

JSC «SOUTH KAZAKHSTAN MEDICAL ACADEMY»



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

08 08 2022 y.



SOUTH KAZAKHSTAN
MEDICAL
ACADEMY

EDUCATIONAL PROGRAM OF RESIDENCY
7R01125

"TRAUMATOLOGY-ORTHOPEDICS FOR ADULTS, CHILDREN'S"



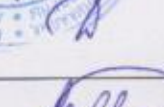
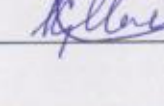
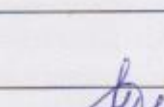
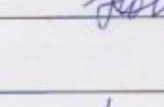
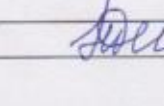
Shymkent, 2022 y.


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Educational program 7R01125 "TRAUMATOLOGY-ORTHOPEDECS FOR ADULT,
CHILDREN'S"

The educational program of the residency 7R01125 "Traumatology-orthopedics for adults, children" was compiled in accordance with the Order of the Minister of Health of the Republic of Kazakhstan "On approval of State mandatory standards for levels of education in the field of healthcare" dated July 4, 2022 No. KRDSM-63 and Standard curricula for postgraduate education and proposals from all interested parties.

Position	Ф.И.О.	Подпись
Developed by		
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Resident of OP 7R01125 "Traumatology-orthopedics for adults, children"	Mekenbaev K.A.	
Protocol No. <u>14</u> from « <u>03</u> » « <u>08</u> » 2022		
Discussed at the meeting of the Residency COP		
Chairman of the CPC	Kauyzbai Zh.A.	
Protocol No. <u>5a</u> from « <u>04</u> » « <u>08</u> » 2022		
Approved by the Clinical Council		
Chairman of the Clinical Council	Kauyzbai Zh.A.	
Protocol No. <u>5a</u> of « <u>05</u> » « <u>08</u> » 2022		
Approved by the Academic Council		
Protocol No. <u>12</u> of « <u>08</u> » « <u>08</u> » 2022		

ОҢТҮСТІК-ҚАЗАҚСТАН MEDISINA АКАДЕМИАСЫ «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казакхстанская медицинская академия»
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Passport of the educational program

1. Mission of the educational program: To be a recognized leader in the field of training highly specialized, competitive orthopedic traumatologists.

2. The purpose of the educational program: training of a qualified traumatologist-orthopedist with a system of universal, professional competencies, capable and ready for independent professional activity in the conditions of primary health care; specialized, including high-tech care; palliative care.

3. Rationale for OP

Achieving high quality postgraduate medical education by introducing mandatory requirements for the level of training of students in traumatology residency;

Regulation of the educational process and creation of a system for monitoring the effectiveness of educational and scientific organizations that train residents and trainees in traumatology;

Streamlining the rights and responsibilities of residency students, stimulating independent educational and practical activities of traumatology residents.

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

Regulatory documents for the development of an educational program

-The Law of the Republic of Kazakhstan "On Education" for medical and pharmaceutical specialties, Order №2 and the state mandatory standard of technical and vocational education in the field of healthcare, approved by Order № KR DSM-63.

-Professional standard "Traumatology-orthopedics" Standard for organizing the provision of traumatological and orthopedic care in the Republic of Kazakhstan, order of the Ministry of Health of the Republic of Kazakhstan № RK DSM 92 dated 08/26/2021 y.

"Regulations on the procedure and procedures for the development of educational programs" of JSC "SKMA" dated May 29, 2019 y.

-Internal regulatory documents of JSC "SKMA".

5. Area of professional activity: the area of professional activity of graduates who have mastered the educational program 7R01125 "Traumatology-orthopedics adults, children" includes the ability to meet the needs of society when providing medical care to trauma patients, to apply and develop advanced innovative technologies in medicine, science and practice.

6. Objects of professional activity:

-organization of health care management;

organization of education;

-organization of social protection

-patients in need of traumatological and orthopedic care

a set of tools and technologies aimed at creating conditions for providing care to patients.

Types of professional activities:

-therapeutic, preventive and diagnostic;

-organizational and managerial;

-research



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Educational program 7R01125 "TRAUMATOLOGY-ORTHOPEDECS FOR
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General information

№	Field name	Note
1	Registration number	7R09100112
2	Code and classification of the field of education	7R 01 Healthcare and Medicine
3	Code and classification of training areas	7R 011 Healthcare
4	Group of educational programs	7R 01125 Traumatology-orthopedics for adults, children's
5	Name of the educational program	7R 01125 "Traumatology-orthopedics for adults, children's" (residency)
6	Type of OP	Updated OP
7	Moscow Time level	7
8	The level of the NRK	7
9	ORC Level	7
10	Purpose of the OP	Training of highly qualified, competitive traumatologists and orthopedists for adults and children, capable of meeting the needs of society in providing medical care to trauma patients, applying and developing advanced innovative technologies in medicine, science and practice.
	Partner university (SOP)	No
	Partner university (DDOP)	No
11	List of competencies	<p>CC1 Medical knowledge: Synthesis of professional and scientific medical knowledge to provide qualified medical care</p> <p>CC2 Communication: Effectively interact with the patient, his environment, and healthcare professionals in order to achieve the best results for the patient</p> <p>CC3 Clinical skills: Providing qualified basic medical care complexity categories. Determining a strategy for providing the population with qualified medical care of the second category of complexity</p> <p>CC4 Professionalism: Coordination of activities in healthcare organizations. The ability to make decisions and bear responsibility for the results of providing qualified medical care</p> <p>CC5 Personal and professional development: Ability to learn independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development</p> <p>CC6 Regulatory knowledge: Ability to act within the legal and organizational field of the healthcare system of the Republic of Kazakhstan</p>

		the principles of diagnosing diseases based on scientific data. Application of modern research methods in healthcare, taking into account bioethics and implementation in clinical practice.
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 trauma and orthopedic care.</p> <p>LO2 Able to effectively interact with the patient, his environment, and healthcare professionals in order to achieve the best results for the patient.</p> <p>LO3 Capable of taking risks and using the most effective methods to ensure a high level of safety and quality of trauma and orthopedic care.</p> <p>LO4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan when providing traumatological and orthopedic care, provide basic care in emergency situations, work as part of interprofessional teams to</p>
		<p>implement policies to improve the health of the nation.</p> <p>LO5 Able to formulate adequate research questions, critically evaluate professional literature on traumatology and orthopedics, effectively use international databases in the work of a traumatologist-orthopedic surgeon, and participate in the work of a research team.</p> <p>LO6 Able to learn independently and train other members of the professional team, actively participate in discussions, conferences and other forms of continuous professional development within the framework of Traumatology-Orthopedics.</p>
13	Form of training	Full - time
14	Language of instruction	Kazakh and Russian
15	Amount of credits	Total 210 credit
16	Training period	3 years
17	Awarded degree, qualification	Doctor traumatologist-orthopedist adults, children
18	Availability of an annex to the license for the direction of personnel training	KZ 36LAA00011387
19	Availability of EP accreditation	Have
	Name of accreditation body	NU "INDEPENDENT CREDIT AND RATING AGENCY"
	Validity period of accreditation	№ AB 3515 27.05.2021-26.05.2026 y
20	Information about disciplines	Application 1. 2

ОҢТҮСТІК-ҚАЗАҚСТАН

MEDISINA
AKADEMIASY

«Оңтүстік Қазақстан медицина академиясы» АҚ



SOUTH KAZAKHSTAN

MEDICAL
ACADEMY

АО «Южно-Казakhstanская медицинская академия»

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Application 1. 1

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

	LO1	LO2	LO3	LO4	LO5	LO6
CC1	+	+	+	+	+	+
CC2	+	+	+	+	+	+
CC3	+	+	+	+	+	+
CC4	+	+	+	+	+	+
CC5	+	+	+	+	+	+
CC6	+	+	+	+	+	+
CC7	+	+	+	+	+	+

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Application 1.2

Competency/learning outcome attainability matrix

№	Name of the discipline	Brief description of the discipline	Cycle (DB, PD)	Component (RC, VK, HF)	Number to the detriment.	Generated learning outcomes (codes)
1	Traumatology and orthopedics outpatient adult	Organization of traumatological assistance to the population of the Republic of Kazakhstan at the pre-hospital stage. The concept of injury. Clinic, diagnostics, differential and diagnostics of traumatological and orthopedic diseases. Methods of conservative treatment in traumatology and orthopedics. Tunnel syndromes in traumatology and orthopedics. Diagnosis and treatment of orthopedic diseases in outpatient settings.	PD	UC	20	LO1 LO2 LO4
2	Traumatology and orthopedics in the hospital adult-1	Organization of traumatological assistance to the population of the Republic of Kazakhstan at the hospital stage. Providing basic assistance at the stages of medical evacuation. Methods of surgical treatment in traumatology and orthopedics. Features of preoperative preparation of	PD	UC	48	LO1 LO2 LO4



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		traumatological and orthopedic patients. Prevention of complications, prognosis. Clinical protocols of the Ministry of Health of the Republic of Kazakhstan on nosologies.				
3	Traumatology and orthopedics in the hospital adult-2	Modern diagnostic and therapeutic manipulations in stationary conditions. Microsurgical methods in traumatology and orthopedics. Arthrosis of large joints. Acute and chronic infectious and toxic diseases of bones and joints. Highly qualified assistance in the diagnosis and treatment of traumatic orthopedic diseases. Benign and malignant tumors of bones and joints. Pathological fractures.	PD	UC	68	LO1 LO2 LO3
4	Traumatology and orthopedics in the hospital adult-3	Methods of parophylaxis and rehabilitation of patients with the most common orthopedic diseases and injuries. Management of patients in the postoperative period, features. Complications encountered in the postoperative period. Clinical protocols of the Ministry of Health of the Republic of Kazakhstan on nosologies. Principles	PD	UC	8	LO3 LO5 LO6

		of operation of rehabilitation centers.				
5	Traumatology and orthopedics outpatient children's	Organization of traumatological assistance to the population of the Republic of Kazakhstan at the pre-hospital stage. The concept of child injury. Clinic, diagnostics, differential diagnosis of traumatological and orthopedic diseases in outpatient settings. Methods of conservative treatment are most often found in pediatric traumatology and orthopedics in outpatient settings. Prevention of complications, prognosis. Skeletal dysplasia. Scoliosis. Flat-valgus deformation of the feet. Epiphyseolysis.	PD	UC	26	LO1 LO2 LO4
6	Traumatology and orthopedics in the children's hospital	Modern diagnostic and therapeutic manipulations in stationary conditions used in children. Highly qualified assistance in the diagnosis and treatment of traumatic orthopedic diseases in children. Fractures and dislocations, the most common in children	PD	UC	30	LO1 LO2 LO3 LO4 LO6



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		Prevention of complications, prognosis.				
		in total			200	

1	Innovative technologies in traumatology and orthopedics.	Modern diagnostic and therapeutic manipulations in stationary conditions. Modern technologies of treatment, prosthetics in traumatology and orthopedics, endovideotechnology. Endoprosthetics, arthroscopy of large and small joints. The use of minimally invasive methods for the stable fixation of bone fragments. Risks and complications.		OC	4	LO3 LO5 LO6
2	Age peculiarities in traumatology and orthopedics	Injuries to the upper (collarbone, humerus) and lower (hip) limbs in children, including during childbirth. Features of "pathological" fractures in childhood and old age (geriarthria). Application of minimally invasive methods of stable fixation of bone fragments. Minimally invasive technologies of surgical treatment of funnel-shaped deformity of the chest and flat-valgus deformity of the feet in children.		OC		LO1 LO2 LO5
3	Inpatient replacement	Diagnostic manipulations and the		OC		LO2 LO3

	technology in the diagnosis and treatment of trauma and orthopedic patients.	volume of operative care in the conditions of emergency rooms and offices of polyclinics. Diagnosis and treatment of degenerative-dystrophic and inflammatory diseases of bones and joints in outpatient settings. Doctor's tactics for fused fractures and dislocations of limb bones.			4	LO5
4	Sports traumatology and orthopedics.	Methods of diagnostics of sports injuries and diseases based on modern, specialized, instrumental and functional diagnostic studies. Types of sports injuries and methods of rehabilitation of athletes. Doctor's tactics. Modern highly qualified assistance. Prevention of recurrence of injuries.		OC		LO2 LO5 LO6
	total				8	
	Total				208	
	Final certification				2	
	Total				210	

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Matrix for achieving LO using various teaching methods

LO (codes)	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 levels provision of traumatological and orthopedic care.	Analysis of the material, feedback from the resident Simulation of situations Maintaining medical records
LO2 Able to effectively interact with patients, their environment, and trauma and orthopedic service specialists in order to achieve the best results for patients.	Long-term case Reflective diary
LO3 Able to assess risks and use the most effective methods to ensure a high level of safety and quality of trauma and orthopedic care.	Supervision of clinical work
LO4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan within the specialty "Traumatology-Orthopedics (adult, pediatric)", provide basic assistance in emergency situations, work as part of interprofessional teams to implement policies to improve the health of the nation.	Standardized patients Video recordings (discussion, evaluation) Observation of clinical work Medical record keeping
LO5 Able to formulate adequate research questions, critically evaluate professional literature, effectively use international databases in the daily activities of the traumatology and orthopedic field, participate in the work research team.	Writing theses and articles. Public performance
LO6 Able to learn independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development within "Traumatology-orthopedics".	Observation

Matrix of compliance of LO with assessment methods

LO (codes)	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 levels of trauma and orthopedic care.	Testing Oral survey Essay (short or long) Short answer
LO2 Able to effectively interact with patients, their environment, and trauma and orthopedic service specialists in order to achieve the best results for patients.	OSCE (with Skills Test Stations) Mini clinical exam



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specialists in order to achieve the best results for patients.	
LO3 Able to assess risks and use the most effective methods to ensure a high level of safety and quality of trauma and orthopedic care.	Analysis of records in the medical history Analysis of records of the doctor's activities Analysis of prescribed treatments
LO4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan within the specialty "Traumatology-Orthopedics (adult, pediatric)", provide basic assistance in emergency situations, work as part of interprofessional teams to implement policies to improve the health of the nation.	Standardized patients Patient reviews Reviews from other residents Grade 360 ⁰
LO5 Able to formulate adequate research questions, critically evaluate professional literature, and effectively use international databases in daily activities	Presentation Publications

Work plan for the entire period of study

Cycle Disciplines	Discipline code	Name of the discipline / modules	Amount of credits	General hours	Classroom	RIC		1 year of study	2 year of studt	3 year of study	The Form contro l	FE
						CPPH	RTIC					
PD	CYCLE OF PROFILING DISCIPLINES		208	6240								
	Mandatory component		200	6000								
PD	UC	R- TOAC A Traumatology and orthopedics. ambulatory-clinic adult	20	600	120	420	60	20			Exam	
		R- TOHA -1 Traumatology and orthopedics in a hospital for adult -1	48	1440	288	1008	144	48			Exam	
		R- TOHA -2 Traumatology and orthopedics in a hospital for adult -2	68	2040	408	1428	204		68		Exam	
		R- TOHA -3 Traumatology and orthopedics in a hospital for adult -3	8	240	48	168	24			8	Exam	



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		R-TOAC C	Traumatology and orthopedics ambulatory-clinic children's	26	780	156	546	78			26	Exam
		R-TOHC	Traumatology and orthopedics in a hospital for children	30	900	180	630	90			30	Exam
		Optional component		8	240	48	168	24	2	2	4	
		R-ITTO	Innovative technologies in traumatology and orthopedics	4	120	24	84	12	2	2		Exam
		R-APTO	Age peculiarities in traumatology and orthopedics									
		R-IRTD TTOP	Inpatient replacement technology in the diagnosis and treatment of trauma and orthopedic patients	4	120	24	84	12			4	Exam
		R-STO	Sports traumatology and orthopedics									
		TOTAL										
		INTERMEDIATE CERTIFICATION										
		FINAL EXAMINATION										
				2	60						2	60
		TOTAL										
				210	6300	1248	4368	624	70	70	70	60