

LD-21ИИ

Federal State Budgetary Educational Institution  
higher education  
"NORTH OSSETIAN STATE MEDICAL ACADEMY"  
Ministry of Health of the Russian Federation

I APPROVED

Rector of the Federal State Budgetary Educational  
Institution of Higher Education SOGMA of the  
Ministry of Health of Russia

April 17, 2024

**TRAINING PROGRAM**

General medical practice (fundamentals of practical training for the professional activities of a general practitioner for the provision of primary health care)

**"BASIC CARDIOPULMONARY RESUSCITATION"**

main professional educational program of higher education - specialty program in specialty 05/31/01 General Medicine,  
approved 04/17/2024

Form of study full-time

Duration of development of OBOP HE XII years

Department

Vladikavkaz, 2024

When developing a practice program, the basis is:

1. Federal State Educational Standard of Higher Education by specialty 05/31/01 General medicine, approved by the Ministry of Education and Science of the Russian Federation on August 12, 2020 No. 988

2. OPOP HE curriculum by specialty 05/31/01 General medicine LD-21-01-21IN;  
LD-21-01-21IN;  
LD-21-02-22IN;  
LD-21-03-23IN;  
LD-21-04-24IN,  
approved by the Scientific Council of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia on April 17, 2024, protocol No. 6.

The practice program was approved at a meeting of the Department of Anesthesiology, Resuscitation and Intensive Care dated April 01 2024, protocol No. 5.

The internship program was approved at a meeting of the central coordinating educational and methodological council dated April 2, 2024, protocol No. 4.

The practice program was approved by the Scientific Council of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated April 17, 2024, protocol No. 6.

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## **Contents of the internship program**

1. 1.indication of the type of practice, method and form(s) of its implementation;
2. 2.a list of planned learning outcomes during internship, correlated with the planned results of mastering the educational program;
3. 3.indication of the place of practice in the structure of the educational program;
4. 4.indication of the scope of practice in credit units and its duration in weeks or in academic or astronomical hours;
5. 5.content of practice;
6. 6.indication of practice reporting forms;
7. 7.assessment materials for conducting intermediate certification of students in practice;
8. 8.a list of educational literature and Internet resources necessary for practical training;
9. 9.a list of information technologies used during practice, including a list of software and information reference systems (if necessary);
10. 10.methodological instructions for students on mastering educational practice;
11. 11.a list of resources of the information and telecommunications network "Internet" (hereinafter referred to as the "Internet") necessary for mastering educational practice;
12. 12.description of the material and technical base necessary for the implementation of the educational process of educational practice.
13. 13.conducting educational activities using e-learning and distance learning technologies.

**1. 1.Indication of the type of practice, method and form(s) of its implementation**

The educational practice “General medical practice (basics of practical training for the professional activity of a physician to provide primary health care) “Cardiopulmonary resuscitation” is a mandatory part of Block 2 of the Federal State Educational Standard of Higher Education in the specialty 05/31/01 “General Medicine”.

Type of practice – practice to obtain primary professional skills, including primary skills and skills in research activities.

Method of practice: stationary

**1. 2. List of planned learning outcomes for practice and results of mastering the educational program**

No	Competency number/index	Contents of competence (or parts thereof)	Topic of the lesson (section)	Competency achievement indicators	Development results		
					know	Be able to	own
1	2	3	4	5	6	7	8
1.	OPK-1	Able to implement moral and legal norms, ethical and deontological principles in professional activities	Fundamentals of modern anesthesiology. Pain syndrome (acute and chronic pain). The simplest methods of pain relief in the practice of resuscitation and intensive care. Acute respiratory failure Acute heart failure. TELA Cardiopulmonary resuscitation. Algorithm 2015. Shock. Types of shock. Etiology, pathogenesis, clinical picture, intensive care. General principles of infusion therapy. Infusion and transfusion media Disturbances in the water-electrolyte and acid-base balance of the body. Acute disturbances of consciousness (fainting, delirium, stupor, coma). Intensive therapy of comatose states. Acute renal failure. Acute liver failure Resuscitation and intensive care in case of accidents	ID-1 GPC-1 Complies with moral and legal standards in professional activities.	Definition, classification, etiology, pathogenesis, clinical picture, diagnosis, treatment of patients with various pathologies	Examine and interview patients, interpret data from laboratory and special research methods, analyze the information received and make a diagnosis, prescribe treatment and evaluate its results	Diagnostic methods for treating patients with various diseases

			(drowning, electric shock, hypothermia, heat stroke). Acute exogenous poisoning.				
2.	PC-1	Providing emergency or emergency medical care to a patient	Fundamentals of modern anesthesiology. Pain syndrome (acute and chronic pain). The simplest methods of pain relief in the practice of resuscitation and intensive care. Acute respiratory failure Acute heart failure. TELA Cardiopulmonary resuscitation. Algorithm 2015. Shock. Types of shock. Etiology, pathogenesis, clinical picture, intensive care. General principles of infusion therapy. Infusion and transfusion media Disturbances in the water-electrolyte and acid-base balance of the body. Acute disturbances of consciousness (fainting, delirium, stupor, stupor, coma). Intensive therapy of comatose states. Acute renal failure. Acute liver failure Resuscitation and intensive care in case of accidents (drowning, electric shock, hypothermia, heat stroke). Acute exogenous poisoning.	ID-1 PC-1 Identifies clinical signs of conditions requiring emergency medical care ID-2 PC-1 Performs measures to provide emergency medical care ID-3 PC-1 Identifies conditions requiring emergency medical care, including clinical signs of sudden cessation of blood circulation and breathing ID-4 PC-1 Performs basic cardiopulmonary resuscitation in combination with electrical impulse therapy (defibrillation)	Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment of patients with various pathologies	Examine and interview patients, interpret data from laboratory and special research methods, analyze the information received and make a diagnosis, prescribe treatment and evaluate its results	Diagnostic methods for treating patients with various diseases
3.	PC-2	Conducting a patient examination to establish a diagnosis	Fundamentals of modern anesthesiology. Pain syndrome (acute and chronic pain). The simplest methods of pain relief in the practice of resuscitation and	ID-1 PC-2 Collects complaints, medical history and illness of the patient and analyzes the information received	Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment of patients	Examine and interview patients, interpret data from laboratory and special	Diagnostic methods for treating patients with various diseases

			<p>intensive care.  Acute respiratory failure  Acute heart failure. TELA  Cardiopulmonary resuscitation. Algorithm 2015.  Shock. Types of shock. Etiology, pathogenesis, clinical picture, intensive care.  General principles of infusion therapy. Infusion and transfusion media  Disturbances in the water-electrolyte and acid-base balance of the body.  Acute disturbances of consciousness (fainting, delirium, stupor, stupor, coma). Intensive therapy of comatose states.  Acute renal failure. Acute liver failure  Resuscitation and intensive care in case of accidents (drowning, electric shock, hypothermia, heat stroke).  Acute exogenous poisoning.</p>	<p>ID-2 PC-2  Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets its results  ID-3 PC-2  Justifies the need and scope of laboratory examination of the patient  ID-4 PC-2  Justifies the need and scope of instrumental examination of the patient  ID-5 PC-2  Justifies the need to refer the patient for consultation to medical specialists  ID-6 PC-2  Analyzes the obtained results of examination of the patient, if necessary, justifies and plans the scope of additional research  ID-7 PC-2  Interprets the results of collecting information about the patient's disease  ID-8 PC-2  Interprets data obtained during laboratory examination of the patient  ID-9 PC-2  Interprets data obtained during instrumental examination of the patient  ID-10 PC-2  Interprets data</p>	<p>with various pathologies</p>	<p>research methods, analyze the information received and make a diagnosis, prescribe treatment and evaluate its results</p>	
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				obtained during patient consultations with medical specialists ID-14 PC-2 Determines medical indications for the provision of emergency, including specialized emergency medical care			
4.	PK-3	Prescribing treatment and monitoring its effectiveness and safety	<p>Fundamentals of modern anesthesiology. Pain syndrome (acute and chronic pain). The simplest methods of pain relief in the practice of resuscitation and intensive care.</p> <p>Acute respiratory failure Acute heart failure. TELA Cardiopulmonary resuscitation. Algorithm 2015. Shock. Types of shock. Etiology, pathogenesis, clinical picture, intensive care.</p> <p>General principles of infusion therapy. Infusion and transfusion media Disturbances in the water-electrolyte and acid-base balance of the body. Acute disturbances of consciousness (fainting, delirium, stupor, stupor, coma). Intensive therapy of comatose states. Acute renal failure. Acute liver failure Resuscitation and intensive care in case of accidents (drowning, electric shock, hypothermia, heat stroke). Acute exogenous</p>	ID-1 PC-3 Draws up a treatment plan for the disease and the patient's condition, taking into account the diagnosis, age of the patient, clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) for the provision of medical care, taking into account the standards of medical care	Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment of patients with various pathologies	Examine and interview patients, interpret data from laboratory and special research methods, analyze the information received and make a diagnosis, prescribe treatment and evaluate its results	Diagnostic methods for treating patients with various diseases

		poisoning.			
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1. **3.Place of practice in the structure of the educational program**

The educational practice “General practice (basics of practical training for the professional activity of a physician to provide primary health care) “Cardiopulmonary resuscitation” is included in the mandatory part of Block 2 Federal State Educational Standard of Higher Education in specialty 05/31/01. "Healing."

1. **4.Scope of practice**

No.	Type of work	Total credit units	Total hours	Semester
				12
				Number of hours
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	1. <b>Contact work between students and the teacher (total), including:</b>	-	24	24
1.	2. Lectures (L)			
1.	3. Clinical Practical Exercises (CP)	-	24	24
1.	4. Seminars (C)			
1.	5. Laboratory work (LR)			
1.	6. <b>Student independent work (SWS)</b>	-	<b>12</b>	<b>12</b>
1.	7. <b>Type of intermediate Certifications</b>	test (G)		
		exam (E)		
1.	8. <b>TOTAL: Total Labor intensity</b>	<b>Hours</b>	<b>36</b>	<b>36</b>
		<b>ZET</b>	<b>1</b>	<b>1</b>

1. **5.Contents of practice**

No./p	Semester number	Name of the topic (section) of the discipline	Types of educational activities (in hours)					Forms of ongoing progress monitoring	
			L	LR	PZ	SRS	Total		
1	2	3	4	5	6	7	8	9	
1	12	The simplest methods of pain relief in the practice of resuscitation and intensive care			2			2	Oral survey Test tasks Situational tasks
2	12	Acute respiratory failure. Practicing skills to ensure airway patency on simulators at the FAC SOGMA.			2			2	Oral survey Test tasks Situational tasks
3	12	Acute heart failure. TELA. Practicing skills to ensure airway patency on simulators at the FAC SOGMA.			2			2	Oral survey Test tasks Situational tasks
4	12	Terminal states. CPR. Algorithm 2015. Practicing skills to ensure airway patency on simulators at the FAC SOGMA.			4			4	Oral survey Test tasks Situational tasks
5	12	Basic principles of infusion-transfusion therapy. Infusion and transfusion media			4	2		6	Oral survey Test tasks Situational tasks
6	12	Shock. Types of shock. Etiology, pathogenesis, clinical picture,			4	4		8	Oral survey Test tasks

		intensive care					Situational tasks
7	12	Acute disturbances of consciousness (fainting, delirium, stupor, stupor, coma). Intensive care of comatose states		2	2	4	Oral survey Test tasks Situational tasks
8	12	Resuscitation and intensive care in case of accidents (drowning, electric shock, hypothermia, heat stroke).		2	2	4	Oral survey Test tasks Situational tasks
9	12	Acute poisoning		2	2	4	Oral survey Test tasks Situational tasks
<b>TOTAL:</b>				<b>24</b>	<b>12</b>	<b>36</b>	

### 1. 6. Indication of practice reporting forms

Based on the results of training practice in basic cardiopulmonary resuscitation, a test is carried out in the form of an interview.

Students provide for credit:

- Diary of educational practice report

### 1. 7. Assessment materials for conducting intermediate certification of students in practice

No.	List of competencies	No. semester	Indicator(s) assessments	Evaluation criterion(s)	Grading scale	Name OM
1	2	3	4	5	6	7
1.	1. OPK-1 PC-1 PC-2 PK-3	12	Order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated 10.07.18 No. 264/0 "On approval of the Standards for quality control of education in the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia	Order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated 10.07.18 No. 264/0 "On approval of the Standards for quality control of education in the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of	Order of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia dated 10.07.18 No. 264/0 "On approval of the Standards for quality control of education in the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of	Tickets by offset Testing

				Russia	Russia	
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1. **8.List of basic and additional educational literature necessary for mastering the educational practice program**

**Main literature**

p/no.	Name	Authors)	Year, place of publication	Number of copies	
				in library	at the cathedral
1	2	3	4	7	8
1.	1 Anesthesiology and resuscitation: textbook	ed.O.A. Valley	M.: GEOTA R-Media, 2006	106	1
1.	2 Anesthesiology and resuscitation : textbook	ed. O.A. Valley	M.: GEOTA R-Media, 2009	"Student Consultant" <a href="http://www.studmedlib.ru/book/ISBN9785970410332.html">http://www.studmedlib.ru/book/ISBN9785970410332.html</a>	
1.	3 Anesthesiology and intensive care in pediatrics: a textbook	ed. V.A. Mikhelson	M.: MEDpress-inform, 2009	12	1

**additional literature**

p/no.	Name	Authors)	Year, place of publication	Number of copies	
				in library	at the department
1	2	3	4	7	8
1.	1 Introduction to anesthesiology and resuscitation: textbook	Levite E.M.	M.: GEOTA R-Media, 2007	2	1
1.	2 Clinical anesthesiology. Book 1	Morgan Jr. E.J.	M: Binom, 2005	2	1
1.	3 Anesthesia and resuscitation in disaster medicine	Slepushkin V.D., Selivanov V.A.	Vladikavkaz, 2005	20	2
1.	4 Emergency care in therapy and cardiology: a textbook	ed. Yu.N.Grinshtein	M.: GEOTA R-Media, 2008	7	1
5.	Methodological recommendations for practical training in	comp. Z.T. Astakhova	Vladikavkaz, 2007	72	5

	emergency therapy for students. YIcourse				
6.	Intensive care: national guidelines: Vol.1	ed. B.R. Gelfand	M.: GEOTA R-Media, 2011	2	1
7.	Intensive care: national guidelines: T.2	ed. B.R. Gelfand	M.: GEOTA R-Media, 2011	2	1

### 9. List of resources of the information and telecommunications network "Internet" necessary for mastering the discipline

#### recommended electronic educational resources used in the process of teaching the discipline

<http://www.medpoisk.ru/>- Directory of medical sites  
<http://rusanesth.com/>- Russian Anesthesiology Server  
<http://nsi.ru/>- Research Institute of Neurosurgery named after. acad. N.N. Burdenko RAMS  
<http://www.med.ru/>- Russian Medical Server  
<http://okontur.narod.ru/>-Open circuit online club anesthesiologists-resuscitators.

### 10. Guidelines for students on mastering the educational practice program

Training consists of contact work (24 hours), including practical classes, and independent work (12 hours). The main educational time is allocated to practical work on providing qualified medical care to patients and providing emergency medical care in urgent conditions.

At The study of the academic discipline uses knowledge of etiology, pathogenesis, clinical picture of diseases and pathological conditions, modern classification of diseases, possible complications of the most common diseases, modern methods of clinical, laboratory, instrumental examination of patients and masters practical skills to formulate a clinical diagnosis, develop a plan of therapeutic actions, formulate indications to the chosen method of treatment, taking into account etiotropic and pathogenetic agents, to justify pharmacotherapy in a particular patient for the main pathological syndromes and emergency conditions.

Practical classes are conducted in the form of clinical analysis of patients undergoing treatment in the clinic, students' participation in the department's rounds. department, demonstration of practical skills in providing medical care using visual aids, solving situational problems, answering test tasks, analyzing clinical patients.

The main method of teaching students in the 6th year is the student's independent work at the patient's bedside under the guidance of a teacher. Along with this, the development of diagnostic research methods in the main sections of internal medicine is actively used in functional diagnostics rooms, X-ray rooms, clinical and biochemical laboratories; participation in clinical and pathological conferences; participation in professor rounds; preparation of medical documentation; participation in thematic rounds and clinical discussions of patients; conducting seminars in the following cycles: cardiology, nephrology, gastroenterology, pulmonology, hematology, functional diagnostics, physical therapy and medical supervision with the basics of manual therapy; conducting test classes and general certification in practical skills; participation of students in scientific work.

Clinical analysis of the patient during lectures and practical classes is accompanied by a demonstration and detailed analysis of the results of additional research methods, with the obligatory participation of students in the analysis, with independent interpretation of complaints, anamnesis, objective status data, functional and laboratory research methods, the formulation of a clinical diagnosis, and the formation of differentiated treatment and rehabilitation plan. The purpose of the analysis is a detailed study of the disease in its individual version.

In accordance with the requirements of the Federal State Educational Standard, active and interactive forms of conducting classes are widely used in the educational process. The share of classes conducted in interactive forms is at least 10% of classroom classes.

Each student is provided with access to the library funds of the University and the department.

The initial level of students' knowledge is determined by testing, the current control of mastering the subject is determined by oral questioning during classes, during clinical discussions, when solving typical situational problems and answering test tasks.

At the end of studying an academic discipline, an intermediate control of knowledge is carried out using test control, testing practical skills and solving situational problems.

Questions on the academic discipline are included in the State final certification of graduates.

### 11. List of information technologies used in the implementation of the educational process for educational practice

Microsoft Office  
PowerPoint;  
Internet Explorer  
All-Russian Educational Internet Program - "Internist"

**1. 12. Description of the material and technical base necessary for the implementation of the educational process in practice**

No./pp	Name of equipment	Quantity	Technical condition
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Special equipment</b>			
1. 1.	Equipment and instruments of resuscitation and intensive care wards		
1. 2.	Operating room equipment and instruments		
1. 3.	Multimedia complex	2	
<b>Phantoms</b>			
1. 4.	For basic cardiopulmonary resuscitation	10	will satisfy.

No.	Name
1. 1.	Mannequins - adult simulators for practicing CPR skills with computer recording of results
1. 2.	Mannequins - simulators for children under 8 years old for practicing CPR skills with computer recording of results
1. 3.	Full-length baby mannequin for training in cardiopulmonary resuscitation skills with computer recording of results
1. 4.	Simulator for training central venous puncture
1. 5.	Training automatic external defibrillators
1. 6.	Manual defibrillator with monitor
1. 7.	Multifunctional robot simulator of an adult patient for emergency care in a team
1. 8.	Multifunctional robot simulator of a child patient for emergency care in a team
1. 9.	Intubation training model
1. 10.	Cricothyrotomy trainer
1. 11.	Simulators for teaching the Heimlich maneuver (adults and children)
1. 12.	Child airway manipulation simulator

**1. 13. Conducting educational activities using e-learning and distance learning technologies.**

Under the conditions of the introduction of restrictive measures (quarantine) associated with an unfavorable epidemiological situation, the threat of the spread of a new coronavirus infection and other force majeure events that do not allow conducting training classes in person, it is possible to study this discipline or part of it using e-learning and distance learning technologies.

Teaching the discipline in the situations described above will be carried out through mastering an electronic course with access to video lectures and interactive course materials: presentations, articles, additional materials, tests and various assignments. When conducting training sessions, ongoing monitoring of progress, as well as intermediate certification of students, platforms of the electronic information and educational environment of the academy and/or other e-learning systems recommended for use at the academy, such as Moodle, Zoom, Webinar, etc., can be used.

Lectures can be presented in the form of audio, video files, "live lectures", etc.

Conducting seminars and practical classes is possible online, both synchronously and asynchronously. Seminars can be held in the form of web conferences.

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Federal State Budgetary Educational Institution  
higher education  
"North Ossetian State Medical Academy"  
Ministry of Health of the Russian Federation  
(FSBEI HE SOGMA mRussian Health Department)

**Diary-REPORT OF TRAINING practice**

**“General medical practice (basics of practical training for the professional activity of a physician to provide primary health care) “Cardiopulmonary resuscitation”**

**Type of practice – practice to obtain primary professional skills, including primary skills and skills in research activities**

**FULL NAME. student** \_\_\_\_\_

**Group, faculty** \_\_\_\_\_

**Practice base:** \_\_\_\_\_

\_\_\_\_\_

**Address:** \_\_\_\_\_

**Head of Practice** \_\_\_\_\_

Last name I.O. (signature)

**Start of practice**" \_\_\_\_ " \_\_\_\_\_ 20\_\_

**End of practice**" \_\_\_\_ " \_\_\_\_\_ 20\_\_