## MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION PENZA STATE UNIVERSITY

MEDICAL INSTITUTE



#### PRACTICAL TRAINING PROGRAM

C2.1.1.2 Clinical Practice (Care of patients with a surgical diseases)

Program (specialty) 31.05.01 General Medicine

Graduate's qualification (degree) – Medical doctor

Study format full-time

### 1. Goals of practical training

The goal of clinical practice (Care of patients with a surgical diseases) is the acquisition by students of practical skills and competencies in the scope of duties of nurses in surgical hospitals in accordance with FSES HE on specialty 310501 "Medicine", and the acquisition of experience in nursing in surgical offices.

### 2. Objectives of practical training

The objectives of clinical practice (Care of patients with surgical diseases) are:

- 1. Acquaintance with the organization of the surgical departments of the hospital: the structure of the surgical department, its layout, hygienic requirements and sanitary treatment of the chambers, the procedural room, dressing room, operating room, medical-protective mode of the surgical department.
  - 2. Study of the functional duties of nurses in a surgical clinic.
  - 3. Independent work as a junior medical staff.

### 3. The place of practical training in the bachelor MPEP's structure

Clinical Practice (Care of Patients with a Surgical diseases) refers to the section of Unit C2 "Practice" of specialty 31.05.01 - General Medicine

Clinical practice is in a methodical relationship with the following disciplines of the PLO:

- Psychology and pedagogy;
- Human anatomy;
- Histology, embryology, cytology;
- Normal physiology;
- Latin language;
- General surgery, radiation diagnosis;
- Propaedeutics of internal diseases, radiation diagnostics;
- Patient care.

### 4. Forms of practical training implementation stationary

### 5. Venue and time of practical training implementation

The base of clinical practice are the surgical departments of state and municipal health institutions that have a corresponding agreement with the university. The duration of the training is 2 weeks. Duration of work is 6 hours (from 8 to 14 hours).

5.1. For people with disabilities, the choice of places for taking practice takes into account health status and accessibility requirements.

### 6. Student's competences to be developed as a result of practical training completion

Cheats		
competen	Name of the	Structural elements of competence (As a result of the said practical
cies	competence	training students should have the following)
GEC-1	abstract thinking, logical analysis and synthesis skills	Knowledge: The forms and methods of scientific knowledge, their evolution; the place and role of Russia in the history of mankind and in the modern world; outstanding figures in medicine and public health, outstanding medical discoveries; the influence of humanistic ideas on medicine; doctrine of health of children and adults, methods of its conservation.  Skills: Competently and independently evaluate the social the situation in Russia and beyond and to carry out its activities taking into account the results of this analysis.  Abilities: The skills of presentation of an independent point of view, analysis and logical thinking, public speech, moral and ethical arguments, discussions and round tables.
GPC-4	strictly follow the rules of medical ethics in professional activities	<ul><li>Knowledge: the basics of medical ethics and deontology.</li><li>Skills: to apply ethical and deontological principles in practical activity.</li><li>Abilities: ethical and deontological principles in practice.</li></ul>
GPC- 10	know how to organize patients care and provide primary medical care	Knowledge: the methods of sanitation; Basics of care for surgical patients; method of patient transportation, linen change, prophylaxis of pressure sores, feeding patients, assistance in the implementation of physiological dispensations, etc.  Skills: conduct a health education conversation with patients and their relatives; to carry out transportation of the patient, change of linen, prophylaxis of pressure sores, feeding the patient, to assist in the implementation of physiological items; perform, treatment of wounds, application of dressings.  Abilities: basic manipulations for the care of patients, methods of providing primary health care first aid
SPC-1	be able to perform the scope of measures aimed at protecting and promoting the health and safety of the public, including fostering healthy lifestyle, prevention of the diseases and their treatment, early diagnostic of medical conditions, their causes and conditions of their development, elimination of harmful environmental factors	Knowledge: the relationship "doctor-patient", "doctor-relatives"; basic medical and pharmaceutical terminology in Latin; main directions of psychology, general and individual features of the psyche of an adult, the psychology of the individual and small groups  Skills: use at least 900 terminological units and terminological elements; to build and maintain working relations with other members of the collective; use knowledge of the basics of human psychology, improve their professional knowledge and skills, while being aware of disciplinary, administrative, civil-law and criminal liability.  Abilities: the principles of medical deontology and medical ethics; skills in reading and writing in Latin for clinical and pharmaceutical terms and recipes.

#### SPC-5

be able to analyse patients complaints and medical history, results of medical examinations, laboratory tests, special equipment diagnostics and others so as to determine the presence or absence of pathologies, medical disorders and diseases

**Knowledge:** etiology, pathogenesis, diagnosis, modern classification, clinical picture, features of the course and possible complications of the most common diseases occurring in a typical form in different age groups; modern methods of diagnosis, diagnostic capabilities of methods of direct investigation of the patient's therapeutic profile, modern methods of clinical, laboratory and instrumental examination of patients (including endoscopic, X-ray methods, ultrasound diagnostics); maintenance of standard accounting and reporting documentation in treatment and prevention institutions

**Skills:** to collect anamnesis; conduct a survey of the patient and his relatives; conduct a physical examination (examination, palpation, percussion, determination of pulse characteristics, BH, measurement of blood pressure); interpret the results of the survey; make a preliminary diagnosis;

outline the scope of additional studies to clarify the diagnosis; write a medical history.

**Abilities:** methods of conducting medical accounting and reporting documentation; methods of general clinical examination of patients; interpretation of the results of laboratory, instrumental diagnostic methods; algorithm for setting a preliminary diagnosis.

SPC-6

be able to determine the pathological states and conditions, symptoms and syndromes, nosology forms according to the International Classification of Diseases Knowledge: structural and functional bases of diseases and pathological processes, causes, main mechanisms of development and outcomes of typical pathological processes, violations of organs and systems; clinical manifestations of the main syndromes; modern methods of clinical, laboratory and instrumental diagnostics of patients with therapeutic profile; the fundamentals of preventive medicine, the organization of preventive measures aimed at improving the health of the population; organization and conduct of rehabilitation activities; mechanism of therapeutic and rehabilitation treatment of physical exercise and physiotherapy and other non-pharmacological methods, indications for their purpose, peculiarities of their conduct;

**Skills:** implement a systematic approach to the analysis of medical information; justify the pathogenetically justified methods of diagnosis, treatment, rehabilitation and prevention of the most common diseases.

**Abilities:** medical-anatomical and pathophysiological conceptual apparatus.

SPC-8

be able to determine the optimum strategy for treating patients with different types of diseases **Knowledge:** the clinical manifestations of symptoms, syndromes (general and local) and complications of the most common diseases; modern classification, methods and algorithm for diagnosis of diseases of internal organs; criteria for diagnosing various diseases; methods of urgent measures and indications for hospitalization of patients; principles and methods of providing first aid in emergency situations.

**Skills:** to put and formulate preliminary and clinical diagnoses (basic, concomitant, complications); to apply in practice

conditions. Abilities: methods of general clinical examination of patients; interpretation of the results of laboratory, instrumental diagnostic methods; algorithms for setting a preliminary and clinical diagnosis of the most common diseases of internal organs; algorithm for the implementation of basic medical and diagnostic measures to provide first aid in emergency conditions. be ready to provide **Knowledge:** the clinical manifestations of symptoms, syndromes hospital treatment for (general and local) and complications of the most common SPC-8 diseases; modern classification, methods and algorithm for patients with different diagnosis of diseases of internal organs; criteria for diagnosing types of diseases various diseases; methods of urgent measures and indications for hospitalization of patients; principles and methods of providing first aid in emergency situations. **Skills:** to put and formulate preliminary and clinical diagnoses (basic, concomitant, complications); to apply in practice algorithms for diagnosing various diseases and to outline the scope of additional studies to clarify the diagnosis; perform basic diagnostic measures to identify urgent and life-threatening conditions. **Abilities:** methods of general clinical examination of patients; interpretation of the results of laboratory, instrumental diagnostic methods; algorithms for setting a preliminary and clinical diagnosis of the most common diseases of internal organs; algorithm for the implementation of basic medical and diagnostic measures to provide first aid in emergency conditions. Knowledge: the basics of applying evidence-based medicine in be ready to analyse and submit for public assessing the health status of the adult population and SPC-20 adolescents, the activities of medical institutions and in scientific assessment the medical data founded research. onevidence-based Skills: to apply in practice the methods of evidence-based medicine medicine in assessing the health status of the adult population and adolescents, the activities of medical institutions and in scientific research. Abilities: the methods of evidence-based medicine in assessing the health status of the adult population and adolescents, the activities of medical institutions and in scientific research.

algorithms for diagnosing various diseases and to outline the scope of additional studies to clarify the diagnosis; perform basic diagnostic measures to identify urgent and life-threatening

### **7. Structure and contents of practical training** Clinical Practice (Care of patients with a surgical diseases).

The total complexity of the training practice is 3 credit units 108 hours (of which 72 hours work in the departments of the surgical profile, 36 hours - independent work of students):

		Types of students'	instruction du independent v	ring pract	tical training workload (in	including hours)	
Nº	Training sections (stages)	Work with documen ts	Work in the procedural room	Care of the patient	Work in a dressing room	Work in the reception department	Current monitori ng means
I	Organizational (meeting with the head of practice)	4					Rule Report security Report in the producti on practice diary
II	Clinical hygiene of the environment environment and Medical staff in surgery Sanitary-hygienic mode of the surgical department.	8,0	10,0	10,0	10,0	10,0	Report in the producti on practice diary
III	Special care for surgical and sick	2,0		16,0			Report in the producti on practice diary
IV	Practice Diary Registration	2,0					Report in the producti on practice diary
V	Conducting the final attestation						Final testing Different iated credit

At the stage "Organizational" the first task of practice is realized "Familiarization with the organization of the surgical departments of the hospital: the structure of the surgical department, the layout, hygienic requirements and sanitary treatment of the wards, the procedural room, dressing, operating,

treatment and protective mode of the surgical department." Distribution to work places.

Students perform the following types of work:

- processing of medical instruments (perform pre-sterilization preparation of medical and surgical instruments, fit dressing materials, operational clothing, masks, gloves, evaluate the sterility of material in bixes);
- work in the surgical department as a junior medical staff (mastering the skills of sanitizing patients, transporting patients, familiarizing themselves with the hospital's sanitary regime, studying the organization of patient care: thermometry, bed rest, changing clothes, etc.);
- work in the reception room (reception procedure, anthropometry, sanitation, filling out documentation, transportation, etc.);
- work in the treatment room (handle hands with disinfectant solutions, acquire the skill of using a surgical mask, disinfect medical instruments, disinfect air);
- work in the surgical dressing department (dressing and changing of sterile gloves, prepare patients for instrumental methods of research).
- work in the operating unit (preoperative preparation of the operating field, dressing of a sterile gown, transportation of patients after the operation, transfer of the patient to the bed).

At the stage of "Special Care for Surgical Patients", the third task of the training practice is "independent work as a junior medical staff".

Students perform the following types of work:

- work in the resuscitation department (perform hygienic treatment of the body of the operated patient, change the bed linen and bed linen of the patient, perform hygienic washing of patients, and treat pressure sores);
- the organization and conduct of care for patients in the postoperative period: mastering the skills of caring for the operating wound, drainage, probes, catheters, prevention of pressure sores
- Nutrition of patients in the postoperative period: familiarization with the basic principles of therapeutic nutrition, catering, artificial, parenteral nutrition, feeding patients in bed and through a probe;
- Features of postoperative management and care of patients after various types of operations in the abdominal, thoracic cavity and extracorporeal organs are considered.
- Carrying out of care for traumatologic patients (impose transport buses, soft bandages);
  - care for patients with thermal lesions;
  - care for patients in a terminal state.

### 8. Educational, research and manufacturing technologies used in practical training Clinical Practice (Care of patients with a surgical diseases)

- Technologies of preparation and use of the newest antiseptic solutions
- Modern technologies of sterilization of medical instruments, bandages and sutures
- Technology of using modern means of hygiene of seriously ill
- Advanced technology of probe insertion of nutrients
- Modern transportation technologies for patients (using special means of transportation)
- Technologies of using modern functional beds
- Modern anthropometry technologies
- Modern technologies for sampling biological media for analysis (blood, urine, etc.)
- Modern technologies of parenteral drug administration
- Modern technologies of thermometry, measurement of blood pressure and pulse

## 9. Educational and methodological support of students' independent work during practical training Clinical Practice (Care of patients with a surgical diseases)

The management of the training practice is carried out by the curator (responsible for the practice of the lecturer in the department of surgery). The direct management of the practice is carried out by the heads of the surgical departments, which together with the curator form the schedule of the work of the students. In the process of passing the practice, students obey the rules of the internal regulations of medical and preventive institutions.

During the practice, a student must:

- Completely perform the tasks stipulated in the program of practice;
- to comply with the rules of internal regulations in force in the medical institution;
- to study and strictly observe the rules of labor protection and safety precautions;
- to be responsible for the work performed and its results on a par with staff workers;
  - Keep a diary, which records all activities during the practice period;
  - participate in the public life of the hospital staff;
- to present to the head of practice a report on the implementation of the program and timely hand over the test in practice;
  - fulfill an individual task (Annex 1).

Each student during the practice keeps a diary in which daily reflects all the work done, describes in detail the most complex manipulations and procedures in which he took part. The diary must necessarily give an idea of the degree of independence of the student when performing this or that manipulation. In

addition, all reporting sections of the diary must be fully completed, they list the number of independently performed manipulations and procedures. The curator constantly monitors students on all sections of the work. At the end of the practice, the diary is certified by the head of the department, the chief doctor of the health facility or his deputy for medical work, and the characteristics of the student's work are included in it.

In the diary, assessments are made for each cycle of practice, which are taken into account when passing the overall test. The set-off is carried out at the end of the training practice of the commission. The assessment of the practice, signed by the curator, is recorded in the student's student's record book. The statement of excellence for academic practice shall be submitted to the directorate. The assessment in practice is equivalent to the exam.

A student who has not completed a curriculum that received a negative review of the work or an unsatisfactory grade is sent again to practice during the student's vacation. In some cases, the directorate may ask the rector the question of the student's further stay at a higher educational institution.

### 10. Forms of intermediate certification (based on practical training results)

Based on the results of clinical practice (care of patients surgical profile) is tested and differentiated.

Exemplary control questions to the differential diagnosis based on the results of clinical practice (Care of patients with surgical profile).

- 1. Purpose and main tasks of general care for surgical patients.
- 2. History of the organization of care for patients.
- 3. Role of N.I. Pirogova in the organization of care for surgical patients.
- 4. The most famous sisters of mercy.
- 5. The role of ethics and deontology in the activities of health workers.
- 6. What is iatrogeny?
- 7. Hygienic standards per patient in the surgical ward.
- 8. Required furniture in the surgery room.
- 9. Definition of hospital infection.
- 10. Sources of hospital infection.
- 11. Measures for the prevention of hospital infection. 12. Determination of antiseptics.
  - 13. Kinds of antiseptics.
- 14. What kind of treatment is a physical antiseptic? 15. The mechanism of action of chemical antiseptics.

## 11. Educational, methodological and informational means provided for practical training Clinical Practice (Care of patients with a surgical diseases)

#### MAIN LITERATURE

- 1. Imaging For Surgical Disease /Sun, Raphael. Lippincott Williams & Wilkins, 2013 eng. <a href="http://www.bibliocomplectator.ru/collections/ebsco-ebooks">http://www.bibliocomplectator.ru/collections/ebsco-ebooks</a>
- 2. Current Surgical Guidelines / Jibawi, Abdullah.-Cade, David. OUP Premium, 2010, eng <a href="http://www.bibliocomplectator.ru/collections/ebsco-ebooks">http://www.bibliocomplectator.ru/collections/ebsco-ebooks</a> ADDITIONAL LITERATURE:
- 1. Perioperative Medicine/ Chikwe, Joanna.-Jones, Philip-Walther, Axel OUP Premium, 2009, eng <a href="http://www.bibliocomplectator.ru/collections/ebsco-ebooks">http://www.bibliocomplectator.ru/collections/ebsco-ebooks</a>
- 2. Fast Facts for Wound Care Nursing / Kifer, Zelia Ann. Springer Publishing Company, Inc., 2012, eng <a href="http://www.bibliocomplectator.ru/collections/ebsco-ebooks">http://www.bibliocomplectator.ru/collections/ebsco-ebooks</a>
- 3. Gerioperative Nursing Care/ Shippee-Rice, Raelene V.-Long, Jennifer V.-Fetzer, Susan. Springer Publishing Company, Inc., 2011, eng <a href="http://www.bibliocomplectator.ru/collections/ebsco-ebooks">http://www.bibliocomplectator.ru/collections/ebsco-ebooks</a>

### Internet resources and software

- 1. <a href="www.elibrary.ru">www.elibrary.ru</a> the largest Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of scientific articles and publications. Electronic versions of Russian scientific and technical journals, including those in the public domain, are available on eLIBRARY.RU.
- 2. <a href="www.ncbi.nlm.nih.gov/pubmed/">www.ncbi.nlm.nih.gov/pubmed/</a> National Medical Library of the United States.
- 3. licensed software:
- "Microsoft Windows" (subscription DreamSpark / Microsoft Imagine Standart); registration number 00037FFEBACF8FD7, contract No. SD-130712001 of 12.07.2013;
- "Kaspersky Anti-Virus" 2016-2017, registration number KL4863RAUFQ, agreement No. XΠ-567116 of August 29, 2016;
- 5. Free software: Open Office; Mozilla Firefox; Google Chrome Adobe Acrobat Reader; 7zip.

# 12. Material and technical means provided for practical training Clinical Practice (Care of patients with a surgical diseases)

No	The name of special premises and	The equipment of special rooms and
	premises for independent work	premises for independent work
1.	Training room number 1 of the Department of Surgery in the Regional Clinical Hospital "Penza Regional Clinical Hospital. N.N. Burdenko", equipped with computer equipment with the ability to connect to the Internet.	-
2.		medical care to patients, including those related to medical interventions, special equipment and

"Agreed"	"Agreed"
<b>Head of Practice</b>	The head of the practice from
from the organization	profile organization
INI	DIVIDUAL TASK
<u> </u>	(a), performed
during the period of in-patient h (Care of patients with a surgical	ospital practice C2.1.1.2 Clinical practice profile) in
_	_

### It is necessary:

to

from

- 1. Undergo safety briefing, familiarize yourself with the internal schedule of the department, study the structure of the in-patient department, organize a protective and sanitary regime.
- 2. To change the bed and underwear in surgical patients, in accordance with modern technology.
- 3. To carry out wet cleaning of premises and ventilation of chambers in accordance with modern technologies. Analysis of current literature, public presentation of the results.
- 4. Accompany and transport patients with surgical profile to treatment and diagnostic rooms.
- 5. To carry out preparation of the patient for conducting modern instrumental methods of examination. Analysis of current literature, public presentation of the results.
- 6. To prepare the patient for subcutaneous, intramuscular and intravenous injections.
- 7. Artificial ventilation of the lungs and indirect cardiac massage on the models.

8. Public presentation of the results	s of the practice.
The assignment was accepted	

The program was compiled by:  1. Nikolskiy V.I. Advanced Doctor in Medical Sciences. Professor at the Department of "Surgery"
It is prohibited to reproduce the said program in any form with out the prior written
permission of the sub-department that developed the program.
The program was approved at a meeting of sub-department "Surgery"
Report № 6 from « 08» 03 20/6
Head of sub-department (Mitroshin A.N.)
The program was approved by the head of sub-department Medical Faculty
(Moiseeva I.Ya.)
The program was approved by the methodological committee of Medical Institute Report $N_{2}$ $\frac{20}{6}$
Head of the methodological committee of Medical Institute(Kalmin O.V.)

The practical training's work program was composed in compliance with requirements of FSES HE taking into academic plan for the educational program 31.05.01 General Medicine

### Data on re-approval of the program for consecutive academic years and record of alterations

Academic	Sub-departments'	Introduced alterations	Signature of sub-
year	decision		department's head
	(Report №, date)		
2016-2017 academic year	Protocol № 1 of 31.08.16	Re-confirmed without change for the new academic year	Stant
2016-2017 academic year	Protocol № 11 from 16.06.17	The qualification of graduates with the "General Practitioner" was changed to "Medical doctor"	Alfant
2017-2018 academic year	Protocol № 1 of 31.08.17	Added in paragraph 5 description of applications of educational technologies to students with disabilities and disabled people	Hamit
2017-2018 academic year	Protocol № 1 of 31.08.17	Re-confirmed for the new academic year	MANY