Assessment Fund
for the discipline **"Outpatient Therapy with a course in gerontology"**

Level of Higher Education

Speciality

Field of Study

560001 – Kyrgyz Republic

General Medicine

2026

The assessment fund is intended for monitoring the knowledge of students in the field of training (specialty) "General Medicine" in the discipline "Outpatient Therapy with a course in gerontology

The assessment fund was reviewed and approved at the meeting of the Department of Therapy
Protocol N1 from «26. ___08__.2026»

Head of the Department Sabirov I.S.

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1.LIST OF COMPETENCES WITH INDICATION OF STAGES OF THEIR FORMATION IN THE PROCESS OF MASTERING A DISCIPLINE

Formed competencies	Planned results of training in the discipline that characterizes the stages of formation of competences	Types of Assessment tools/section code in the document
PC-8	**Knowledge of:** modern population health indicators; risk factors; basics of medical documentation analysis **Skills:** assess population health at the healthcare facility level; identify risk groups **Expertise:** methods of outpatient medical records analysis; approaches to public health promotion	Block A, D — tests, oral questioning Block B, D — situational tasks Block C, D — practical tasks(ECG.analysis)
PC-7	**Knowledge of:** clinical features and complications of common diseases; diagnostic methods; organization of medical care **Skills:** carry out preventive measures; complete medical documentation; use databases **Expertise:** clinical examination methods; interpretation of lab/instrumental data; diagnosis formulation	Block A, D — tests. oral questioning Block B, D — case tasks Block C, D — clinical case analysis
PC-14	**Knowledge of:** diagnostic value of complaints and anamnesis; clinical symptoms; diagnostic criteria **Skills:** collect anamnesis; examine patients; formulate diagnosis **Expertise:** diagnostic algorithms; clinical reasoning	Block A, D — tests. oral questioning Block B, D — tasks Block C, D — clinical cases
PC-16	**Knowledge of:** diagnostic algorithm according to ICD; disease classification; emergency conditions **Skills:** formulate diagnosis; identify life-threatening conditions **Expertise:** diagnostic algorithms;	Block A, D — tests. oral questioning Block B, D — tasks Block C, D — practical skills

Formed competencies	Planned results of training in the discipline that characterizes the stages of formation of competences	Types of Assessment tools/section code in the document
	emergency recognition skills	
PC-17	**Knowledge of:** principles of treatment; indications and contraindications; care algorithms **Skills:** prescribe treatment; individualize therapy; provide emergency care **Expertise:** treatment skills; monitoring therapy effectiveness	Block A, D — tests. oral questioning Block B, D — tasks Block C, D — practical work
PC-19	**Knowledge of:** signs of emergency conditions; first aid algorithms; hospitalization criteria **Skills:** recognize emergencies; provide first aid; refer for hospitalization **Expertise:** resuscitation skills; emergency management algorithms	Block A, D — tests. oral questioning Block B, D — tasks Block C, D — practical skills

2. FLOW CHART OF THE DISCIPLINE/PRACTICE
Field of study/specialization 560001 General medicine
Course - 6/semester - 11
Credit units (CU) – 3
Scope testing semester -credit

Title of module according to WPD	Type of control	Forms of control	Minimal credit points	Maximal credit points	Week of control
semester 11					
General issues Pulmonology	module 1				
	Formative assessment	Oral survey, practical skills of outpatient examination (situational tasks or analysis of a case patient), attendance. Abstracts (reports or presentations).	11	21	7
	Midterm examination	Control work number 2 Test, situational task, analyzes or radiographs	6	9	
Cardiology part 1	module 2				
	Formative assessment	Oral survey, practical skills of outpatient examination (situational tasks or analysis of a case patient), attendance. Abstracts (reports or presentations).	8	14	12
	Midterm examination	Control work number 3 Test, situational task, ECG	4	7	
Cardiology part 2	module 3				
	Formative assessment	Oral survey, practical skills of outpatient examination (situational tasks or analysis of a case patient), attendance. Abstracts (reports or presentations).	8	13	16
	Midterm	Control work number 4 Test, situational task, ECG	3	6	

	examination				
Total for a semester			40	70	
Midpoint assessment		Curation of patient with outpatient card	20	30	
Summative assessment			60	100	

Note: 1 point is taken for each missed lecture and practical lesson.

Field of study/specialization 560001 General medicine
Course -6/semester – 12
Credit units (CU) – 3
Scope testing semester –credit with mark

Title of module according to WPD	Type of control	Forms of control	Minimal credit points	Maximal credit points	Week of control
12 semester					
Gastroenterology	Module 5				
	Formative assessment	Oral survey, practical skills of outpatient examination (situational tasks or analysis of a case patient), attendance. Abstracts (reports or presentations).	7	15	28
	Midterm examination	Control work number 5 Test, situational task, analysis	3	7	

Nephrology. Rheumatology	Module 6				
	Formative assessment	Oral survey, practical skills of outpatient examination (situational tasks or analysis of a case patient), attendance. Abstracts (reports or presentations).	9	15	33
	Midterm examination	Control work number 6 Test, situational task, analysis	4	9	
Endocrinology. Hematology	Module 7				
	Formative assessment	Oral survey, practical skills of outpatient examination (situational tasks or analysis of a case patient), attendance. Abstracts (reports or presentations).	10	15	38
	Midterm examination	Control work number 7 Test, situational task, analysis	7	9	
Total for a semester			40	70	
Midpoint assessment (credit with mark)		Station " medical examination»	20	30	
Summative assessment			60	100	

Note: 1 point is taken for each missed lecture and practical lesson.

3. STANDARD CONTROL TASKS AND OTHER MATERIALS NECESSARY FOR ASSESSING THE PLANNED LEARNING OUTCOMES OF THE DISCIPLINE/PRACTICUM (ASSESSMENT TOOLS)

Block A

TESTS FOR OUTPATIENT THERAPY WITH A COURSE IN GERONTOLOGY

1. **The main task of a primary care (polyclinic) physician is:**
   A) Performing complex surgical interventions
   B) Managing only patients with chronic diseases
   C) Organizing outpatient care, early diagnosis, and disease prevention
   D) Working only in emergency care settings
2. **The functions of a district (primary care) physician include:**
   A) Performing only laboratory diagnostics
   B) Dispensary follow-up of patients and coordination of referrals
   C) Issuing sick-leave certificates only
   D) Treating patients only during exacerbations of disease
3. **Who should conduct dispensary observation of patients without proven cardiovascular disease but with high or very high cardiovascular risk?**
   A) Physician of the Department of Medical Prevention (or district physician if such department is absent)
   B) Polyclinic physician
   C) Physician of the day hospital
   D) Cardiologist of the polyclinic
4. **Who should conduct summary preventive counseling at the final stage of dispensarization?**
   A) Polyclinic physician
   B) Physician of the Department of Medical Prevention
   C) Physician of the day hospital
   D) Cardiologist of the polyclinic
5. **What is the recommended duration of summary preventive counseling (minutes)?**
   A) 10
   B) 30
   C) 60
   D) 5
6. **Which institutions conduct medical and social expertise?**
   A) Federal institutions of medical and social expertise
   B) Regional institutions of medical and social expertise
   C) Municipal institutions of medical and social expertise
   D) Compulsory medical insurance funds
7. **For what period is disability of Group I established?**
   A) 2 years
   B) 1 year
   C) 3 years
   D) Indefinitely
8. **For what period is disability of Group II established?**
   A) 1 year
   B) 3 years
   C) Indefinitely
   D) 2 years
9. **How is the degree of loss of professional ability determined?**
   A) As a percentage
   B) As fractions
   C) As decimal values
   D) Based on subjective characteristics
10. **What is the most probable cause of anemia in a 55-year-old man who underwent gastric resection 7 years ago and has macrocytosis? Deficiency of:**
    A) Vitamin B12 (cyanocobalamin)
    B) Iron

C) Erythropoietin
D) Pyridoxine

11. **What is the main goal of anti-Helicobacter therapy in peptic ulcer disease?**
    A) Reducing relapse frequency
    B) Reducing pain intensity
    C) Accelerating ulcer healing
    D) Reducing risk of perforation
12. **How long does it usually take for vitamin B12 deficiency to develop when dietary intake is absent?**
    A) 4–5 years
    B) 3–4 months
    C) 5–8 months
    D) 9–12 months
13. **What diagnostic method is decisive for confirming liver cirrhosis?**
    A) Elastography (elastometry)
    B) Ultrasound examination
    C) Radiography
    D) Irrigoscopy
14. **Which complication is characteristic of liver cirrhosis?**
    A) Liver failure
    B) Hemoptysis
    C) Atrioventricular conduction disorder
    D) Hypertensive crisis
15. **What type of changes are typical in irritable bowel syndrome?**
    A) Functional disorders
    B) Organic changes
    C) Hereditary disorders
    D) Developmental anomalies of the intestine
16. **Which factor predisposes to the development of irritable bowel syndrome after infection?**
    A) History of intestinal infection
    B) Milk consumption
    C) High-fiber diet
    D) Dyslipidemia
17. **Which blood pressure level (mmHg) corresponds to Grade I arterial hypertension?**
    A) 150/95
    B) 160/100
    C) 150/100
    D) 160/95
18. **Which blood pressure level (mmHg) corresponds to Grade II arterial hypertension?**
    A) 170/100
    B) 180/90
    C) 180/95
    D) 160/110
19. **Which blood pressure level (mmHg) corresponds to Grade III arterial hypertension?**
    A) 170/115
    B) 175/105
    C) 165/95
    D) 170/100
20. **How many times should arterial pressure be measured during one doctor's visit?**
    A) 2

B) 1
C) 3
D) 4

21. **How long before measuring blood pressure should smoking be avoided (hours)?**
A) 0.5
B) 2.5
C) 1.5
D) 2
22. **What office blood pressure level (mmHg) is used as the threshold for diagnosing arterial hypertension?**
A) 140/90
B) 130/80
C) 135/85
D) 145/90
23. **Which additional diagnostic method can reveal target organ damage in arterial hypertension?**
A) Fundus examination
B) Daily urinary cortisol excretion
C) Blood aldosterone level
D) Daily epinephrine excretion
24. **What ECG change may be detected in hypertensive patients?**
A) RV5, V6 > RV4
B) RV4 > RV5, V6
C) S1 > R1
D) RIII > RI
25. **Hypertensive patients are classified as high or very high risk when they have which syndrome?**
A) Metabolic syndrome
B) Astheno-vegetative syndrome
C) Dyspeptic syndrome
D) Post-cholecystectomy syndrome
26. **Arterial hypertension caused by pheochromocytoma is associated with:**
A) Increased catecholamine secretion
B) Increased renin secretion
C) Excess mineralocorticoid secretion
D) Increased angiotensin formation
27. **Renal parenchymal hypertension develops mainly due to:**
A) Activation of the renin-angiotensin system
B) Excess mineralocorticoid secretion
C) Increased catecholamine secretion
D) Increased angiotensin formation
28. **Which marker is most specific for diagnosing hypertension caused by Cushing's syndrome?**
A) 17-oxycorticosteroids
B) Thyrotropin
C) Renin
D) Creatinine
29. **Sudden headache, increased blood pressure, tachycardia and polyuria after an attack are characteristic of:**
A) Pheochromocytoma syndrome
B) Conn's syndrome

C) Cushing's syndrome
D) Climacteric syndrome

30. **Accounting form №025/U "Medical card of a patient receiving outpatient medical care":**
    A) Is completed for every patient receiving outpatient medical care
    B) Is used only in specialized clinics
    C) Is completed separately by each doctor
    D) Is completed only during the first and last visit
31. **In paragraph 19 of form №025-1/U, when a patient visits a polyclinic physician, it is necessary to indicate:**
    A) Primary medical care
    B) Primary pre-medical care
    C) Primary specialized care
    D) Palliative care
32. **Form №025-1/U "Patient's ticket for receiving medical care in outpatient conditions" records:**
    A) Visits to physicians of any specialty providing outpatient care
    B) Emergency care provided by ambulance staff
    C) Laboratory and radiological examinations
    D) Emergency care at public events
33. **When filling form №030/U "Checklist of dispensary monitoring", the card number must correspond to:**
    A) Outpatient medical card (form №025/U)
    B) Medical insurance policy number
    C) SNILS number
    D) Patient ticket (form №025-1/U)
34. **Who signs form №030-13/U "Passport of the medical site of citizens entitled to social services"?**
    A) Polyclinic physician and methodologist
    B) Chief physician
    C) Chairman of the medical commission
    D) Deputy chief physician
35. **Who signs form №070/U "Certificate for obtaining a voucher for sanatorium treatment"?**
    A) Chairman of the medical commission
    B) Attending physician
    C) Chief physician
    D) Deputy chief physician
36. **Who signs the referral coupon to form №070/U?**
    A) Attending physician and sanatorium chief physician
    B) Deputy chief physician of the sanatorium
    C) Chairman of the medical commission
    D) Attending physician of the referring organization
37. **Citizens entitled to social services undergo in-depth medical examination:**
    A) Once per year
    B) Twice per year
    C) Three times per year
    D) Four times per year
38. **Additional laboratory and instrumental examinations in dispensary observation are performed:**
    A) Once per year
    B) Twice per year

C) Three times per year
D) Four times per year

39. **Patronage visits by the district nurse are conducted once every:**
A) 3 months
B) 6 months
C) Year
D) Month
40. **When a patient reaches 17 years of age, data from form №112/U are transferred to:**
A) Form №052-1/U
B) Form №025/U
C) Form №025-1/U
D) Form №030-13/U
41. **Who signs form №057/U-04 "Referral for hospitalization or consultation"?**
A) Head of department
B) Chief physician
C) Deputy chief physician
D) Chairman of the medical commission
42. **How often does the district nurse fill in form №039-1/U-06 "Work diary of the district nurse"?**
A) Daily
B) Weekly
C) Monthly
D) Quarterly
43. **At the beginning of treatment for diseases causing temporary disability, the physician may issue a sick-leave certificate for:**
A) Up to 15 days
B) Up to 5 days
C) Up to 10 days
D) Entire treatment period
44. **Who decides on extension of sick leave beyond 15 days?**
A) Medical commission
B) Attending physician
C) Chief physician
D) Deputy chief physician
45. **Permanent disability without re-examination may be assigned to:**
A) Patients with irreversible anatomical defects
B) Patients with Group I disability
C) Disabled children
D) Patients with occupational disease
46. **In cases of severe trauma or tuberculosis with poor prognosis, a patient must be referred for medical and social expertise no later than:**
A) 12 months
B) 4 months
C) 10 months
D) 3 months
47. **ST-segment depression on ECG is typical for:**
A) Angina pectoris attack
B) Variant angina
C) Pericarditis
D) Left ventricular aneurysm
48. **The most common cause of acute myocarditis is:**
A) Viral infection

B) Bacterial infection
C) Fungal infection
D) Toxic exposure

49. **The most common cause of coronary insufficiency is:**
A) Coronary artery atherosclerosis
B) Muscular bridge
C) Congenital coronary pathology
D) Left ventricular hypertrophy

50. **Primary cardiomyopathy includes:**
A) Hypertrophic cardiomyopathy
B) Alcoholic cardiomyopathy
C) Metabolic cardiomyopathy
D) Dyshormonal cardiomyopathy

51. **Syncope, dizziness, coronary insufficiency and dyspnea are typical for:**
A) Hypertrophic cardiomyopathy with LV outflow obstruction
B) Aortic valve insufficiency
C) Dilated cardiomyopathy
D) Post-infarction cardiosclerosis

52. **Which is a modifiable risk factor for atherosclerosis?**
A) Type 2 diabetes mellitus
B) Age
C) Heredity
D) Male sex

53. **Which cardio-specific marker of necrosis is used in diagnosing myocarditis?**
A) Troponin I
B) Myoglobin
C) LDH
D) Total CK

54. **Which drug is one of the most effective lipid-lowering agents?**
A) Rosuvastatin
B) Simvastatin
C) Atorvastatin
D) Pravastatin

55. **Statins should be discontinued if transaminase levels exceed normal by:**
A) 3 times
B) 2 times
C) 4 times
D) 5 times

56. **On transabdominal ultrasound, the gallbladder wall appears as:**
A) A single-layer isoechogenic structure forming the contour
B) A single curved structure with hypo- and hyperechoic layers
C) A two-layer linear structure with hypo- and hyperechoic layers
D) A two-layer hypoechoic structure

57. **Which drug is most commonly used in autoimmune hepatitis?**
A) Prednisolone
B) Cyclosporine
C) Triamcinolone
D) Lamivudine

58. **Ulcerative colitis is characterized by:**
A) Frequent intestinal bleeding
B) Long asymptomatic course

C) Segmental lesions
D) Transmural ulcers

59. **The degree of gastritis activity is reflected by infiltration of gastric mucosa mainly with:**
A) Leukocytes
B) Eosinophils
C) Lymphocytes
D) Macrophages
60. **What level of glycated hemoglobin (%) is diagnostic for diabetes mellitus?**
A) ≥ 6.5
B) ≥ 6.0
C) ≥ 6.8
D) ≥ 7.0

Appendix № 2

Clinical case for Outpatient Therapy with a course in gerontology

Pulmonology

Task 1

Man 46 years old, on an outpatient visit to the polyclinic was complained on a fever of 38 °C, a constant cough with mucopurulent sputum, dyspnea in physical exertion, general weakness, increased sweating. He considers himself sick during the week, when after a hypothermia he had got a cough, a few days later increased the temperature and began dyspnea when walking. In anamnesis has an acute pneumonia 2 years ago, a chronic gastritis within 10 years. Smokes up to 1.5 packs a day, does not consume alcohol. In an objective examination: the general condition is satisfactory. Skin is wet. The temperature is 37.3 ° C. Respiration rate - 20 per minute. There is a shortening of the percussion sound below the angle of the left scapula, in the same place wet small bubbling rales, crepitation. The heart sounds are quick, rhythmic. Pulse - 100 per minute, rhythmic, satisfactory filling and tension. Blood pressure - 130/80 mm Hg. The tongue is coated with a grayish coating. The abdomen is soft, painless. The liver and spleen are not palpable.

1. What is the diagnosis of this patient?

2. Your survey plan.

3. What is the management of this patient?

Task 2

The 60 years old man complained on a cough with a mucopurulent sputum, mostly in the morning, dyspnea with little physical exertion, weakness, sweating. The temperature did not rise. From anamnesis: for 10 years suffers from COPD. Experience of smoking more than 30 years. Practically every day worries nonproductive cough, mostly in the morning with the release of mucopurulent sputum, dyspnea with physical exertion. The general condition did not significantly suffer, therefore, the bronchodilators refused to offer baseline therapy as suggested earlier. During the last 6 months, he noticed an increase in dyspnea, which began to bother even with a slight physical exertion - walking for a distance of about 100 meters, and therefore turned to the doctor. Increased sputum and purulent component in it. In the past year, suffered 1 exacerbation. On examination: satisfactory nutrition. Diffuse "warm" cyanosis. BR at rest - 20 per minute. The temperature is normal. Peripheral edema is absent. In the lungs on both sides throughout the entire length - scattered dry variegated rattles. When testing on the CAT questionnaire, the number of points is 15. The number of points on the dyspnea scale mMRC-3. With spirography, an obstructive type of respiratory disturbances was revealed: FVC - 70% of the proper values, FEV1 - 60% of the proper values. In the general blood test, erythrocytes are 5 x 10 / l; hemoglobin - 150 g / l; leukocytes - 7.2 x 10 / l; there is no shift in the neutrophil formula: stab neutrophils - 3%; ESR - 15 mm /

h. On the review radiogramm of the lungs - pulmonary fields without focal and infiltrative shadows, increased transparency, the pulmonary pattern is redundant, deformed.

Assignments to the task:

1. Clinical diagnosis.

2. Does the patient has an indication for hospitalization?

3. What additional studies should be done at the outpatient level?

4. What is the management of this patient?

Task 3

The patient is 30 years old. He complained on episodes of dyspnea, mainly with a violation of exhalation: at daytime up to 3 episodes a week, at night - 1-2 times a week. Attacks are accompanied by a strong cough with a discharge of light mucous sputum. He notes the limitation of physical activity - he hardly climbs to the second floor. Several times a day uses berotek inhalations. From an anamnesis: suffers from bronchial asthma - since the childhood. The exacerbations are in spring and summer during the flowering of the grasses. Attacks of expiratory dyspnea at any time of the year, when inhaled sharp odors - deodorants, aerosols of household chemicals, paints, street and house dust. Two years ago she suffered anaphylactic shock after bee sting. Basic therapy with bronchodilators and inhaled glucocorticoids was not performed, since the seizures were rare - 1-2 times a month - only when exposed to provoking odors. Attacks were removed by inhalations of salbutamol or berotek. This deterioration is associated with the relocation of the office where the patient works, to a new premises where repairs, whitewashing and painting were carried out. On examination: Satisfactory nutrition. The skin is clean. The respiratory rate is 20 per minute. In the lungs on both sides throughout the entire course are scattered, mostly high-toned, dry rales. Heart rate - 80 per minute. Blood pressure 120/80 mm Hg. In the study of the lung function was revealed an obstructive type of respiratory disturbances with violation of bronchial patency, mainly at the level of bronchial tubes of small caliber. The value of FVC and FEV1 prior to inhalation of the berotek is 70% and 60% of the corresponding values, respectively. After the inhalation of the berotek, these indicators rose to 86% and 80%, respectively. The general analysis of a blood - without deviations from normal. At a thorax roentgenography no pathology didn't revealed.

Assignments to the task:

1. What is the diagnosis of this patient?

2. Is the bronchial obstruction in a given patient reversible?

3. Determine if the patient has indications for hospitalization.

4. What is the management of this patient?

Task 4

The polyclinic physician was called to the house of the patient 32 years old. The patient complains of a severe cough with the release of a large amount of purulent sputum with an unpleasant odor, a fever, malaise, shortness of breath, pain in the right side of the chest. He has got sick a week ago after hypothermia. He did not seek medical help, took aspirin. Yesterday the condition sharply worsened, the cough increased, there was a large amount of purulent sputum with an unpleasant smell. Objectively: the temperature is 38.5 ° C. General condition of moderate severity. The skin is clean. Hyperemia of the face. Percussion of the thorax: on the right side under the scapula in the 7-8 intercostal area, blunting of percussion sound. On the rest area is a pulmonary percussion sound. When auscultation in the area of blunting, bronchial breathing, large and medium bubbling wet rales are heard. On the rest area is a vesicular breath. The heart sounds are muffled. Heart rate 102 per min. Blood pressure 100/70 mm Hg. Abdominal pathology was not revealed.

Assignments

1. What is the diagnosis of this patient?

2. Name the necessary additional studies.

3. List possible complications.

4. What is the management of this patient?

Task 5

In a patient of 36 years old, the disease began sharply with an increasing of temperature to 39.8 ° C, headache, he became listless and decreased an appetite. On the second day of illness appeared a dry, painful cough. By the beginning of the 3rd day of the disease, a mucous discharge from the nasal cavity

appeared. During the polyclinic physician examination temperature was 37.9 ºC. Sluggish, irritable. Scleral vessels are injected. Skin covers are clean, hyperemia of the cheeks. Nasal breathing is difficult, mild mucosal discharge. Hyperemia of the throat moderate with a cyanotic shade, granulation of the posterior pharyngeal wall. The lymph nodes of the neck are not enlarged, they are painless for palpation. Heart tones are sonorous, rhythmic. HR - 118 per minute. In the lungs, breathing is hard, wiry rattles. BR - 28-30 per minute. The abdomen is soft, painless on palpation. The liver and spleen are not palpable. Micturition is free. There are no meningeal symptoms.

Assignments:

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. What methods of specific prevention of this infection do you know?

Cardiology

Task 1 Cardio

Patient 60 years old, a pensioner, complains on pulsating headache in the morning, sometimes nosebleeds, blurred vision for the last 6 months. The anamnesis: the above-stated complaints disturb about 6-7 years, was not treated. Objectively: body mass index-25. The left border of the heart is 1.0 cm outside of the left SCL. The tones are clear, the rhythm is correct, the accent of the second tone above the aorta, heart rate - 74 per min, BP 160/90 mm Hg. ECG: SV1 + RV6 = 36mm.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Temporary disability and medical examination.

Task 2 Cardio

The 68 years old patient, a pensioner, complains on dyspnea, palpitation while walking, climbing on the 2nd floor. From anamnesis: suffers AH from the age of 42, takes enalapril 10 mg 2 times a day. 5 years ago had an MI of anterolateral wall. Objectively: acrocyanosis, body mass index – 26, weakened vesicular breathing in the lower parts of the lungs, moist non-sound wheezing. BR -18 in min. HR-96 per minute, BP 170/105 mm. Hg. Apical beat localized at 5 intercostal space at 1 cm outside of the SCL, reinforced. Cholesterol 7,2 mmol / l, ECHO: thickness of the back wall of LV 1.3 cm, EF-55%.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Indications for examination of working capacity and clinical examination.

Task 3 Cardio

Patient Sh. 48 years old, carpenter, works at the construction site. Complaints on sensations of cardiac disruptions, which are passing without assistance, pressing chest pain, lasting for 5 minutes, appears after 300-500 meters of walking, stops after NTG intake in 5 minutes. Currently he is on the hospital sheet for a month with a diagnosis of myocardial infarction. Objectively: vesicular breathing, heart tones muffled, HR - 82 min., rhythmic. BP 130/80 mm Hg. CBC and clinical urine analysis are normal. ECG: sinus rhythm, large-focal changes in the LV back wall.

1. What is the diagnosis of this patient?

2. Your further actions.

3. Determine the patient's ability to work.

Task 4 Cardio

Patient 18 years old, complains on a feeling of heat and burning in his face, heaviness in the head, high blood pressure rate - 190/120 mm Hg. Objectively: the patient's condition is satisfactory. Auscultation: vesicular respiration. The left border of the heart is shifted on 4-5 cm to the left, the heart sounds sonorous, the rhythm is correct. Above the aorta, on the neck and at the second and third intercostal spaces at the left edge of the sternum is a systolic murmur. Pulsations of femoral arteries is weak, pulsations on anterior and posterior tibial arteries are not determined. CBC and clinical urine analysis are normal.

1. What is the diagnosis of this patient?

2. Additional research methods.

3. Treatment.

Task 5 cardio

Patient 49 years old, driver. On an out-patient visit complains on pain behind a breast bone with irradiation to the left shoulder and scapula. Pain paroxysmal, occurs during fast walking, accompanied by a sense of fear, at rest quickly passes. He was sick for 2 months, he was treated first by a neurologist with a diagnosis of "Intercostal neuralgia", took analgin, physiotherapy, applied mustard plaste, but his condition did not improve. For a long time he smokes a lot. He suffers from hypertension. The father and elder brother suffered from myocardial infarction. Objectively: the general condition is satisfactory. He is overweight. There is vesicular respiration and clear pulmonary sound, the heart in slightly enlarge to the left. Tones at the apex of the heart is weak, above the aorta is an accent of the second tone. BP - 170/100 mm. Hg. The pulse is rhythmic, 88 per minute, slightly tense. Other organs are not changed. ECG at rest is normal.

1. What is the diagnosis of this patient?

2. Make a survey plan.

3. Management of the patient and clinical examination.

Rheumatology

Task 1 Rheumatology

A patient of 18 years old complains on increasing of the temperature to 38 ° C, weakness, palpitations and dyspnea when climbing to the 2nd floor, pain in all joints. These symptoms presented within 2 weeks. 1 month ago she suffered tonsillitis, was treated with aspirin, rinsed throat, after that hers condition improved, pain in throat disappeared. However, in two weeks the temperature rose again and above- listed symptoms appeared. She has never been sick before. Objectively: there are no peripheral edema, joints are not changed, movements in them are full. Pharynx is pale pink, tonsils are not enlarged. There is normal vesicular breathing in the lungs. The border of the heart is not expanded, auscultation - the tones are muffled, in the 2nd intercostal space to the right of the sternum is heard a soft diastolic murmur, the heart rate is 100 per min., rhythm is correct, the blood pressure is 110/70 mm Hg, the liver is not enlarged.

1. What is the diagnosis of this patient?

2. Survey plan.

3. What is the management of this patient?

4. Dispancerization. Prevention.

Task 2 Rheumatology

Patient 45 years old, turned to the clinic with complaints on pain and swelling in the small joints of both hands, feet, in the large joints of the extremities, limitation of mobility in them, morning stiffness before lunch. She has symptoms for 7 years, is on observation by a specialized clinic. Permanently took 7.5 mg of prednisolone per day, NSAIDs (50-75 mg / day of voltaren or 0.5 g / day of naproxen). When viewed: defiguration of radiocarpal, metacarpophalangeal, proximal interphalangeal and elbow joints. CBC: erythrocytes - 3,6 • 10^{12} / l, Hb - 116 g / l, leukocytes - 9 • 10 / l, ESR - 50 mm / h. Radiography of the hands: periarticular osteoporosis, narrowing of joint cavities, multiple erosions and usuras in the area of proximal interphalangeal joints.

1. What is the diagnosis of this patient?

2. What additional examinations are needed?

3. What is the management of this patient?

4. Medical and labor expertise.

Task 3 Rheumatology

Patient S., 38 years old, turned to the clinic with complaints on weakness, weight loss, tight swelling of the skin of dorsum of both hands, forearms, darkening of the skin, chilliness at the fingertips, whitening of the fingers in the cold, pain in large joints. She feels herself sick for 3 years. At the beginning there was a chilliness of fingers, cyanosis and whitening in the cold. During the last 3 months, suffers from weakness, dense edema of the hands, forearm, temperature - 37.5 ° C. On examination: the patient is underweighted; the skin is swarthy, impacted. Lymph nodes are enlarged. The pulse is 96 per minute, BP is 100/60 mm Hg. Heart is normal. The heart sounds are muffled, a short systolic murmur at the top. Breathing in the lungs is vesicular, in the lower parts of both sides - pneumosclerotic rales. The abdomen is soft on palpation, the liver is at the edge of the costal arch. At examination in the general analysis of blood:

erythrocytes - 3,1 • 10^{12} / l, Hb - 90 g / l, color index is 0.7, the leukocytes are 8.2 • 10 / L, the ESR is 53 mm / h.

1. What is the diagnosis of this patient?
2. What additional examinations are needed?
3. What is the management of this patient?
4. Medical and labor expertise.

Task 4 Rheumatology

Patient 21 years old, turned to the clinic complaining on a fever of 39 ° C, weakness, weight loss, pain and swelling in the knee, ankle and elbow joints, and enlargement of the submaxillary and axillary lymph nodes. On examination: the condition is severe. There is an butterfly-like erythema on the face, ulcers of the oris tunica mucosa. Submandibular and axillary lymph nodes are enlarged. Swelling of the knee, ankle, elbow joints. Movements in the joints are painful. Pulse - 118 beats per minute, rhythmic. Blood pressure is 150/110 mm Hg. Boundary of the heart: the right one is shifted 1 cm to the right of the right edge of the sternum, the left - 2 cm to the left from the left clavicular line. Heart tones are weakened, systolic murmur at the apex and at the 5th point. With percussion of the lungs, dullness of the pulmonary sound in the lower parts on both sides is determined. Breathing is weakened, in the lower parts of the lungs is not carried out. The liver is 2 cm beyond from rib margin, soft, sensitive. On the lower legs there is swelling. In CBC: erythrocytes - 2,8 • 10^{12} / l, leukocytes - 3,2 • 10 / l, platelets - 90 • 10 / l; clinical urine analysis: protein - 5 g / l, unit weight -1020, white blood cells - 6-8 in the field of view, erythrocytes - 20-25 in the field of view, hyaline cylinders - 3-5 in the field of view.

1. What is the diagnosis of this patient?
2. What additional examinations are needed?
3. What is the management of this patient?
4. Medical and labor expertise.

Task 5 Rheumatology

Patient 70 years old, consulted to the clinic with complaints on severe pain in the left hip joint, both knee joints (more to the left), both ankle joints, and sometimes in the small joints of the hands. Pain in legs appear at the end of the day after physical exertion, when descending from the stairs, after a long sitting (it is difficult to get up from the chair). Recently, the gait began to change: appeared limping on the left leg. For the first time pains in the joints appeared about 5 years ago. The deterioration occurred about a year ago with the appearance of all the above complaints. She had never consulted to a doctor, treated with folk medicines. She sustained rare colds, cholecystectomy was done 10 years ago. On examination: patient is overweighed. Height 160 cm, weight 95 kg. Skin is clean, of a normal color. There is pulmonary sound above the lungs, auscultation - vesicular breathing. Cardiac border is not expanded. Heart tones are rhythmic, muffled. Blood pressure - 160/85 mm Hg. Heart rate - 82 beats per minute. The abdomen is soft, painless. Stool and diuresis without features. Joints of hands: in the area of distal phalanges there are nodose growths. Hip joints: retraction, flexion, rotation in the right joint is painful, slightly limited; in the left - movements are sharply limited, painful. Knee joints: small O- shaped deformation, defiguration of the left joint due to edema. The movements in both joints are somewhat limited due to pain (more to the left), during movements can be heard crepitation. Ankle joints are not deformed. There is pain in palpation of the lumbosacral spine.

1. What is the diagnosis of this patient?
2. What surveys are needed?
3. What is the management of this patient?

Nephrology

Task 1 Nephrology

Patient 25 years old, turned to the clinic with complaints on pain and heaviness in the lumbar region, a burning sensation at the end of the act of urination, increase in body temperature, chilly sensation, increasing of blood pressure to 160/100 mm Hg. From anamnesis - he considers himself to be ill for 3 years, when the body temperature rose to 38.5 degrees for the first time, there was a strong chill, a headache, nausea, vomiting, muscle tension in the lumbar region, pain in the hypochondrium, frequent painful urination. For 1.5 months she was treated in a hospital: she took biseptol, ampicillin. Has discharged from hospital with improvement. The aggravation of the disease began 2 days ago, when

listed- above complaints appeared. Objectively: there is no swelling, the skin is of normal color, moist. When palpation of the abdomen, pain is noted in the projection of the left kidney. The symptom of oscillation on the 12th rib is positive on both sides. CBC: er. - 3.2x10 / l, Hb - 110 g / l, color index - 0.9, leu. - 9.6x10 / l, stab cell - 5%, segmentated cell -70%, lymph. - 20%, m - 5%, ESR - 28 mm / h. The general analysis of urine: the reaction is acidic, urine density - 1010, the protein 400 mg / l, the leukocytes 15-20 in field of view, the erit .- 8-10 in field of view. Nechiporenko analysis: leukocytes - 10.000 per 1 ml, erythrocytes - 2.000 per 1 ml, cylinders - 1.000 per 1 ml.

1 What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dispanserization. Determine the work forecast. Prevention.

Task 2 Nephrology

Patient 35 years old, complained on general weakness, nausea, periodic headaches. When examining the outpatient card, changes in urine tests in the form of proteinuria were revealed. On examination: the face is pasty, the skin is pale, dry. Blood pressure - 170/110 mm Hg., accent of the second tone over the aorta. In lungs without pathological sings. The abdomen is soft, painless on palpation, the symptom of Pasternatsky is negative on both sides. The kidneys are not palpable. CBC: er. - 3,0x1012 / l, Нв - 100 g / l, color index - 0,9, leu. - 7,8x109 / l, the formula without deviations, ESR - 35 mm / hour. General analysis of urine: urine dencity - 1002, protein - 1.0 g / l, leu. - 4-5 in the sp., er. - 5-8 in n / sp, hyaline and granular cylinders. Kidney ultrasound: the kidneys are located in a typical place, the contours are smoth, the sizes are 7.8-4.0 cm, parenchyma is thinned, considerably densified - 0.9 cm, the absence of cortex-medullar differentiation. Signs of nephrosclerosis. Pelvicalyceal system without features.

1. What is the diagnosis of this patient? .

2. What is the management of this patient?

3. Dispanserization. Prevention.

Task 3 Nephrology

Patient 17 years old, without complains. A week ago she has had catarrhal phenomena, subfebrile fever. On the third day after the onset of the disease, noticed a change in the color of urine - it became reddish. The condition is satisfactory, the skin is of normal color and moisture. Blood pressure - 120/80 mm Hg. In the lungs: vesicular breath, no wheezing. Heart tones are rhythmic, clear. The abdomen is soft, painless on palpation. Pasternatsky's symptom is negative on both sides. Micturition is free, painless, there is no swelling.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dispanserization. Prevention. Period of temporary disability.

Task 4 Nephrology

The patient 30 years old, 2 weeks after the angina, suddenly in the morning begins swelling. In a history has kidney disease. General condition of moderate severity, pallor and puffiness of the face, massive swelling of the legs, lower back, ascites, fluid in the pleural cavity. In the lungs with auscultation in the lower parts the respiration is weakened. Heart tones are rhythmic, clear. Blood pressure is 190/120 mm Hg. The abdomen is soft, painful on palpation in the area of the kidneys projection. General analysis of urine: urine dencity - 1010, protein - 0.6 g / l, er. - 50-60 in sp., cylinders: hyaline, granular. CBC: Нв - 120 g / l, erythrocytes - 4,6x10 / l, leu. - 8,3x10 / l, ESR - 20 mm / hour.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dispanserization. Labor expertise. Prevention.

Task 5 Nephrology

Patient 18 years old, turned to the clinic with complaints on edema of the face, lower limbs, headache, nagging pain in the lower back, general weakness, the appearance of a blurred pink urine. The patient considers himself sick within 3 days. Postponed diseases: influenza, 2 weeks ago was a sore throat. Objectively: the temperature is 37.7 ° C. The general condition is of a moderate severity. The face is swollen, swelling on the feet and legs. The skin is pale. Vesicular breathing. Heart sounds are rhythmic,

muffled, accent of the 2nd tone on the aorta. Pulse 84 per minute, rhythmic, intense. BP 165/100 mm Hg. The tongue is clear. The abdomen is soft, painless. Pasternatsky's symptom is weakly positive on both sides.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dyspanserization. Labor expertise.

Endocrinology

Task 1 Endocrinology

Student, 18 years old, by the doctor of a draft commission of the military commissariat is sent for examination to the polyclinic. With objective examination: height 185 cm, body weight 68 kg. The skin of normal color, subcutaneous fat is moderately developed, narrow shoulders, long arms and legs, wide hips (eunuchoid physique); high feminine voice, gynecomastia, lean hairiness on the face and body, muscle mass and strength (by the results of dynamometry) are lowered, the penis and testicles are reduced. sides.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dyspanserization. Labor expertise.

Task 2 Endocrinology

Patient 36 years old, turned to a doctor in the clinic complaining on general weakness, easy fatigabilit, loss of hair, memory impairment, decreased interest in life, facial swelling, irregular menstruation. She considers herself ill during the last 1.5 years. The condition gradually worsened, gained 12 kg in weight during the period of illness. Objectively: the general condition is satisfactory, overweighed (height 162 cm, weight 90 kg). Skin pale, dry, desquamation of the skin on both shins. There is swelling of the face, legs. The thyroid gland is not palpable. A postoperative scar is on the neck. The voice is rude. The patient is slow-moving. Heart sounds are muffled, rhythmic. Pulse 56 per minute. Blood pressure - 100/60 mm Hg. In the lungs, vesicular breathing with a harsh tinge. The tongue is thickened, and there are traces of teeth along the edges. The abdomen is slightly inflated, constipation. The liver and spleen are not enlarged. CBC: Hb - 90 g / l, CI - 0,7, er. - 3,1 x 10 / l, leuk - 4,8 x 10 / l, ESR - 3 mm / h.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dyspanserization. Prevention.

Task 3 Endocrinology

A student, 17 years old, turned to the polyclinic, but lost consciousness at the reception. According to the word of relatives, for the last few days he complained on severe weakness, fatigue, drowsiness, and drank a lot of fluids. Did not turned to a doctor. 3 weeks before that he has had a severe acute respiratory virus infection. Objectively: the patient is unconscious. Poorly reacts to pain stimuli. Skin covers are dry, the turgor of tissues is reduced. Eyeballs on palpation are soft. There is a smell of acetone from his mouth. Heart sounds are rhythmical, sonorous. The heart rate is 120 per minute. BP - 80/40 mm Hg. Breath noisy, frequent. BR - 26 per minute. At auscultation rales are not listened. The tongue is dry, covered with a dirty brown fur, the mucous membrane of the mouth is dry. The abdomen is soft. The liver is at the edge of the costal arch. Laboratory: blood sugar - 32 mmol / l.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Dyspanserization. Labor expertise. Prevention.

Task 4 Endocrinology

Patient 56 years old, complains on general weakness, dizziness, flickering before the eyes, swelling of the face in the morning, dry in his mouth, thirst (drinks up to 3 liters of fluid a day), frequent urination (over night up to 4-5 times). He considers himself sick during the year when he began to feel general weakness, dizziness, flashing of "flies" before his eyes after physical exertion, psycho-emotional stress. The last deterioration in the health state is within 3 weeks: weakness and dizziness became more pronounced. Thirsty and dry mouth notes for many years, did not attach attention to them, did not turned to a doctor. Objectively: the state is closer to satisfactory. Position is active. Consciousness is clear. The skin is pale,

dry. Swelling of the face. Tones of the heart are muffled, rhythmic, accent of the second tone over the aorta. Pulse - 64 per minute. Blood pressure - 190/115 mm Hg. The left border of the heart is 2 cm to the outside of the left mid-clavicular line. Breathing is vesicular, no wheezing, BR - 16 per minute. Percussion - clear pulmonary sound. The abdomen is soft, painless on palpation. The liver is at the edge of the costal arch. Stool is normal. Urination is free, painless, rapid. Pasternatskii's symptom is negative on both sides.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Medical and social expertise. Dyspanserization. Prevention Task 5 Endocrinology

Patient 65 years old, turned to the clinic complaining on dyspnea, which occurs when walking at 100 meters, climbing to 1 stairwell, accompanied by light dizziness, passing after he stops; pain in the calf muscles when fast walking; dry mouth, frequent urination (over night - 3-4 times). He has been thirsty and dry in the mouth for the past 8 years, has not given any attention to this, did not consulted with doctors. Dyspnea appeared six months ago, the intensity of it gradually increased, which made him to consult a doctor. Objectively: the state is satisfactory, the consciousness is clear, the position is active. Increased nutrition: weight 92 kg with an increase of 168 cm. Skin covers of normal color and moisture. Heart rhythms are rhythmic, muffled, systolic murmur at the apex, conducted in the axillary region. The left border of the heart is 1.5 cm outside of the left mid-clavicular line. Pulse - 84 per minute. Blood pressure - 140/80 mm Hg. Breathing is vesicular, in the lower parts of the lungs a small amount of moist, small-bubbly, non-sound wheezing. BR - 26 per minute. The tongue is rather dry, clear. The abdomen is soft, painless. The liver protrudes from under the edge of the costal arch by 1.5 cm, the edge is dense-elastic, painless. Stool is normal. Pulsation on the arteries of the rear of the foot is sharply weakened.

1. What is the diagnosis of this patient?

2 What is the management of this patient?

3. Medical and social examination.

Hematology

Task 1 Hematology

Patient housewife, 38 years of age, complains on a moderate general weakness, dizziness, darkening of her eyes, paresthesia in her feet and unstable gait. Lost in a weight about 10 kg. The above listed complaints appeared several months ago and slowly grew. On examination, there is a slight icterus of the skin, visible mucous membranes. In the lungs, the breath is vesicular. BP - 120/70 mm Hg. The pulse is 96 bpm. Heart tones are rhythmic, a soft systolic noise is heard. In palpation the abdomen is soft, painless. The liver protrudes from under edge of the costal arch by 1.5 cm. The spleen is not palpable. CBC: Hg - 70 g / l, color index - 1.4, platelets - 110x10 / l, leukocytes - 2.5x10 / l, stab neutrophil - 5%, segmented neutrophil - 56%, monocytes - 10%, lymphocytes - 29%, ESR - 12 mm / h, macrocytosis, hyper-segmentation of neutrophils.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Medical and social examination.

Task 2 Hematology

Patient metalworker, 64 years old. Complains on a decrease of appetite, weight loss, moderate general weakness, dyspnea. Objective: skin and visible mucosal tunics are pale. There are palpable, dense, painless, mobile lymph nodes 3-3.5 cm in size. In the lungs, the breath is vesicular. BP - 150/90 mm Hg.

Pulse - 92 bpm. Heart tones are rhythmic, a soft systolic noise is heard. When palpating the abdomen is soft, painless. The liver extends from under the edge of the costal arch by 2.5 cm, the spleen by 1.5 cm. CBC: Hb - 82 g / l, color index - 1.0, leukocytes - 11x10 / l, stab neutrophil - 2%, segmented neutrophil - 16%, monocytes - 10%, lymphocytes - 72%, mostly mature forms, ESR - 32 mm / h.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Medical and labor expertise. Dispancerization. Task 3 Hematology

Patient an engineer, 25 years old, complains on a pain in epigastric region, general weakness, fatigue. In history - peptic ulcer of the duodenum. Objectively: skin and visible mucous tunics are pale. In the lungs the breath is vesicular. BP - 120/70 mm. Hg. Pulse - 92 bpm. Heart tones are rhythmic, a soft systolic noise is heard. The abdomen when palpating is soft, painful in the epigastric region. Liver, spleen - along the edge of the costal arch. CBC: Hg - 70 g / l, CI - 0.77, leukocytes - 5x109 thousand, platelets - 195 thousand, ESR - 12 mm / h. The total bilirubin is 12 μmol / l, serum iron is 4.5 μmol / l. Analysis of feces for latent blood is positive.

1. What is the diagnosis of this patient?

2. Medical and labor examination.

3. Dispancerization. Prevention.

Task 4 Hematology

A man 35 years old. Complains on an increasing of the right cervical lymph nodes for two to three months, decrease of appetite, weight loss, itching, a mild general weakness, a fever up to 38 ° C, night sweats. Objectively, when viewed - skin, visible mucous tunics are clean. Palpating dense, painless, mobile cervical lymph nodes 4-3.5 cm in size. In the lungs is vesicular breath. BP - 130/80 mm. Hg. Pulse - 72 bpm. Heart tones are rhythmical, pure. When palpating the abdomen is soft, painless. The liver protrudes from under the edge of the costal arch by 0.5 cm, the spleen is not palpable. CBC: Hb- 112 g / l, CI-1.0, leukocytes-4,700, stab neutrophil - 2%, segmented neutrophil - 56%, monocytes- 10%, lymphocytes-32%, ESR - 32 mm / h.

1. What is the diagnosis of this patient?

2. What is the management of this patient?

3. Medical and labor expertise. Dispancerization.

Task 5 Hematology

Patient an economist, 44 years old. She complained on a fever of 38.6 ° C, a sore throat, mild pain while swallowing, sweating, general weakness, recurrent nasal bleeding. She feels herself sick for a month, when begins pain when swallowing with increasing in body temperature. She called a local doctor who, after examination, diagnosed tonsillitis, the patient received antibiotics (ampicillin - 0.5 x 4 times a day) for 7 days. The condition did not improved. Then the doctor suspected pneumonia, recommended cefazolin 1.0 x 3 times a day. At a roentgenography of organs of a thorax no focal or infiltrative shadows was revealed. Against the background of antibiotic therapy, the temperature dropped to 37.1 ° C. Objectively: the state of moderate severity. The skin is pale, on the skin of the upper and lower extremities is a petechial rash. Palpation of the sternum is moderately painless. Peripheral lymph nodes are not palpable. The abdomen is soft, painless when palpated. The liver and spleen are at the edge of the costal arch. A stool and diuresis are in normal rate. CBC: HB-70 g / L, leukocytes - 2,2 x 10 /l, blast cells - 88%, platelets - 12 x 10 / l.

1. What is the diagnosis of this patient?

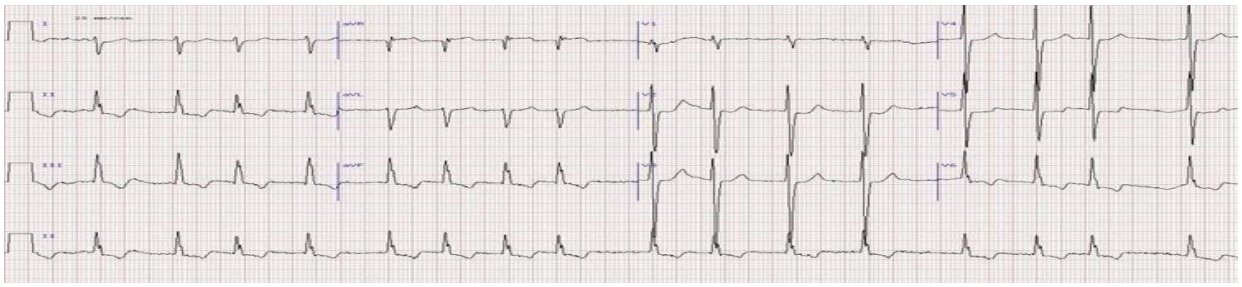
2. What is the management of this patient?

3. Medical and social expertise.

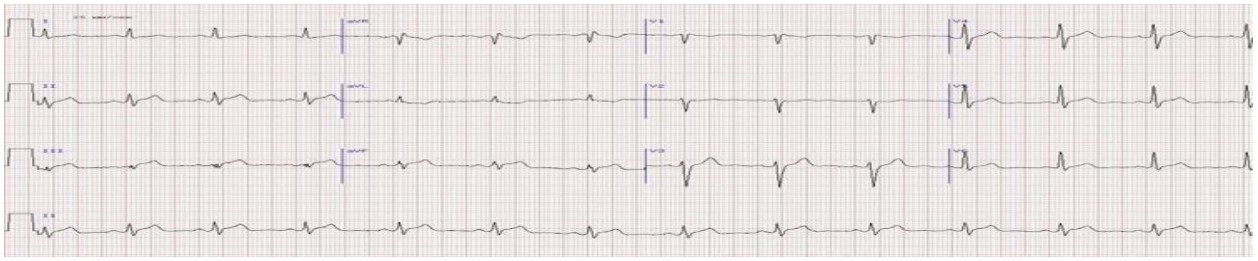
Appendix № 4

ECG

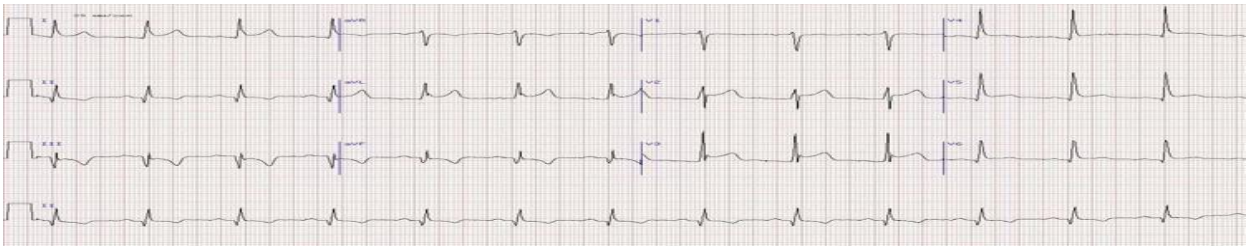
83-year-old woman. ECG: Atrial fibrillation with LV hypertrophy, deviation of electrical heart axis to the right.



43-year-old man. There is a slight rise of ST-segment in II, III, aVF and in V5-V6. Depression of ST – segment in aVL is reciprocal to primary ST elevation in the lower-lateral region.



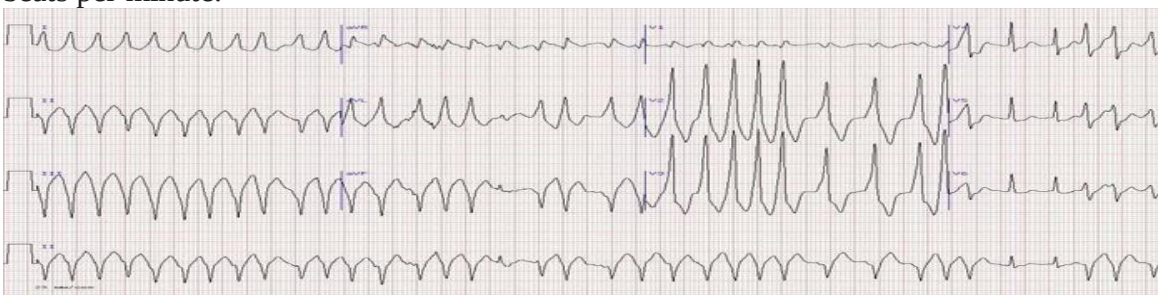
47-year-old man. Sinus rhythm with normal electrical heart axis and intervals. Two known findings: 1) Q- wave myocardial infarction of a LV lower wall of uncertain prescription. 2) diffuse elevation of ST– segment



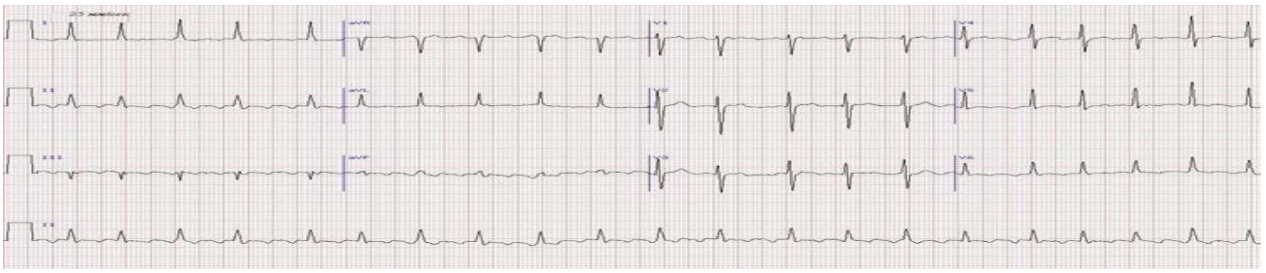
in anterior and lateral leads. In anamnesis has had an acute myocardial infarction with pericarditis

59-year-old woman with attacks of palpitations and dizziness. Atrial

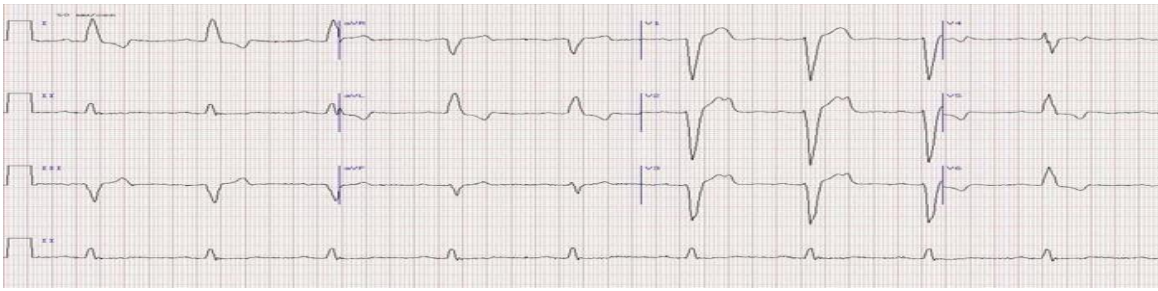
fibrillation with WPW syndrome. HR frequency is approximately 230 beats per minute.



Tachycardia and light cyanosis. Atrial flutter. QRS with a frequency



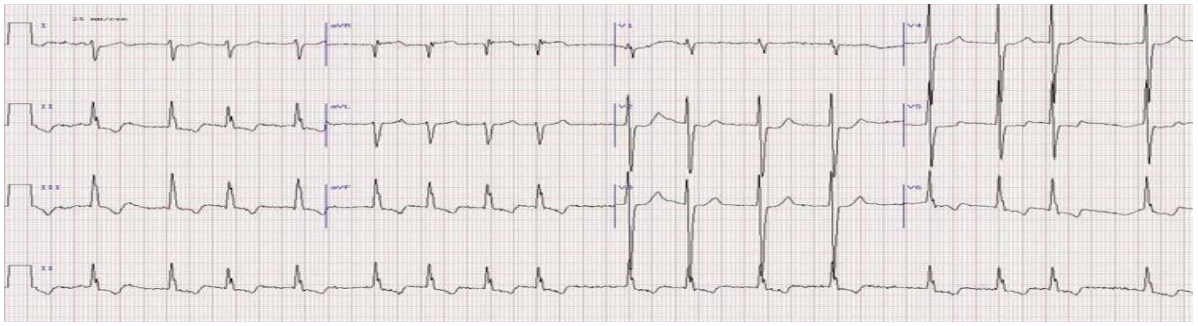
of approximately 300 beats / minute, with variable ventricular response (holding 2: 1, sometimes 3: 1).
71-year-old man. Atrial tachycardia with a 2:1 blockade (see overlapping of the P-teeth on the T-teeth in the leads V2 and V3) and left bundle brunch blockade.



The patient is a 47-year-old woman who does not complain. This ECG hasn't changed from her childhood. This example shows a complete AV blockade.



83-year-old woman. ECG demonstrates atrial fibrillation with LV hypertrophy, deviation of electrical heart axis to the right. This combination is characteristic of both ventricles hypertrophy, and its combination with atrial fibrillation in rheumatism (the patient has mitral stenosis and aortic valve damage).



Appendix № 5

X-ray images of various diseases

1. Deforming arthrosis of the right knee joint:



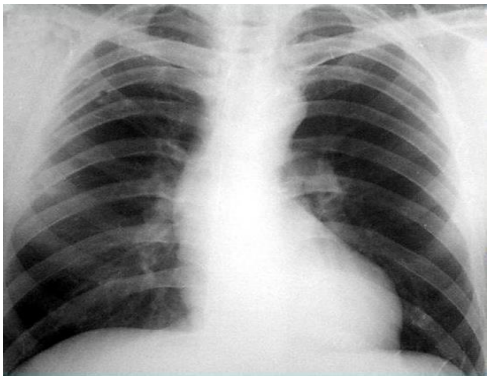
Деформирующий артроз правого коленного сустава:
а – 1 стадия; б – 2 стадия;
в – 3 стадия (суставная щель резко сужена)

а-1 stage; б-2 stage; в-3 stage (articular crack is sharply narrowed)

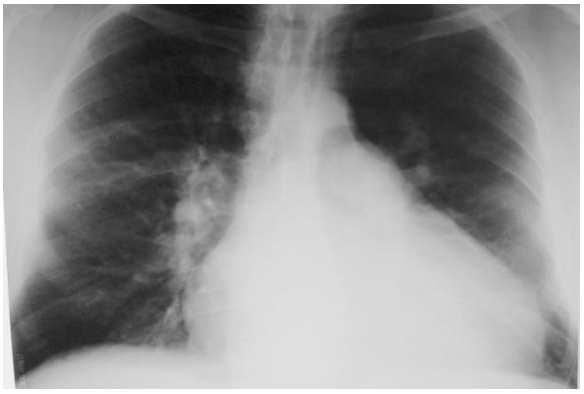
2. "Gouty hand"



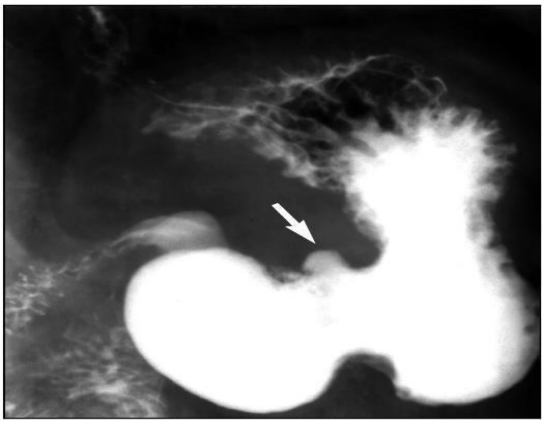
3. Aortic stenosis



4. Combined mitral defect



5. Ulcer of small curvature of the stomach



6. Skull defects in myeloma



7. Rheumatoid arthritis of the 3rd stage.



Больная М. РА 3-й стадии.
Обзорная рентгенография кистей. Выраженный распространенный остеопороз. Множественные кистовидные просветления костной ткани. Сужены щели большинства суставов. Множественные эрозии костей и суставных поверхностей. Множественные вывихи и подвывихи суставов, деформаций эпифизов костей. Костных анкилозов нет. Асимметричное поражение суставов запястий (больше слева)

Appendix № 6

Laboratory and instrumental methods of research

Stools
Amount: 450 mg
Consistency: liquid
Form: unformed with gas bubbles
Color: greenish yellow
Reaction: acidic
Slime: +

MICROSCOPIC STUDY:
Vegetable cells:

- Digested: single cells
- Undigested: in large number
  Muscle fiber undigested: +++
  Fatty acids: in large quantities
  Neutral fat: absent
  Soap: +++
  Starch: +++
  Iodophile flora: ++
  Leukocytes: ++

Lipid profile

- General cholesterol: 8.0 mmol/l
- LDL-cholesterol: 4.2 mmol/l
- Triglycerides: 0.9 mmol/l
- General cholesterol: 7.2 mmol/l
- LDL-cholesterol: 4.4 mmol/l
- Triglycerides: 1.3 mmol/l

Thyroid hormones

- T4: 150 nmol/l
- TTG: 0.01 IU/l

- T4: 35 nmol/l
- TTG: 45 IU/l

Hepatic Tests (1)

- Total protein: 76.4 g/l
- Bilirubin: total 67.5 μmol/l, direct 57.3 μmol/l, indirect 10.2 μmol/l
- Thymol: 1.5 units
- Alkaline phosphatase: 4.2 μmol/l
- Albumins: 58.2%
- Globulins: 41.8%
    - Alfa1: 5.2%
    - Alfa2: 6.7%
    - Beta: 10.2%
    - Gamma: 9.5%
- Coefficient A/G: 1

Hepatic Tests (2)

- Total protein: 75.2 g/l
- Bilirubin: total 40.2 μmol/l, direct undetected
- Thymol: 1.5 units
- Albumins: 65.0%
- Globulins: 35.0%
    - Alpha: 5.6%
    - Alpha2: 6.8%
    - Beta: 10.5%
    - Gamma: 19%
- Coefficient A/G: 1.5

Echocardiography (Age 32)

- Aorta: not changed (d-3.0 cm)
- Aortic valve: unchanged, opening 1.8 cm, systolic pressure gradient 4.0 mm Hg, regurgitation not revealed
- Mitral valve: valves compacted, diastolic pressure gradient 8 mm Hg, regurgitation ++
- Tricuspid valve: fused, mobility maintained, regurgitation +
- Pulmonary artery: not expanded
- Average LAP: 24 mm Hg
- Left atrium: 4.2 cm
- Left ventricle: end-diastolic size 5.6 cm, end-systolic size 3.4 cm, EF 69%
- LV posterior wall thickness: 0.8 cm
- Interventricular wall thickness: 0.8 cm
- Right ventricle: 2.2 cm, anterior wall 0.4 cm
- Right atrium: not enlarged
- Atrial septum: unchanged
- Interventricular septum: unchanged
- Pericardium: without features
- Signs of volumetric overload of the left ventricle

Immunological markers

- Antistreptolysin-O: 1:1250
- Antihyaluronidase: 1:500
- C-reactive protein: 3 mm (+++)
- Antistreptolysin-O: 1:650
- Antihyaluronidase: 1:300
- C-reactive protein: 3 mm (+++)

TYPES OF CONTROL AND CERTIFICATION, FORMS OF ESTIMATED MEANS

1. SITUATIONAL TASKS

Task example

Patient is 45 years old, a programmer, turned to the district physician with complaints of pain in the epigastric region, mainly on an empty stomach and at night causing him to wake up, as well as almost permanent heartburn, a feeling of heaviness and bursting in the epigastric region after eating, sour belching and nausea. From the anamnesis it is known that the patient smokes a lot, abuses coffee and eats irregularly. There are frequent exacerbations of chronic pharyngitis. He has been ill for about three years. He was not examined and treated himself using phytotherapy.

On examination the condition is satisfactory. BMI is 32.0 kg/m². Skin is clean with normal color. Body temperature is normal. Tonsils and posterior pharyngeal wall are not hyperemic. In the lungs breathing is vesicular, there is no wheezing. Cardiac tones are muffled and rhythmic, heart rate is 70 beats per minute, blood pressure is 120/80 mm Hg. The abdomen participates in breathing, palpation is mildly painful in the epigastric region, there is no muscle tension of the abdomen, the symptom of effleurage in the lumbar region is negative.

EGDS: the esophagus is freely passable, longitudinal folds are thickened, focal hyperemia of the mucosa of the distal part is observed, the cardia is not completely closed. On an empty stomach it contains a small amount of light secretory fluid and mucus. The folds of the gastric mucosa are thickened and crimped. The bulb of the duodenum is deformed, a mucosal defect up to 0.5 cm in diameter is detected on the posterior wall. The edges of the defect have clear boundaries and are hyperemic and edematous. The bottom of the defect is covered with white fibrinous overlays. Postbulbar sections without pathology. Urease test for the presence of Helicobacter pylori is positive.

Questions

1. Suppose the most likely diagnosis.
2. Justify your diagnosis.
3. Compile and justify a plan for an additional examination of the patient.
4. What treatment would you recommend to the patient as part of combination therapy? Justify your choice.
5. Is it necessary to take the patient for dispensary registration? What prophylactic therapy should be prescribed on demand when symptoms of peptic ulcer exacerbation appear?

Standard answer to the situational task

1. Duodenal ulcer associated with Helicobacter pylori, first identified single small ulcer (0.5 cm) of the posterior wall of the duodenal bulb with cicatricial and ulcerative deformation. Gastroesophageal reflux disease (GERD) stage I. Chronic pharyngitis in remission. Obesity of the first degree.
2. The patient has hungry pains, nocturnal pains and heartburn which are characteristic of duodenal ulcer. The diagnosis is confirmed by EGDS data: deformation of the duodenal bulb and mucosal defect up to 0.5 cm on the posterior wall. The edges are clearly defined, hyperemic and edematous, and the bottom is covered with white fibrinous overlays. Association of peptic ulcer with Helicobacter pylori is confirmed by a positive urease test. GERD stage I is diagnosed based on complaints of heartburn and sour belching, the presence of risk factors such as chronic pharyngitis and obesity, and EGDS

findings including thickened longitudinal folds and focal hyperemia of the distal esophageal mucosa. Obesity of the first degree is determined by BMI 32.0 kg/m².

3. To avoid complications the following examinations are recommended: complete blood count, transaminases (ALT, AST), blood glucose and creatinine levels. ECG for differential diagnosis with ischemic heart disease. Ultrasound examination of the abdominal cavity to exclude concomitant pathology. Cytological and histological examination of biopsy samples from the edges of the ulcer and esophageal mucosa to determine inflammation and detect metaplasia. Daily intraesophageal pH monitoring to clarify the nature of reflux. Consultation with a surgeon if complications of peptic ulcer are suspected, consultation with an oncologist if malignant ulceration is suspected, and consultation with an otolaryngologist to clarify the stage of chronic pharyngitis.
4. Triple eradication therapy for Helicobacter pylori: proton pump inhibitor in a standard dose (Omeprazole 20 mg, Lansoprazole 30 mg, Rabeprazole 20 mg or Esomeprazole 20 mg) together with Clarithromycin 500 mg and Amoxicillin 1000 mg or Metronidazole 500 mg. All medications are prescribed twice daily for at least 10–14 days. If therapy is ineffective, quadruple therapy is recommended. Because GERD is present, prokinetics such as Itopride hydrochloride should be prescribed to stimulate gastric emptying. Itopride hydrochloride increases gastrointestinal motility due to antagonism of dopamine D2 receptors.

Guidelines for assessing situational tasks (%)

Complete full and accurate clinical diagnosis based on complaints, history, objective and physical examination, as well as laboratory and instrumental data with theoretical justification – 85–100%.
Correct but incomplete answer without theoretical justification – 70–84%.
Incomplete solution including only one element – 60–69%.
All items incorrect – 0–59%.

1. SCALE OF THE REPORT'S ASSESSMENT

№	Indicator name	Rating, %
The form		20
1.	Division of the text into the introduction, main part and conclusion	0-10
2.	Logical, understandable transition from one part to another, as well as within parts	0-10
Content		60
1.	Conformity to the theme	0-10
2.	Presence of the main topic (thesis) in the introduction and addressing of the introductory part to the reader	0-10
3.	Development of the topic (thesis) in the main part (the disclosure of the main positions through a system of arguments, supported by facts, examples, etc.)	0-20
4.	Presence of conclusions corresponding to the topic and content of the main Part	0-20
Report		
1.	Correctness and accuracy of the speech during protection	0-5
2.	The breadth of horizons (answers to questions)	0-10
3.	Compliance with the time-limit	0-5
TOTAL SCORE		100

SCALE OF SUMMARY'S ESTIMATION

	No answer – 0 points	Minimal answer is 39-59%	Open answer is 60-69%	Complete answer is 70-84%	Exemplary, worthy of imitation - 85-100%	Score
Disclosure of the problem	----	The problem is not solved. There are no conclusions	The problem is not fully disclosed. Conclusions are not made or are not justified	The problem is solved. An analysis of the problem was carried out without additional literature. Not all conclusions are made or justified.	The problem is solved completely. The analysis of the survey was carried out with the use of additional literature. The conclusions are made.	
Presentation	----	Presented information is not logically related	Presented information is not systematized and not consistent	Presented information is systematized and consistent	Presented information is systematized, consistent, logically related	
Decoration	----	Not satisfied conditions of the abstract design. Provided more than 4 errors in the information	3-4 errors in the information provided	No more than 2 errors in the information provided	There are no errors in the information provided	
Answers to the questions	----	No answer to the questions	Answers only to the basic questions	Answers to the questions are complete or partially complete	The answers to the questions are complete with examples and explanations	
Final rate	----	Unsatisfactory	Satisfactorily	Good	Excellent	

SCALE OF PRESENTATION'S EVALUATION

	No answer - 0 points	Minimal answer is 39-59%	Open answer is 60-69%	Complete answer is 70-84%	Exemplary, worthy of imitation - 85-100%
Disclosure of the problems		The problem is not disclosed. No conclusions	Problem not disclosed completely. Conclusions are not made or conclusions are not substantiated	The problem is solved. The analysis problems without attracting additional literature. Not all conclusions are made or are justified.	The problem is solved completely. Conducted analysis of the problem with attraction of additional literature. Conclusions are made.
Performance		The Information is not logically connected. Professional terms was not used.	The information is not systematized and not consistent. Used 1-2 professional terms	The Information is systematized and consistent. Used more then 2 professional terms.	The Information is systematized, consistent and logically connected. Used more than 5 professional terms
Decoration		Was not used informational technologies (PowerPoint). More than 4 errors in the information	Informational technologies (PowerPoint) was partially used. 3-4 mistakes in presented information	Informational technologies (PowerPoint) was used. Not more than 2 mistakes in presented information	Informational technologies (PowerPoint) was widely used. There are no mistakes in presented information
Answers to the questions		No answer to the questions	Only answers to the elementary questions	Answers to the questions are full or partially complete.	Answers to questions complete with tacking examples and explanations
Final rate		Unsatisfactory	Satisfactorily	Good	Excellent

6. SCALE OF TESTS ESTIMATION (boundary control – "Knowledge")

1. There are 20 questions in one test task.
2. Ready answers are provided for each question, but only one is correct.
3. Each correct answer equals 5%.
4. The total score is calculated as the sum of the collected percentages.
5. The collected percentage is converted into points (score).

When testing:
Excellent – 85–100% (17–20) correct answers.
Good – 70–84% (14–16) correct answers.
Satisfactory – 60–69% (12–13) correct answers.
Unsatisfactory – less than 60% (0–12) correct answers.

Level of theoretical questions assessing:
85–100% – complete, consistent, literate and logical answer; demonstration of excellent knowledge of the program material and additional literature; reproduction of educational material with the required degree of accuracy.
75–84% – minor mistakes are present but confidently corrected after additional questions; demonstration of good knowledge of the program; clear presentation of the material.
60–74% – minor mistakes in the answer not corrected by the student; demonstration of insufficient knowledge of the program; unstructured presentation of the material.
Less than 60% – lack of knowledge of the material; serious mistakes when answering.

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6. SCALE OF ANALYTICAL AND PRACTICAL TASKS ESTIMATION (intermediate control – "TO KNOW AND TO OWN")

Verbal poll. When evaluating verbal answers the following criteria are taken into account:

1. Knowledge of the main principles of outpatient therapy.
2. Depth and completeness of answering the question.
3. Knowledge and correct use of medical terminology.
4. Ability to explain, draw conclusions and give reasoned answers.
5. Logical and consistent response and ability to answer additional questions.

Assessment of verbal answers (in %):

Score 85–100 – logically correct and well-structured answer using proper medical terminology of outpatient therapy. The student demonstrates excellent knowledge of etiology and pathogenesis of internal diseases, identifies main symptoms and syndromes, establishes preliminary and clinical diagnosis, understands clinical course, outpatient diagnostics according to polyclinic capabilities, treatment at outpatient stage including sanatorium-spa treatment, determines prognosis, indications for hospitalization, patient management tactics, temporary disability criteria, preventive medical examinations and issues of temporary or permanent disability.

Score 70–84 – good knowledge of polyclinic therapy, correct preliminary and clinical diagnosis, knowledge of etiology, clinical course, outpatient diagnostics, treatment including sanatorium-spa therapy, prognosis, hospitalization indications, management tactics and disability

assessment. However the answer is incomplete or the student is not oriented in 1–2 elements listed above.

Score 60–69 – average knowledge of outpatient therapy including clinical course, diagnostics and treatment at outpatient stage. The student can partly determine prognosis, hospitalization indications, management tactics and disability criteria but shows weak orientation in preliminary and clinical diagnosis. The answer is incomplete or lacks orientation in three elements mentioned above.

Score 0–59 – extremely weak knowledge of outpatient therapy. The student is not oriented in etiology, pathogenesis, clinical course, diagnostics, treatment and prognosis of diseases and makes serious mistakes. Demonstrates lack of understanding of the task requirements.

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7. SCALE OF CONTROL WORKS ASSESSMENT (boundary control)

Control work may include: situational task, ECG interpretation, tests, laboratory analysis interpretation or X-ray interpretation.

ECG ESTIMATION SCALE

Presence of complete ECG interpretation according to protocol.

Rhythm (sinus or non-sinus): correct – 10%, incorrect – 0%.
Rhythm regularity: correct – 10%, incorrect – 0%.
Heart rate: correct – 10%, incorrect – 0%.
Electrical axis of the heart: correct – 10%, incorrect – 0%.
Conclusion: correct – 60%, incorrect – 0%.

ECG interpretation assessment:
85–100% – excellent.
70–84% – good.
60–69% – satisfactory.
0–59% – unsatisfactory.

SCALE OF ANALYSIS ASSESSMENT

Full interpretation of laboratory or instrumental analysis is evaluated.

85–100% – excellent: full interpretation of results and explanation of possible diseases or conditions.
70–84% – good: interpretation is not complete, not all diseases or conditions are mentioned.
60–69% – satisfactory: unclear interpretation of the results.
0–59% – unsatisfactory: incorrect interpretation.

X-RAY SCORING SCALE

85–100% – excellent: full interpretation of the X-ray image and possible diseases or conditions.
70–84% – good: interpretation incomplete.
60–69% – satisfactory: unclear interpretation.
0–59% – unsatisfactory: incorrect interpretation.

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8. SCALE OF PRACTICAL SKILLS ESTIMATION (intermediate control – "SKILLS AND EXPERTISE")

Practical skills are evaluated during outpatient consultation. Skills include collecting complaints, anamnesis, objective examination (palpation, percussion, auscultation), preliminary diagnosis, examination plan and treatment plan.

Assessment levels:
85–100% – full demonstration of practical skills without mistakes, correct interpretation of results, ethical and deontological principles followed.
75–84% – most skills demonstrated with minor mistakes, interpretation with small difficulties.
60–74% – partial fulfillment of skills, many mistakes, poor interpretation.
0–59% – skills not performed or completely incorrect.

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9. SCALE OF AMBULATORY CARD FILLING ASSESSMENT (intermediate control – "SKILLS AND EXPERTISE")

The outpatient card is evaluated during patient consultation and must follow the standard structure including passport data, complaints, anamnesis, objective examination, preliminary diagnosis, examination plan, results and interpretation, clinical diagnosis with justification, treatment plan, temporary disability indication and preventive recommendations.

85–100% – card filled correctly according to the scheme.
75–84% – minor inaccuracies present but understood and corrected by the student.
60–74% – significant mistakes such as unjustified diagnosis or incomplete examination plan.
0–59% – card not filled according to the scheme or diagnosis not justified.

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10. GENERAL KNOWLEDGE ASSESSMENT SCALE (Final control of the discipline)

SCALE OF ORAL INTERVIEW ASSESSMENT ("KNOWLEDGE")

Criteria include knowledge of disease etiology, prevention, classification, clinical course, diagnostics, laboratory and instrumental methods, treatment principles, organization of outpatient care, rehabilitation, medical and social expertise and ethical aspects.

16–20 points – strong knowledge, logical and consistent answer.
10–15 points – good knowledge with minor inaccuracies.
5–10 points – basic knowledge with several errors.
1–4 points – poor knowledge with serious mistakes.

SCALE OF PRACTICAL TASKS ASSESSMENT (“SKILLS AND EXPERTISE”)

8–10 points – excellent knowledge of medical terminology, correct anamnesis collection, patient examination, interpretation of results, correct diagnosis, proper outpatient card completion and treatment decisions.

4–7 points – partial mastery of skills with some inaccuracies.

1–3 points – weak knowledge and poor interpretation.

0 points – no understanding of the problem or no attempt to solve the task.