

*Federal State Autonomic Educational Institution of Tertiary Education
“Peoples’ Friendship University of Russia”*

Medical Institute

Recommended by MCSN

PROGRAM OF THE PRACTICAL TRAINING

Name of the educational training

Practice for learning emergency medical skills

Recommended for the direction of training/specialty

31.05.01 General Medicine

Focus of the program

General Medicine

Graduate qualification

Doctor of medicine

1. Goal and objectives of productive practice

Goal of the practice:

- mastering of the theoretical foundations, standards, algorithms for performing urgent medical procedures while providing emergency medical care in hospital settings.

2. Objectives of the practice:

- mastering the diagnosis of emergency conditions, determining the tactics of patient management;
- implementation of medical interventions for medical care provision at the pre-hospital stage;
- monitoring the effectiveness of the measures taken, monitoring the patient's condition;
- carrying out the transportation of the patient in hospital settings;

3. Position of the practice in the OP VO structure:

The industrial practice "Practice for learning emergency medical procedures" refers to the basic part of the curriculum block (block 2).

The time for passing the practice at the Accreditation and Simulation Center is determined by the educational timetable and it is included in the curriculum grid in the form of a distributed practice. Further practice at clinics based in city hospitals is carried out after passing the test lesson (zachyot).

4. Modes for "Practice for learning emergency medical procedures" conductance

Clinical

5. Venue and time for "Practice for learning emergency medical procedures" conductance

Clinics based at city hospitals

The practice is carried out at clinical sites in the City Clinical Hospitals of Moscow. The direct leaders of the practice are employees of various departments of the medical faculty of the RUDN University.

6. Competencies of the student, formed as a result of practical training:

Table 1 shows the previous and subsequent disciplines aimed at the formation of discipline competencies in accordance with the competence matrix of OP VO.

Table 1

Previous and subsequent disciplines aimed at the formation of discipline competencies

№ p/p	Code and name of the competency	Previous disciplines	Subsequent disciplines (groups of disciplines)
General professional competencies			
1	GPC-4. Being able to use medical devices provided for by the procedure for medical care, and conduct patient examinations in order to determine a diagnosis	Anatomy, Propedeutics of internal diseases; general surgery	Faculty therapy, hospital therapy, faculty surgery, hospital surgery, anesthesiology and resuscitation
2	GPC-6. Being able to organize patient care, provide primary health care, arrange work and make professional decisions in emergency	Anatomy, biology	Propedeutics of internal diseases;

	conditions at the prehospital stage, in emergency situations, epidemics and in foci of mass destruction		
Professional competencies			
3	PC-1. Being able to provide emergency or urgent medical care to a patient	Anatomy, biology	Introduction to the specialty, propaedeutics of internal diseases, therapy

The process of learning the discipline is directed to obtain next competencies

Table 2

Building competencies

Competencies	Name of competency	Competence achievement indicators
GPC-4	Being able to use medical devices provided for by the procedure for medical care, and conduct patient examinations in order to determine a diagnosis	GPC-4.1. Being able to use medical devices in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, care taking into account the medical care standards. GPC-4.2. Being able to assess the effectiveness and safety of medical devices. GPC-4.3. Mastering the technique of performing typical medical procedures using medical devices provided for by the procedures for medical care provision.
GPC-6	Being able to organize patient care, provide primary health care, arrange work and make professional decisions in emergency conditions at the prehospital stage, in emergency situations, epidemics and in foci of mass destruction mass destruction	GPC-6.2. Being able to identify the conditions which require emergency medical care, including clinical signs of sudden cessation of blood circulation and respiration. GPC-6.3. Being able to provide emergency medical care to patients in conditions that pose a threat to the life of a patient, including clinical death (cessation of the vital bodily functions (blood circulation and (or) breathing).
PC-1	Being able to provide emergency or urgent medical care to a patient	PC-1.1. Being able to assess the condition of a patient who needs emergency or urgent medical care. PC-1.3. Being able to provide emergency medical care to patients with sudden acute diseases, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life. PC-1.4. Being able to recognize conditions which pose a threat to the patient's life, including conditions of clinical death (cessation of the vital bodily functions (blood circulation and/or respiration) which require emergency medical care.

		PC-1.5. Being able to provide emergency medical care to patients in conditions which pose a threat to the patient's life, including clinical death (cessation of the vital bodily functions (blood circulation and/or respiration)).
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As a result of studying the discipline, the student must:

Know:

- features of diagnostics of emergency conditions;
- an algorithm of action in the event of emergency conditions at the prehospital stage in accordance with the standards of emergency medical care;
- algorithms for the provision of emergency medical care for terminal conditions at the prehospital stage;
- principles of pharmacotherapy for emergency conditions at the prehospital stage;
- rules, principles and types of transportation of patients to a medical institution;
- rules of asepsis and antiseptics in the treatment room,
- algorithm for performing injections;
- rules for filling out medical documentation;

Be able to:

- to examine the patient in case of emergency conditions at the prehospital stage;
- determine the severity of patient's condition;
- highlight the leading syndrome;
- work with portable diagnostic and resuscitation equipment;
- provide post-syndromic emergency medical care;
- carry out cardiopulmonary resuscitation;
- control the basic vital parameters;
- to carry out pharmacotherapy at the prehospital stage; perform all types of injections;
- determine the indications for hospitalization and transport the patient;
- organize the work of the team for the provision of emergency medical care to patients;
- provide emergency medical care for various types of injuries, apply various types of bandages;

Possess next skills:

- conducting a clinical examination in case of emergency conditions at the prehospital stage;
- determining the severity of the patient's condition and identifying the leading syndrome;
- carrying out differential diagnosis of diseases;
- work with portable diagnostic and resuscitation equipment, use the AED for its intended purpose and indications;
- algorithms for providing emergency medical care for various types of injuries;
- algorithms for performing urgent diagnostic and therapeutic procedures.

7. The structure and content of the educational practice "Practice for learning emergency medical skills"

The total workload of the educational practice is **3 credit units**.

№ p/p	Chapters (stages) of the practice	Types of production work while at practice, including independent work of students and labor intensity (in hours)	Forms of current control
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		Practical lessons	CPC	Workload (hours)	
1.	Legal aspects of provision and non-provision of medical care to the injured (sick) ones. The personnel's safety procedures while providing the care	2	2	4	Diary
2.	Emergency care for sudden death in adults	8	3	11	Diary
3	Parenteral drug administration	8	3	11	Diary
4	Cleaning procedures of the gastrointestinal tract	8	3	11	Diary
5	First aid for bleeding and blood loss	8	3	11	Diary
6	First aid for mechanical injuries and traumatic shock	8	4	12	Diary
7	First aid for injuries of the spine, chest, pelvic bones, traumatic brain injury	8	4	12	Diary
8	First aid for wounds	8	4	12	Diary
9	First aid in case of extreme impacts and accidents	8	4	12	Diary
10	First aid in case of accidents	8	4	12	Diary
	Total	74	34	108	

8. Educational, research and scientific-directed technologies used during the practice "Practice for learning emergency medical skills"

In the process of passing the practice; the next educational, research and scientific-directed technologies should be used.

Educational technologies during practice include: safety instruction; an introductory tour through the organization; initial instruction at the workplace; usage of the library fund; organization and information technology (attendance at meetings, seminars, etc.); verbal communication technologies (conversations with managers, specialists); mentoring (work during the period of practice as an apprentice to an experienced specialist); information and communication technologies (information from the Internet, e-mail, etc.); work in the library (clarification of the content of educational and scientific problems, professional and scientific terms, indicators), etc.

Scientific and production technologies during practice include: innovative technologies used in the organization, studied and analyzed by students during the practice.

Research technologies during practical training include: defining the problem, object and subject of research, setting a research problem; development of research tools; observation, measurement, fixation of results; collection, processing, analysis and preliminary systematization of factual and literature material.

9. Educational and methodological support of independent work of students during the productive practice "Practice for learning emergency medical skills"

The Accreditation and Simulation Training Centre of the Institute of Medicine is located in zone A of the Faculty of Humanitary and Social Sciences, covers an area of about 2,500 square

meters, auditoriums 356, 433, 161, 160, 157,158, 347, 172, 424 - classes for practicing cleaning procedures, parenteral introduction of medicines, practicing basic cardiopulmonary resuscitation techniques, practicing bandaging techniques, each of the classrooms has 15-20 training seats (multimedia equipment, materials for current testing, equipped with simulators, manikins).

Equipment – manikins, simulators for carrying out manipulations:

№№	Name of the model	Quantity	Developer
1	Nursing Simulator NS SB 20144	15	Nasco, USA
2	Auscultation Simulator with Smart Scope NSLF01142U	2	Nasco, USA
3	Arrhythmia Simulator NS.SB28954U	1	Nasco, USA
4	Central venous catheterization simulator NS LF01087U	10	Nasco, USA
5	Hand phantom for practicing intravenous access KK.ARM-11	10	Nasco, USA
6	Adult / Pediatric CPR Practice Manikin	20	Nasco, USA
7	Intramuscular Injection Simulator LM	20	Japan
8	Simulator for clinical examination of the female pelvis with a set of pathology models LT 60905	5	United Kingdom
9	Venipuncture and Intravenous Injection Simulator LT 00290	20	United Kingdom
10	Airway Simulator TAA 11100	10	Japan
11	Universal laparoscopic trainer, Helago Lap Simulator - Teacher HD	10	United Kingdom
12	Pediatric Gastric Sounding and Lavage Simulator AR331	4	United Kingdom
13	Epicystostomy Simulator AR 341	2	United Kingdom
14	Probe Feeding Simulator KKMW8.11-386	2	Japan
16	Female Bladder Catheterization Simulator LT60155	4	United Kingdom
17	Venipuncture and Intravenous Catheterization Simulator LT00290	5	United Kingdom
18	Rectal Examination Manikin LT60120	2	United Kingdom
19	5-Year Old CPR and Care Manikin NS32865U	4	USA
20	Newborn Care Training Manikin LM026M	2	Japan
21	ECG Electrode Placement Manikin NS LF01300U	1	USA
22	Male Pelvis Examination Simulator	1	United Kingdom
23	Manikin for practicing skills of opening and smoothing the cervix	4	United Kingdom
24	Set of patch wounds	2	United Kingdom

10. Informative resources of the discipline

a) **Licensed software.** Internet websites, corresponding to individual topics of the discipline, resources of the university electronic library d) databases, information / reference / search systems.

6) Databases, reference and search systems

1. TUIS – Telecommunication educational and informative system of the RUDN University
<http://esystem.rudn.ru/>
2. EBS of RUDN University and third-party EBS to which university students have access on the basis of concluded agreements:
 - Electronic library system RUDN - EBS RUDN <http://lib.rudn.ru/MegaPro/Web>
 - EBS "University Library Online" <http://www.biblioclub.ru>
 - EBS "Urait" <http://www.biblio-online.ru>
 - EBS "Student Consultant" www.studentlibrary.ru
 - EBS "Lan" <http://e.lanbook.com/>

11. Educational and methodological support of the discipline:

a) Basic literature

1. Kostsova N.G., Tigai Zh.G., Dogotar O.A. *et al.* General medical skills. Algorithms of performance. Peoples' Friendship University of Russia. 2019, 112 p.
2. Hands' hygiene of medical personnel. Federal clinical guidelines. - M., 2014. - 31 p.
3. ESC 2017 recommendations.
4. Recommendations of AAK, AAC, 2016
5. Materials of the Federal Methodological Accreditation Centre: a list of practical skills in simulated conditions. <https://fmza.ru>
6. Clinical guidelines VNOK, 2017
7. Nikitin I.S., Galustov A.M., Lobzhanidze B.D. *et al.* General medical skills. Algorithms of performance. M.: RUDN. 2020, 355 p.

6) Additional literature

1. SP 3.1.1.2341-08 "PREVENTION OF VIRAL HEPATITIS B".
2. SP 3.1.2659-10 "PREVENTION OF INFECTIOUS DISEASES IN ENDOSCOPIC MANIPULATIONS" (CHANGES AND ADDITIONS No. 1 to SP 3. 1. 1275-03).
3. SP 3.1.958-00 "PREVENTION OF VIRAL HEPATITIS. GENERAL REQUIREMENTS FOR EPIDEMIOLOGICAL SURVEILLANCE OF VIRAL HEPATITIS".
4. SP 3.5.1378-03 "SANITARY AND EPIDEMIOLOGICAL REQUIREMENTS FOR ORGANIZATION AND IMPLEMENTATION OF DISINFECTING ACTIVITIES".

12. Methodical recommendations for organization of productive practice:

In the educational process, active and interactive forms of conducting classes are used, all theoretical material - a briefing of a practical lesson is accompanied by PowerPoint presentations and interactive videos. During practical classes, medical instruments are used for a specific manual skill, consumables used in medical institutions, mannequins, simulators designed to practice manual skills, algorithms for performing manual skills using a checklist.

Students are required to attend classes, complete assignments within the framework of classroom and independent work to develop manual skills in accordance with the checklist items, using recommended educational materials, electronic educational resources, databases, information / reference / electronic search systems.

Independent work takes place in classrooms - simulation classes of the Accreditation and Simulation Training Centre, designed to practice a specific manual skill, where students can repeatedly master and perform the same manual skill without a mentor.

13. Fund of assessment tools for certification of students during the productive practice "Practice for learning emergency medical skills".

Materials for assessing the level of mastering the practical material during the productive practice "Practice for learning emergency medical skills", including a list of competencies indicating the stages of their formation, a description of indicators and criteria for assessing competencies at

various stages of their formation, a description of the assessment scales, standard control tasks or others materials necessary for assessing knowledge, skills, techniques and (or) experience of activity, characterizing the stages of the competencies' formation in the process of learning the educational program, methodological materials that determine steps for assessing knowledge, skills, stechniques and (or) experience of activities defining stages of formation of competencies, developed in full capacity and freely available to students on the discipline page at TUIS RUDN.

The program is compiled in accordance with requirements of FSES HE.

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