

JSC "SOUTH KAZAKHSTAN MEDICAL ACADEMY"



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MEDICAL
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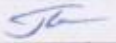
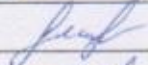

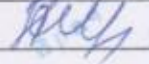
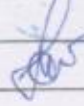

EDUCATIONAL RESIDENCY PROGRAM


7R01108

" ENDOCRINOLOGY FOR ADULTS, CHILDREN "

Educational residency program
7R01105 «Endocrinology for adults, children»

updated according to the requirements of the Order of the Minister of Health of the Republic of Kazakhstan "On approval of the state compulsory standards of higher and postgraduate education" from July 4, 2022, the Ministry of Health of the Republic of Kazakhstan № 63 and Order of the Minister of Science.

Position	Full name	Signature
Developed by		
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Protocol No. <u>1</u> of " <u>31</u> " " <u>08</u> " 2022		
Discussed at the meeting of the Residency CEP		
Chairman of the CEP	Kauyzbai Zh.A.	
Protocol No. <u>50</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>50</u> of " <u>04</u> " " <u>08</u> " 2022		
Approved by the Academic Council		
Protocol No. <u>12</u> from " <u>08</u> " " <u>08</u> " 2022.		

ОҢТҮСТІК-ҚАЗАҚСТАН MEDISINA АКАДЕМИЯСЫ «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department «Therapy and cardiology» Educational residency program 7R01108 Endocrinology adult, children		044-51/11- Page 3 из 12 стр

Passport of the educational program

1. The mission of the educational program:

Training of competitive personnel in the field of endocrinology with a high level of professionalism to meet the needs of the national and regional health care system, demonstrating continuity in continuous professional development and social responsibility for contributing to the development of medicine.

2. The purpose of the educational program is to train highly qualified, competitive endocrinologists who are able to meet the needs of society in providing medical care to endocrinological patients, apply and develop advanced innovative technologies in medicine, science and practice.

3. Justification of the EP

Endocrinology is a field of clinical and theoretical medicine that studies the morphology and functioning of the glands of internal (endocrine) secretion, the hormones they secrete, the characteristics of their synthesis and effect on the body.

An endocrinologist diagnoses pathology from the endocrine system and, if necessary, corrects disorders of the endocrine glands: suppresses, stimulates or replaces the production of hormones and biologically active substances that regulate vital body functions.

At the national level, the issues of endocrinology in the healthcare system are reflected in the main regulatory documents On the approval of the standard for the organization of endocrinological care in the Republic of Kazakhstan. Order of the Acting Minister of Health of the Republic of Kazakhstan dated March 31, 2023 No. 53. Registered with the Ministry of Justice of the Republic of Kazakhstan on March 31, 2023 No. 32209; On approval of the rules for the provision of specialized, including high-tech medical care. Order of the Minister of Health of the Republic of Kazakhstan dated December 8, 2020 No. KR DSM-238/2020. Registered with the Ministry of Justice of the Republic of Kazakhstan on December 10, 2020 No. 21746

The need for medical

4. Professional standard, on the basis of which the educational program has been developed • Professional standard "Endocrinology (adult, children's) "

On the approval of the standard for the organization of endocrinological care in the Republic of Kazakhstan. Order of the Acting Minister of Health of the Republic of Kazakhstan dated March 31, 2023 No. 53. Registered with the Ministry of Justice of the Republic of Kazakhstan on March 31, 2023 No. 32209

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



General information

№	Characteristics of educational programs	Data
1	Registration number	7R01100260
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	R008 Endocrinology (adults, children)
5	Names of educational program	7R01108 Endocrinology (adults, children) (residency)
6	Type of the EP	New EP
7	Level of MSKO	7
8	Level of NRK	7
9	Level of ORK	7
10	Distinctive features of the OP	No
	Partner -University (JEP)	
	Partner -University (DEP)	
11	List of competencies	<p>C1. Patient supervision: formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice in conducting highly specialized cardiological care.</p> <p>C 2. Communication and collaboration: interact effectively with the cardiological patient, his environment, and healthcare professionals in order to achieve the best results for the patient</p> <p>C 3. Professionalism: assess risks and use the most effective methods to ensure a high level of safety and quality of highly specialized cardiological care.</p> <p>C 4. Public health: to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in their specialty, to provide basic cardiological care in emergency situations, to work as part of interprofessional teams to implement the policy of strengthening the health of the nation</p> <p>C 5. Research: 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>C 6. Training and development: to study independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development.</p>



12	Learning outcomes	<p>LO1: formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice in conducting highly specialized cardiological care.</p> <p>LO2: communicate effectively with the cardiac patient, their environment, healthcare professionals in order to achieve the best results for the patient</p> <p>LO3: assess risks and use the most effective methods to ensure a high level of safety and quality in highly specialized cardiac care.</p> <p>LO4: act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in their specialty, provide basic cardiological care in emergencies, work as part of interprofessional teams to implement the policy of promoting the health of the nation</p> <p>LO5: 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: learn independently and train other members of the professional team, actively participate in discussions, conferences and other forms of continuous professional development.</p>
13	Form of training	Full - time
14	Language of training	Kazakh and Russian
15	Volume of loans	140
16	The term of study	2 years
17	Assigned qualification	doctor –endocrinologist adults, children
18	Availability of an appendix to the license for the direction of training	KZ36LAA00011387
19	Existence of EP accreditation	+
	Name of accreditation body	IAAR
	Accreditation period	№73LAA0001178810.06.2022-09.06.2027Ys.
20	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
CC1	+	+	+			
CC2		+		+		
CC3			+		+	
CC4				+		
CC5					+	
CC6						+

Appendix 1.2

Matrix of achievable competencies/learning outcomes

№	Names of discipline	Brief description of the discipline	Cycle	Component	Number of credits	Generated learning outcomes (codes)
1	Internal diseases	The relevance of creating a multidisciplinary team of therapeutic doctors in the diagnosis, management and treatment of patients with endocrine diseases. Principles of early detection of diseases of internal organs in patients with endocrine diseases. Forecasting the course of internal diseases and prevention of their complications. Organization of preventive measures aimed at reducing the incidence of internal diseases in patients with endocrine diseases.	PD	MC	12	LO1 LO3 LO5
2	Childhood diseases	The prenatal and postnatal periods of a child's development depend on the functioning of the endocrine system. Conducting an initial examination of the child, making a diagnosis, dynamic observation, conducting a medical examination.. Determination of the emotional and personal characteristics of sick children. Measures aimed at early detection of endocrine system disorders in children.	PD	MC	6	LO1 LO3 LO5
3	Endocrinology in the	Epidemiology of endocrine diseases. Nomenclature and classification of endocrine diseases.	PD		42	LO1 LO2 LO3



	(adult)	with endocrine pathology. Differential diagnosis of diseases of the endocrine system. The basic principles of treatment of diseases of the endocrine system. Standards. Clinical protocols and clinical recommendations of the Republic of Kazakhstan on endocrine pathology. Rehabilitation of patients with diseases of the endocrine system in stationary conditions. Research in endocrinology.		MC		LO6
4	Endocrinology in the hospital (children)	Specialized medical inpatient care for endocrine diseases in children. Age-related and genetic aspects of endocrine diseases in children. Features of endocrine diseases in childhood. Selection and conduct of diagnostic tests. Principles of treatment. Psychological assistance to patients and their relatives with endocrine diseases in children. Rehabilitation of patients with endocrine pathology in inpatient conditions	PD	MC	20	LO1 LO2 LO3 LO4 LO5 LO6
5	Endocrinology outpatient (adult)	Organization of outpatient care for patients with endocrine pathology. Inpatient replacement technologies. Clinical protocols of the Republic of Kazakhstan, clinical recommendations of international medical communities on topical diseases of the endocrine system. Prevention and rehabilitation of patients with endocrine diseases. Clinical examination of patients with endocrine diseases. Medical and social expertise of patients with endocrine diseases. Portal "Hospitalization Bureau." Prevention issues.	PD	MC	20	LO1 LO2 LO6



6	Endocrinology outpatient (children)	Organization of outpatient care for pediatric patients with endocrine pathology. Features of the course of endocrine diseases in childhood. Issues of timely diagnosis, treatment, prevention, rehabilitation using clinical protocols and clinical recommendations for postocrine diseases in pediatrics. Hospital-replacement and consultative and diagnostic care in pediatric endocrinology.	PD	MC	10	LO1 LO2 LO6
7	Reproductive endocrinology, infertility and pregnancy	Contemporary issues of "Reproductive Endocrinology." Diagnosis and treatment of reproductive disorders in endocrine patients. A set of means and technologies aimed at creating conditions for protecting the health of citizens with endocrine pathology. Artificial methods of insemination, in vitro insemination (IVF).	PD	MC	10	LO1 LO3 LO5
8	Highly specialized endocrinological care	Highly specialized care for patients with endocrine diseases in accordance with modern principles of evidence-based medicine. The main medical treatment-diagnostic and preventive interventions to provide highly specialized medical care to the population in endocrine diseases and endocrinopathies.	PD	MC	6	LO3 LO4 LO5
9	Radiation and radioisotope diagnostics	Significance of imaging methods and radioisotope diagnostics of endocrinological patients. Optimal selection of visual diagnostic methods in endocrinology. Physical basics of ultrasound diagnostics. Interpretations of the results of functional diagnosis of patients with endocrine pathology. New technologies in ultrasound diagnostics. Features of visual diagnosis in children.	PD	MC	8	LO1 LO3 LO6
	Fundame	The importance of hormone				



	replacem ent therapy in endocrino logy	with endocrinopathy. Prevention and correction of changes resulting from endocrine disorders. The use of substitution therapy in men with delayed puberty, impotence, the development of cancer, to stimulate spermatogenesis, regulation of the main male hormone – testosterone.				
11	Pregnanc y and endocrine pathology	Endocrine pathology during pregnancy. Pregnancy and thyroid diseases. Pregnancy and diabetes mellitus. Complications of diabetes. Modern methods of diagnosis, treatment and follow-up of pregnant women with extragenital pathology correspond to modern standards of qualified care.	PD	OC	4	LO1 LO2
12	Diabetes School	Structured education for patients with diabetes and people with risk factors, aimed at preventing this disease and its consequences. Theoretical basis for conducting group interactive and individual structured training for patients with type 1 and type 2 diabetes mellitus and persons with risk factors for diabetes mellitus	PD	OC		LO2 LO3 LO6



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

LO	Methods used Teaching and learning	
LO1: Patient care :formulatea clinical diagnosis, prescribe a treatment plan, and evaluate its effectiveness based on evidence-based practice in highly specialized cardiac care.	Analysis of the material, feedback from the resident	Modeling situations and maintaining medical records
LO2: Communication and collaboration: communicate effectively with the cardiac patient, their environment, healthcare professionals in order to achieve the best results for the patient	A reflective diary	Maintaining medical records
LO3: Professionalism: assess risks and use the most effective methods to ensure a high level of safety and quality in highly specialized cardiac care.	Supervision of clinical work	
LO4: Public health: act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in their specialty, provide basic cardiological care in emergencies, work as part of interprofessional teams to implement the policy of promoting the health of the nation	Supervision of clinical work	Maintaining medical records
LO5: Research: formulate adequate research questions, critically evaluate professional literature, effectively use international databases in their daily activities, participate in the work of the research team	"Journal Club"	Writing abstracts, articles Public appearances
LO6: Training and Development : learn independently and train other members of the professional team, actively participate in discussions, conferences and other forms of continuous professional development.	Observation	

The matrix of compliance with LO assessment methods

LO	Methods used Teaching and learning	
LO1: Patient care :formulatea clinical diagnosis, prescribe a treatment plan, and evaluate its effectiveness based on evidence-based practice in highly specialized cardiac 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: Communication and collaboration: communicate effectively with the cardiac patient, their environment, healthcare professionals in order to achieve the best results for the patient	OSCE (with Skill Check stations) Mini Clinical Exam Long-term Case	A reflective diary
LO3: Professionalism: assess risks and use the most effective methods to ensure a high level of	Analysis of records in the medical history	Supervision of clinical work



	Analysis of prescriptions	
LO4: Public health: act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in their specialty, provide basic cardiological care in emergencies, work as part of interprofessional teams to implement the policy of promoting the health of the nation	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: Research: formulate adequate research questions, critically evaluate professional literature, effectively use international databases in their daily activities, participate in the work of the research team	Abstract/presentation of the Publication	"Journal Club" Writing abstracts, articles Public appearances
LO6: Training and Development : learn independently and train other members of the professional team, actively participate in discussions, conferences and other forms of continuous professional development.	Portfolio Clinical records Self-assessment	Observation

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 study	The form control /	F E
						CPPH	RTIC/				
PD/	CYCLE OF PROFILING DISCIPLINES		138	4140							
PD MC	Mandatory component		134	4020							
	R-ID	Internal disease	12	360	72	252	36	12		Exam	
	R-CD	Childhood diseases	6	180	36	126	18	6		Exam	
	R-EOA	Endocrinology outpatient (adult)	20	600	120	420	60	20		Exam	
	R-EOC	Endocrinology outpatient (children's)	10	300	60	210	30	10		Exam	

		(children's)									
	R-RRD	Radiation and radioisotope diagnostics	8	240	48	168	24		8	Exam	
	R-REIP	Reproductive endocrinology, infertility and pregnancy	10	300	60	210	30		10	Exam	
	R-EHA	Endocrinology in the hospital (adult)	42	1260	252	882	126		42	Exam	
	R-HSEC	Highly specialized endocrinological care	6	180	36	126	18		6	/ Exam	
	Optional component		4	120	24	84	12	2	2		
	R-FRTE	Fundamentals of replacement therapy in endocrinology/						2			
OC	R-PEP	Pregnancy and endocrine pathology/	4	120	24	84	12		2	Exam	
	R-DS	Diabetes school									
TOTAL			138	4140	828	2898	414*				
IC	INTERMEDIATE CERTIFICATION										
FE	FINAL EXAMINATION		2	60					2		60
TOTAL			140	4200	828	2898	414	70	70		60