

**CATALOG OF COMPETENCE**  
**on specialty "General practitioner"**

**POSTGRADUATE LEVEL**

Catalog of competencies (postgraduate level) on the specialty "General practitioner" developed by a working group consisting of: Kudaibergenova I. O. (Chairman), Mirrakhimov E. M. (Deputy Chairman), Kaliev R. R., Brimkulov N. N., Ibragimov A. A., Isakova G. B., Ibragimova T. M., Satkynalieva Z. T., Yusupova G. S.

The materials of the state educational standard of postgraduate medical education in the specialty "General Practitioner" were used in the development of the catalog of competence.

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### **Explanatory note**

Currently, the Kyrgyz Republic is actively implementing health sector reforms. The system of medical education is undergoing significant changes, as one of the fundamental systems that provide practical healthcare with highly professional personnel.

As part of the ongoing reforms in the health sector, the course is taken to improve the provision of medical care in all its branches, including specialized medical care, which in turn requires the need to train highly qualified medical personnel of a new generation with a large number of skills.

The role of a specialist therapist is one of the main ones, due to the high prevalence of internal diseases, high rates of burden and mortality from internal diseases in Kyrgyzstan.

The task of educational organizations of health care within the framework of the reforms carried out in the system of medical personnel is to improve the quality and compliance of their training, according to the changing needs of the population.

In this regard, a new catalog of competencies of a general practitioner has been revised and developed.

When developing this catalog of competencies, the following documents are taken as a basis: materials of the state educational standard of postgraduate medical education in the specialty of general practitioner.

When developing the document, international standards for training doctors of a narrow specialty were also taken into account, but the fact that the duration of postgraduate training of narrow specialists in therapeutic disciplines is 3 years after completing a residency in the specialty "general practitioner" in accordance with the new "Strategy for the development of postgraduate and continuing medical education in the Kyrgyz Republic for 2014-2020", approved by the Order of the Ministry of Public Health of the Kyrgyz Republic dated 18.05.2015 No. 248.

### **I. General provisions**

#### **1.1. Definition (definition) of concepts**

A **"general practitioner"** is a specialist who has completed training in a postgraduate professional education program in a clinical residency or professional retraining on the cycle of specialization in the specialty "Therapy" which is required to master the medical manipulations of the therapeutic profile, that is, to be able to provide qualified therapeutic

assistance to adults with common diseases of the internal organs and to carry out the main medical and diagnostic measures, as well as to master the methods of forming a healthy lifestyle and strictly comply with the requirements of medical ethics and medical deontology when conducting health-improving, preventive, therapeutic and diagnostic and rehabilitation measures among the population in outpatient and polyclinic conditions, in the hospital and at home.

## **1.2. Basic principles of the work of a specialist of a general practitioner**

"General Practitioner" uses the following principles in its work:

- Open and unrestricted access to medical care;
- Simultaneous treatment of both acute and chronic diseases, if necessary, urgent and comorbid conditions;
- Use of modern diagnostic and treatment approaches based on the principles of evidence-based medicine.
- Preventive focus of care, to prevent the impact of risk factors for the development of diseases of internal organs by informing the population and risk groups
- Duration and continuity of care based on the needs of each patient, using an individual approach;
- Coordination of medical care to the patient;
- The principle of economic efficiency and feasibility of assistance;

## **1.3. Purpose of the document**

This Catalog of competencies should become part of the regulations for postgraduate training of a general practitioner.

Based on the catalog of the therapist's competence:

### **Determined:**

- The purpose and content of postgraduate training of a general practitioner the level of professional competence, knowledge and practical skills of a general practitioner

### **Developed by:**

- general practitioner training programs;
- criteria for evaluating the quality of training of a general practitioner;
- standard requirements for the certification of a general practitioner
- standards of examination, treatment, rehabilitation and follow-up of patients;

### **Organized by:**

- learning process;
- professional orientation of medical graduates;

### **Conducted by:**

- certification of the "general practitioner".

## **1.4. Users of the document**

According to the purpose of the document, the users are:

- Ministry of Public Health of the Kyrgyz Republic
- Educational organizations
- Health organizations
- Professional associations
- Medical practitioners
- Clinical residents
- Other stakeholders

## **Chapter 2. General tasks**

This chapter lists the general competencies that a general practitioner should have. The general competencies presented in the Catalog are consistent with international recommendations and approaches that have been summarized by the Royal Society of Physicians of Canada. According to this approach, the doctor - the therapist should be not only a professional in their field, but also a manager, a specialist in communication skills, a promoter of a healthy lifestyle, a research scientist.

## **2.1. General practitioner as a medical specialist/expert**

A general practitioner is a doctor who has received special training, completed a clinical residency in the specialty of therapy, to provide medical care to the adult population. As a specialist, he provides care to patients within the limits of his professional competence, observing the principles of evidence-based medicine. Commitment to modern communication (on-line) and information, computer and electronic technologies. Professional competencies will be discussed in the following chapters.

### **General competencies (GC 1, GC-2, GC-4, GC-8 )**

#### **As a specialist, a general practitioner is able to:**

- take care of the health of patients and society (assess the risks to the health of patients, give advice on maintaining and promoting health, lead a healthy lifestyle, both physically and mentally, recommend screening tests and vaccination in accordance with national protocols);
- advise, accompany and care for patients in cooperation with representatives of other specialties, duly respecting their right to self-determination;
- conduct anamnesis collection;
- perform an examination (clinical examination) of the patient;
- interpret the information obtained during the collection of anamnesis and clinical examination, establish a preliminary and differential diagnosis and develop a patient management plan using the results of an objective examination;
- perform the usual tests and additional procedures adopted in this specialty;
- assign appropriate diagnostic and therapeutic measures, explain their essence to the patient and interpret the results;
- properly and long-term care for patients with chronic, incurable, progressive diseases;
- advise patients and their families on the formation of a healthy lifestyle and the prevention of diseases;
- perform all diagnostic and therapeutic measures, taking into account the cost/reasonable utility ratio, and guarantee patient safety by applying the principles of efficiency, expediency and cost-effectiveness;
- store and protect medical information properly;
- acquire, maintain and expand your professional competence.

## **2.2. Communication skills**

The "General Practitioner" effectively and appropriately manages relationships with patients, families, contact persons, and other professionals involved in the treatment. He bases his decisions and communication of information on mutual understanding and trust.

#### **"General practitioner" is able to:**

- build trusting relationships with patients,
- get important information from patients and their environment, discuss it, and share elements of the knowledge gained, taking into account the patient's situation;

- inform the risks and benefits of diagnostic and therapeutic measures in a form that is understandable to the patient and obtain informed consent;
- make a decision about diagnostic and therapeutic procedures for disabled and underage patients by discussing these procedures with the appropriate representatives of these patient groups;
- document the information received during consultations / home visits and pass it on as soon as necessary;
- empathize by reporting bad news and responsibly report complications and mistakes.

### **2.3. Skills of working in cooperation (in a team)**

The therapist collaborates with patients, contact persons and other treatment participants from a wide variety of professional groups, taking into account their experience and opinions.

#### **The general practitioner is able to:**

- collaborate with other specialists and experts from other professional groups, with nurses, especially in providing long-term care to patients with chronic non-communicable diseases;
- recognize differences of interest, accept other opinions, and avoid conflicts and resolve them through cooperation.

### **2.4. Management skills (manager)**

The doctor becomes a member of the healthcare system and contributes to the optimization of the work of the healthcare organization in which he works. It carries out its management tasks within the framework of its inherent functions. It sets priorities and consciously decides how to use limited health resources.

As a manager, a therapist is able to:

- successfully manage their professional activities and take on management tasks that correspond to their professional position;
- find a balance between your professional and private activities;
- effectively use limited health care resources for the benefit of the patient, taking into account efficiency, adequacy and cost-effectiveness;
- evaluate and use relevant information for patient care;
- provide and improve the quality of medical care and patient safety.

### **2.5. Health promotion and healthy lifestyle promotion skills**

- A general practitioner can promote a healthy lifestyle among patients and the general public. It can help patients navigate the healthcare system and get appropriate care in a timely manner.
- Be able to convince and promote the principles of a healthy lifestyle among patients and their families, influencing the family leader, using other methods and means (media, publishing, etc.)

The therapist is able to:

- describe the factors that affect human and social health and promote the preservation and promotion of health;
- recognize problems that affect the patient's health and take the necessary measures.

## **2.6. Research Scientist**

During their professional activity, the therapist seeks to acquire significant knowledge in their specialty, monitors their development and promotes them using modern information technologies. Make presentations and reports at therapeutic forums, and publish articles in scientific journals.

As a research scientist, a general practitioner is able to:

- constantly improve the skills aimed at his professional activity;
- critically comprehend specialized medical information and its sources and take it into account when making decisions;
- inform patients, medical students, other doctors, government officials, and other people who actively care about their health, and support them in their actions to learn;
- promote the development, dissemination and implementation of new knowledge and methods.

## **2.7. Knowledge in the field of professional ethics**

The general practitioner carries out his / her practical activities in accordance with ethical norms and principles, quality standards of medical care and regulatory legal acts in the field of healthcare.

As a professional, the therapist is able to:

- carry out their professional activities in accordance with high quality standards, demonstrating a responsible and careful attitude to patients
- practice ethically and responsibly, while respecting the legal aspects of the activities of medical professionals.
- "Communication skills" and "teamwork" should be based on the principles of medical ethics and deontology.

## **Duration and structure of training.**

The duration of training in the specialty of general practitioner will be 3 years, 1 year of residency in the general practitioner program, then 2 years in the specialty of therapy.

## **Chapter 3. Special tasks (professional competencies)**

### **Types of activities of a general practitioner**

The general practitioner is obliged to master the following types of activities and their corresponding personal tasks for providing primary health care to the population, regardless of age and gender, in accordance with the legal documents of the Kyrgyz Republic:

- diagnosis, treatment, prevention and rehabilitation of the most common diseases;
- provision of emergency and emergency medical care;
- Palliative care activities;
- performing medical manipulations;
- compliance with infection safety measures when providing medical care and performing medical manipulations;
- organizational and managerial activities;

In accordance with the types of activity of a general practitioner, professional competencies are grouped into the following categories:

- 3.1 Common symptoms and syndromes (List 1)
- 3.2 Common diseases and conditions (List 2)
- 3.3 General patient problems (List 3)
- 3.4 Medical manipulations (List 4)
- 3.5 Emergency conditions (List 5)

**The professional competencies of a general practitioner are characterized by:**

**In diagnostic activities: (PC-5, PC-6)**

Ability and readiness to make a diagnosis based on a diagnostic study in the field of internal diseases

Ability and readiness for differential diagnosis of diseases based on diagnostic studies in the field of internal diseases

The ability and willingness to identify the main pathological symptoms and syndromes of internal organ diseases in patients, using knowledge of the basics biomedical and clinical disciplines, taking into account the laws of the current pathology of organs, systems and the body as a whole; analyze the patterns of functioning of organs and systems in diseases of internal organs and pathological processes;

Use the algorithm for making a diagnosis (main, concomitant, and complication), taking into account the International Statistical Classification of Diseases and Health Problems (ICD)

Perform basic diagnostic measures to identify urgent and life-threatening conditions in diseases of internal organs;

**In medical activity: (PC-8, PC-9, PC-11)**

Ability and willingness to perform basic therapeutic measures in patients with internal diseases of a particular group of nosological forms that can cause severe complications and (or) death (diseases of the cardiovascular, endocrine, respiratory, digestive, genitourinary systems, blood, as well as rheumatological diseases;

Timely detect life-threatening violations of internal organs, use methods of their immediate elimination, implement anti-shock measures;

Ability and willingness to prescribe adequate treatment to therapeutic patients in accordance with the diagnosis, to implement an algorithm for choosing drug and non-drug therapy for specialized patients.

**In rehabilitation activities (PC-14)**

Ability and willingness to apply various rehabilitation measures (medical, social, psychological) for the most common pathological conditions and injuries of the body

The ability and willingness to make recommendations on the choice of the optimal regime during the rehabilitation of therapeutic patients (motor activity, depending on the morphofunctional status), to determine the indications and contraindications to the appointment of physical therapy, physiotherapy, reflexology, herbal medicine.

**In preventive activities (PC-15, PC-16)**

The ability and willingness to apply modern hygienic methods of collecting and medical-statistical analysis of information on the health indicators of adults and adolescents at the level of various departments medical organizations in order to develop evidence-based measures to improve and preserve the health of the population

Ability and willingness to use methods of assessing natural and medico-social factors in the development of internal diseases, to carry out their correction, implement prophylactic activities, external links infectious, parasitic and non-communicable diseases, conduct sanitary and educational work on hygiene issues.

### **In organizational and managerial activities (PC17)**

Ability and willingness to use the regulatory documentation adopted in healthcare (laws of the Kyrgyz Republic, technical regulations, international and national standards, orders, recommendations, the International system of units (SI), the current international classifications), as well as documentation for assessing the quality and effectiveness of the work of medical organizations of a therapeutic profile.

The ability and willingness to use knowledge of the organizational structure of the therapeutic profile, management and economic activities of medical organizations of various types to provide medical care, to analyze the performance of their structural units, to evaluate the effectiveness of modern medical-organizational and socio-economic technologies in the provision of medical services to patients with diseases of internal organs.

#### **3.1. List – 1. The most common symptoms and syndromes in the practice of a general practitioner**

<b>Symptoms</b>
Apnea
Chest pain
Abdominal pain
Joint pain and changes
Headache
Vertigo
Diarrhea
Dysuria and changes in urine
Depression
Jaundice
Gastrointestinal bleeding
Constipation
Heartburn, belching
Cough
Itchy skin
Hemoptysis
Fever, hyperthermia
Flatulence
Nosebleeds
Fainting
Upper respiratory tract obstruction
Shortness of breath
Edematous syndrome, ascites
Obesity
Oliguria and anuria
Loss of consciousness
Loss of appetite
Weight loss
Heartbeat
Wheezing (asthmoid) breathing
Convulsions



Weakness
Nausea and vomiting
Anxiety
<b>Syndromes</b>
Acute respiratory failure
Chronic respiratory failure
Pulmonary hypertension syndrome
Acute right ventricular heart failure syndrome
Acute left ventricular heart failure syndrome
Acute coronary syndrome
Acute pulmonary heart syndrome
Chronic pulmonary heart syndrome
Pulmonary infiltration syndrome.
Cardialgia syndrome
Metabolic syndrome
Arterial hypertension syndrome
Portal hypertension syndrome
Hypersplenism syndrome
Gastric dyspepsia syndrome
Intestinal dyspepsia syndrome
Malabsorption syndrome
Cardiomegaly syndrome
Autoimmune syndrome
Hepatic cell failure syndrome
Cholestasis syndrome
Hepatorenal syndrome
Cardiorenal syndrome
Hepatosplenomegaly syndrome
Joint syndrome
Hyperglycemia syndrome
Hypoglycemia syndrome
Hyperthyroidism syndrome
Acute kidney injury syndrome
Nephrotic syndrome
Urinary syndrome
Chronic kidney disease syndrome
Rhythm disturbance syndrome
Conduction disorder syndrome
Hypotension syndrome
External secretory insufficiency syndrome
Anemic syndrome

**3.2 List -2. The most common diseases and conditions in the practice of a general practitioner.** The list of diseases and conditions is not exhaustive. Tasks are classified according to the competencies that must be achieved by the end of training in this discipline.

The following gradation is used to indicate the level of competence:

**Level1** Awareness sufficient to recognize the pathology and determine the circumstances under which the patient should be referred to a specialist indicates that the clinical resident can independently diagnose and treat accordingly most patients with this disease or condition; if necessary, determine the indications for hospitalization.

**Level 2** Knowledge sufficient to guide the patient under the supervision or consultation of a specialist, indicates that the clinical resident is guided in this clinical situation, makes a preliminary diagnosis and redirects the patient to the secondary or tertiary level for final verification of the diagnosis and selection of therapy; subsequently, it monitors the prescribed therapy (medical examination).

**The letter "H"** - means that the condition or disease is urgent and indicates the need for emergency diagnosis and / or treatment. The resident is able to assess the patient's condition and begin to provide emergency care and organize urgent hospitalization.

**Special skills:**

**The general practitioner should be able to establish the diagnosis and conduct the necessary treatment for the following diseases and conditions:**

**List 1**

<b>Respiratory diseases</b>	<b>Level</b>	<b>H</b>
Pneumonia.	1	
COPD.	1	
Bronchial asthma.	1	H
Obstructive sleep apnea syndrome	2	
Dry and exudative pleurisy.	2	
Bronchiectatic lung disease	1	H
Pulmonary embolism (pulmonary infarction)	2	H
Acute and chronic respiratory failure.	2	H
Pulmonary arterial hypertension.	2	
Occupational diseases and dust etiology.	2	
Lung cancer.	2	

<b>Diseases of the circulatory system</b>	<b>Level</b>	<b>H</b>
Hypertension.	1	H
Symptomatic arterial hypertension	2	
ACS (unstable angina, acute myocardial infarction)	2	H
Chronic form of CBS (atherosclerotic disease, stable angina pectoris, post-infarction cardiosclerosis)	1	
Acute heart failure.	2	H
Chronic heart failure.	1	
Congenital and acquired heart defects.	2	
Myocarditis, cardiomyopathy.	2	
Infectious (septic) endocarditis.	2	
Pericarditis	2	
Acute rhythm disturbance.	2	H
<b>Diseases of the digestive system</b>	<b>Level</b>	<b>H</b>
Esophageal disease. GERD.	1	
Functional diseases of the stomach. Non-ulcer dyspepsia syndrome	1	
Chronic gastritis, duodenitis.	1	
Peptic ulcer of the stomach and duodenum 12	1	H
Diseases of the operated stomach.	2	
Bowel diseases: Irritable bowel syndrome.	1	
Dysbacteriosis (a syndrome of excessive growth of bacteria in the intestine).	1	
Non-specific ulcerative colitis. Crohn's disease.	2	
Diseases of the gallbladder and biliary tract		
Dyskinesia of the biliary tract and gallbladder.	1	
Chronic non-calculous cholecystitis.	1	
Chronic calculous cholecystitis.	2	
Postcholecystectomy syndrome	2	
Chronic pancreatitis	1	
Liver diseases		
Chronic hepatitis of various etiologies.	1	
Cirrhosis of the liver.	2	H
Non-alcoholic fatty liver disease.	1	
Toxic liver damage.	1	H
Medicinal liver damage	1	
Cancer of the esophagus, stomach, colon, liver, pancreas.	2	
<b>Diseases of the urinary system</b>		
Tubulointerstitial kidney diseases:	1	
Glomerulonephritis: acute and chronic	2	
Chronic pyelonephritis.	1	
Acute kidney injury.	2	H
A chronic disease.	2	
Amyloidosis of the kidneys.	2	
NephroNephrotic syndrome.	2	
Kidney cancer.	2	

<b>Diseases of the hematopoietic system</b>	<b>Level</b>	<b>H</b>
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Anemia (iron deficiency, B12 - and folic acid deficiency), Posthemorrhagic.	1	
Hemorrhagic diathesis.	2	
<b>Diseases of the joints and connective tissue</b>	<b>Level</b>	<b>H</b>
Joint diseases: rheumatoid arthritis, reactive arthritis, Reiter's disease and syndrome.	2	
Osteoarthritis.	1	
Metabolic diseases of the joints: osteoporosis, gout.	2	
ORL, recurrent rheumatic fever, HRBS (acquired heart defects).	2	
Diffuse connective tissue diseases (SLE, SSD dermatomyositis.)	2	H
<b>Diseases of endocrine system</b>	<b>Level</b>	<b>H</b>
Type 1 and type 2 diabetes.	1	H
Thyroid diseases: endemic goiter (iodine deficiency), nodular goiter, diffuse toxic goiter, hypothyroidism, autoimmune thyroiditis)	2	
Thyroid cancer. Early clinical manifestations. Diagnostics. Tactics of patient administration.	2	
Eating disorders (obesity). Types of obesity.	1	
Pharmacology in the Clinic of Internal Diseases		
Clinical pharmacology and tactics of drug use in diseases of internal organs	1	
Side effect of drugs used in the clinic of internal diseases	1	
Combination of pharmacotherapy with other types of treatment.	1	
Separate issues of related etiology.		
Diseases of internal organs and pregnancy	1	
Diseases of the internal organs in various prof. diseases	1	
Lesions of internal organs in systemic diseases	1	
Lesions of internal organs in endocrine pathologies	1	
Lesions of internal organs in infectious diseases.	1	
Features of the course of various forms of diseases of internal organs in high-altitude conditions.	1	
Features of the course of the disease of internal organs in the elderly and senile age.	1	

## PHTHISIOLOGY

<b>Condition/disease</b>	<b>Level</b>	<b>H</b>
Pulmonary tuberculosis. Clinic, diagnosis, tactics of the doctor.	1	

### 3.3 PALLIATIVE CARE

Condition/disease	Level	H
Pain syndrome in diseases of internal organs	1	
Communication with the dying person and his relatives in diseases of the internal organs.	1	

### 3.4 GENERAL PATIENT PROBLEMS

Internal Medicine Clinic	Level
Difficult patient/Aggressive patient in therapy	1
Gender problems in diseases of internal organs.	1
Disability/health limitations in diseases of the internal organs.	1

**The formation of professional competencies of a general practitioner (resident) involves mastering the system of professional knowledge, skills, skills, possessions**

**List of knowledge, skills and possessions of a general practitioner:**

**The general practitioner should know:**

- The Constitution of the Kyrgyz Republic
- Laws and other regulatory legal acts of the Kyrgyz Republic in the field of healthcare
- The main provisions of the "Fundamentals of Legislation of the Kyrgyz Republic" on the protection of public health
- Legislation on the obligation of medical insurance, on the territorial program of state guarantees of free medical care (types of medical care provided by the state) to the population free of charge, medical care provided within the framework of the territorial program of compulsory medical insurance, medical care provided at the expense of budgets of all levels.)
- Principles of the organization of therapeutic care in the Kyrgyz Republic, the work of hospital and polyclinic institutions, the organization of emergency and emergency care.
- Questions of the connection of diseases with unfavorable professional factors.
- Have an understanding of the grounds for bringing a doctor to various types of responsibility (disciplinary, administrative, criminal).
- Basic questions of normal and pathological anatomy, normal and pathological physiology, the relationship of the functional systems of the body and the levels of their regulation.
- Fundamentals of water-electrolyte metabolism, acid-base balance; possible types of their disorders and principles of treatment.
- Basic questions of metabolism (metabolism of lipids, proteins, carbohydrates).
- The system of bleeding and hemostasis, the physiology and pathophysiology of the blood clotting system, the basics of blood replacement therapy, indicators of homeostasis in normal and pathological conditions.

- Clinical Practice symptomatology and pathogenesis the main ones therapeutic diseases in adults, their prevention, diagnostics and treatment, Organization services intensive therapies and resuscitation in therapeutic clinics, equipment for intensive care and intensive care units.
- Basic issues of rehabilitation.
- Fundamentals of non-drug therapy, physical therapy, physical therapy and medical supervision, indications and contraindications to spa treatment.
- Organization of monitoring of side effects and undesirable effects of medicines.
- Fundamentals of rational nutrition of healthy individuals, principles of dietary therapy of therapeutic patients.
- Anti-epidemic measures in the event of a focus of infection.
- Issues of medical and social expertise, dispensary monitoring of healthy and sick people.
- Issues of prevention of diseases of internal organs.
- Forms and methods of sanitary and educational work.
- Principles of the organization of the medical service of civil defense and disaster medicine.

**A general practitioner should be able to:**

- get information about the disease, apply objective methods of examination of the patient, identify general and specific signs of the disease;
- to assess the severity of the patient's condition, to take the necessary measures to remove the patient from such a state, to determine the scope and sequence of resuscitation measures, to provide the necessary urgent assistance;
- identify special research methods (laboratory, radiological and functional);
- interpret the results of laboratory tests of patients (blood, urine, feces, sputum, punctate, etc.), and evaluate and interpret instrumental diagnostic methods, including modern invasive and non-invasive technologies).
- determine the indications for hospitalization and organize it;
- conduct a differential diagnosis, justify the clinical diagnosis, plan and tactics of patient management;
- evaluate the electrocardiogram, spirogram, X-ray examination data and give a conclusion on them;
- determine the degree of violation of homeostasis and perform all measures to normalize it;
- prescribe the necessary medicines and other therapeutic measures;
- determine the issues of the patient's ability to work – temporary or permanent disability, transfer to another job;
- carry out the necessary anti-epidemic measures when identifying an infectious patient;
- conduct medical examinations of healthy and sick people, be able to analyze the results;
- to issue medical documentation provided for by the legislation on health care.

**The general practitioner must possess:**

- principles of medical deontology and medical ethics;
- methodology for evaluating the results of laboratory special research methods;
- interpretation of the results of functional examinations of internal organs;
- skills of prescribing therapeutic measures in accordance with the standard of medical care for diseases of internal organs;

- methods of registration of medical documentation for a patient with diseases of internal organs;
- maintaining the necessary medical documentation for a patient with a disease of internal organs, drawing up plans, reports and conducting an analysis of their work.

## **LIST OF PRACTICAL SKILLS OF A GENERAL PRACTITIONER (List 3)**

### **I. Skills of clinical examination of the patient**

1. Complete clinical examination of the patient in all organs and systems – examination, percussion, palpation, auscultation,

### **II. Skills in interpreting the results of laboratory and instrumental studies.**

**Evaluation of clinical tests** of blood, urine, feces, sputum, pleural and ascitic fluid, biochemical blood tests. Clotting time, bleeding time, prothrombin index.

Assessment of the indicators of the electrolyte and acid-base balance of the blood.

Evaluation of the results of serological studies (RA, RSC, IHR, HIR), hepatitis antigens, markers of viral hepatitis A,B,C,D, E, PCR - viral hepatitis.

#### **Evaluation**

Urinalysis (sample of Nechiporenko, Zimnitsky);

Rehberg samples

Urine and blood culture

Glycemic profile

Glucose Tolerance Test

Hormonal blood tests (TSH, T3, T4, catecholamines, renin, aldosterone)

Results of an allergic test

Results of the immunological status of the study (immunoglobulins)

ECG results

Results of spirometry, picrofluometry

Endoscopy (EGDS, colonoscopy, rectoromanoscopy)

Bronchoscopies

Computed tomography of the chest and abdominal organs

ECHO and Doppler echocardiography, the main indicators of hemodynamics (VCB, CVP, UO, MO, ejection fractions, TPVR).

Ultrasound of the abdominal cavity, kidneys

VEM sample

Daily ECG monitoring, daily blood pressure monitoring.

Coronarography and aortography

Liver and renal lymph node biopsy, fibroscanning (elastography) of the liver.

Magnetic resonance imaging of internal organs.

Radioisotope scanning

**Analysis** of radiographs for major diseases of the bronchopulmonary, cardiovascular systems, gastrointestinal tract, kidneys, bile ducts, spine joints, and skull

### **Skills of documentation management, organization of medical business**

Filling in and maintaining a medical record of an inpatient patient, extracts from a medical record Filling in and maintaining medical records in a polyclinic: medical cards of an



outpatient patient (F-025) a statistical coupon (F-025/y) a list of disability, a referral for hospitalization (F-28), a sanatorium card (F-072/y) and other  
 Prescriptions preferential for narcotic and drug-containing drugs  
 Medical and social expertise  
 Referral to the MSE  
 Making an informed decision on the state of working capacity  
 Participation in the preparation of an individual program of rehabilitation measures for the prevention of disability  
 Organization of medical examinations at the site, analysis of morbidity with temporary disability  
 Voluntary and mandatory medical insurance.

### 3.5 PERFORMING MEDICAL MANIPULATIONS (practical skills)

The therapist should be able to perform the following manipulations independently:

#### General manipulations: (list 3)

Injections (i / m, i / v, n / a).  
 Determination of blood type, Rh factor  
 Conducting and decoding an ECG  
 Be able to interpret the results of the conclusions of instrumental studies (X-ray, ultrasound, echocardiography, EGDS, FVD).  
 Peak flowmetry.  
 Glucometry, a test for glucose tolerance.  
 Aerosol inhalation technique using spacers, nebulizers.  
 Measurement of blood pressure.  
 Gastric lavage.

#### Manipulations for emergency care:

Cardiopulmonary resuscitation:  
 Indirect heart massage  
 Mouth-to-mouth, mouth-to-nose breathing»  
 Restoration of airway patency  
 Using the Ambu bag  
 Tongue fixation and duct insertion  
 Defibrillation  
 Stopping external bleeding  
 Heimlich's trick.

### 3.5. Medical manipulations and practical skills.

The therapist should be able to perform the following manipulations independently

№	Manipulation	Level 1	Level 2	Number of manipulations
1.	Methods of standard examination of patients with internal diseases		2	100

2.	Self-measurement of blood pressure in accordance with the WHO protocol.		2	100
3.	Self-removal and decoding of the ECG		2	80
4.	Independent implementation of peak flowmetry and interpretation of their results.		2	80
5.	Independent pulse oximetry and interpretation of their results.		2	60
6.	Determination of MT, abdominal circumference.		2	100
7.	Independent conduct of glucometry and interpretation of their results.		2	60
8.	Justification of target levels of lipid metabolism.	1		60
9.	Justification of the target levels of carbohydrate metabolism.	1		70
10.	Justification of target blood pressure levels.		2	100
11.	Participation in load tests and interpretation of their results.	1		30
12.	Gastric lavage.		2	10
13.	Methods of diagnosis of HP infection (serological, histomorphological, urease tests). Evaluation and interpretation of their results.	1		20
14.	Technique of conducting spirometry. Evaluation and interpretation of their results.	1		70
15.	Interpretation of the results of pharmacological tests in GERD.	1		20
16.	Interpretation of the results of biopsy of the esophageal mucosa, stomach, intestines, and lymph nodes, liver	1		5
17.	Participation in the methodology of esophagogastroduodenoscopy (EGD) and independent interpretation of their results.	1		60
18.	Participation in the method of conducting rectosigmoidoscopy (RRS) and independent interpretation of their results.	1		15
19.	Participation in the method of colonoscopy and independent interpretation of their results.	1		20
20.	Participation in the method of conducting PH of gastric contents and independent interpretation of their results.	1		20
21.	Participation in the methodology of conducting ultrasound examinations of the abdominal organs, ultrasound dopplerography (ultrasound, ultrasound) and independent interpretation of their results.	1		80
22.	Participation in the method of conducting fib	1		20

	scans of the liver and independent interpretation of their results.			
23.	Interpretation of the results of radiology (graphy) esophagus, stomach, small and large intestine	1		100
24.	Interpretation of abdominal review radiography data	1		30
25.	Participation in the procedure of performing an irrigoscopy and independent interpretation of their results.	1		30
26.	To justify the indications for the use of computed tomography and nuclear magnetic resonance (NMR) techniques for diseases of internal organs.	1		30
27.	Evaluation of the results of serological examination (RA, RSC, IHR, HIR), hepatitis antigens, markers of viral hepatitis A, B, C, D, E, PCR-viral hepatitis	1		20
28.	Interpretation of the results of serological markers of tumor growth (AFP, CEA, CA-19-9, CA-125, CA-72-4)	1		20
29.	Interpretation of the results of markers of autoimmune diseases (AMA, ALIA-MAHH, LIA-liver)	1		20
30.	Evaluation of markers of cytolysis and hepatic cell necrosis.	1		30
31.	Assessment of markers of cholestasis.	1		15
32.	Evaluation of clinical blood tests, urine tests, and biochemical blood tests	1		80
33.	Assessment of the patient's height and weight indicators, calculation of BMI		2	50
34.	The method of determining ascites		2	30
35.	Filling out and maintaining the medical record of the inpatient patient, extracts from the medical record		1	100
36.	Filling out and maintaining medical documentation in the polyclinic: medical card of an outpatient patient, statistical card, disability certificate, referral for hospitalization, health resort card, and others.		2	100
37.	Referral to MSEC		2	20
38.	Interpretation of daily ECG results, blood pressure monitoring, load tests	1		30
39.	Participation in the method of conducting echocardiography, Doppler ECHOCARDIOGRAPHY and independent interpretation of their results.	1		50
40.	Interpretation of the results of aortography, coronarography	1		10

LIST 3.6. URGENT (EMERGENCY) STATES.

The general practitioner should be able to independently diagnose and provide emergency care at the pre-hospital stage, as well as determine the tactics of providing further medical care in the following emergency conditions in the internal medicine clinic:

1. General medical issues

- 1.1. Clinical death
- 1.2. Poisoning and intoxication.
- 1.3. Collapse
- 1.4. Fainting

2. Internal diseases

2.1. Coma

- 2.1.1. Hypoglycemic coma.
- 2.1.2. Diabetic ketoacidosis
- 2.1.3. Hypothyroid (myxedematous) coma
- 2.1.4. Hepatic coma
- 2.2. Shock
  - 2.2.1. Hypovolemic shock
  - 2.2.2. Cardiogenic shock
  - 2.2.3. Anaphylactic shock
- 2.3. Acute respiratory failure
- 2.4. Severe asthma attack
- 2.5. Quincke's edema.
- 2.6. Pulmonary embolism.
- 2.7. Acute heart failure.
- 2.8. Acute cardiac arrhythmias and conduction disorders.
- 2.9. Hypertensive crisis.
- 2.10. Acute coronary syndrome with ST segment elevation.
- 2.11. Acute coronary syndrome without ST segment elevation.
- 2.12. Acute kidney injury.
- 2.13. Acute liver failure.
- 2.14. Pulmonary edema.
- 2.15. Thyrotoxic crisis.
- 2.16. Acute adrenal insufficiency.
- 2.17. Gastrointestinal bleeding.

## CHAPTER 4

### Recognition criteria and classification of postgraduate education institutions

#### Categories of postgraduate training institutions:

**Category A (1 year):** Departments of therapy of national personnel, research institutes and other republican institutions

**Category B (6 months):** Therapy departments of city, regional clinics and regional hospitals.

**Category C (1 year):** Therapeutic and other departments specializing in the care of patients with internal pathology, CFM.

**Category D (4 months)** Medical offices that specialize in the field of therapy.

## Characteristics of institutions for providing postgraduate education

Category	Category		
	A	B	C
Characteristics of the clinic			
Therapy departments of national centers and republican institutions	+	+	-
Department of other hospitals	-	+	+
Medical institutions with outpatient / polyclinic departments	+	+	-
Medical Team			
Medical director-specialist in the field of therapy	+	+	+
University lecturer	+	-	-
Full-time (at least 80%)	+	+	+
Participating in the preparation of students	+	+	-
Assistant manager - a specialist in the field of therapy, who is an employee of the faculty of postgraduate education	+	+	+
At least 1 full-time doctor (including the head) or head of the department	+	+	+
Postgraduate education			
Structured postgraduate training Program	+	+	+
Interdisciplinary training (hours / week)	+	+	+
Participation in scientific research with publication in peer-reviewed journals	+	-	-
Analysis of clinical cases in a multidisciplinary team (therapist, cardiologist, surgeon, oncologist, etc.)	+	-	-
<b>Basic medical services in the field of therapy</b>			
ECG	+	+	+
ECHOCARDIOGRAPHY	+	+	-
Daily ECG monitoring	+	+	-
Daily blood pressure monitoring	+	+	-
Bicycle ergometric test	+	+	-
Pharmacological tests	+	+	-
Ultrasound of internal organs	+	+	+
Doppler ultrasound of blood vessels	+	+	-
Aortography	+	-	-
Coronarography	+	-	-
Multispiral CT of coronary vessels	+	-	-
Esophagogastroduodenoscopy	+	+	-
Ultrasound of the abdominal cavity, ultrasound dopplerography (ultrasound, UZDG)	+	+	+

Puncture of the abdominal cavity	+	+	-
Urease respiratory helic test	+	+/-	-
Coprogram	+	+	+
Biopsy of esophageal, gastric, and intestinal mucosa	+	+/-	-
Rectoromanoscopy (RRS)	+	+/-	-
Colonoscopy	+	+/-	-
Liver fibroscanning	+	-	-
<b>Radioscopy (- graphy) esophagus, stomach, small and large intestine.</b>	+	+	-
<b>Overview radiography of the abdominal cavity</b>	+	+	+/-
<b>Irrigoscopy.</b>	+	+	-
CT and MRI of the abdominal organs.	+	+/-	-
Serological studies (RA, RSC, RNGA, RTGA), hepatitis antigens, markers of viral hepatitis A,B, C, D, E, PCR-viral hepatitis.	+	+	-
Immunological studies: autoimmune and cancer markers in diseases of the gastrointestinal tract and liver.	+	+	-

Recognized medical institutions are clinical bases for postgraduate training of a general practitioner and must meet the requirements according to state educational standards.

## **Chapter 5. Regulations on the examination/certification.**

**The purpose of the exam / certification** is to determine the level of knowledge and practical skills of residents who have been trained in the specialty "Therapy" in accordance with the catalog of competencies.

### **Examination commission.**

#### **The composition of the commission.**

#### Composition of the examination committee:

- 2 representatives of Group "A" clinics
- 1 representative of group "B" or "C" clinics
- 2 FPGE representatives
- 2 representatives of the PMA.

#### Tasks of the exam /attestation commission:

- Organization and conduct of the exam / attestation;
- Conduct the exam and report the result;
- Review and correct exam questions as needed
- Submission of exam questions no later than 1 month before the exam.

**Filing an appeal.** The candidate may challenge the composition of the expert group. The appeal must be submitted before the exam begins. If approved, the exam is postponed for a minimum of 3 months and a maximum of 6 months, a new expert group must be appointed in advance.

### **Exam Structure:**

Part 1: A structured oral exam based on a discussion of clinical cases with minimal criteria for results determined in advance (the exam uses case descriptions, examination results, X-rays, functional examinations, and other illustrations (60 to 90 minutes)

Part 2: Written exam with multiple choice answers (90 questions in 3 hours)

### **Admission to the exam.**

Graduates of the postgraduate educational program of therapy and internists who have completed a specialization (250 credit hours) to confirm their qualifications.

### **Exam/attestation evaluation criteria:**

The assessment of each part of the exam, as well as the final grade, is given with the mark "passed" or "failed". The exam is successful if both parts of the exam are passed.

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