Ministry of Health of the Russian Federation

federal state budgetary educational institution
higher education
"North-Western State Medical University named after I.I. Mechnikov"

Ministry of Health of the Russian Federation

(Federal State Budgetary Educational Institution of Higher Education North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federation)

DISCIPLINE WORK PROGRAM

"Clinical Guidelines in Outpatient Practice"

Specialty: 31.05.01 General Medicine

Focus: Organization and provision of primary health care to the adult population in medical organizations

Implementation language: Russian, English

2021

Подлинник электронного документа, подписанного ЭП, хранится в системе электронного документооборота ФГБОУ ВО СЗГМУ им. И.И.Мечникова Минздрава России
СВЕДЕНИЯ О СЕРТИФИКАТЕ ЭП
Сертификат 00CDEE3BD65A19B375D4FAEE2ABC26F298
Владелец Сайганов Сергей Анатольевич
Действителен с 03.12.2025 12:23:25 по 26.02.2027 12:23:25

The work program for the discipline "Clinical Guidelines in Outpatient Practice" has been developed in accordance with the Federal State Educational Standard of Higher Education (specialist degree) for Specialty 31.05.01 General Medicine, approved by Order No. 988 of the Ministry of Science and Higher Education of the Russian Federation dated August 12, 2020, "On Approval of the Federal State Educational Standard of Higher Education (Specialist Degree) for Specialty 31.05.01 General Medicine."

Compilers of the work program of the discipline:
N.A. Kunitskaya, Associate Professor, Department of Internal Medicine, Clinical Pharmacology and Nephrology, Doctor of Medical Sciences

Reviewer:
O.A. Sablin, Head of the Department of Therapy and Occupational Pathology, Clinic No. 1, Nikiforov Russian Center of Emergency and Radiation Medicine, EMERCOM of Russia; Professor, Doctor of Medical Sciences; Honored Physician of the Russian Federation.

The discipline work program was discussed at a meeting of the Department of Internal Medicine, Clinical Pharmacology and Nephrology
April 27, 2021. Protocol No. 21.

Head of Department _____ /N.V. Bakulina/
(signature) (full name)

Approved by the Methodological Commission for the specialty 31.05.01 General Medicine
May 11, 2021

Chair _____ /I.G. Bakulin/
(signature) (full name)

Reviewed by the Methodological Council and recommended for approval by the Academic Council
May 20, 2021

Chairman _____ /Artyushkin S.A./
(signature) (full name)

Date of update:

CONTENTS

1.The purpose of mastering the discipline4 4
2. The place of discipline in the structure of the educational program4 4
3.List of planned learning outcomes in the discipline, correlated with the planned results of mastering the educational program4 4
4. Discipline workload and types of academic work 8 5
5. Discipline content structured by sections (topics), with the number of academic hours and types of classes indicated 8 7
6. Methodological guidelines for students on mastering the discipline 14 12
7. Assessment materials 14 12
8.List of educational literature and Internet resources necessary for mastering the discipline14 12
9.List of information technologies used to master the discipline, including a list of software, professional databases and information reference systems15 13
10. Facilities and technical resources for the discipline 17 15
Appendix A 19 17

1. The purpose of mastering the discipline

The purpose of mastering the discipline "Clinical Guidelines in Outpatient Practice" is to develop the competencies of students in Specialty 31.05.01 General Medicine in the field of healthcare organization.

2. The place of discipline in the structure of the educational program

The discipline "Clinical Guidelines in Outpatient Practice" belongs to the part formed by participants in educational relations within Block 1 "Disciplines (Modules)" of the main professional educational program for Specialty 31.05.01 General Medicine (specialist degree), specialization: Organization and Provision of Primary Healthcare to the Adult Population in Medical Organizations. The discipline is mandatory.

3. List of planned learning outcomes in the discipline, correlated with the planned results of mastering the educational program

Code and name of competency	Code and name of the competency achievement indicator
PC-1. Able to organize and provide urgent or emergency medical care to patients	ID-2 PC-1.2. Provides emergency medical care for conditions that threaten the patient's life, including clinical death
PC-2. Able to examine a patient in order to identify major pathological conditions, symptoms, disease syndromes, and nosological entities	ID-1 PC-2.1. Interviews and examines the patient (collects complaints and medical and life history; performs inspection, palpation, percussion, and auscultation) ID-2 PC-2.2. Formulates a preliminary diagnosis, prepares an investigation plan, and refers the patient for laboratory and/or instrumental examinations when medically indicated, in accordance with current procedures for medical care, clinical guidelines, and standards of care ID-3 PC-2.3. Refers the patient for consultation with medical specialists and/or for specialized medical care in an inpatient or day-care setting when medically indicated, in accordance with current procedures for medical care, clinical guidelines, and standards of care ID-3 PC-2.4. Performs differential diagnosis with other diseases/conditions ID-5 PC-2.5. Establishes a diagnosis with due regard to clinical classifications and the current International Statistical Classification of Diseases and Related Health Problems (ICD)
PC-3. Able to manage and treat patients requiring medical care	ID-1 PC-3.1. Develops a treatment plan and prescribes non-pharmacological and pharmacological treatment, taking account of the diagnosis, age, and clinical presentation, in accordance with current procedures for medical care, clinical guidelines, and standards of care in primary healthcare ID-2 PC-3.2. Assesses the efficacy and safety of medicines, medical devices, therapeutic nutrition, and other treatment methods in primary healthcare ID-3 PC-3.3. Provides palliative medical care in cooperation with medical specialists, specialized medical organizations, and social services in primary

	healthcare ID-4 PC-3.4. Provides personalized general medical care, including to pregnant women and elderly and senile patients, in primary healthcare
PC-4. Able to carry out a set of measures to prepare for and conduct various types of medical assessment	ID-1 PC-4.1. Performs temporary disability assessment ID-2 PC-4.2. Determines indications for referral for medical and social assessment in primary healthcare

Competency achievement indicator code	Learning outcomes (assessment indicators)	Evaluation tools
ID-2 PC-1.2.	**Knows the emergency medical care algorithm** for conditions that threaten the patient's life	Clinical case Security questions
ID-1 PC-2.1	**Knows: methods of collecting complaints and the patient's life and medical history; methods of a complete physical examination.**	Clinical case Security questions
	Is able to collect complaints and the patient's life and medical history and analyze the information obtained; use complete physical examination techniques in patients with various internal diseases.	Clinical case Abstract
	Has skills in collecting complaints and the patient's life and medical history and analyzing the information obtained; applying complete physical examination techniques.	Clinical case
ID-2 PC-2.2 ,	**Knows the International Classification of Diseases**	Test tasks
	Is able to justify the need for and scope of laboratory investigation in a patient with an internal disease.	Security questions
	Has skills in formulating a preliminary diagnosis and preparing a plan of laboratory and instrumental examinations for a patient with an internal disease. Referring a patient for laboratory testing when medically indicated, in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care	Clinical case Test tasks Security questions Abstract
ID-3 PC-2.3	**Knows the procedures for providing medical care** Clinical guidelines (treatment protocols) and standards of medical care for patients with internal diseases.	Test questions,
	Is able to justify the need to refer a patient for consultation with medical specialists	Test items,
	Has skills in referring a patient for consultation with medical specialists and/or for specialized medical care in an inpatient or day-care setting when medically indicated, in accordance with current procedures for medical care, clinical guidelines, and standards of care	Clinical cases Abstract
ID-4 PC-2.4	**Knows the etiology, pathogenesis and pathomorphology, clinical presentation, differential diagnosis, course, complications, and outcomes of internal diseases.**	Test items, Security questions

	Is able to identify the etiology, pathogenesis and pathomorphology, clinical presentation, differential diagnosis, course, complications, and outcomes of internal diseases	Clinical case
	Has skills in performing differential diagnosis with other diseases, including emergency conditions.	Clinical case
ID-5 PC-2.5.	**Knows the International Classification of Diseases and clinical guidelines (treatment protocols), taking account of standards of care,** **Is able to formulate a diagnosis in accordance with the International Classification of Diseases.** **Has skills in establishing a diagnosis in accordance with the current International Statistical Classification of Diseases and Related Health Problems (ICD).**	Control questions; clinical case
ID-1 PC-3.1	**Knows current methods of using medicines, medical devices, and therapeutic nutrition for diseases and conditions, in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care.** - mechanisms of action of medicines; - indications and contraindications for their use - complications caused by their use. - current non-pharmacological methods of treating diseases and conditions	Test tasks
	Is able to use medical devices in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care. Prepare a treatment plan for diseases and conditions, taking account of the diagnosis, age, and clinical presentation Prescribe medicines, taking account of the diagnosis, age, and clinical presentation. Prescribe non-pharmacological treatment, taking account of the diagnosis, age, and clinical presentation **Has skills in prescribing medicines, taking account of the diagnosis, age, and clinical presentation.** Prescribing non-pharmacological treatment, taking account of the diagnosis, age, and clinical presentation	Test tasks Clinical case. Abstract
ID-2 PC-3.2	**Knows procedures for medical care, clinical guidelines (treatment protocols), standards of care, and mechanisms of action of medicines,** - indications and contraindications for their use - complications caused by their use.	Security questions Test tasks
	Is able to use medical devices in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care; assess the efficacy and safety of medicines and therapeutic nutrition	Clinical case
ID-3 PC-3.3	**Knows general principles of organizing medical care for the population; procedures for medical care, clinical guidelines (treatment protocols), standards of care, and the procedure for providing palliative medical care.**	Security questions Test tasks
ID-4 PC-3.4.	**Knows procedures for medical care, clinical guidelines (treatment protocols), and standards of care, including care for pregnant women and elderly and senile patients in primary healthcare.**	Security questions Test tasks
ID-1 PC-4.1.	**Is able to perform temporary** disability assessment	Security questions Test tasks

ID-2 PC-4.2.	**Is able to determine indications for** referral for medical and social assessment in primary healthcare care	Security questions Test tasks

4. Scope of discipline and types of academic work

Type of educational work	Labor intensity	Semesters
		12
Contact work between students and teachers	**36**	**36**
Classroom work:	34	34
Lectures (L)	12	12
Practical exercises (PP)	22	22
Independent work:	**36**	**36**
during the period of theoretical training	32	32
preparation for the test	4	4
Interim assessment: pass/fail test; consultations	2	2
Total workload: academic hours	**72**	
credit units	**2**	

5. The content of the discipline, structured by sections (topics) indicating the number of academic hours and types of training sessions

5.1.Content of discipline sections

item no.	Name of discipline section	Lecture topics	List of competencies formed in the process of mastering the section
1	Draft legislation of the Russian Federation in the field of health protection; regulatory legal acts and documents governing the activities of medical institutions. International Classification of Diseases.	Medical law: concept and sources. Main stages in the development of medical law and its sources. Current legislation of the Russian Federation (sources of medical law). 1. Constitution of the Russian Federation, Article 41. 2. Federal Law "On the Fundamentals of Health Protection of Citizens" is the principal law in healthcare and establishes the legal, organizational, and economic principles of health protection (Federal Law No. 323-FZ dated November 21, 2011). 3. "On the Sanitary and Epidemiological Welfare of the Population" (Law of the Russian Federation No. 000-1 dated April 19, 1991, and Federal Law No. 52-FZ dated March 30, 1993). In addition to measures ensuring sanitary and epidemiological supervision and the rights and obligations of citizens in this field, the law implements the principle of separating practical healthcare services from sanitary supervision services.	PC-1, PC-2, PC-3, PC-4

		4. Federal Law dated January 1, 2001, "On Medical Insurance of Citizens." Under this law, medical insurance was established for all citizens of the Russian Federation and was provided on a contractual basis. 5. "On Psychiatric Care and Guarantees of Citizens' Rights in Its Provision" (Law of the Russian Federation No. 000-1 dated July 2, 1992). 6. "On the Donation of Blood and Its Components" — Federal Law dated January 1, 2001 (Law of the Russian Federation No. 000-1 dated June 9, 1993). 7. "On Preventing the Spread in the Russian Federation of the Disease Caused by the Human Immunodeficiency Virus (HIV Infection)" (Federal Law No. 38-FZ dated March 30, 1995). 8. "On Preventing the Spread of Tuberculosis" (Federal Law No. 77-FZ dated June 18, 2001). 9. "On Immunoprophylaxis of Infectious Diseases" (Federal Law No. 000 dated September 17, 1998). 10. "On Narcotic Drugs and Psychotropic Substances" (Federal Law No. 3-FZ dated January 8, 1998). 11. "On Transplantation of Human Organs and/or Tissues" (Law of the Russian Federation No. 000-1 dated December 22, 1992). ICD-10.	
2	Standards of medical care and clinical guidelines in cardiology	Medical interventions required to diagnose a disease or condition (examination by a medical specialist; basic and specialized investigations). Medical services for treating a disease or condition and monitoring treatment in accordance with applicable clinical guidelines.	PC-1, PC-2, PC-3, PC-4
3	Standards of medical care and clinical guidelines in gastroenterology	Medical interventions required to diagnose a disease or condition (examination by a medical specialist; basic and specialized investigations). Medical services for treating a disease or condition and monitoring treatment in accordance with applicable clinical guidelines.	PC-1, PC-2, PC-3, PC-4
4	Standards of medical care and clinical guidelines in pulmonology	Medical interventions required to diagnose a disease or condition (examination by a medical specialist; basic and specialized investigations). Medical services for treating a disease or condition and monitoring treatment in accordance with applicable clinical guidelines.	PC-1, PC-2, PC-3, PC-4
5	Standards of medical care	Medical interventions required to diagnose a	PC-1, PC-2,

	and clinical guidelines in endocrinology	disease or condition (examination by a medical specialist; basic and specialized investigations). Medical services for treating a disease or condition and monitoring treatment in accordance with applicable clinical guidelines.	PC-3, PC-4
6	Standards of medical care and clinical guidelines in rheumatology	Medical interventions required to diagnose a disease or condition (examination by a medical specialist; basic and specialized investigations). Medical services for treating a disease or condition and monitoring treatment in accordance with applicable clinical guidelines.	PC-1, PC-2, PC-3, PC-4

5.2.Thematic plan of lectures

item no.	Name of discipline section	Lecture topics	Active forms of learning	Labor intensity (academic hours)
1	Draft legislation of the Russian Federation in the field of health protection; regulatory legal acts and documents governing the activities of medical institutions. International Classification of Diseases.	L.1 Draft legislation of the Russian Federation in the field of health protection; regulatory legal acts and documents governing medical institutions. International Classification of Diseases.	-	2
2	Standards of medical care and clinical guidelines in cardiology	L.2 Standards of medical care and clinical guidelines in cardiology.	-	2
3	Standards of medical care and clinical guidelines in gastroenterology	L.3 Standards of medical care and clinical guidelines in gastroenterology.	-	2
4	Standards of medical care and clinical guidelines in pulmonology	L.4 Standards of medical care and clinical guidelines in pulmonology.	-	2
5	Standards of medical care and clinical guidelines in endocrinology	L.5 Standards of medical care and clinical guidelines in endocrinology.	-	2
6	Standards of medical care and clinical guidelines in rheumatology	L.6 Standards of medical care and clinical guidelines in rheumatology.	-	2
			TOTAL:	12

5.3.Thematic plan for practical classes

№ p/p	Name of discipline section	Topics of practical classes	Active forms of learning	Current control forms	Labor intensity (academic hours)

1	Standards of medical care and clinical guidelines in cardiology	Practical class 1 Cardiology standard of medical care: a patient with coronary artery disease	Group discussion	situational tasks	4
2	Standards of medical care and clinical guidelines in gastroenterology	Practical class 2 Gastroenterology standard of medical care: a patient with chronic biliary tract disease	Group discussion	situational tasks	4
3	Standards of medical care and clinical guidelines in pulmonology	Practical class 3 Pulmonology standard of medical care: a patient with bronchial asthma	Group discussion	situational tasks	4
4	Standards of medical care and clinical guidelines in endocrinology	Practical class 4 Endocrinology standard of medical care: a patient with diabetes mellitus	Group discussion	situational tasks	4
5	Standards of medical care and clinical guidelines in rheumatology	Practical class 5 Rheumatology standard of medical care: a patient with rheumatoid arthritis	Group discussion	test questions, test tasks, situational tasks	4
6	Standards of medical care and clinical guidelines in cardiology Standards of medical care and clinical guidelines in gastroenterology Standards of medical care and clinical guidelines in pulmonology Standards of medical care and clinical guidelines in endocrinology Standards of medical care and clinical guidelines in rheumatology	Final class	Group discussion	test questions, test tasks, situational tasks	2
				TOTAL:	22

5.4. Thematic plan of seminars: not provided

5.5. Thematic plan of laboratory work: not provided

5.6. Independent work:

item no.	Name of discipline section	Types of independent work*	Current control forms	Labor intensity (academic hours)
1	Standards of medical care and clinical guidelines in cardiology Standards of medical care and clinical guidelines in gastroenterology Standards of medical care and clinical guidelines in pulmonology Standards of medical care and clinical guidelines in endocrinology Standards of medical care and clinical guidelines in rheumatology	Study of lecture materials. Study of educational literature. Work with regulatory documents	Solving clinical cases Essay	32
	Preparation for the pass/fail test			4
	TOTAL:			36

5.6.1. List of regulatory documents:

1. 1. Federal Law No. 273-FZ dated December 29, 2012, "On Education in the Russian Federation";
2. Federal Law No. 323-FZ dated November 21, 2011, "On the Fundamentals of Health Protection of Citizens in the Russian Federation";
3. Federal Law No. 326-FZ dated November 29, 2010, "On Compulsory Medical Insurance in the Russian Federation";
4. Order No. 707n of the Ministry of Health of the Russian Federation dated October 8, 2015, "On Approval of Qualification Requirements for Medical and Pharmaceutical Professionals with Higher Education in the Field of Healthcare and Medical Sciences."
5. Order No. 541n of the Ministry of Health and Social Development of the Russian Federation dated July 23, 2010, "On Approval of the Unified Qualification Reference Book for Positions of Managers, Specialists, and Employees," section "Qualification Characteristics of Positions of Healthcare Workers";
6. Order No. 17n of the Ministry of Health and Social Development of the Russian Federation dated January 18, 2012, on approval of the procedure for providing medical care to adults in the fields of internal medicine and family medicine
7. Order No. 543n of the Ministry of Health and Social Development of the Russian Federation dated May 15, 2012, "On Approval of the Regulations for Organizing the Provision of Primary Healthcare to the Adult Population";
8. Order No. 477n of the Ministry of Health and Social Development of the Russian Federation dated May 4, 2012, "On Approval of the List of Conditions Requiring First Aid and the List of First-Aid Measures"

9. Order No. 738n of the Ministry of Health of the Russian Federation dated October 31, 2018, "On Amendments to the Procedure for Providing Medical Care to Adults in the Field of Internal Medicine, Approved by Order No. 17n of the Ministry of Health and Social Development of the Russian Federation dated January 18, 2012"

5.6.2. Abstract topics:

1. Chronic gastritis. Pharmacotherapy algorithms and lifestyle recommendations.
2. Atrial fibrillation. Pharmacotherapy algorithms and lifestyle recommendations.
3. Bronchial asthma. Pharmacotherapy algorithms and lifestyle recommendations.
4. Osteoarthritis. Pharmacotherapy algorithms and lifestyle recommendations.
5. Rheumatoid arthritis. Current management in outpatient settings.
6. Gastroesophageal reflux disease. Current management in outpatient settings.
7. Chronic obstructive pulmonary disease. Current management in outpatient settings.
8. Patients after acute coronary syndrome. Current management in outpatient settings.
9. Algorithm for providing care for heart failure syndrome.

6. Guidelines for students on mastering the discipline

Mastering the discipline "Clinical Guidelines in Outpatient Practice" includes studying the etiology, pathogenesis, clinical manifestations, principles of diagnosis, and the management and treatment of the most common diseases. The discipline includes lectures, practical classes, and independent study. The lecture course discusses current classifications, patient-management strategies, and principles of diagnosis and treatment, with detailed consideration of primary and secondary disease prevention. Practical classes develop and improve students' ability to apply the theoretical knowledge acquired.

At the beginning of each practical class, students' baseline knowledge is assessed, enabling the instructor to conduct the class more effectively. Using an individual patient as an example, the class discusses the causes and mechanisms of the disease and the features of its clinical presentation; formulates a preliminary diagnosis; outlines diagnostic methods and principles of treatment; and examines in detail the opportunities for primary and secondary prevention in that patient. Mastery of the topic is monitored and assessed during the class.

During practical classes, students undergo ongoing assessment, including clinical cases, control questions, and testing in the Moodle learning management system.

Students' independent work includes writing an essay on one of the proposed topics.

If a lecture is missed, the student must submit an essay on the missed topic (at least 25 handwritten pages) and answer the instructor's control questions.

If a practical class is missed, the student must write an essay on the topic (at least 25 handwritten pages) and answer the instructor's theoretical questions. After a satisfactory response on the missed topic, mastery of the material is assessed using an individual patient as an example.

7. Evaluation materials

Assessment materials for the discipline for ongoing monitoring of progress and intermediate certification of students include examples of assessment tools (Appendix A to the work program of the discipline), procedure and assessment criteria.

8. List of educational literature and Internet resources necessary for mastering the discipline

8.1. Educational literature:

1. Internal Medicine: Textbook in 2 Volumes / edited by V.S. Moiseev et al. 3rd revised and expanded edition. Moscow: GEOTAR-Media, 2015. Vol. 1, 958 pp.; Vol. 2, 895 pp. Student Consultant Electronic Library System. Access: Vol. 1: http://www.studmedlib.ru/book/ISBN9785970433102.html
N.L. Smirnova, Kozlovskaya. Moscow: GEOTAR-Media, 2016. 816 pp.
Access: http://www.rosmedlib.ru/book/ISBN9785970437148.html
2. Acute Renal Failure / V.M. Ermolenko, A.Yu. Nikolaev. Moscow: GEOTAR-Media, 2017. Access: http://www.rosmedlib.ru/book/ISBN9785970441725.htm
3. Clinical Guidelines "Algorithms for Specialized Medical Care for Patients with Diabetes Mellitus" / edited by I.I. Dedov and M.V. Shestakova. Issue 8. Moscow, 2017. Access: https://endojournals.ru/index.php/dia/article/download/8341/6141
4. Internal Diseases: Textbook in 2 Vols. Vol. I / edited by A.I. Martynov, Z.D. Kobalava, S.V. Moiseev. Moscow: GEOTAR-Media, 2022. 688 pp. ISBN 978-5-9704-6766-4. Electronic text // Student Consultant Electronic Library System: https://www.studentlibrary.ru/book/ISBN9785970467664.html
5. Internal Diseases. Vol. II: Textbook in 2 Vols. / edited by A.I. Martynov, Z.D. Kobalava, S.V. Moiseev. Moscow: GEOTAR-Media, 2022. 616 pp. ISBN 978-5-9704-6767-1. Electronic text // Student Consultant Electronic Library System: https://www.studentlibrary.ru/book/ISBN9785970467671.html
6. Internal Diseases: in 2 Vols. Vol. I: Textbook / edited by A.I. Martynov, Zh.D. Kobalava, S.V. Moiseev. 4th revised edition. Moscow: GEOTAR-Media, 2023. 784 pp. ISBN 978-5-9704-7231-6. Electronic text // Student Consultant Electronic Library System: https://www.studentlibrary.ru/book/ISBN9785970472316.html
7. Internal Diseases: in 2 Vols. Vol. II: Textbook / edited by A.I. Martynov, Zh.D. Kobalava, S.V. Moiseev. 4th revised edition. Moscow: GEOTAR-Media, 2023. 704 pp. ISBN 978-5-9704-7232-3. Electronic text // Student Consultant Electronic Library System: https://www.studentlibrary.ru/book/ISBN9785970472323.html

8.2. Resources of the Internet information and telecommunications network:

Name of Internet resource	Email address of the resource
Journal of medical Internet research	http://www.jmir.org
Journal of Nephrology	http://cybernephrology.org/
Scientific Society of Nephrologists of Russia	http://nonr.ru/
Russian Dialysis Society	http:/.nephro.ru/
Information and educational system for medical practitioners	http://www.rosmedlib.ru
Russian medical portal	http://www.rosmedportal.com
World Health Organization	http://www.who.int

9. List of information technologies used to master the discipline, including a list of software, professional databases and information reference systems

9.1. List of information technologies used in the educational process:

item no.	Name of discipline section	Information technology
	Draft legislation of the Russian Federation in the field of health protection; regulatory legal acts and documents governing the activities of medical	placement of educational materials in the electronic information and educational environment of North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, https://moodle.szgmu.ru/course/view.php?id=462 —

	institutions. International Classification of Diseases. Standards of medical care and clinical guidelines in cardiology Standards of medical care and clinical guidelines in gastroenterology Standards of medical care and clinical guidelines in pulmonology Standards of medical care and clinical guidelines in endocrinology Standards of medical care and clinical guidelines in rheumatology	testing in the electronic information and educational environment of North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, https://moodle.szgmu.ru/mod/quiz/view.php?id=14945

9.2. List of software used in the educational process (licensed and freely distributed software, including domestically produced):

item no.	Software product name	License validity period	Documents confirming right to use software products
licensed software			
1.	ESET NOD 32	1 year	Government contract № 07/2020
2.	MS Windows 8 MS Windows 8.1 MS Windows 10 MS Windows Server 2012 Datacenter - 2 Proc MS Windows Server 2012 R2 Datacenter - 2 Proc MS Windows Server 2016 Datacenter Core	Unlimited	State contract No. 30/2013-O; Government contract No. 399/2013-OA; Government contract No. 07/2017-EA.
3.	MS Office 2010 MS Office 2013	Unlimited	Government contract No. 30/2013-OA; Government contract No. 399/2013-OA.
4.	Academic LabVIEW Premium Suite (1 User)	Unlimited	Government contract № 02/2015
licensed software of domestic production			
1.	Anti-plagiarism	1 year	Government contract № 2409
2.	“WEBINAR (WEBINAR)” VERSION 3.0	1 year	Contract No. 347/2020-M
3.	"3KL e-learning	1 year	Contract No. 348/2020-M

	environment"		
4.	TrueConf Enterprise	1 year	Contract No. 396/2020-EA
free software			
1.	Google Chrome	Unlimited	Open License Agreement GNU GeneralPublicLicense
2.	NVDA	Unlimited	Open License Agreement GNU GeneralPublicLicense
freely distributed software of domestic production			
1.	Moodle	Unlimited	Open License Agreement GNU GeneralPublicLicense

9.3. List of professional databases and information reference systems:

item no.	Name software product	License validity period	Documents confirming right to use software products	Mode access for disabled students and persons with limited health capabilities
1.	Consultant Plus	1 year	Agreement No. 655/2020-EA	-
2.	EBS “Student Consultant”	1 year	Contract No. 307/2020-EA	http://www.studmedlib.ru/
3.	EMB “Doctor Consultant”	1 year	Contract No. 281/2020-EA	http://www.rosmedlib.ru/
4.	EBS "Ibooks.ru/ibooks.ru"	1 year	Contract № 06/2020	https://ibooks.ru
5.	EBS “IPRBooks”	1 year	Contract No. 08/2020-ZK	http://www.iprbookshop.ru/special
6.	Electronic library system “Bukap”	1 year	Contract № 05/2020	https://www.books-up.ru/
7.	EBS "Lan Publishing House"	1 year	Contract No. 395/2020-EA	https://e.lanbook.com/

10. Material and technical support of discipline

Lecture classrooms for classes, group and individual consultations, ongoing assessment, and interim assessment, equipped with teaching equipment and technical aids: 47 Piskarevsky Prospect, Building L (Pavilion 18), Room 1, St. Petersburg, North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia;
Equipment: chalkboard; instructor's desk and chair; student desks and chairs.
Technical teaching aids: multimedia projector, teacher’s laptop, system unit, monitor.
Special technical teaching aids: Roger Pen (Roger personal wireless transmitter in the form of a pen), Roger MyLink (Roger Pen system signal receiver) (for students with hearing impairments); IntelliKeys (wired keyboard with Russian Braille with a matte black finish), (St. Petersburg, Piskarevsky Prospekt, 47, lit. R (building 9), room No. 18.19, Federal State Budgetary Educational Institution of Higher Education North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federation).

Classrooms for seminar-type classes, group and individual consultations, ongoing assessment, and interim assessment, equipped with teaching equipment and technical aids

Room 5, Pavilion 18 (Building L), North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, 47 Piskarevsky Prospect

Equipment: chalkboard; instructor's desk; two-seat student desks (10);
Technical teaching aids: multimedia projector, instructor's laptop, monitor.

Room 6, Pavilion 18 (Building L), North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, 47 Piskarevsky Prospect
Equipment: instructor's desk; two-seat student desks (6);
Technical teaching aids: multimedia projector, instructor's laptop, monitor.
Room 7, Pavilion 18 (Building L), North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, 47 Piskarevsky Prospect
Equipment: chalkboard; instructor's desk; single-seat student desks (10);
Technical teaching aids: multimedia projector, instructor's laptop, monitor.
Room 8, Pavilion 18 (Building L), North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, 47 Piskarevsky Prospect
Equipment: chalkboard; instructor's desk; two-seat student desks (5); visual aids.
Technical teaching aids: multimedia projector, instructor's laptop, monitor.
Room 9, Pavilion 18 (Building L), North-Western State Medical University named after I.I. Mechnikov, Ministry of Health of Russia, 47 Piskarevsky Prospect
Equipment: chalkboard; instructor's desk; two-seat student desks (5); visual aids.
Technical teaching aids: multimedia projector, instructor's laptop, monitor.
Special technical teaching aids: Roger Pen (Roger personal wireless transmitter in the form of a pen), Roger MyLink (Roger Pen system signal receiver) (for students with hearing impairments); IntelliKeys (wired keyboard with Russian Braille with a matte black finish), (St. Petersburg, Piskarevsky Prospekt, 47, lit. R (building 9), room No. 18.19, Federal State Budgetary Educational Institution of Higher Education North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federation).

Premises for independent work of students, equipped with computer equipment with the ability to connect to the Internet and provided with access to the electronic information and educational environment of the University: St. Petersburg, Piskarevsky Prospekt, 47, lit. AE (building 32),
aud. No. 1, lit. R (building 9), room. No. 18.19 FSBEI HE North-Western State Medical University named after. I.I. Mechnikov of the Russian Ministry of Health.

Appendix A

Ministry of Health of the Russian Federation

federal state budgetary educational institution
higher education
"North-Western State Medical University
named after I.I. Mechnikov"
Ministry of Health of the Russian Federation

(Federal State Budgetary Educational Institution of Higher Education North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federation)

EVALUATION MATERIALS

(for ongoing monitoring of progress and intermediate certification of students)

Specialty:	31.05.01 General medicine
Direction:	Organization and provision of primary health care to the adult population in medical organizations
Name of discipline:	Clinical Guidelines in Outpatient Practice

St. Petersburg – 2021

1. List of planned learning outcomes in the discipline

Competency achievement indicator code	Learning outcomes (assessment indicators)	Evaluation tools
ID-2 PC-1.2.	**Knows the emergency medical care algorithm** for conditions that threaten the patient's life	Clinical case Security questions
ID-1 PC-2.1	**Knows: methods of collecting complaints and the patient's life and medical history; methods of a complete physical examination.**	Clinical case Security questions
	Is able to collect complaints and the patient's life and medical history and analyze the information obtained; use complete physical examination techniques in patients with various internal diseases.	Clinical case Abstract
	Has skills in collecting complaints and the patient's life and medical history and analyzing the information obtained; applying complete physical examination techniques.	Clinical case
ID-2 PC-2.2	**Knows the International Classification of Diseases**	Test tasks
	Is able to justify the need for and scope of laboratory investigation in a patient with an internal disease.	Security questions
	Has skills in formulating a preliminary diagnosis and preparing a plan of laboratory and instrumental examinations for a patient with an internal disease. Referring a patient for laboratory testing when medically indicated, in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care	Clinical case Test tasks Security questions Abstract
ID-3 PC-2.3	**Knows the procedures for providing medical care** Clinical guidelines (treatment protocols) and standards of medical care for patients with internal diseases.	Test questions,
	Is able to justify the need to refer a patient for consultation with medical specialists	Test items,
	Has skills in referring a patient for consultation with medical specialists and/or for specialized medical care in an inpatient or day-care setting when medically indicated, in accordance with current procedures for medical care, clinical guidelines, and standards of care	Clinical cases Abstract
ID-4 PC-2.4	**Knows the etiology, pathogenesis and pathomorphology, clinical presentation, differential diagnosis, course, complications, and outcomes of internal diseases.**	Test items, Security questions
	Is able to identify the etiology, pathogenesis and pathomorphology, clinical presentation, differential diagnosis, course, complications, and outcomes of internal diseases	Clinical case
	Has skills in performing differential diagnosis with other diseases, including emergency conditions.	Clinical case
ID-5 PC-2.5.	**Knows the International Classification of Diseases and**	Control questions;

	clinical guidelines (treatment protocols), taking account of standards of care, **Is able to formulate a diagnosis in accordance with the International Classification of Diseases.** **Has skills in establishing a diagnosis in accordance with the current International Statistical Classification of Diseases and Related Health Problems (ICD).**	clinical case
ID-1 PC-3.1	**Knows current methods of using medicines, medical devices, and therapeutic nutrition for diseases and conditions, in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care.** - mechanisms of action of medicines; - indications and contraindications for their use - complications caused by their use. - current non-pharmacological methods of treating diseases and conditions	Test tasks
	Is able to use medical devices in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care. Prepare a treatment plan for diseases and conditions, taking account of the diagnosis, age, and clinical presentation Prescribe medicines, taking account of the diagnosis, age, and clinical presentation. Prescribe non-pharmacological treatment, taking account of the diagnosis, age, and clinical presentation **Has skills in prescribing medicines, taking account of the diagnosis, age, and clinical presentation.** Prescribing non-pharmacological treatment, taking account of the diagnosis, age, and clinical presentation	Test tasks Clinical case. Abstract
ID-2 PC-3.2	**Knows procedures for medical care, clinical guidelines (treatment protocols), standards of care, and mechanisms of action of medicines,** - indications and contraindications for their use - complications caused by their use.	Security questions Test tasks
	Is able to use medical devices in accordance with current procedures for medical care, clinical guidelines (treatment protocols), and standards of care; assess the efficacy and safety of medicines and therapeutic nutrition	Clinical case
ID-3 PC-3.3	**Knows general principles of organizing medical care for the population; procedures for medical care, clinical guidelines (treatment protocols), standards of care, and the procedure for providing palliative medical care.**	Security questions Test tasks
ID-4 PC-3.4.	**Knows procedures for medical care, clinical guidelines (treatment protocols), and standards of care, including care for pregnant women and elderly and senile patients in primary healthcare.**	Security questions Test tasks
ID-1 PC-4.1.	**Is able to perform temporary** disability assessment	Security questions Test tasks
ID-2 PC-4.2.	**Is able to determine indications for** referral for medical and social assessment in primary healthcare care	Security questions Test tasks

2. Examples of assessment tools and assessment criteria for ongoing monitoring

2.1. Examples of incoming control

1. Specify the risk factors for cardiovascular disease.
2. Specify the risk factors for diabetes mellitus.
3. Specify the 2010 ACR/EULAR classification criteria for rheumatoid arthritis.
4. Specify the classification criteria for bronchial asthma.

Criteria for a pass/fail grade

Rating	Description
"passed"	Demonstrates a thorough understanding of the problem. All requirements for the task have been met
"not accepted"	Demonstrates a lack of understanding of the problem. Many requirements for the assignment have not been met. No answer.

2.2. Examples of test tasks:

ID-2 PC-2.2,
Question title:
Question No. 1
DISEASE-MODIFYING AGENTS USED TO TREAT RHEUMATOID ARTHRITIS INCLUDE
1. Glucocorticosteroids and cytostatic agents
2. Diuretics and protein solutions
3. Antibiotics and multivitamins
4. Calcium antagonists and bisoprolol
ID-3 PC-2.3, ID-4 PC-2.4
Question title:
Question No. 2
List the ECG findings most characteristic of patients with essential hypertension:

- 1. Peaked P wave in leads II and III;
- **2. Left ventricular hypertrophy;**
- 3. Right bundle branch block;
- 4. Broad, notched P wave in leads I and II.

ID-1 PC-3.1, ID-2 PC-3.2, ID-3 PC-3.3, ID-4 PC-3.4, ID-1 PC-4.1, ID-2 PC-4.2,
Question title:
Question No. 3
In which type of hyperlipoproteinemia are blood cholesterol, triglycerides, LDL, and VLDL elevated?

- 1. I;
- 2. Type IIa;
- **3. II b;**
- 4. III;
- 5. IV.

Evaluation criteria, grading scale for test tasks

Rating		Description
"excellent"	5	Completed in full – 90%-100%
"good"	4	Not fully implemented – 80%-89%
"satisfactory"	3	Completed with deviations: 70–79%
"unsatisfactory"	2	Partially completed: 69% or fewer correct answers

2.3. Examples of essay topics

ID-1 PC-2.1, ID-2 PC-2.2, ID-3 PC-2.3
Bronchial asthma. Pharmacotherapy algorithms and lifestyle recommendations.
ID-1 PC-3.1
Osteoarthritis. Pharmacotherapy algorithms and lifestyle recommendations.

Evaluation criteria, abstract grading scale

Rating		**Description**
Excellent	5	All requirements for writing and defending an abstract are met: the problem is identified and its relevance is justified, a brief analysis of various points of view on the problem under consideration is made and one's own position is logically presented, conclusions are formulated, the topic is fully disclosed, the scope is maintained, requirements for external design are met, correct answers to additional questions are given
"good"	4	The basic requirements for the abstract and its defense have been met, but there are some shortcomings; in particular, there are inaccuracies in the presentation of the material; there is no logical consistency in judgments; the scope of the abstract is not maintained; there are omissions in design; Incomplete answers were given to additional questions during the defense
"satisfactory"	3	There are significant deviations from the abstracting requirements; in particular: the topic is only partially covered; there were factual errors in the content of the abstract or in answering additional questions; no output during protection
"unsatisfactory"	2	The topic of the abstract is not disclosed, a significant misunderstanding of the problem is revealed, or the abstract is not presented at all

2.4. Examples of clinical cases are provided under ongoing assessment

ID-2 PC-1.2

1. CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part:

Patient G., aged 48, a foreman at a chemical plant, presented to an outpatient physician with severe constricting retrosternal pain radiating to the left shoulder and epigastric region. This pain occurred for the first time while he was on his way to work. As the outpatient clinic was nearby, the patient sought medical attention there. His medical history includes pneumonia. He smokes and does not abuse alcohol.

Physical examination: the patient is overweight. The skin is pale and moist. Cyanosis of the lips is present. Vesicular breath sounds are heard in the lungs, with no rales. Pulse is 92 beats/min, regular, and of satisfactory volume. Blood pressure is 155/80 mmHg. Cardiac borders: the right border lies along the right sternal edge; the left border is 1 cm lateral to the left midclavicular line. Heart sounds are muffled; no murmurs are heard. The abdomen is soft and non-tender. The liver and spleen are not palpable.

Results of additional investigations for Internal Medicine Case 1:

ECG: attached.

1. Complete blood count: RBC 4.5 × 10^12/L; WBC 10.5 × 10^9/L; eosinophils 0%; band neutrophils 6%; segmented neutrophils 65%; lymphocytes 22%; monocytes 7%; ESR 10 mm/h.
2. Blood clotting time: 3 min.
3. Prothrombin index: 100%.
4. CRP positive; CPK 2.4 mmol/g·h; AST 26 U/L; ALT 18 U/L.
5. Radiograph: attached.

QUESTIONS

1. Identify the principal syndromes.
2. Formulate a preliminary diagnosis.
3. What additional investigations should be performed?
4. Prepare a patient-management plan and justify the chosen approach.
5. Specify measures for preventing the disease.

ID-2 PC-2.2

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient V., aged 58, an engineer, suddenly developed frequent irregular palpitations two hours ago while working at his country house; these were accompanied by weakness and discomfort in the cardiac region. He was brought to the hospital admission department. Over the past year, he has experienced similar palpitations, most often during exertion. These episodes were brief and resolved spontaneously at rest. Review of his outpatient medical record for the past two years showed repeatedly elevated cholesterol levels (7.6 mmol/L, predominantly low-density lipoproteins).

Physical examination: the skin is slightly pale; hypersthenic body habitus. Vesicular breath sounds are heard in the lungs, with no rales. The left cardiac border lies along the midclavicular line. Blood pressure is 150/100 mmHg. The radial pulse is rapid and irregular at 102 beats/min. Heart sounds at the apex vary in intensity and are irregular; heart rate is 112 beats/min. The abdomen is soft and non-tender. The liver is not enlarged.

1. ECG: attached.
2. Echocardiography: mild enlargement of the left atrial cavity (3.8 cm). Blood cholesterol 7.6 mmol/L; AST 5 U/L; ALT 4 U/L; CRP 0; prothrombin index 102%; clotting time 8 min.
3. Fundoscopy: atherosclerosis of the retinal vessels.
4. Urinalysis: specific gravity 1.020; no protein; no glucose; leukocytes 1–2 per high-power field.
5. Blood glucose test: 4.5 mmol/L.

QUESTIONS

1. Identify the principal syndromes and formulate a preliminary diagnosis.
2. What additional investigations should be performed?
3. Prepare and justify a patient-management plan.
4. Specify the main groups of medicines, regimen, and diet.
5. Specify measures for preventing the disease.

ID-3 PC-2.3

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient E., a 34-year-old woman, was admitted to the internal medicine department with aching epigastric pain occurring on an empty stomach and subsiding after meals, heartburn, belching, and occasional nausea. History: these symptoms, of varying severity, have been present for the past year. She did not seek medical attention. On the advice of acquaintances, she relieved the pain and heartburn with Almagel. She consulted a physician for the first time and was referred by her primary care physician for inpatient examination and treatment. Physical examination: her condition is satisfactory. The skin is of normal color. Lymph nodes are not palpable. Breath sounds are vesicular. Pulse is 50 beats/min and regular. Blood pressure is 110/70 mmHg. Heart sounds are clear. The tongue is moist, with a grayish coating at the root. The abdomen is soft and mildly tender in the epigastrium. The liver does not extend below the costal margin. The spleen is not palpable. No edema is present. Complete blood count: RBC 4.2 × 10^12/L; Hb 129 g/L; color index 0.9; WBC 7.0 × 10^9/L; differential count normal; ESR 13 mm/h.

Blood chemistry: creatinine 70 μmol/L; total protein 72 g/L; protein fractions: albumin 55%, α1 4.2%, α2 6.7%, β 15%, γ 19.1%; total cholesterol 3.2 mmol/L; β-lipoproteins 4.2 g/L; alkaline phosphatase 1.2 U; total bilirubin 15.3 μmol/L, direct bilirubin absent, indirect bilirubin 15.3 μmol/L; AST 0.3 μmol/L; ALT 0.25 μmol/L. Coprogram: dark brown, formed stool; slightly alkaline reaction; muscle fibers absent; neutral fat absent; fatty acids positive; starch equivocal; digestible fiber positive; mucus absent. Esophagogastroduodenoscopy revealed no pathology in the esophagus, stomach, or duodenum.

Questions:

1. What disease may be suspected?
2. What other investigations may be performed, and what results are expected?
3. Consultations with which specialists are indicated?
4. Determine the patient's management strategy. Are inpatient examination and treatment indicated?
5. Treatment

ID-4 PC-2.4

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient Zh., aged 47, reports dull pain and heaviness in the epigastric region after meals, poor appetite, nausea, an unpleasant taste in the mouth, unstable stools with a tendency toward diarrhea, weakness, dizziness, and unpleasant sensations in the distal extremities. History: he first noticed epigastric discomfort after meals several

years ago. His appetite gradually deteriorated, and he developed a tendency toward diarrhea, especially after consuming milk and dairy products. He did not seek medical attention. During recent months he has experienced weakness and intermittent dizziness, for which he consulted a physician. An outpatient complete

blood count revealed anemia. His primary care physician referred him for inpatient examination and treatment. Physical examination: the condition is of moderate severity. The skin is pale. The tongue is red, with atrophied papillae. Angular stomatitis is present. Breath sounds are vesicular. Pulse is 100 beats/min, regular, and soft. Blood pressure is 100/60 mmHg. Heart sounds are muffled, with a soft systolic murmur at the apex. The abdomen is soft and moves with respiration. Deep palpation is painful in the epigastrium. The liver extends 2 cm below the costal margin. The Shchetkin–Blumberg sign is negative. The spleen is not palpable. No edema is present. Complete blood count: RBC 1.7 × 10^12/L; Hb 85 g/L; color index 1.5; reticulocytes 1%; WBC 3.4 × 10^9/L; segmented neutrophils 60%; lymphocytes 24%; monocytes 16%; platelets 150 × 10^9/L; ESR 27 mm/h. Hypersegmented neutrophil nuclei, macrocytes, and Howell–Jolly bodies are present. Urinalysis is unremarkable. Blood chemistry shows elevated bilirubin due to the indirect fraction. Gastric fluoroscopy: the mucosal relief is smoothed, tone and peristalsis are reduced, and gastric emptying is accelerated.

Questions

1. What disease may be present? Formulate the diagnosis.
2. What are the possible etiological factors of this disease?
3. Which diseases should be considered in the differential diagnosis?
4. What complications of the disease are possible?
5. What are the possible outcomes of the disease?

ID-1 PC-3.1

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient R., a 26-year-old woman, was admitted with pain and swelling of the metacarpophalangeal, wrist, and knee joints and restricted movement in these joints. In the morning, stiffness in the affected joints lasts until 12 noon. The disease began seven months ago after tonsillitis.

Examination: deformity of the metacarpophalangeal, wrist, and knee joints; restricted mobility; reduced hand-grip strength. Pulse is regular at 84 beats/min; blood pressure is 120/80 mmHg. Cardiac borders are normal. Heart sounds are regular and of satisfactory intensity. No abnormalities are detected in the lungs or abdominal organs. Complete blood count: ESR

36 mm/h; CRP +++; α2-globulins 11.6%; γ-globulins 25%. Hand radiography: signs of periarticular osteoporosis in the metacarpophalangeal joints.

Questions

1. Formulate the diagnosis in accordance with ICD-10.
2. List the diagnostic criteria for the disease.
3. Prescribe investigations in accordance with the standards for examining patients with this condition.
4. Prescribe treatment in accordance with the standards for treating patients with this condition.

ID-2 PC-3.2

Clinical case

Instructions: REVIEW THE SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient R., a 59-year-old taxi driver, developed severe retrosternal pain radiating to the lower jaw and left upper limb on Monday evening. At home, on his wife's advice, he attempted to relieve the pain with nitroglycerin, without significant effect. The total duration of the pain exceeded 20 minutes, and the patient called emergency medical services.

History: over the past 10 years, the patient's blood pressure has risen to a maximum of 170/90 mmHg. He has smoked 20 cigarettes a day for the past 20 years. One month ago, he first noticed retrosternal pain after intense physical exertion, which resolved at rest. He has not undergone examination or received treatment. Family history: his 76-year-old mother has arterial hypertension and has had a myocardial infarction; his father died of a myocardial infarction at the age of 55.

Examination: the condition is of moderate severity. The skin is pale. Height 168 cm; weight 90 kg; BMI 32 kg/m². Heart sounds are muffled; the second heart sound is accentuated over the aorta; rhythm is regular. Blood pressure is 160/90 mmHg. Heart rate is 92 beats/min. Breath sounds are vesicular, with no added sounds. Respiratory rate is 22 breaths/min. The abdomen is soft and non-tender. Liver dullness by Kurlov is 11 × 9 × 8 cm. No peripheral edema is present.

Laboratory results: total cholesterol 6.7 mmol/L; triglycerides 2.8 mmol/L; HDL cholesterol 0.62 mmol/L; fasting glucose 5.2 mmol/L; creatinine 124 μmol/L; eGFR (CKD-EPI) 54.5 mL/min/1.73 m². The outpatient record also documented a decrease in eGFR to 55 mL/min/1.73 m² four months earlier. Albuminuria is 40 mg/day.

ECG shows sinus rhythm at 92 beats/min, ST-segment elevation of up to 4 mm in leads I, aVL, and V1–V5, and ST-segment depression of up to 2 mm in leads II, III, and aVF.

Questions:

1. Suggest the most likely diagnosis.
2. Justify your diagnosis.
3. Which myocardial reperfusion strategy should be selected in this case?
4. Which medicines would you recommend as oral antiplatelet therapy? Justify your choice.
5. Specify the possible complications of antiplatelet therapy. Which parameters should be monitored?

Assessment criteria and grading scale for clinical cases

Rating		**Description**
"excellent"	5	The solution is explained in detail, consistently, and

		accurately, with theoretical justification, the necessary diagrams and visual demonstrations, and correct, fluent use of terminology. Answers to additional questions are correct and clear.
"good"	4	The solution is detailed but not sufficiently logical, with isolated errors in detail and some difficulty with theoretical justification, diagrams, and visual demonstrations. Answers to additional questions are correct but insufficiently clear.
"satisfactory"	3	The explanation is incomplete and inconsistent, contains errors, and has weak theoretical justification. There are significant difficulties and errors in diagrams and visual demonstrations. Answers to additional questions are insufficiently clear and contain errors in detail.
"unsatisfactory"	2	The explanation is incomplete and inconsistent, contains major errors, and lacks theoretical justification. The student is unable to provide diagrams and visual demonstrations, or makes numerous errors. Answers to additional questions are incorrect or absent.

2.5. Examples of control questions

ID-2 PC-1.2	Algorithm for providing medical care for acute coronary syndrome Algorithm for providing medical care for hypertensive crisis Algorithm for providing medical care for cardiac asthma in acute coronary syndrome Algorithm for providing medical care for paroxysmal atrial fibrillation Algorithm for providing care for gastrointestinal bleeding Algorithm for providing care for bronchial obstruction syndrome Algorithm for providing medical care for hypoglycemic coma Algorithm for relieving pain in articular syndrome. Algorithm for relieving pain in osteoarthritis
ID-2 PC-2.2	Markers of cytolysis syndrome in acute coronary syndrome Biochemical markers of cholestasis Serological markers for the early diagnosis of rheumatoid arthritis. Algorithm for diagnosing type 2 diabetes mellitus Biochemical markers of cholestasis Causes of cytolysis. Biochemical markers of cytolysis
ID-3 PC-2.3	Management of patients after acute coronary syndrome. Management of patients with peptic ulcer disease Management of patients with chronic gastritis Management of patients with irritable bowel syndrome Management of patients with bronchial asthma Management of patients with chronic obstructive pulmonary disease Management of patients with pneumonia Management of patients with type 2 diabetes mellitus. Algorithm for prescribing glucose-lowering medicines. Indications for prescribing insulin preparations Management of patients with osteoarthritis.
ID-4 PC-2.4	Risk factors for atherosclerosis Risk factors for essential hypertension

	Causes of cholestasis Etiological factors of pneumonia Etiological factors of chronic obstructive pulmonary disease Etiological factors of bronchial asthma Complications of peptic ulcer disease Complications of bronchial asthma Early and late complications of diabetes mellitus
ID-5 PC-2.5.	Formulation of the diagnosis in patients with essential hypertension Risk groups for complications of essential hypertension. Classification of acute coronary syndrome Formulation of the diagnosis in patients with acute coronary syndrome Classification of atrioventricular conduction disorders
ID-2 PC-3.2	Dietary recommendations for patients with diabetes mellitus Dietary recommendations for patients with atherosclerosis Dietary recommendations for patients with gastroesophageal reflux disease Dietary recommendations for patients with peptic ulcer disease Use of anticoagulants and antiplatelet agents in acute coronary syndrome: indications and contraindications. Management of patients after acute coronary syndrome. Management of patients with essential hypertension. Indications and contraindications for prescribing ACE inhibitors and angiotensin II receptor blockers. Dietary recommendations for patients with diabetes mellitus Dietary recommendations for patients with atherosclerosis Dietary recommendations for patients with gastroesophageal reflux disease Dietary recommendations for patients with peptic ulcer disease
ID-3 PC-3.3	Management of patients with refractory heart failure
ID-4 PC-3.4.	Specific features of managing elderly patients after acute coronary syndrome. Specific features of managing elderly patients with peptic ulcer disease Specific features of managing elderly patients with chronic gastritis Management of patients with chronic obstructive pulmonary disease Specific features of managing elderly patients with pneumonia
ID-1 PC-4.1.	Management of patients with coronary artery disease; indications for temporary disability assessment Management of patients with bronchial asthma; indications for temporary disability assessment
ID-2 PC-4.2.	Rules for completing documents and the referral form for medical and social assessment Indications for referring patients with coronary artery disease for medical and social assessment. Indications for referring patients with essential hypertension for medical and social assessment. Indications for referring patients with peptic ulcer disease for medical and social assessment.

Evaluation criteria, assessment scale for control questions

Rating		Description
"excellent"	5	Knows all the educational material, understands it perfectly and has thoroughly mastered it. Gives correct, conscious and confident answers to questions (within the program). In oral

Rating		Description
		answers he uses literary correct language and does not make mistakes.
"good"	4	Knows all the required educational material, understands it well and has mastered it firmly. Answers questions (within the program) without difficulty. In oral answers he uses literary language and does not make gross mistakes
"satisfactory"	3	Knows basic educational material. Answers questions (within the limits of the program) with difficulty. In oral answers, he makes mistakes when presenting the material and in constructing his speech.
"unsatisfactory"	2	Does not know most of the educational material, answers, as a rule, only to the teacher's leading questions, hesitantly. Makes frequent and serious mistakes in oral answers

3. Current control procedure

Ongoing assessment in the discipline is conducted through answers to control questions, test assignments, clinical case solutions, and presentation of an essay.

4. Examples of assessment tools and grading criteria for interim assessment (pass/fail test)

4.1. An approximate list of checklists to prepare for the test:

ID-2 PC-1.2,	Algorithm for providing medical care for acute coronary syndrome Algorithm for providing medical care for hypertensive crisis Algorithm for providing medical care for cardiac asthma in acute coronary syndrome Algorithm for providing medical care for paroxysmal atrial fibrillation Algorithm for providing care for gastrointestinal bleeding Algorithm for providing care for bronchial obstruction syndrome Algorithm for providing medical care for hypoglycemic coma Algorithm for relieving pain in articular syndrome. Algorithm for relieving pain in osteoarthritis
ID-2 PC-2.2,	Markers of cytolysis syndrome in acute coronary syndrome Biochemical markers of cholestasis Serological markers for the early diagnosis of rheumatoid arthritis. Algorithm for diagnosing type 2 diabetes mellitus Biochemical markers of cholestasis Causes of cytolysis. Biochemical markers of cytolysis
ID-3 PC-2.3,	Management of patients after acute coronary syndrome. Management of patients with peptic ulcer disease Management of patients with chronic gastritis Management of patients with irritable bowel syndrome Management of patients with bronchial asthma Management of patients with chronic obstructive pulmonary disease Management of patients with pneumonia Management of patients with type 2 diabetes mellitus. Algorithm for prescribing glucose-lowering medicines. Indications for prescribing insulin preparations Management of patients with osteoarthritis.

ID-4 PC-2.4	Risk factors for atherosclerosis Risk factors for essential hypertension Causes of cholestasis Etiological factors of pneumonia Etiological factors of chronic obstructive pulmonary disease Etiological factors of bronchial asthma Complications of peptic ulcer disease Complications of bronchial asthma Clinical syndromes of diabetes mellitus. Risk factors for diabetes mellitus. Stages of development. Diagnosis of the early stages. Early and late complications of diabetes mellitus Osteoporosis. Classifications. Current principles of diagnosis and therapy. Inflammatory and non-inflammatory joint lesions: arthritis and osteoarthritis. Classifications. Current principles of diagnosis and therapy Diseases presenting with jaundice and hepatosplenomegaly. Current diagnostic methods and therapeutic approaches. Investigation plan for patients with biliary tract and liver disorders. Diseases presenting with gastric dyspepsia: chronic gastritis, functional dyspepsia, esophagitis, gastroesophageal reflux disease, and early forms of gastric and esophageal tumors. Patient-management strategies and selection of therapy. Cardiac rhythm disorders: arrhythmias. Specific clinical manifestations of rhythm disorders of organic and non-organic origin. Current methods for investigating cardiac rhythm disorders: monitoring, cardiac event paging, loop recording, stimulation-based provocation, and endocardial electrophysiological study. Differential diagnosis of paroxysmal cardiac rhythm disorders Cardiac conduction disorders: blocks. Differential diagnosis of conduction disorders. Selection and implementation of individualized therapy. Acute conduction disorders: emergency care Inflammatory and non-inflammatory diseases of the endocardium. Infective endocarditis. Clinical manifestations: systemic involvement. Pharmacological management. Indications for surgical treatment. Primary and secondary prevention of endocarditis
ID-5 PC-2.5.	Formulation of the diagnosis in patients with essential hypertension Risk groups for complications of essential hypertension. Classification of acute coronary syndrome Formulation of the diagnosis in patients with acute coronary syndrome Classification of atrioventricular conduction disorders Treatment of diabetes mellitus. Dietary treatment. Glucose-lowering medicines: mechanisms of action, indications, and contraindications. Adverse effects and complications of therapy. Insulin therapy: diet during insulin therapy, insulin preparations, insulin-administration methods, and the concept of insulin resistance
ID-2 PC-3.2	Dietary recommendations for patients with diabetes mellitus Dietary recommendations for patients with atherosclerosis Dietary recommendations for patients with gastroesophageal reflux disease Dietary recommendations for patients with peptic ulcer disease

	Use of anticoagulants and antiplatelet agents in acute coronary syndrome: indications and contraindications. Management of patients after acute coronary syndrome. Management of patients with essential hypertension. Indications and contraindications for prescribing ACE inhibitors and angiotensin II receptor blockers. Dietary recommendations for patients with diabetes mellitus Dietary recommendations for patients with atherosclerosis Dietary recommendations for patients with gastroesophageal reflux disease Dietary recommendations for patients with peptic ulcer disease
ID-3 PC-3.3	Management of patients with refractory heart failure
ID-4 PC-3.4.	Specific features of managing elderly patients after acute coronary syndrome. Specific features of managing elderly patients with peptic ulcer disease Specific features of managing elderly patients with chronic gastritis Management of patients with chronic obstructive pulmonary disease Specific features of managing elderly patients with pneumonia
ID-1 PC-4.1.	Management of patients with coronary artery disease and indications for temporary disability assessment. Management of patients with bronchial asthma and indications for temporary disability assessment
ID-2 PC-4.2.	Rules for completing documents and the referral form for medical and social assessment Indications for referring patients with coronary artery disease for medical and social assessment. Indications for referring patients with essential hypertension for medical and social assessment. Indications for referring patients with peptic ulcer disease for medical and social assessment.

Evaluation criteria, assessment scale for control questions

Rating		**Description**
"excellent"	5	Knows all the educational material, understands it perfectly and has thoroughly mastered it. Gives correct, conscious and confident answers to questions (within the program). In oral answers he uses literary correct language and does not make mistakes.
"good"	4	Knows all the required educational material, understands it well and has mastered it firmly. Answers questions (within the program) without difficulty. In oral answers he uses literary language and does not make gross mistakes
"satisfactory"	3	Knows basic educational material. Answers questions (within the limits of the program) with difficulty. In oral answers, he makes mistakes when presenting the material and in constructing his speech.
"unsatisfactory"	2	Does not know most of the educational material, answers, as a rule, only to the teacher's leading questions, hesitantly. Makes frequent and serious mistakes in oral answers

4.2. Examples of clinical cases:

ID-2 PC-1.2

1. CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part:

Patient G., aged 48, a foreman at a chemical plant, presented to an outpatient physician with severe constricting retrosternal pain radiating to the left shoulder and epigastric region. This pain occurred for the first time while he was on his way to work. As the outpatient clinic was nearby, the patient sought medical attention there. His medical history includes pneumonia. He smokes and does not abuse alcohol.

Physical examination: the patient is overweight. The skin is pale and moist. Cyanosis of the lips is present. Vesicular breath sounds are heard in the lungs, with no rales. Pulse is 92 beats/min, regular, and of satisfactory volume. Blood pressure is 155/80 mmHg. Cardiac borders: the right border lies along the right sternal edge; the left border is 1 cm lateral to the left midclavicular line. Heart sounds are muffled; no murmurs are heard. The abdomen is soft and non-tender. The liver and spleen are not palpable.

Results of additional investigations for the internal medicine case:

ECG: attached.
1. Complete blood count: RBC 4.5 × 10^12/L; WBC 10.5 × 10^9/L; eosinophils 0%; band neutrophils 6%; segmented neutrophils 65%; lymphocytes 22%; monocytes 7%; ESR 10 mm/h.
2. Blood clotting time: 3 min.
3. Prothrombin index: 100%.
4. CRP positive; CPK 2.4 mmol/g·h; AST 26 U/L; ALT 18 U/L.
5. Radiograph: attached.

Questions

1. Identify the principal syndromes.
2. Formulate a preliminary diagnosis.
3. What additional investigations should be performed?
4. Prepare a patient-management plan and justify the chosen approach.
5. Specify measures for preventing the disease.

ID-2 PC-2.2

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient V., aged 58, an engineer, suddenly developed frequent irregular palpitations two hours ago while working at his country house; these were accompanied by weakness and discomfort in the cardiac region. He was brought to the hospital admission department. Over the past year, he has experienced similar palpitations, most often during exertion. These episodes were brief and resolved spontaneously at rest. Review of his outpatient medical record for the past two years showed repeatedly elevated cholesterol levels (7.6 mmol/L, predominantly low-density lipoproteins).

Physical examination: the skin is slightly pale; hypersthenic body habitus. Vesicular breath sounds are heard in the lungs, with no rales. The left cardiac border lies along the midclavicular line. Blood pressure is 150/100 mmHg. The radial pulse is rapid and irregular at

102 beats/min. Heart sounds at the apex vary in intensity and are irregular; heart rate is 112 beats/min. The abdomen is soft and non-tender. The liver is not enlarged.

1. ECG: attached.
2. Echocardiography: mild enlargement of the left atrial cavity (3.8 cm). Blood cholesterol 7.6 mmol/L; AST 5 U/L; ALT 4 U/L; CRP 0; prothrombin index 102%; clotting time 8 min.
3. Fundoscopy: atherosclerosis of the retinal vessels.
4. Urinalysis: specific gravity 1.020; no protein; no glucose; leukocytes 1–2 per high-power field.
5. Blood glucose test: 4.5 mmol/L.

QUESTIONS
1. Identify the principal syndromes and formulate a preliminary diagnosis.
2. What additional investigations should be performed?
3. Prepare and justify a patient-management plan.
4. Specify the main groups of medicines, regimen, and diet.
5. Specify measures for preventing the disease.

ID-3 PC-2.3

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient E., a 34-year-old woman, was admitted to the internal medicine department with aching epigastric pain occurring on an empty stomach and subsiding after meals, heartburn, belching, and occasional nausea. History: these symptoms, of varying severity, have been present for the past year. She did not seek medical attention. On the advice of acquaintances, she relieved the pain and heartburn with Almagel. She consulted a physician for the first time and was referred by her primary care physician for inpatient examination and treatment. Physical examination: her condition is satisfactory. The skin is of normal color. Lymph nodes are not palpable. Breath sounds are vesicular. Pulse is 50 beats/min and regular. Blood pressure is 110/70 mmHg. Heart sounds are clear. The tongue is moist, with a grayish coating at the root. The abdomen is soft and mildly tender in the epigastrium. The liver does not extend below the costal margin. The spleen is not palpable. No edema is present. Complete blood count: RBC 4.2 × 10^12/L; Hb 129 g/L; color index 0.9; WBC 7.0 × 10^9/L; differential count normal; ESR 13 mm/h.

Blood chemistry: creatinine 70 μmol/L; total protein 72 g/L; protein fractions: albumin 55%, α1 4.2%, α2 6.7%, β 15%, γ 19.1%; total cholesterol 3.2 mmol/L; β-lipoproteins 4.2 g/L; alkaline phosphatase 1.2 U; total bilirubin 15.3 μmol/L, direct bilirubin absent, indirect bilirubin 15.3 μmol/L; AST 0.3 μmol/L; ALT 0.25 μmol/L. Coprogram: dark brown, formed stool; slightly alkaline reaction; muscle fibers absent; neutral fat absent; fatty acids positive; starch equivocal; digestible fiber positive; mucus absent. Esophagogastroduodenoscopy revealed no pathology in the esophagus, stomach, or duodenum.

Questions:

1. What disease may be suspected?
2. What other investigations may be performed, and what results are expected?
3. Consultations with which specialists are indicated?
4. Determine the patient's management strategy. Are inpatient examination and treatment indicated?
5. Treatment

ID-3 PC-2.4

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient Zh., aged 47, reports dull pain and heaviness in the epigastric region after meals, poor appetite, nausea, an unpleasant taste in the mouth, unstable stools with a tendency toward diarrhea, weakness, dizziness, and unpleasant sensations in the distal extremities. History: he first noticed epigastric discomfort after meals several years ago. His appetite gradually deteriorated, and he developed a tendency toward diarrhea, especially after consuming milk and dairy products. He did not seek medical attention. During recent months he has experienced weakness and intermittent dizziness, for which he consulted a physician. An outpatient complete

blood count revealed anemia. His primary care physician referred him for inpatient examination and treatment. Physical examination: the condition is of moderate severity. The skin is pale. The tongue is red, with atrophied papillae. Angular stomatitis is present. Breath sounds are vesicular. Pulse is 100 beats/min, regular, and soft. Blood pressure is 100/60 mmHg. Heart sounds are muffled, with a soft systolic murmur at the apex. The abdomen is soft and moves with respiration. Deep palpation is painful in the epigastrium. The liver extends 2 cm below the costal margin. The Shchetkin–Blumberg sign is negative. The spleen is not palpable. No edema is present. Complete blood count: RBC 1.7 × 10^12/L; Hb 85 g/L; color index 1.5; reticulocytes 1%; WBC 3.4 × 10^9/L; segmented neutrophils 60%; lymphocytes 24%; monocytes 16%; platelets 150 × 10^9/L; ESR 27 mm/h. Hypersegmented neutrophil nuclei, macrocytes, and Howell–Jolly bodies are present. Urinalysis is unremarkable. Blood chemistry shows elevated bilirubin due to the indirect fraction. Gastric fluoroscopy: the mucosal relief is smoothed, tone and peristalsis are reduced, and gastric emptying is accelerated.

Questions

1. What disease may be present? Formulate the diagnosis.
2. What are the possible etiological factors of this disease?
3. Which diseases should be considered in the differential diagnosis?
4. What complications of the disease are possible?
5. What are the possible outcomes of the disease?

ID-1 PC-3.1

CLINICAL CASE

Instructions: REVIEW THE CLINICAL SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient R., a 26-year-old woman, was admitted with pain and swelling of the metacarpophalangeal, wrist, and knee joints and restricted movement in these joints. In the morning, stiffness in the affected joints lasts until 12 noon. The disease began seven months ago after tonsillitis.

Examination: deformity of the metacarpophalangeal, wrist, and knee joints; restricted mobility; reduced hand-grip strength. Pulse is regular at 84 beats/min; blood pressure is 120/80 mmHg. Cardiac borders are normal. Heart sounds are regular and of satisfactory intensity. No abnormalities are detected in the lungs or abdominal organs. Complete blood count: ESR

36 mm/h; CRP +++; α2-globulins 11.6%; γ-globulins 25%. Hand radiography: signs of periarticular osteoporosis in the metacarpophalangeal joints.

Questions

1. Formulate the diagnosis in accordance with ICD-10.
2. List the diagnostic criteria for the disease.
3. Prescribe investigations in accordance with the standards for examining patients with this condition.
4. Prescribe treatment in accordance with the standards for treating patients with this condition.

ID-2 PC-3.2

Clinical case

Instructions: REVIEW THE SITUATION AND PROVIDE DETAILED ANSWERS TO THE QUESTIONS

Main part

Patient R., a 59-year-old taxi driver, developed severe retrosternal pain radiating to the lower jaw and left upper limb on Monday evening. At home, on his wife's advice, he attempted to relieve the pain with nitroglycerin, without significant effect. The total duration of the pain exceeded 20 minutes, and the patient called emergency medical services.

History: over the past 10 years, the patient's blood pressure has risen to a maximum of 170/90 mmHg. He has smoked 20 cigarettes a day for the past 20 years. One month ago, he first noticed retrosternal pain after intense physical exertion, which resolved at rest. He has not undergone examination or received treatment. Family history: his 76-year-old mother has arterial hypertension and has had a myocardial infarction; his father died of a myocardial infarction at the age of 55.

Examination: the condition is of moderate severity. The skin is pale. Height 168 cm; weight 90 kg; BMI 32 kg/m². Heart sounds are muffled; the second heart sound is accentuated over the aorta; rhythm is regular. Blood pressure is 160/90 mmHg. Heart rate is 92 beats/min. Breath sounds are vesicular, with no added sounds. Respiratory rate is 22 breaths/min. The abdomen is soft and non-tender. Liver dullness by Kurlov is 11 × 9 × 8 cm. No peripheral edema is present.

Laboratory results: total cholesterol 6.7 mmol/L; triglycerides 2.8 mmol/L; HDL cholesterol 0.62 mmol/L; fasting glucose 5.2 mmol/L; creatinine 124 μmol/L; eGFR (CKD-

EPI) 54.5 mL/min/1.73 m². The outpatient record also documented a decrease in eGFR to 55 mL/min/1.73 m² four months earlier. Albuminuria is 40 mg/day.

ECG shows sinus rhythm at 92 beats/min, ST-segment elevation of up to 4 mm in leads I, aVL, and V1–V5, and ST-segment depression of up to 2 mm in leads II, III, and aVF.

Questions:

1. Suggest the most likely diagnosis.
2. Justify your diagnosis.
3. Which myocardial reperfusion strategy should be selected in this case?
4. Which medicines would you recommend as oral antiplatelet therapy? Justify your choice.
5. Specify the possible complications of antiplatelet therapy. Which parameters should be monitored?

Assessment criteria and grading scale for clinical cases

Rating		**Description**
"excellent"	5	The solution is explained in detail, consistently, and accurately, with theoretical justification, the necessary diagrams and visual demonstrations, and correct, fluent use of terminology. Answers to additional questions are correct and clear.
"good"	4	The solution is detailed but not sufficiently logical, with isolated errors in detail and some difficulty with theoretical justification, diagrams, and visual demonstrations. Answers to additional questions are correct but insufficiently clear.
"satisfactory"	3	The explanation is incomplete and inconsistent, contains errors, and has weak theoretical justification. There are significant difficulties and errors in diagrams and visual demonstrations. Answers to additional questions are insufficiently clear and contain errors in detail.
"unsatisfactory"	2	The explanation is incomplete and inconsistent, contains major errors, and lacks theoretical justification. The student is unable to provide diagrams and visual demonstrations, or makes numerous errors. Answers to additional questions are incorrect or absent.

Evaluation criteria, grading scale pass/fail

Rating	**Description**
"passed"	Demonstrates a thorough understanding of the problem. Knows the basic concepts within the framework of the issue under discussion, methods of study and their relationship with each other, practical problems and has an idea of promising directions for developing the issue under consideration
"not accepted"	Demonstrates a lack of understanding of the problem. Does not know the basic concepts, methods of study, within the framework of the issue being discussed, has no idea about the main practical problems

5. Intermediate assessment **procedure**

Intermediate assessment in the discipline is conducted as a pass/fail test. The test includes solving clinical cases and answering control questions