and healthcare professionals in order to achieve the best results for him.	OSCE (with skill check stations). A mini-clinical exam.	A long-lasting case
LO3. Is able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care.	Analysis of records in the medical history Analysis of the records of the doctor's activities	Keeping diaries
LO4. Is able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in pediatrics, provide basic assistance in emergency situations, work as part of inter-professional teams to implement a policy of strengthening the health of the nation	Evaluation 360 ⁰	Patient reviews Feedback from other students Rating 360
LO5. He is able to formulate adequate research questions, critically evaluate professional literature, effectively use international databases in his daily activities, and participate in the work of the research team.	Summary/ presentation	Publications
LO6 is able to study independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development.	Portfolio	Clinical records Self-assessment



Work plan for the entire period of study

The cycle of disciplines	The dissociation code	Name of disciplines/modules/	Number of credits	Shared hours	Classroom	SRO		1 year of study	2 year of study	Form of control	Final certification
						SROP	SRO				
PD		CYCLE OF PROFILING DISCIPLINES	138	4140							
		Mandatory component	134	4020							
	R-DBS	Children's diseases in the hospital	70	2100	420	1365	315	48	22	Ex	
	R-DI	Childhood infections	6	180	36	117	27		6	Ex	
	R-ITP	Intensive care in pediatrics	12	360	72	234	54	12		Ex	
	R-Neo	Neonatology	6	180	36	117	27		6	Ex	
	R-DH	Pediatric Surgery	6	180	36	117	27		6	Ex	
	R-DF	Pediatric phthisiology	4	120	24	78	18		4	Ex	
	R-APP	Outpatient pediatrics	14	420	84	273	63	10	4	Ex	
	R-SNMP	Emergency medical care	12	360	72	234	54		12	Ex	
	R-DD	Pediatric dermatovenerology	4	120	24	78	18		4	Ex	
PD		Optional component	4	120	24	78	18		4		
	R-FDP	Functional diagnostics in pediatrics									
	R-SADDP	Modern aspects of dietary prophylaxis and diet therapy in pediatrics									
	R-KLDP	Clinical and laboratory diagnostics in pediatrics	4	120	24	78	18		4	Ex	
	R-KIAS	Clinical immunology and allergology in the hospital									
	R-MSR	Management of scientific research									
		in total	138	4140	828	2691	621				
IC		INTERMEDIATE CERTIFICATION									
FC		FINAL CERTIFICATION	2	60					2		60
		total	140	4200	828	2691	621	70	70		60