

JSC "SOUTH KAZAKHSTAN MEDICAL ACADEMY"



"APPROVED"

Rector of SKMA, Professor

M. Rysbekov

2024




SOUTH KAZAKHSTAN  
MEDICAL  
ACADEMY

THE EDUCATIONAL PROGRAM OF THE RESIDENCY

7R01107

" PULMONOLOGY (ADULT, CHILDREN'S)"

Shymkent, 2024

ОҢТҮСТІК-ҚАЗАҚСТАН МЕДИСІНА АКАДЕМИЯСЫ «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
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Educational program 7R01107 «Pulmonology (adult, children)» 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 the approval of professional standards in the field of health."

Department of Phthisiopulmonology and Radiology

Head of the Department: М.Т. Касаева Kasaeva L.T.

Protocol No 8 of 26 01 2024

Chairman of the CPC "Therapy" Ж.А. Кауызбай Kauyzbay Zh.A.

**Agreed with the employer:**

Chief freelance pulmonologist of Shymkent,

Head of the Department of Pulmonology,

City hospital № 2 Shymkent Г.М. Байдилдаева Baidildaeva G.M.

2nd year Resident

EP "Pulmonology (adult, pediatric)" М.С. Әбилдайева Әbildayeva M.S.

Discussed at the meeting of the Clinical Council

Chairman of the Clinical Council Ж.А. Кауызбай Kauyzbay Zh.A.

Protocol No 8 of 29 01 2024


Approved by the First Vice-Rector

First Vice-Rector М.М. Есиркепов Esirkeпов M.M.

" 30 " 01 2024

Approved by the Academic Council

Protocol No. 14 of " 31 " 01 2024

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## 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 pulmonologists.
- 2. The purpose of the educational program:** Training of a competitive pulmonologist with a system of universal, professional competencies, capable and ready for independent professional activity in primary health care; highly specialized pulmonological care; palliative care.

### 3. Justification of the Educational Program (EP)

Pulmonology is a branch of medicine dealing with the study, diagnosis and treatment of diseases of the bronchopulmonary system.

One of the urgent tasks of modern pulmonology is to create uniform standards for the diagnosis and treatment of various lung diseases. The diagnosis should be based on the data of anamnesis, clinical, laboratory and other types of research.

Modern pulmonology is a field of dynamic development in both scientific and practical medicine. In recent years, there have been changes in the ideas of what a modern pulmonologist should know (erudition), what he should be able to do (practice), and, finally, what level of competence a modern pulmonologist should correspond to.

4. Professional standard, on the basis of which the educational program Professional standard "Pulmonology" was developed. Standard for the organization of pulmonological care in the Republic of Kazakhstan Order of the Ministry of Health of the Republic of Kazakhstan № 46 dated 01/25/2024.


5. **Field of professional activity:** the field of professional activity of graduates who have mastered the educational program 7R01107 Pulmonology (adult, children's) includes diagnosis, treatment, prevention and rehabilitation of diseases of the bronchopulmonary system in adults and children, as well as public health protection in general.

### 6. Objects of professional activity:

- organization of the health department;
- organization of education;
- organization of social protection;
- adult and child population;
- a set of tools and technologies aimed at creating conditions for public health protection.


### Types of professional activity:

- therapeutic, preventive and diagnostic;
- organizational and managerial;
- scientific research.


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### General information

№	Characteristics of the EP	Information
1	Registration number	7R01100265
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	7R007 -Pulmonology (adult, children's)
5	Name of the educational program	7R01107 "Pulmonology (adult, children's)"
6	Type of EP	Updated EP
7	The level by MSKO	7
8	The level of the NRK	7
9	ORC Level	7
10	Distinctive features of the EP	None
11	List of competencies	<p><b>KK1 Medical knowledge:</b> Synthesis of professional and scientific medical knowledge to provide qualified medical assistance</p> <p><b>KK2 Communication:</b> Effectively interact with the patient, his environment, and healthcare professionals in order to achieve the best results for the patient</p> <p><b>KK3 Professionalism:</b> Coordination of activities in healthcare organizations. The ability to make decisions and be responsible for the result of providing qualified medical care</p> <p><b>KK4 Personal and professional development:</b> The 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><b>KK5 Regulatory and legal knowledge:</b> The ability to act within the legal and organizational framework of the</p>

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		<p>healthcare system of the Republic of Kazakhstan.</p> <p><b>KK6 Research:</b> The ability to research and evaluate the results of their professional activities, the application of principles of diagnosis of diseases based on scientific data. The application of modern research methods in healthcare, taking into account bioethics, and the introduction of clinical practice.</p>
12	Learning outcomes (LO)	<p><b>LO1</b> is 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 for patients with diseases of the bronchopulmonary system.</p> <p><b>LO2</b> is able to effectively interact with the pulmonological patient, his environment, and healthcare professionals in order to achieve the best results for the patient.</p> <p><b>LO3</b> is able to assess risks and use the most effective methods to ensure a high level of safety and quality of pulmonological care to the population.</p> <p><b>LO4</b> is able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in the specialty “Adult and pediatric pulmonology”, provide basic assistance in emergency situations, work as part of interprofessional teams to implement a policy of strengthening the health of the nation</p> <p><b>LO5</b> is able to formulate adequate research questions, critically evaluate professional literature, effectively use international databases in the daily activities of the pulmonological field, and participate in the work of the research team.</p> <p><b>LO6</b> is able to study independently and train other members of the professional team, actively participate in discussions, conferences and other forms of continuous professional development in the field of pulmonology.</p>
13	The form of education	Full-time
14	The language of education	Kazakh and Russian
	The duration of education	2 years
16	Volume of credits	140
17	The qualification awarded	Doctor-pulmonologist adults, children
18	Availability of an appendix to the license for the direction of education	KZ22BFA00167288

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19	Availability of EP accreditation	Have
20	Name of the accreditation organization	NAAR
21	The validity period of the accreditation	10.06.2022 -09.06.2027№AB4357
22	Information about the disciplines	Appendixes 1,2

Appendixes 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					+	+


Appendixes 1.2

**Matrix of achievability of competencies/learning outcomes**

№	The name of the discipline	Brief description	Cycle	Component	Number of credits.	Generated codes
1	Pulmonology	Functional diagnostic methods in	PD	MC	18	LO1 LO2

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	outpatient clinics-1, adult	pulmonology. General principles of bronchodilator and antibacterial therapy. Respiratory diseases of the respiratory system at the outpatient stage.				LO3
2	Pulmonology outpatient clinics-2, adult	Allergic and occupational lung diseases. Breathing disorders during sleep. Pulmonary rehabilitation. Respiratory support at the outpatient stage.	PD	MC	12	LO1 LO2 LO4
3	Pulmonology outpatient clinics-1, children's	Functional diagnostic methods and differential diagnosis of bronchopulmonary diseases. Common diseases in pediatric pulmonology at the outpatient stage. Medical examination of bronchopulmonary diseases in children. Provision of services for compulsory medical insurance.	PD	MC	12	LO1 LO2 LO3
4	Pulmonology outpatient clinics-2, children's	Orphan diseases in children. Congenital malformations of the bronchopulmonary system in children. Hereditary diseases of the lungs and bronchi in children. Etiology, clinic, diagnostic algorithm, treatment according to the clinical protocol of the	PD	MC	10	LO1 LO2 LO3 LO4

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		Ministry of Health of the Republic of Kazakhstan. Rehabilitation of children with bronchopulmonary diseases.				
5	Pulmonology in the hospital-1, adult	Visual diagnostic methods in pulmonology. Pathomorphology in pulmonology. Pharmacotherapy in pulmonology. Respiratory diseases of the respiratory system in the hospital	PD	MC	22	LO1 LO3 LO6
6	Pulmonology in the hospital-2, adult	Phthisiopulmonology. Oncopulmonology. Interstitial and orphan lung diseases. Abnormalities of the bronchopulmonary system and suppurative processes in the lungs. Intensive pulmonology. Interventional pulmonology.	PD	MC	26	LO1 LO2 LO3
7	Pulmonology in the hospital-1, children's	Visual diagnostic methods in pediatric pulmonology. Pharmacotherapy in pediatric pulmonology. Diseases associated with various pathogenic factors. Allergic diseases of the respiratory tract.	PD	MC	18	LO1 LO3 LO6
8	Pulmonology in the hospital-2, children's	Congenital anomalies of the bronchopulmonary system and genetically	PD	MC	16	LO1 LO2 LO3



		determined diseases in children. Clinical symptoms, diagnosis, differential diagnosis, treatment and prevention from the perspective of evidence-based medicine. Interstitial lung diseases in children. Intensive pulmonology of childhood.				
1	Radiation diagnostics	Radiological syndromes of lung diseases. Radiation diagnostics of emergency conditions in pulmonology. The algorithm of diagnosis in lung diseases.				LO1 LO2 LO3 LO4
2	Research management and biostatistics	Planning of research work. The method and methodology of scientific research. Legislative and regulatory bases of scientific research. Stages of scientific research. Methods and methods of intellectual property protection. Professional ethics in the field of science.	PD	MC	4	LO5 LO6
	Total:				138	
	Final examination:				2	
	Total:				140	

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Appendixes 1.2

Matrix of achievability of competencies/learning outcomes

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	outpatient clinics-1, adult	pulmonology. General principles of bronchodilator and antibacterial therapy. Respiratory diseases of the respiratory system at the outpatient stage.				LO3
2	Pulmonology outpatient clinics-2, adult	Allergic and occupational lung diseases. Breathing disorders during sleep. Pulmonary rehabilitation. Respiratory support at the outpatient stage.	PD	MC	12	LO1 LO2 LO4
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		Ministry of Health of the Republic of Kazakhstan. Rehabilitation of children with bronchopulmonary diseases.				
5	Pulmonology in the hospital-1, adult	Visual diagnostic methods in pulmonology. Pathomorphology in pulmonology. Pharmacotherapy in pulmonology. Respiratory diseases of the respiratory system in the hospital	PD	MC	22	LO1 LO3 LO6
6	Pulmonology in the hospital-2, adult	Phthisiopulmonology. Oncopulmonology. Interstitial and orphan lung diseases. Abnormalities of the bronchopulmonary system and suppurative processes in the lungs. Intensive pulmonology. Interventional pulmonology.	PD	MC	26	LO1 LO2 LO3
7	Pulmonology in the hospital-1, children's	Visual diagnostic methods in pediatric pulmonology. Pharmacotherapy in pediatric pulmonology. Diseases associated with various pathogenic factors. Allergic diseases of the respiratory tract.	PD	MC	18	LO1 LO3 LO6
8	Pulmonology in the hospital-2, children's	Congenital anomalies of the bronchopulmonary system and genetically	PD	MC	16	LO1 LO2 LO3

		determined diseases in children. Clinical symptoms, diagnosis, differential diagnosis, treatment and prevention from the perspective of evidence-based medicine. Interstitial lung diseases in children. Intensive pulmonology of childhood.				
1	Radiation diagnostics	Radiological syndromes of lung diseases. Radiation diagnostics of emergency conditions in pulmonology. The algorithm of diagnosis in lung diseases.				LO1 LO2 LO3 LO4
2	Research management and biostatistics	Planning of research work. The method and methodology of scientific research. Legislative and regulatory bases of scientific research. Stages of scientific research. Methods and methods of intellectual property protection. Professional ethics in the field of science.	PD	MC	4	LO5 LO6
	Total:				138	
	Final examination:				2	
	Total:				140	

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Appendix 1.3


The matrix of achievement of RO by various teaching methods

LO (codes)	Teaching and learning methods							
	Participation in the rounds	Maintaining medical records	PS - Examination of the patient	Performing/participating in clinical work	Standardized patient	Writing theses	Participation in conferences (seminars, Olympiads)	Public speaking
LO1	+	+	+	+	+			
LO2	+		+	+	+			
LO3		+	+	+				
LO4	+			+	+			
LO5						+	+	+
LO6							+	+

Appendix 1.4


The matrix of compliance with LO assessment methods

LO (codes)	Assessment methods									
	Oral Response	Testing	Essay	Demonstration of patient examination	DOPS - assessment of the development of practical	Analysis of records in the medical history and outpatient records (diagnostic procedures, prescribed therapy)	Standardized patient	Score 360 <sup>o</sup>	Abstract/presentations	Portfolio Publications Self-assessment
LO1	+	+		+	+	+	+	+		
LO2				+	+	+	+	+		
LO3				+	+	+	+			
LO4					+	+	+			
LO5	+		+						+	+
LO6	+			+					+	+

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### Work plan for the entire period of study

The cycle of disciplines	Code of discipline	Name of discipline	Credits	General hours	Classroom hours	SIW		1 year	2 year	3 year	Control forms	FC	
						SIWT	SIW						
PD		<b>CYCLE OF PROFILING DISCIPLINES</b>	<b>70</b>	<b>2100</b>	<b>420</b>	<b>1365</b>	<b>315</b>						
		<b>Mandatory component</b>	<b>70</b>	<b>2100</b>	<b>420</b>	<b>1365</b>	<b>315</b>						
		<b>1 course</b>											
PD	MC	R-POCA-1	Pulmonology outpatient clinics-1, adult	10	300	60	195	45	10			Exam	
		R-POCA-2	Pulmonology outpatient clinics-2, adult	12	360	72	234	54	12			Exam	
		R-PHA-1	Pulmonology in the hospital-1, adult	22	660	132	429	99	22			Exam	
		R-PHA-2	Pulmonology in the hospital-20, adult	26	780	156	507	117	56			Exam	
<b>2 course</b>													

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PD	CYCLE OF PROFILING DISCIPLINES		68	2040	408	1126	306		70	
MC	<b>Mandatory component</b>		<b>64</b>	<b>1920</b>	<b>384</b>	<b>1048</b>	<b>288</b>		<b>64</b>	Exam
	R-POCA-1	Pulmonology outpatient clinics-1, adult	8	240	48	156	36		8	Exam
	R-POCCh-1	Pulmonology outpatient clinics-1, children's	12	360	72	234	54		12	Exam
	R-POCCh-2	Pulmonology outpatient clinics-2, children's	10	300	60	195	45		10	Exam
	R-PHCh-1	Pulmonology in the hospital-1, children's	18	540	108	351	81		18	Exam
	R-PHCh-2	Pulmonology in the hospital-2, children's	16	480	96	112	72		16	Exam
	<b>Optional component</b>		<b>4</b>	<b>120</b>	<b>24</b>	<b>78</b>	<b>18</b>		<b>4</b>	
	R-RD	Radiation diagnostics	4	120	24	78	18		4	Exam
	R-RMB	Research management and biostatistics								
	<b>TOTAL</b>		<b>138</b>	<b>2100</b>	<b>468</b>	<b>1326</b>	<b>306</b>		<b>138</b>	
FE	<b>FINAL EXAMINATION</b>		<b>2</b>	<b>60</b>					<b>2</b>	
	<b>TOTAL</b>		<b>140</b>	<b>2160</b>	<b>468</b>	<b>1326</b>	<b>306</b>		<b>140</b>	