

JSC «SOUTH KAZAKHSTAN MEDICAL ACADEMY»



«APPROVE»
Rector of SKMA, professor
Rysbekov M.M.
2024

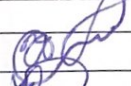



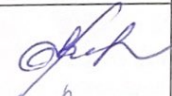
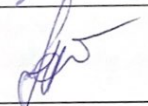




SOUTH KAZAKHSTAN
MEDICAL
ACADEMY

RESIDENCE EDUCATIONAL PROGRAM
7R01123 «PEDIATRIC SURGERY»

Shymkent 2024

The residency educational program “Pediatric Surgery” was developed on the basis of the order of the Minister of Health of the Republic of Kazakhstan dated January 25, 2024 No46 “On approval of professional standards in the field of healthcare”.

Job title	Full name	Signsture
Developed		
Head of the department, PhD	Kemelbekov K.S	
Department assistant	Narkhojayev N.S	
Representative of practical healthcare.		
Deputy Chief Physician for Surgery "Regional Children's Clinical Hospital" HD of the TR	Turysbekov S.A.	
Resident of the EP «Pediatric surgery»	Abdiyev B.N.	
Protocol of the meeting of the department № 6 from "25" "01" 2024		
Discussed at a meeting of the Pediatric Residency CEP Chairman of the CEP Protocol № 5 from "26" "01" 2024	Bektenova G.Y.	
Agreed on the Clinical Council Chairman of the Clinical Council Protocol № 8 from "29" "01" 2024	Kauyzbai Zh.A.	
Agreed First vice-rector JVS SKMA First vice-rector JSC SKMA «30» «01» 2024	Yessirkepov M.M.	
Approved by the Academic Council Protocol № 14 from "31" "01" 2024.		

ОНТҮСТІК-ҚАЗАҚСТАН MEDISINA АКАДЕМИЯСЫ «Оңтүстік Қазақстан медицина академиясы» АҚ	 SKMA -1979-	SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казakhstanская медицинская академия»
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Educational program passport

1. Mission of the educational program.

Training of highly qualified competitive pediatric surgeons for the Southern region and the country as a whole based on the achievements of modern science.

2. The purpose of the educational program.

Training of a pediatric surgeon for practical healthcare, possessing a system of universal professional competencies, capable of independently providing pediatric surgical care to a child in the conditions of primary health care, specialized, including high-tech medical care.

3. Rationale for EP


Pediatric surgery is a discipline that studies surgical diseases of childhood, clinical features, diagnostics and modern methods of surgical treatment, taking into account the anatomical and physiological characteristics of the body. The main task of pediatric surgeons is the timely diagnosis of surgical pathology and the provision of highly qualified surgical treatment in accordance with Order of the Ministry of Health of the Republic of Kazakhstan dated May 15, 2023 No. 81. "On approval of the standard for organizing the provision of pediatric surgical care in the Republic of Kazakhstan" and clinical protocols for diagnosis and treatment in pediatric surgery of the Ministry of Health of the Republic of Kazakhstan. The need for pediatric surgeons in the Republic of Kazakhstan at all levels of medical care is very high and the shortage of highly qualified specialists is felt at all levels, which is the rationale for the opening and need to train pediatric surgeons, primarily at the regional level, taking into account the main strategies and programs for the development of the healthcare system .

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

- 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."


5. Area of professional activity. Healthcare

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

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General information

№	EP characteristics	Data
1	Registration number	7R09100177
2	Code and classification of the field of education	7R01 Health (medicine)
3	Code and classification of training areas	7R011 Health
4	Group of educational programs	R023 Pediatric surgery
5	Name of educational program	7R01123 Pediatric surgery (residency)
6	Type of EP	Updated educational program
7	ISCED level	7
8	NQL level	7
9	GQL level	7
10	Distinctive features of EP	No
	HEI - partner	-
	HEI - partner	-
11	List of competencies	<p>KK1. Patient supervision: able to identify the main pathological symptoms, be able to carry out differential diagnostics, interpret examination results to make a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness.</p> <p>KK2. Communication and collaboration: able to communicate effectively with patients and their relatives, involving them in discussion and participation in the process of diagnostic, treatment and preventive measures</p> <p>KK3. Safety and quality: Able to carry out dynamic monitoring of healthy and sick children in surgical medical institutions.</p> <p>KK4. Public Health: Able to conduct a clinical examination of a sick child with surgical pathology and make a clinical diagnosis in accordance with modern clinical protocols</p> <p>KK5. Research: Able to assess the potential risks of therapy in pediatric surgery, prescribe treatment according to evidence-based international practice and determine its effectiveness.</p> <p>KK6. Training and development: Able to organize and carry out a complex of early rehabilitation measures for major surgical diseases of childhood.</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 stages of pediatric surgical care;</p> <p>LO2: able to effectively interact with relatives of the child, with health professionals in order to achieve the best results for the child;</p> <p>LO3: able to assess risks and use the most effective methods to</p>

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		ensure a high level of safety and quality of pediatric surgical care; LO4: able to act within the legal and organizational field of the healthcare system of the Republic of Kazakhstan in the provision of pediatric surgical care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement child health promotion policies; LO5: able to formulate adequate research questions, critically evaluate professional literature on pediatric surgery, effectively use international databases in their daily activities, participate in the work of the research team; LO6: able to learn independently and train other members of the professional team of pediatric surgeons, actively participate in discussions, conferences and other forms of continuous professional development.
13	Form of study	Full-time
14	Language of study	Kazakh and Russian
15	Volume of credits	210
16	Training period	3 years
17	Awarded academic Degree	Doctor - children's surgeon
18	Availability of application to license for training	KZ 22BFA00167288
19	Availability of accreditation of EP	10.06.2022, № AB 4364
	Name of accreditation body	IAR
	Duration of accreditation	KZ73LAA00011788, 10.06.2022г.-09.06.2027г.
20	Information about disciplines	Appendix 1.2

Appendix 1.1

Matrix for correlating learning outcomes in the educational program as a whole with the competencies being developed

	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6
K1	+	+	+			
K2		+		+		
K3			+		+	
K4				+		
K5					+	
K6						+

Appendix 1.2

Competency/learning outcome attainability matrix

№	Name of discipline	Brief description of the discipline	Cycle (PD)	Component (MC, OC)	Number of credits	Formable learning outcomes (codes)
1	Routine Surgery with Urology	Indications for conservative and surgical treatment. Features of preoperative preparation and postoperative treatment in children with elective surgery. Terms of surgical treatment. Diagnosis, treatment standards and rehabilitation of children with surgical pathologies in a planned manner. Research methods and differential diagnostic criteria in pediatric urology. Diagnosis and timing of surgical treatment of urological patients.	PD	MC	40	LO 1 LO2 LO 5
2	Purulent Surgery	The principles of treatment of purulent surgical infections in children. Prevention of purulent surgical and nosocomial infections. Diagnosis, conservative and surgical treatment. Features of acute purulent disease of the skin and subcutaneous tissue, lymphadenitis and adenoflegmon in children. Complications.	PD	MC	30	LO 3 LO 2
3	Emergency surgery	Differential diagnosis, surgical tactics and treatment methods in children with acute surgical diseases. Conservative treatment, surgical tactics and indications for surgical treatment for acute appendicitis, strangulated hernia, peritonitis, cholecystitis, gastrointestinal bleeding, damage to the hollow organs of the abdominal cavity, intestinal invagination.	PD	MC	25	LO 1 LO 2
4	Neonatal surgery	Anatomical and physiological characteristics of the newborn. Malformations of the facial skeleton, malformations, birth trauma of	PD	MC	20	LO 1 LO 3 LO 4


		<p>newborns, gastroschisis, congenital high and low intestinal obstruction. Modern principles for the diagnosis and treatment of newborn disease. Features of peritonitis, sepsis and ulcerative necrotic enterocolitis in newborns.</p>				
5	Thoracic surgery	<p>Features of the anatomical and physiological development of the chest and its organs in children. New methods for examining the chest organs in children. Modern methods of conservative and surgical treatment of malformations of the lungs, congenital diaphragmatic hernia, chronic inflammatory lung disease in children. Features of the treatment of injuries of the esophagus and stomach, foreign bodies of the respiratory tract, Mallory-Weiss syndrome, pulmonary echinococcosis.</p>	PD	MC	20	LO 3 LO 4 LO 6
6	Traumatology, orthopedics	<p>Anato-physiological features of the musculoskeletal system in children. Diagnosis and conservative treatment of traumatic brain injuries, fractures of the long bones, femoral fractures, intraarticular fractures of the lower leg, epiphyses, fractures of the spine in children. Indications for surgical treatment. The principles of surgical treatment. Conservative, surgical treatment and rehabilitation of children with orthopedic diseases, burns and post-burn contractures.</p>	PD	MC	25	LO 1 LO 2 LO 3
7	Outpatient surgery	<p>On the activities of health organizations providing outpatient care in the Republic of Kazakhstan. Pediatric surgery on an outpatient basis. Children's injuries and its prevention. Principles of dispensary observation. The principles of rehabilitation of children with injuries of the musculoskeletal system at the level of outpatient services.</p>	PD	MC	24	LO 2 LO 3
8	Endoscopic surgery	<p>Principles of organizing work in a laparoscopic operating room and</p>	PD	MC	16	LO 2

		preparing patients for surgery. Features of surgical equipment, technical features of diagnostic studies and surgical laparoscopy. The technique of endoscopic surgery in children. Complications of laparoscopic surgery and ways to prevent them. Technical features of fibrocolonoscopy, sigmoidoscopy.				LO 3 LO 5
	Total				200	
9	Neurosurgery	The basics of neurosurgery. Clinical and instrumental methods for examining patients with neurosurgical diseases. Clinical diagnosis. Differential diagnosis with other diseases of the central nervous system. Modern methods of surgical intervention. Features of pre- and postoperative administration of patients with neurosurgical pathologies.	PD	OC	4	LO 1 LO 3 LO 4
10	Intensive care in pediatrics	Clinical symptoms, methods of diagnosis and treatment of critical conditions in pediatrics. Efferent medicine, respiratory and infusion therapy in anesthesiology and intensive care. Features of intensive care in premature infants and patients with congenital malformations.	PD	OC		LO 1 LO 3 LO 4
11	Oncology	Pre-malignant and malignant oncological diseases that occur in childhood. Morphological, immunological, genetic and molecular biological techniques for identifying tumors. Advanced achievements in oncology. Practical recommendations for the diagnosis and treatment of neoplastic diseases in children.	PD	OC	4	LO 1 LO 3 LO 4
12	Pathological anatomy	Key questions of the general and private courses of pathological anatomy, as well as the biopsy sectional course. Special questions and topics on separate diseases. Examples of pathological diagnoses, medical death certificates, autopsy protocols,	PD	OC		LO 1 LO 3 LO 4

		and clinical and pathological analysis materials.			
13	Pediatric gynecology	Anatomical and physiological features of the pelvic organs in girls. Clinical symptoms, gynecological diseases. Methods of diagnosis and treatment of critical conditions in gynecology. Sexually transmitted diseases. Features of conservative and surgical treatment in pediatric gynecology.	PD	OC	LO 1 LO 3 LO 4
	Total				8
	Final examinational				2
	Total				210

Matrix for achieving LO using various teaching methods


LO	Learning and teaching methods	
LO1: able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all stages of pediatric surgical care	Analysis of the material, feedback from the resident	Simulation of situations Maintaining medical records
LO2: able to effectively interact with relatives of the child, with health professionals in order to achieve the best results for the child	Practical bedside skills	Simulation of situations Maintaining medical records
LO3: able to assess risks and use the most effective methods to ensure a high level of safety and quality of pediatric surgical care	Analysis of the material, feedback from the resident	Simulation of situations Maintaining medical records
LO4: able to act within the legal and organizational field of the healthcare system of the Republic of Kazakhstan in the provision of pediatric surgical care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement child health promotion policies	Practical bedside skills	Analysis of material Modeling of situations Maintaining medical records
LO5: able to formulate adequate research questions, critically evaluate professional literature on pediatric surgery, effectively use international databases in their daily	Publications Portfolio	Writing abstracts and articles Public performance

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activities, participate in the work of the research team		
LO6: able to learn independently and train other members of the professional team of pediatric surgeons, actively participate in discussions, conferences and other forms of continuous professional development.	Publications Portfolio	Writing abstracts and articles Public performance

Matrix of compliance of LO with assessment methods

LO	Assessment methods	
LO1: able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all stages of pediatric surgical care	Testing Oral survey	Patient reviews Reviews from other residents Score 360 ⁰
LO2: able to effectively interact with relatives of the child, with health professionals in order to achieve the best results for the child	Mini clinical exam	Patient reviews Reviews from other residents Score 360 ⁰
LO3: able to assess risks and use the most effective methods to ensure a high level of safety and quality of pediatric surgical care	Analysis of records in the medical history	Patient reviews Score 360 ⁰
LO4: able to act within the legal and organizational field of the healthcare system of the Republic of Kazakhstan in the provision of pediatric surgical care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement child health promotion policies	Oral survey	Patient reviews Reviews from other residents Score 360 ⁰
LO5: able to formulate adequate research questions, critically evaluate professional literature on pediatric surgery, effectively use international databases in their daily activities, participate in the work of the research team	Presentation	Publications
LO6: able to learn independently and train other members of the professional team of pediatric surgeons, actively participate in discussions, conferences and other forms of continuous professional development.	Portfolio	Clinical records Self-esteem

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Work plan for the entire period of study

Cycle disciplines	Discipline code	Name of discipline/modules	Amount of credits	General hours	Classroom	RIC		1 year of study	2 year of study	3 year of study	The form control	FE
						CPPH	RTIS					
БП/ ПД/ PD/		CYCLE OF PROFILING DISCIPLINES	208	6240								
		Mandatory component	200	6000								
	R-ES	Emergency surgery	25	750	150	487	113		25		Exam	
	R-TS	Thoracic surgery	20	600	120	390	90			20	Exam	
	R-OS	Outpatient surgery	24	720	144	468	108			24	Exam	
	R-ESU	Elective surgery with urology	40	1200	240	780	180	20	20		Exam	
	R-PS	Purulent surgery	30	900	180	585	135	30			Exam	
	R-HN	Neonatal surgery	20	600	120	390	90			20	Exam	
	R-TO	Traumatology, orthopedics	25	750	150	487	113		25		Exam	
	R-ES	Endoscopic surgery	16	480	96	312	72	16			Exam	
		Optional component	8	240	48	156	36	4		4		
	R-NSr	Neurosurgery									Exam	
	R-ICP	Intensive care in pediatrics	4	120	24	78	18	4				
	R-Onc	Oncology									Exam	
	R-PA	Pathological anatomy	4	120	24	78	18					
	R-PG	Pediatric gynecology								4		
		Total:	208	6240	1248	405	936					
						6						
IC	Intermediate certification											
FE	Final examination											
			2	60						2		60
	TOTAL		210	6300	1248	4056	936	70	70	70		60