## «SOUTH KAZAKHSTAN MEDICAL ACADEMY»



EDUCATIONAL RESIDENCY PROGRAM
7R01102
RHEUMATOLOGY (ADULTS, CHILDREN)

The educational program of the residency 7R01102 Rheumatology (adult, children's) 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		
Teaching staff of the Department of Therapy and cardiology		
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Protocol no. 2 from 18. 0/20224		P80×394
Discussed at the meeting of the Residency CEP	Kauyzbai Zh.A.	AN 15
Chairman of the CEP	Kauyzoai Zii.A.	() a
Protocol no. 5 from 26-01 2024	- 1 1 771 A	1
Approved by the Clinical Council Chairman of the Clinical Council	Kauyzbai Zh.A.	furs
Protocol No. 8 from "28" " 01 " 2020	WY	
Approved by the First Vice-Rector	Yesirkepov M.M.	11.11.5/
The first vice-rector  "30"" 01 "2014		M.M. M
Approved by the Academic Council		
Protocol no. 14 from 31.01 2024		

**Educational program passport** 

1. The mission of the educational program is to train competitive personnel, achieve learning outcomes to provide the health care system and society with highly qualified rheumatologists. Duration of study: 2 years.

Qualification awarded upon completion of study - doctor-rheumatologist adults, children.

2. The purpose of the educational program Training of doctors who have professional abilities and independently provide specialized highly qualified rheumatological care to the population, regardless of age and gender.

#### 3. Justification of the OP

Rheumatology is a specialization of internal medicine dealing with the diagnosis and therapy of groups of diseases manifested in systemic/local damage to the connective tissues of the musculoskeletal system of the human body. The need for rheumatologists in the Republic of Kazakhstan at all levels of medical care is very high.

The need of medical organizations for rheumatologists is the justification for the discovery and the need to train rheumatologists, 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 rational use of medicines.

- 4. The professional standard on the basis of which the educational program has been developed
- Professional standard Rheumatology (adult, children's (project)
- Standard of organization of medical care in rheumatology Order of the Minister of Health of the Republic of Kazakhstan dated March 28, 2023 No. 45. Registered with the Ministry of Justice of the Republic of Kazakhstan on March 29, 2023 No. 32147
- 5. The field of professional activity. Healthcare
- 6. Objects of professional activity.
- Health management organizations;
- healthcare organizations;
- educational organizations;
- organization of science;
- social protection organizations
- Types of professional activity
- -therapeutic, preventive and diagnostic
- --organizational and managerial
- -scientific research

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### Information about educational program

No.	Characteristics of the EP	Data
1	Registration number	7R01100273
2	Code and classification of the field of education	7R01 Healthcare (medicine)
3	Code and classification of training areas	7R011 Healthcare
4	Group of educational programs	R002 Rheumatology for adults, children
5	Names of educational program	7R01102 Rheumatology for adults, children
6	Type of EP	Updated EP
7	Level of MSKO	7
8	Level of NRK	7
9	Level of ORK	7
10	Distinctive features of the EP	No
11	List of competencies	C1: able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all levels of medical care  C2: able to effectively interact with the patient, his environment, healthcare professionals in order to achieve the best results for the patient  C3: able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care  C4: he is able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in his specialty, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the policy of strengthening the health of the nation  C5: he is able to formulate adequate research questions, critically evaluate professional literature, and effectively use international databases in team activities.  C6: he 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
12	Learning outcomes	LO1. Has the skills of diagnosis, differential diagnosis, treatment, evaluation of its effectiveness based on evidence-based practice and preventive measures at all levels of rheumatological care.

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		LO2. Predicts the outcome of the disease and its complications; uses the most effective methods to ensure a high level of safety and quality of medical rheumatological care.  LO3. Interacts with a patient with rheumatological pathology, his environment and colleagues, in order to achieve the best results for the patient.  LO4. Operates within the legal and organizational field of the healthcare system of the Republic of Kazakhstan in the specialty "Rheumatology adults, children" works as part of interprofessional teams.  LO5. Participates in conducting research work by evaluating professional literature, using international databases, formulating research questions and finding answers to them.  LO6.Carries out continuous professional development in the field of rheumatology through self-study and training of others, participation in conferences and discussions.
13	Form of training	Full - time
14	Language of training	Kazakh and Russian
15	Volume of loans	140
16	Assigned qualification	Doctor-rheumatologist adults, children
17	Availability of an appendix to the license for the direction of training	KZ 22BFA00167288
18	Existence of EP accreditation	+
	Name of accreditation body	IAAR
	Accreditation period	10.06.2022-09.06.2027Ys.
19	Information about the disciplines	Appendix 1.2

### Appendix 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
C1	+	+	+			
C2		+		+		
C3			+		+	
C4				+		
C5					+	
C6						+

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Appendix 1.2

№		Intrix of achievability of c Brief description of the discipline		Component		Generated learning outcomes (codes)
1	Outpatient clinic rheumatology, adult	Organization of outpatient care for rheumatological patients. Stationary replacement technologies. Clinical protocols of the Republic of Kazakhstan, clinical recommendations of the international medical communities on topical rheumatological diseases (RH). Features of diagnosis, treatment and follow-up of pregnant women with RS. Prevention and rehabilitation of patients with RS. Medical examination of patients with RS. Medical and social examination of patients with RS. Medical and social examination of patients with RS. The portal "Bureau of hospitalization".	PD	MC	26	LO2 LO3
2	Rheumatology outpatient, children's	Organization of outpatient care for pediatric rheumatological patients. Features of the course of rheumatological diseases in childhood. Issues of timely diagnosis, treatment, prevention, rehabilitation using	PD	MC	26	LO2 LO3 LO6

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		clinical protocols and clinical recommendations for rheumatological diseases in pediatrics. Inpatient replacement and consultative diagnostic care in pediatric rheumatology				
3	Rheumatology in the hospital, adult-1	Epidemiology of rheumatological diseases. Nomenclature and classification of rheumatological diseases. Methods of examination of rheumatological patients. Differential diagnosis of joint diseases. Clinical immunology and immunopathology of rheumatological diseases. The basic principles of treatment of rheumatological diseases. Clinical protocols and clinical guidelines (RK, EULER, AP, PP). Rehabilitation of patients with pathology of the articular apparatus in stationary conditions. Research in rheumatology.	PD	MC	18	LO1 LO5 LO6
4	Rheumatology in the hospital, adult-2	Epidemiology of rheumatological diseases. Nomenclature and classification of rheumatological diseases. Methods of examination of rheumatological patients. Differential diagnosis of joint diseases. Clinical immunology and	PD	MC	24	LO1 LO5 LO6

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		immunopathology of rheumatological diseases. The basic principles of treatment of rheumatological diseases. Clinical protocols and clinical guidelines (RK, EULER, AP, PP). Rehabilitation of patients with pathology of the articular apparatus in stationary conditions. Research in rheumatology.				
5	Rheumatology in the hospital, children's	Provision of specialized medical inpatient care for rheumatological diseases in children. Age and genetic aspects of rheumatological diseases in children. Features of rheumatological diseases in childhood. Selection and conduct of diagnostic tests. Principles of treatment. Psychological assistance to patients and their relatives with rheumatological diseases in children. Rehabilitation of patients with JURA in stationary conditions.	PD	MC	40	LO2 LO3 LO6
6	Pregnancy rheumatic diseases	Management tactics in the prenatal and postpartum period of women with rheumatic diseases. Identification of the features of the course of rheumatic pathology in pregnant women, the management of therapy during pregnancy and	PD	OC	2	LO2 LO3

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		the choice of treatment tactics, the expected prognosis of the disease and possible complications, the development of rheumatic disease during pregnancy and in the postpartum period.				
7	Biostatistics in rheumatology	Methodological tools for descriptive and analytical statistics, types and features of biomedical research, experimental and clinical research in the field of the use of biological drugs in rheumatology.  Computer statistical programs, acquisition of skills for independent work with software products and solving practical problems necessary for planning, conducting and processing research results.	PD	OC	2	LO5 LO6
8	Immunological tests in rheumatology	Immunological laboratory diagnostics of rheumatological diseases. Principles of diagnostic use of immunological tests. Calculation of analytical parameters of immunological tests in rheumatology. Interpretation of the results of serological examination in systemic rheumatological diseases. Methods of immunological	PD	OC	2	LO4 LO5 LO6

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		diagnosis in rheumatology. Standardization and quality control of immunological tests. Clinical use of immunological tests in the diagnosis of rheumatological diseases.				
9	The use of biological drugs in rheumatologica l diseases	Genetic engineering biological preparations in rheumatology. Legal regulation of biological preparations in the Republic of Kazakhstan. Classificati on of genetically engineered biological drugs. Rheumatological diseases in which biological drugs are used.  Pharmacodynamics, pharmacokinetics and pharmacoeconomics of genetically engineered biological drugs.  Features of the use of biological drugs. Side effects of biological drugs. Contraindications to therapy with biological drugs.	PD	OC	2	LO2 LO5

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### The matrix of achievement of LO by various teaching methods

LO	Methods used Teaching and learning					
LO1. Has the skills of diagnosis, differential diagnosis, treatment, evaluation of its effectiveness based on evidence-based practice and preventive measures at all levels of rheumatological care.	Analysis of the material, feedback from the resident	Modeling situations and maintaining medical records				
LO2. Predicts the outcome of the disease and its complications; uses the most effective methods to ensure a high level of safety and quality of medical rheumatological care.	A reflective diary	Maintaining medical records				
LO3. Interacts with a patient with rheumatological pathology, his environment and colleagues, in order to achieve the best results for the patient.	Supervision of clinical work					
LO4. Operates within the legal and organizational field of the healthcare system of the Republic of Kazakhstan in the specialty "Rheumatology adults, children" works as part of interprofessional teams.	Supervision of clinical work	Maintaining medical records				
LO5. Participates in conducting research work by evaluating professional literature, using international databases, formulating research questions and finding answers to them.	"Journal Club"	Writing abstracts, articles Public appearances				
LO6. Carries out continuous professional development in the field of rheumatology through self-study and training of others, participation in conferences and discussions.	Observation	Observation				

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### The matrix of compliance with LO assessment methods

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LO	Methods used Teaching and learning					
LO1. Has the skills of diagnosis, differential diagnosis, treatment, evaluation of its effectiveness based on evidence-based practice and preventive measures at all levels of rheumatological care.	Testing Oral interview Essay (short and long) The short answer	Analysis of the material, feedback from the resident Modeling of situations Maintaining medical records				
LO2. Predicts the outcome of the disease and its complications; uses the most effective methods to ensure a high level of safety and quality of medical rheumatological care.	OSCE (with Skill Check stations) Mini Clinical Exam Long- term Case	A reflective diary				
LO3. Interacts with a patient with rheumatological pathology, his environment and colleagues, in order to achieve the best results for the patient.	Analysis of records in the medical history Analysis of doctor's activity records Analysis of prescriptions	Supervision of clinical work				
LO4. Operates within the legal and organizational field of the healthcare system of the Republic of Kazakhstan in the specialty "Rheumatology adults, children" works as part of interprofessional teams.	Standardized patients Patient reviews Reviews from other students Score 3600	Standardized patients Video recordings (discussion, evaluation) Observation of clinical work Development of a draft drug form Maintaining medical records				
LO5. Participates in conducting research work by evaluating professional literature, using international databases, formulating research questions and finding answers to them.	Abstract/presentation of the Publication	"Journal Club" Writing abstracts, articles Public appearances				
LO6. Carries out continuous professional development in the field of rheumatology through self-study and training of others, participation in conferences and discussions.	Portfolio Clinical records Self-assessment	Observation				

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### Work plan for the entire period of study

				t of	ral	E _ E	RI	C	1 vear	2 year	The	FE
	vele plines	Discipline	Name of the discipline/ modules	Amount of credits	<b>MGeneral</b> hours	RIC year year The of of form stud y y control						
PD		CY	CLE OF PROFILING DISCIPLINES	138	4140							
-		M	landatory component	134	4020							
		R-OCRC	Outpatient clinic rheumatology, children's	26	780	156	546	78	26		Exam	
	UC	R-RHC	Rheumatology in the hospital, children's	40	1200	240	840	120		40	Exam	
		R-OCRA	Outpatient clinic rheumatology, adult	26	780	156	546	78	26		Exam	
DD		R-RHA	Rheumatology in the hospital, adult	42	1260	252	882	126	18	24	Exam	
PD	oc	Optional component		4	120	24	84	12		4		
		R-PRD R-BR	Pregnancy and rheumatic diseases/ Biostatistics in rheumatology	2	60	12	42	6		2	Exam	
		R-ITR R-UBDRD	Immunological tests in rheumatology/	2	60	12	42	6		2	Exam	
			TOTAL	138	4140	828	2898	414*				
,	C	INTERM	IEDIATE CERTIFICATION *									
	FE	FI	NAL EXAMINATION	2	60					2		60
			TOTAL	140	4200	828	2898	414	70	70		60