# Federal State Educational Institution of Higher Professional Education "Peoples" Friendship University of Russia"

## Institute of Medicine

#### PROGRAM OF THE PRACTICAL TRAINING

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Clinical practice: Physician Assistant

## Recommended for the direction of training/specialty

#### 31.05.01 General medicine

(the code and name of the training direction (specialty))

Focus of the program (profile)

### **General medicine**

(name of the educational program in accordance with the orientation (profile))

# **Graduate qualification - General practitioner**

(the qualification of the graduate is indicated in accordance with the order of the Ministry of Education and Science of the Russian Federation as amended on 04/10/17 No320)

### 1. The purpose of the practical training "Physician Assistant".

The purpose of the practical training "Physician Assistant" is for students working as an assistant surgeon or assistant general practitioner to master the skills of medical work.

## 2. Tasks of practical training

IV year students are attached to a doctor of the surgical or therapeutic department and work under his control in the ward, supervising 6 to 12 patients. At the same time, students learn to fill out a medical history (using the methods of physical examination of the patient), establish the diagnosis of the disease, prescribe the necessary additional methods of special examinations, prepare patients for operations and monitor patients in the postoperative period. Work should begin with a presence at the morning medical conference.

## 3. Place of practical training in the structure of the OP VO specialty

The practical training of IV year students is based on the theoretical knowledge of the courses: "General nursing care", "Propaedeutics of internal diseases", "General surgery", as well as "Faculty therapy" and "Faculty surgery". In addition, medical practice is based on practical knowledge and skills acquired earlier, during the passage of nursing practice.

### 4. Forms of practical training "Physician Assistant".

Students work from 09:00 to 15:00 o'clock (total time 6 hours), however, working hours can be changed according to the working hours of the medical staff of the medical institution. The medical practice takes place under the supervision of a doctor, to whom the head of the surgical department attaches students. Working as a physician assistant, a student oversees 6-12 patients. During the period of practical training in therapy and surgery, students work in the emergency department, in the therapeutic and surgical wards, dressing rooms and operating theatres. The student fills in the medical records after examining patients using physical methods, formulates a clinical diagnosis, if necessary, uses methods of special research of patients, actively participating in these studies. Daily observation of the patient is recorded in diaries. In consultation with your doctor prescribes treatment for the patient. If it is necessary to perform surgical treatment, the patient is prepared for the upcoming operation, takes part in surgery as an assistant, leads the patient in the postoperative period, both in the intensive care unit and in the ward of the surgical department, taking an active part in the dressings. Observing the patient in the postoperative period, the student should pay attention to the functional state of the patient's organs and systems (measurement of body temperature, blood pressure, determination of pulse and respiration frequency, amount of urine excreted), monitor the functioning of drains. Working in the department of purulent surgical infection, a student, under the supervision of medical personnel (nurse or doctor), makes bandaging patients using various methods of treatment of purulent wounds. Overseeing patients with purulent surgical infection, he carefully fills in the temperature sheet in the medical history.

While working in the traumatology department, a student masters the methods of treating various types of bone fractures (manual and instrumental reposition, skeletal traction), masters the technique of applying plaster casts, supervises patients with traumatic brain injury. In the admission department, students master the features of examination of urgent patients requiring emergency surgical care.

During the period of medical practice in surgery, the student must take part in two nightly duties, actively helping doctors participate in all medical events.

### 5. Place and time of practical training "Physician Assistant".

Practical training of students of the medical faculty on the cycle of surgery is carried out for two weeks in summer (June-July months) on the basis of clinical city hospitals in Moscow with multidisciplinary departments equipped with modern medical equipment and staffed with highly qualified personnel.

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

OK-1, OK-5-8, OPK- 1-11, PK-2-22

As a result of this practical training the student must acquire the following practical skills, abilities, universal and professional competence:

#### Know:

- functional duties of the doctor.
- work with medical documentation
- determine indications for hospitalization of patients with therapeutic, surgical and gynaecological profile and implement hospitalization in an emergency and planned manner;
- how to gather complaints: main complaints and found during the survey of the organ systems.
- the history of the main and concomitant diseases.
- interpret the data of objective examination of the patient.
- substantiate the preliminary diagnosis and its formulation.
- make a survey plan.
- interpret the results of the examination (tests, ecg and other functional methods, endoscopy, x-ray examination, etc.);
- formulate the final clinical diagnosis (rationale and formulation).
- to conduct differential diagnosis.
- the etiology and pathogenesis of the disease
- prescribe treatment for the underlying disease.
- assess the prognosis of the disease.
- know the methods of prophylaxis (primary and secondary).
- give the patient recommendations on the primary prevention of the most common diseases, a healthy lifestyle, taking into account the state of his health
- know the functional responsibilities of the doctor.
- provide first aid in case of emergency before the arrival of emergency medical care:

#### To be able to:

- work as a physician assistant
- work with medical documentation
- provide first aid in case of emergency before the arrival of emergency medical care:
  - a) in hypertensive crisis
  - b) in case of cardiac asthma
  - c) pulmonary edema
  - d) in case of bronchial asthma attack
  - e) in hyperthermia
  - f) with angina status
  - g) in case of epilepsy
  - h) fainting
  - i) at cardiac and respiratory arrest
  - i) stroke
  - k) in acute allergic reactions
- interpret the results of the examination (tests, ecg and other functional methods, endoscopy, x-ray examination, etc.).);
- correctly fill in the documentation with which the district therapist deals;
- determine indications for hospitalization of patients with therapeutic, surgical and gynecological profile and implement hospitalization in an emergency and planned manner;
- give the patient recommendations on the primary prevention of the most common diseases, a healthy lifestyle, taking into account the state of his health;

#### To master:

• medical skills.

## 7. Structure and content of the practical training

The total labour input of training practice is 7 credit units - 252 hours

№	Sections (stages) of practice	students and labor intensity (in hours)			Forms of current control	
1	Safety instructions	Safety instructions in the surgical department	Safety instructions in the diagnostic department	Safety instructions in the diagnostic department	Safety instructions in the operating unit	Journal
2	Fundamentals of diagnosis of the pathological process. Registration of the medical card of the patient	Main points of the medical history	Subjective research methods	Objective research methods	Objective methods of research on organs	Journal
3	Management of the patients in the pre-and postoperative periods	Preoperative period	Operation	The postoperative period in the intensive care unit	Postoperative period in the surgical department	Journal
4	Elements of medical equipment	Technical methods performed without compromising the integrity of tissues	Techniques performed in violation of tissue integrity ("minor surgery»)	Impact on abdominal organs	Assistance with abdominal operations	Journal
5	Technical methods, effects on the patient's body	Terminal status and cardio- pulmonary resuscitation	переливание крови	Local anesthesia	Novocaine blockade	Credit

### 8. Research technologies used in practical training "Physician Assistant".

Educational, research and production technologies should be used in the process of practical training.

Educational technologies during the internship include:

- safety instructions; organization tour; primary briefing in the workplace;
- use of library stock;
- organizational and informative technologies (attendance at meetings, conferences, etc.);
- verbal communication technologies (conversations with managers, specialists);
- mentoring (work in the period of practice as a student of an experienced specialist);

- information and communicative 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 internships include: innovative technologies used in the organization, studied and analysed by students in the course of practice.

Research technologies in practice include: defining a problem, object and subject of research, setting a research task; development of research tools; observation, measurement, fixation of results; collection, processing, analysis and preliminary systematization of factual and literary material.

# 9. Teaching and methodological support for students' independent work during practical training "Physician Assistant".

The practice is led by the staff of the Department of faculty surgery, and the direct work of students is controlled by the medical staff (doctors and nurses) of the surgical Department of the hospital. The main form of control of industrial practice is the "Journal of practice". Each student fills in a journal with a detailed description of the work performed for the current day. The diary is signed by the senior nurse of the department.

During the practice, the student must fill in a diary of practical training, which indicates the nature of the work performed by him and lists all the practical skills that he has mastered. The diary must be signed by the head of the department, as well as the employee of the department, who led the practice. The journal is given to the Dean's office of the medical faculty and is an official document on the basis of which the student is transferred to the next course of study at the medical faculty of the University.

# 10. Forms of intermediate certification (based on the results of practical training) "Physician Assistant".

According to the results of practical training, the student submits a report in the form of a diary and is interviewed by the head of the practice, after what the is given a final grade.

The intermediate certification consists of the following stages:

- Test control.
- Score for writing a "Diary of practice".
- Interview.

# 11. Educational-methodical and informational support of the practical training "Physician Assistant".

- (a) basic literature:
- 1. Gynecology: textbook /ed. V. E. Radzinsky, A.M. Fuchsa.- Moscow: GEOTAR Media, 2014.-1000s.
- 2. Pautkin Y. F., Klimov A. E., A. G. Pogasov Practice of students in the surgical clinic. M.: RUDN, 2011.
- 3. Pulmonology. National leadership. Edited by A. G. Chuchalin, M: "GEOTAR-Media", 2014.
- 4. Gastroenterology. National leadership. M: "GEOTAR-Media", 2014.
- 5. Nephrology. National leadership. M: "GEOTAR-Media", 2014.
- 6. The state of emergency in the internal diseases clinic// (manual for doctors edited by Professor P. P. Ogurtsov, Professor Dvornikov V. E.), M.: PFUR, 2013.
- 7. Pautkin Yu. F., Klimov A. E. Management of the patient in a surgical clinic. Guide for students. M., 2007.

- b) additional literature:
- 1. Kuznetsov. N. A. General surgery. Textbook. Medpresinform, 2009.
- 2. Malyarchuk V. I., Pautkin Yu. F. Surgical diseases (rate of surgery). M., 2002.
- 3. Kozinets G. I. Interpretation of blood and urine tests (clinical significance of tests). St. Petersburg, 1997.
- c) software and Internet resources: testing Program "Mentor»
- d) databases, reference and search systems
- 1. Electronic library RUDN http://lib.rudn.ru/
- 2. Educational portal of PFUR (http://web-local.rudn.ru);
- 3. Scientific electronic library (http://elibrary.ru/defaultx.asp);
- 4. Universal library ONLINE (http://biblioclub.ru);
- 5. Library of electronic journals BENTHAM OPEN

(http://www.benthamscience.com/open/a-z.htm);

- 6. Library e-journals Elsevier (http://www.elsevier.com/about/open-access/open-archives)
- 7. Medlib medical online library (http://med-lib.ru/)
- 8. The national library system of the United States http://www.ncbi.nlm.nih.gov/pubmed/
- 9. http://www.ispub.com/

## 12. Material and technical support of practical training "Physician Assistant".

The equipment necessary for the successful passage of the practical training, is provided by various departments of the clinical departments of hospitals and medical departments of the faculty responsible for the internship.

Standard equipment of departments of health facilities and the centre of simulation training.

# 13. Evaluation fund for the intermediate certification of students in practical training "Physician Assistant".

After graduation from the practical training, an intermediate certification is carried out (according to the results of the internship), which consists of the test, interview and practical skills.

Monitoring of the assessment of students' knowledge is carried out according to a score-rating system. Grade is put in the student's record-book in the appropriate column.

### Criteria for evaluation:

Conformity of assessment systems (previously used assessments of final academic performance, ECTS assessments and score-rating system (SRS) assessments of current performance).

Score-rating system (SRS)	Traditional ratings in RF	Score ECTS
95 - 100	5	A
86 - 94		В
69 - 85	4	C
61 - 68	3	D
51 - 60		E
31 - 50	2	FX
0 - 30		F
51-100	Credit	Passed

# Test tasks during the intermediate certification for the practical training "Physician Assistant".

Instructions: choose one correct answer.

### 1.Bioavailability is:

- 1. The time during which the drug content in plasma is reduced by 50%
- 2. The amount of drug entering the systemic circulation in relation to the administered dose
- 3. The average concentration after the next administration of the drug.
- 4. The amount of drug in plasma that is not associated with protein

### 2. What is pregravid preparation?

- 1. preparation for pregnancy
- 2. preparation for childbirth
- 3. preparation for termination of pregnancy
- 4. examination before choosing a method of contraception

# 3. Specify the group of choice in the treatment of stable angina in patients after myocardial infarction:

- 1. Beta-blockers
- 2. Slow calcium channel blockers
- 3. ACE inhibitors
- 4. Myocardial cytoprotectors (preduktal)

### 4. When should a patient give up bad habits?

- 1. with the onset of pregnancy
- 2. 1 month before planned pregnancy
- 3. at least 3 months before the planned pregnancy
- 4. do not give up

# 5. The most optimal study design to study the effectiveness and safety of treatment methods is:

- 1. one-step descriptive study;
- 2. cohort study;
- 3. case-control study»;
- 4. randomized clinical trial.

### 6. Hypovolemic disorders develop when:

- 1. heart attack;
- 2. traumatic shock;
- 3. anaphylactic shock;
- 4. pulmonary embolism.

### 7. The point of compression of the artery in the wound of the radial or ulnar artery:

- 1. axillary area;
- 2. shoulder artery;
- 3. carotid artery;
- 4. compression of the artery proximal to the wound site

### Example of a situational task on the training practice "Physician Assistant".

#### Situational task № 1

For patient A. 26 years old, an ambulance was called on the 2nd day of illness. He became ill acutely, body temperature rose to  $40\,^\circ$  C, there was a severe headache, weakness, nausea, single vomiting. The next day, the condition worsened, weakness increased dramatically, rash. On examination: conscious, but adynamic, lethargic, pale, no focal and meningeal symptoms. On the skin, mainly of the lower extremities, an abundant stellate hemorrhagic rash, single elements are located on the face, body, sometimes they merge, there are necrosis. In the lungs, breathing is weakened, wheezing is not heard, shortness of breath is - 36 per minute, rhythmic heart sounds, deafness, and thready pulse - 104 beats. per min, blood pressure 60/0 mm Hg. Art. Tongue dry, lined. The abdomen is soft, painless. Liver, spleen not palpable. Does not urinate.

- What are the assumptions about the diagnosis?
- What caused the severity of the disease?
- What should be the tactic of the first aid doctor?
- What research is needed to confirm diagnosis?

#### Situational task № 2

A man, 38 years old, was admitted to hospital due to a syncopal state. From the anamnesis it is known that within one year periodically notes attacks of dizziness, pressing pain in the chest, heartbeat during exercise. The patient's father died suddenly at the age of 45. In an objective examination, attention is drawn to the rough systolic murmur on the left edge of the sternum with a maximum at the top. BP 110/80 mm Hg. V. heart rate 78 beats per minute. On ECG – sinus rhythm, the correct 76 in min.

Indicate the most likely diagnosis:

- Mitral valve insufficiency.
- Stenosis of the aortic valve.
- Idiopathic hypertrophic subaortic stenosis.
- Coronary heart disease.
- Dilated cardiomyopathy.

### Situational task № 3

A 40-year-old patient, on the 5th day of his stay in the surgical department of the hospital, had complaints of cough with discharge of purulent-bloody sputum, shortness of breath, an increase in body temperature to 39 C.

Concomitant disease: Chr. gastritis, without exacerbation.

Allergic reactions in history was not.

Smokes 10 cigarettes a day. Alcohol does not abuse.

Objectively: The condition is serious. The frequency of respiratory movements - 32 per minute. In the lungs, to the right in the posterior-lower regions, shortening of the percussion sound. On the radiograph: darkened to the right, respectively, the lower lobe of several cavities with a level.

Blood leukocytes - 18x109 / 1 with a shift to the left.

The task:

- Make a diagnosis.
- Probable pathogen, how to identify it.
- Prescribe treatment.
- Alternative antibacterial drugs with treatment failure.

The program of was compiled in accordance with the requirements of the FSES HE approved by order of the Ministry of Education and Science of the Russian Federation of February 9, 2016 No. 95.

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