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# HEALTHCARE MANAGEMENT AND MARKETING



Manual textbook

# MINISTRY OF HEALTH OF UKRAINE Odesa National Medical University

Viktoriia Borshch Olena Rudinska Nataliia Kusyk

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Manual textbook



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The basic concepts of management in healthcare are considered as a scientifically based management process, in particular, at the micro-level: healthcare institutions of public and private ownership, and at the macro-level: national health systems. The basic principles of personnel management in healthcare institutions, the specifics of personnel policy and recruitment in medical institutions, the basics of remuneration in healthcare, basic forms and systems of remuneration of medical personnel and motivational mechanisms of healthcare, the financial environment, the main models and systems of healthcare, the features of strategic planning of healthcare institutions are described.

The basic concepts of marketing in healthcare, the functioning of the medical services market and the directions of marketing research, the prospects for the use of medical marketing in healthcare are considered. The features of a comprehensive market study in the healthcare marketing system, the possibility of using marketing models and the features of positioning medical services in the market are presented. The basics of pricing in healthcare are considered, in particular, the emphasis is placed on the structure of the price of medical services and the features of pricing in healthcare at the state level. The basic fundamentals and basic concepts of strategic marketing in healthcare are given. The emphasis is placed on marketing strategies in the healthcare management system and the process of their development. The features of strategic marketing planning based on the technologies of strategic analysis and marketing business planning in medicine are considered.

The training manual is intended for applicants of higher education and teachers of medical specialties of institutions of higher education. Also, the material of the training manual can be useful to a wide range of users interested in studying management and marketing in healthcare.

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# FOREWORD

The health status of the population serves as an integral indicator of the general state of society, an important component of the country's human capital. By shaping public health and influencing the potential of the workforce employed in all spheres of the national economy, healthcare provides services to other sectors of the national economy and society that largely compensate for the negative consequences of their functioning.

The reform of healthcare in Ukraine requires a change in the basic principles of management in the field of healthcare. Along with administrative influence, the legal and economic independence of healthcare entities is expanding competition in the process of resource allocation is increasing.

Public health management in Ukraine is a complex task of the entire Ukrainian society, which involves many sectors of the national economy and management structures. The implementation of modern transformations in the healthcare system involves the use of special management and marketing methods, taking into account the specifics of medical services. In any case, the modern healthcare system considers medical organizations as, firstly, specific economic entities endowed with all the basic financial and economic rights and obligations, and, secondly, as independent participants in market relations, taken in all their complexity and contradictions, and at the same time taking into account all the specifics of healthcare.

So, learning the basics of management and marketing in healthcare is a necessary element of training highly professional personnel for the healthcare management system.

The training manual consists of two sections.

The first section "Management in Healthcare" is devoted to the basics of management in healthcare; problems of personnel management of healthcare institutions and remuneration; opportunities for financing healthcare; the basics of strategic management in healthcare.

The basic concepts of management in healthcare are considered as a scientifically based management process, in particular, at the micro-level: healthcare institutions of public and private ownership, and at the macro - level: national health systems. The basic principles of personnel management in healthcare institutions, the specifics of personnel policy and recruitment in medical institutions, the basics of remuneration in healthcare, basic forms and systems of remuneration of medical personnel and motivational mechanisms of medical personnel management are given. The essence of financial and economic relations and processes in healthcare, the financial environment, the main models and systems of healthcare financing are presented. The basic principles and basic concepts of strategic management in healthcare, the features of strategic planning of healthcare institutions are described.

The second section "Marketing in Healthcare" is devoted to the basics of marketing in healthcare; issues of comprehensive market research in the healthcare marketing system; pricing issues in healthcare; issues of strategic marketing in healthcare and the basics of strategic analysis.

The basic concepts of marketing in healthcare, the functioning of the medical services market and the directions of marketing research, the prospects for the use of medical marketing in healthcare are considered. The features of a comprehensive market study in the healthcare marketing system, the possibility of using marketing models and the features of positioning medical services in the market are presented. The basics of pricing in healthcare are considered, in particular, the emphasis is placed on the structure of the price of medical services and the features of pricing in healthcare at the state level. The basic fundamentals and basic concepts of strategic marketing in healthcare are given. The emphasis is placed on marketing strategies in the healthcare management system and the process of their development. The features of strategic marketing planning based on the technologies of strategic analysis and marketing business planning in medicine are considered.

The training manual is intended for applicants of higher education and teachers of medical specialties of institutions of higher education.

Also, the material of the training manual can be useful to a wide range of users interested in studying management and marketing in healthcare.

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SECTION 1

#### **1.1. FUNDAMENTALS OF MANAGEMENT IN HEALTHCARE**

- 1.1.1. Basic fundamentals of healthcare management
- 1.1.2. Management in healthcare institutions

**1.1.3.** Management of national healthcare systems *Control auestions* 

Tests

Situational tasks

- 1.2. PERSONNEL MANAGEMENT OF HEALTHCARE INSTITUTIONS. FUNDAMENTALS OF REMUNERATION IN HEALTHCARE
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RECOMMENDED LITERATURE TO SECTION 1 "MANAGEMENT IN HEALTHCARE"

# FUNDAMENTALS OF MANAGEMENT IN HEALTHCARE

1.1.1. Basic fundamentals of healthcare management.

1.1.2. Management in healthcare institutions.

1.1.3. Management of national healthcare systems.

# 1.1.1. Basic fundamentals of healthcare management

Management as an activity has existed throughout the history of mankind. We can say that management was from the moment when people had a need to work together. A certain form of managerial activity appeared when it was necessary to collect taxes, to create an army, to feed people who did not produce food themselves.

Management relationships in medicine occur at the following levels:

- *macro-level*: at the level of public administration (the national level of the legislative and executive branches of government), regional, local, sectoral, departmental levels, that is, at the level of administration of the country's healthcare system;

- *micro-level*: at the management level of a separate medical institution (medical institutions, insurance companies, public organizations, health insurance funds).

In the management of the health care system, it is necessary to distinguish:

- administration of healthcare;

- management of medical institutions.

Most experts believe that the definitions of "administration" and "management" are synonymous, but their content different is both taking into account microand approaches. macroeconomic



Therefore, researchers believe that it is more appropriate to use the term "administration" for the macro level, and the term "management" for the micro level.



Management as a general concept can be interpreted:

- on the one hand - as a process of influencing someone or something;

on the other
 hand – as a system of
 managing subjects, objects of
 management and management
 actions.

**Management in healthcare as a macro system** is the science of management, regulation and control of financial, labor and material resources by health authorities and institutions.

The goal of management in healthcare is to reduce the losses of society from morbidity, disability and mortality of the population with available resources.

The task of management in healthcare is to effectively achieve the goal by improving the quality of medical, diagnostic and preventive measures and rational use of healthcare resources.

The object of management in healthcare is a medical institution (medical enterprise, institution, clinic, etc.).

The entity of management in healthcare is the management apparatus, management bodies (for example, the Ministry of Health, Chief Physicians, Heads of Departments, Heads of Clinics, etc.).

**Management in healthcare, as a microsystem**, is the administration of a medical institution directly as an independent financial and economic unit.

Management in medicine can be viewed from two positions:

1. On the one hand, management in medicine is the process of influencing material, labor and financial relations (material, labor and financial resources), their organization for



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the implementation of the economic and social policy of a medical institution.

2. On the other hand, management in medicine is the totality of all the organs of the management apparatus of a medical institution and their managerial actions.

Management is determined by the principles, methods, functions and goals of administration.

### Management principles (general classification):

1. Organizational, coordination and operational principles aimed at activating and strengthening the motivation of each employee and the entire team. Among them: power and responsibility; unity of command; unity of leadership; centralization; linear management; order; stability; initiative, etc.

2. Development principles aimed at optimizing relationships and improving the effectiveness of collective activity. Among them: discipline, fairness, subordination of individual interests to common ones, cooperative spirit, constancy of staff, remuneration, etc.

3. Principles of increasing the style, authority, and representation of the institution.

# Management methods (general classification):

- organizational and administrative;
- economic and household;
- legal;
- socio-psychological.

In addition, management methods include: methods of reinforcement and stimulation; methods of regulating behavior; methods for optimizing the labor process and increasing employee responsibility; methods for



developing employee initiative and improving individual skills.

Management functions are determined by the level of the administration system.

The administration system of any object has three levels:

- strategic - at this level, goals and possible results in the future are determined;

- *tactical* - this level allows you to optimally define specific tasks, organization, step-by-step execution and control of results;

- *operational* - this level ensures the effective implementation of production actions with a good implementation of available resources

(for example, accounting, control and analysis of the activities of already functioning structures).



Management functions (general classification):

1. The first function includes the study of the situation, the collection and processing of information (analysis of the current situation).

2. The second function involves making a decision on preliminary calculations or transformations of information. After

receiving comprehensive, complete, reliable and timely information (data on the actual condition of the object), a management decision is made and planning for its implementation is carried out.

3. The third function is to organize the implementation of the decision by ordering forces and means, debugging the necessary production links and monitoring its execution (preliminary, guiding, filtering, final control).

Each component of the management of the health care system, carried out at different levels, is characterized by activities for the development, adoption and implementation of administration decisions. This requires the use of management technologies (methods, forms, tools for development and decision-making).

Management technologies (general classification):

1. Management technologies of healthcare administration, which include: development of State, regional and municipal health policy; selection at the State level of the health care model and its legislative,



regulatory, personnel, organizational, financial, information support; development of State policy of reforming the health care system; development of the State policy of remuneration of medical workers; development of the State policy of training of medical workers, their certification, professional development, licensing; standardization of medical services; optimization of the network of healthcare institutions, including State medical institutions; regulatory and legal regulation of the resource provision of healthcare institutions;

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regulatory and legal regulation of the financial provision of healthcare institutions; legislative and regulatory regulation of the network of State medical institutions; definition of organizational support for administration.

2. Management technologies of financial administration, which include the following: development of financial policy (state, regional, municipal, local) healthcare; financial forecasting and financial planning (determining the needs and volumes of financial support for healthcare in general and by levels); operational financial management; financial control and audit; monitoring; analysis, evaluation of the effects and effectiveness of financial support for healthcare and in the context of healthcare institutions of different forms of ownership.

3. *Management technologies of financial administration of medical institutions*, which include: estimated planning; estimated financing; internal audit.

# 1.1.2. Management in healthcare institutions

The main information levels of the emergence of economic and managerial relations:

1. *Microeconomic level*. At the microeconomic level, they include the activities of each individual, individual sites, links and structures of the production of medical services. The main microeconomic element of healthcare is a medical institution, which in its essence acts as a kind of enterprise (firm) that produces and provides services. As for the private practitioner, he, in fact, embodies, personifies



the whole medical institution, acting alternately as the main staff, manager, maintenance worker, etc., unless, of course, we are talking about the use of hired labor.

2. *The macroeconomic level.* Within the framework of the national economy as a whole, and, above all, in those sectors directly related to healthcare (medical industry, pharmaceutical industry, instrument making, special branches of textile, food industry, transport engineering, construction, trade, etc.), macroeconomic relations are developing. In modern conditions of integration of many types of medical activities at the international level, macroeconomic relations enter the sphere of the world economy, the functioning of the health services market on a global scale.

3. Recently, the tendency to allocate another level of relations – the *medi-economic level* (from Latin – medius, from English – middle). At this level, economic relations in healthcare are studied, considered as a large branch in the economy (super-branch), consisting of a number of sub-sectors, industries and specializations, connected by the solution of one functional task – the protection and strengthening of public and individual health.

For the functioning of any administration system, the following conditions must be met:



- the managed system must have the ability to switch to different states, change its properties;

- the management system should have a real opportunity to change, with the help of management decisions, the state of the entity, and for this the management system

should have appropriate bodies, structures and mechanisms;

- management claiming to be reasonable must necessarily be purposeful, that is, have a clearly set goal and desired end results;

- the management system should be able to select various options for approved solutions;

- the management system must have real material, intellectual, informational, financial resources;

- the control system should not only be clearly oriented to the control goal, but also have information about the current state of the controlled object through feedback channels at every moment of time;

- optimal management requires skills to assess the quality of management decisions, reliable criteria and representative indicators.

There are two parties in the management of a medical institution: the entity of management (managers) and the object of management (labor, financial and material resources).

Three levels of management system in a medical institution:

- *strategic level* (for example, head physician, director);

- *tactical level* (for example, deputy chief physician in areas and sections of work, chief (senior) nurse);

*– operational level* (for example, heads of departments, departments that do not have subordinates of other managers, including senior nurses of departments).

Depending on the features of the entity, along with the functions of managing the object as a whole, the functions of individual management links are distinguished:

- *technical operations* - production (for example, for medical institutions, the production functions include diagnostics, examination, rehabilitation, preventive measures, etc.);

- commercial transactions - purchase, sale, exchange (for example, for medical institutions - this is the sale of certain types of medical services);

- *financial transactions* - raising funds and disposing of them for the implementation of activities;

- *insurance operations* - insurance, protection of property and persons;

- *accounting operations* - accounting, statistics, etc.;

*– administrative operations –* long-term program and target planning, organization, coordination, administrative functions and control.

The management decision is a directive act, mandatory for execution, and it has three sub-functions: guiding, coordinating, and mobilizing.

Requirements for a management decision:

- it should have a clear target orientation;

- it must be justified;

- it must be addressed;

- it must be consistent and competent;



- it should be effective (at a lower cost to achieve the intended results);

- it should be specific.

*There are two main ways to make a decision*: individual and collective. In any case, the final decision of the issue remains with the head.



# Algorithm (sequence) of management decisions:

- setting goals and objectives (program-target planning);

- collecting the necessary information;

 modeling and preliminary examination of possible solutions;

- making a management decision;
- organization of execution;
- execution control;
- evaluation of effectiveness and correction of results.

A number of factors influence the effectiveness of management decisions: competence, information support, reasonableness of the decision, timeliness of the management act.

The effectiveness of the management of a medical institution is determined by the introduction of *scientific labor organization*, that is, the creation of optimal conditions for the effective use of working time by employees.

A special place in the execution of management decisions is occupied by the introduction into the work of medical institutions of *modern technical means* for the rapid collection, storage, processing and transportation of information using modern means of communication. All this is achieved by *automating both the healthcare management system in general and the medical institution in particular*, that is, constantly providing the heads of health authorities and medical institutions with the necessary information to implement the tasks of accounting, planning, strategic and operational management.

In addition, the effectiveness of management should be considered not only by optimizing technological solutions, but also taking into account adequate *psychological attitudes*.

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Among the factors hindering the development of individual qualities in management specialists, it is possible to distinguish:

- lack of personal value orientations;
- lack of personal interest;
- insufficient professional qualifications;
- inability to influence people;
- inability to improve yourself;
- inability to control yourself;
- lack of a sense of duty;
- disorganization, dishonesty;

- inability to subordinate personal interests to group, collective tasks and attitudes, etc.

Motivation – interested activity and attachment of personnel and



a combination of production, physiological and psychological guidelines are important for effective management. Among the qualitative ways of influencing the team in management, leadership style plays an important role (a set of management methods and management psychology).

Basic Leadership Styles:

- *The director's style* is when the leader is guided by the principle of "do as I said", keeps employees under control and uses encouragement, punishment, and initiative as a driving force.

- *The leader* - *organizer* is a strict but fair leader. He gives clear instructions to subordinates, influences beliefs and informs each employee of his assessment of his qualities and achievements.

- *Personal style* is when a leader follows the motto "first of all people, and then business." He trusts people, appreciates good relationships in the team. As an incentive, he provides employees with additional benefits, a sense of comfort, security, and tranquility.

- *The democratic style* is when the leader adheres to the principle of "one person – one vote." Such a leader encourages employees to actively participate in decision-making, personally supervises everyone and encourages them to take active action.

- The desire to set the pace of work is a leader who strives to do himself more, he undertakes many tasks, works a lot, assuming that other employees will follow his example, provides many with the opportunity to plan and work independently.

- *Mentoring style* is when a leader is guided by the principle of "you can do it." This type of leader helps the members of the "team" and encourages them to work better, giving them the opportunity for personal development.

# 1.1.3. Management of national healthcare systems

**Public healthcare management** in Ukraine is a complex task of the entire Ukrainian society, which involves many sectors of the national economy and administration structures.

To make a scientifically based decision in the field of healthcare management, data of a medical, social, economic, legal and other nature are needed.

Factors determining the forms and methods of managing the health system of the population as a whole and at individual territories:



 social factors and social orientation of decisions, actions of state, regional, and local authorities;

- the level of socio-economic development of the country as a whole and its individual regions;

- implementation of the principles of social justice and accessibility of scientific achievements in the field of healthcare for all members of society;

- the level of scientific support of healthcare problems;

- adaptation of international experience in the field of medical and social security of the population of the country as a whole and at different regions.

# The comprehensive public healthcare system consists of:

- structural elements - relevant departments of medical and social security;

- functional elements - bodies and institutions of medical and social services.

All elements of the healthcare system are interconnected with each other. For the normal functioning of healthcare subsystems, it is necessary that a constant and sufficient exchange of information in quantity and quality be established between their individual elements. The implementation of complex healthcare tasks requires a systematic approach in which the functions and competencies of all participants in the medical and social protection of the population are clearly delineated.



Organization

The healthcare system should be built in strict accordance *with international human* 

rights provisions and taking into account the recommendations of international organizations, such as: World Health Organization (WHO), UNESCO, UNICEF, ILO (International Labor Organization), etc.

Resolution of the World Health Assembly "Principles of development of the national healthcare system" dated 23.06.1970.

The main provisions on the implementation of the rights of a citizen to healthcare:

- proclamation of the responsibility of the state and society for healthcare, implemented on the basis of a set of economic and social measures;

- organization of optimal training of public healthcare personnel;

- development of health care on the basis of a wide range of measures aimed at public and individual prevention, which involves an organic combination of therapeutic and preventive work in all medical and sanitary institutions and services;

- providing the entire population of the country with the highest level of qualified public preventive and curative care, provided without financial or other restrictions, by creating an appropriate network of medical institutions;

- wide use in each country of the achievements of world science and practice;

- sanitary education of citizens and involvement of them in the implementation of all healthcare programs.

The legislation of Ukraine on healthcare is based on: the Constitution of Ukraine, the Law of Ukraine "Fundamentals of Legislation of Ukraine on Healthcare," as well as other legislative acts regulating public relations in the field of healthcare (mainly orders, resolutions of the Cabinet of Ministers of Ukraine, the President of Ukraine, and the Ministry of Health of Ukraine).



The Law of Ukraine "Fundamentals of Legislation of Ukraine on Healthcare."

Basic principles of healthcare in Ukraine:

- recognition of healthcare as a priority activity of society and the State as one of the main factors of survival and development of the people of Ukraine;

- obtaining human and civil rights and freedoms in the field of healthcare and ensuring related State guarantees;

- humanistic orientation, ensuring the priority of universal values over class, national, group or individual interests, increased medical and social protection of the most vulnerable segments of the population;

- equality of citizens, democracy and accessibility of medical care and other healthcare services;

- compliance with the objectives and level of socio-economic and cultural development of society, scientific validity, material, technical and financial security;

- focus on modern standards of health and medical care, a combination of domestic traditions and achievements with world experience in the field of healthcare;

- preventive and prophylactic nature, comprehensive social, environmental

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and medical approach to healthcare;

- the complexity of the healthcare economy and its multi-channel financing, a combination of State guarantees with de-monopolization and promotion of entrepreneurship and competition;

- decentralization of public administration, development of selfgovernment of institutions and independence of health workers on a legal and contractual basis.

# The main healthcare authorities in Ukraine.

A specially authorized central body of State executive power in the field of healthcare is the Ministry of Healthcare of Ukraine, whose competence is determined by the regulations approved by the Cabinet of Ministers of Ukraine, and other central executive authorities implementing State policy in the areas of sanitary and epidemic well-being of the population, quality control and safety of medicines, combating with the HIV infection/AIDS and other socially dangerous diseases. The functions of specially authorized State authorities in administrative-territorial units of Ukraine are assigned to the Council of Ministers of the Autonomous Republic of Crimea and local State administrations.

The direct health care of the population is provided by health care institutions: sanitary-preventive, therapeutic-preventive, physical culture and recreation, sanatorium-resort, pharmacy, scientific-medical institutions and others.

Healthcare institutions are created by enterprises, institutions and organizations of various forms of ownership, as well as by individuals with the necessary material and technical base and qualified specialists. The procedure and conditions for the establishment of healthcare institutions, state registration and accreditation of these institutions, as well as the procedure for licensing medical and pharmaceutical practices are determined by legislative acts of Ukraine. A healthcare institution carries out its activities on the basis of a charter approved by the owner or an authorized body.

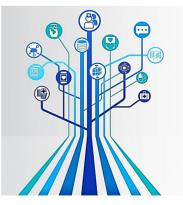
The public healthcare sector is a set of institutions of State and municipal forms of ownership, whose activities are aimed at providing

healthcare to citizens. State-owned institutions are designed to perform tasks of national importance.

In turn, municipal institutions that are owned by local governments provide healthcare at the local level.

In organizational terms, the public healthcare sector can be characterized by two characteristics:

1. *Industry feature*. The sectoral structure of the public healthcare sector in Ukraine testifies to



a wide range of State activities in the field of healthcare: providing medical care to the population of the country, ensuring sanitary and epidemiological well-being, production of medicines, research work.

2. Administrative-territorial feature. Based on the territorial and administrative division of the country and in accordance with the requirements of the approximation of medical care to the direct consumer, three levels of therapeutic and preventive care are distinguished:

- The first level - primary medical-sanitary helf - provides for the consultation of a general practitioner (family), diagnosis and treatment of the most common diseases, referral of the patient for specialized care, preventive measures.

- *The second level* - secondary (specialized) medical care is qualified counseling, prevention and treatment, which is carried out by specialist doctors.

- The third level - tertiary (highly specialized) medical care - is provided by doctors (or their groups) who have appropriate training in the field of complex diseases for diagnosis and treatment, as well as rare diseases.

Primary and secondary medical care is provided in outpatient clinics, rural district hospitals, polyclinics, city and central district hospitals. Tertiary care is provided by specialized and multidisciplinary hospitals, diagnostic and medical centers, dispensaries.

According to the level of subordination, State and municipal healthcare institutions can be divided into two groups:

- medical institutions subordinate to the Ministry of Health of Ukraine;

- medical institutions subordinate to separate departments and administration institutions.



The basis consists of medical institutions subordinate to the Ministry of Health of Ukraine, the total number of which is about 90 % of the entire network of medical institutions owned by the State. The system of institutions subordinate to the Ministry of Health of Ukraine

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is the main provider of medical services that are available to the entire population.

Today, Ukraine is undergoing a transformation of the organizational and economic mechanism for the formation and use of the resource potential of the healthcare system. The direction and course of this transformation depends not only on the orientation towards creating a market environment, but also on the model of organization and management of healthcare system.

The model of the organization of the healthcare system cannot be stable (unchanged), it must be constantly improved. International experience shows that it should cover three autonomous but interrelated spheres of public life:

- the sphere of public healthcare management;
- the sphere of healthcare related to public self-organization;
- the sphere of professional medical activity.

The development of the healthcare system should be based on a combination of interaction between the State, the medical community and public interests. Almost all foreign models of healthcare organization are based on this approach. In different models of the organization of the healthcare system, appropriate emphasis is placed on a particular area of public life.

In the USA, priority is given to public self-organization, manifested in the market organization of the medical services system, the high market value of medical services, and the high authority of American medicine in society. The American model assumes the introduction of personal responsibility of doctors for the volume and quality of medical services into the organization of medical practice services.

In the developed countries of Europe, the sphere of public healthcare management is dominant. In Germany, the State has

mechanism formed for а transferring the contributions of enterprises to healthcare system. In Sweden. the State supports an organized initiative on public health care, but priority is given by direct budget allocation for healthcare sector. In



some developed countries of the world (Great Britain, Finland, Denmark), the basic model of healthcare is dominated by the State (budgetary) component, which assumes almost full reimbursement of medical services costs at the expense of the State budget. Healthcare institutions and other factors of production of medical services are owned and controlled by the State. The market is assigned a secondary role to address the shortcomings of the public healthcare sector. In these mentioned countries, the State acts as a guarantor of social protection of medical workers (minimum wage, pension provision, vacations).



# **Control questions**

- 1. What are the levels at which management relationships occur in medicine?
- 2. Describe the purpose, main objectives, object and subject of management in healthcare.
- 3. Explain the management of medical institutions from two positions.
- 4. Describe the principles and methods of management according to the general classification.
- 5. Describe the management functions that are determined by the level of the management system.
- 6. Provide a general classification of management technologies.
- 7. Describe the main information levels of the emergence of economic and managerial relations.
- 8. Describe the levels of the management system in the medical facility.
- 9. Define the management decision, the requirements for it, and the algorithm of its adoption.
- 10. What are the factors that determine the forms and methods of managing the health care system of the population as a whole and in individual territories?
- 11. What are the most important principles of the development of the national health system, noted in the Resolution of the World Health Assembly?
- 12. What are the basic principles of healthcare in Ukraine?

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- 13. What are the main healthcare bodies in Ukraine?
- 14. Describe the public healthcare sector in Ukraine.
- 15. Reveal the main directions of healthcare development in the modern world.

# Tests



## 1. Management in healthcare, as macro-systems, is:

- A. Activities aimed at improving management forms, increasing production efficiency through a set of principles, methods and means that activate labor activity, intelligence and motives of behavior, both individual employees and the entire team.
- B. The science of management, regulation and control of financial, labor and material resources by healthcare authorities and institutions.
- C. The most effective achievement of the goal by improving the quality of medical, diagnostic and preventive measures and the rational use of healthcare resources.
- D. Direct management of a medical institution as an independent financial and economic unit.

# 2. Management in healthcare as microsystems is:

- A. Activities aimed at improving forms of management, increasing production efficiency through a set of principles, methods and means that activate labor activity, intelligence and motives of behavior, both individual employees and the entire team.
- B. The science of management, regulation and control of financial, labor and material resources by healthcare authorities and institutions.
- C. The most effective achievement of the goal by improving the quality of medical, diagnostic and preventive measures and the rational use of healthcare resources.
- D. Direct management of a medical institution as an independent financial and economic unit.

- 3. The totality of all the organs of the management apparatus of a medical institution and their managerial actions is:
  - A. Management in healthcare as a process.
  - B. Management in healthcare as a system.
- 4. Organizational, coordination and operational management principles aimed at activating and strengthening the motivation of each employee and the entire team is:
  - A. Discipline and justice.
  - B. Power and responsibility.
  - C. Unity of command and unity of leadership.
  - D. Centralization.
  - E. Subjugation of individual interests by the common.
  - F. Staff constancy.
- 5. The development of state, regional and municipal healthcare policy; the choice at the state level of the healthcare model and its legislative, regulatory, personnel, organizational, financial, information support is:
  - A. Management technologies of healthcare administration.
  - B. Management technologies of financial administration.
  - C. Management technologies of financial administration of medical institutions.
- 6. At this level, economic relations in healthcare are studied, considered as a large industry in the economy, consisting of a number of subsectors, industries and specializations are:
  - A. Microeconomic level of the emergence of economic and managerial relations.
  - B. Macroeconomic level of the emergence of economic and managerial relations.
  - C. Medium economic level of the emergence of economic and managerial relations.
- 7. There are three levels of management system in the medical institution. The Deputy Chief Doctor in the areas and sections of work, including the chief (senior) nurse, present:
  - A. Strategic management level.
  - B. Tactical level of management.
  - C. Operational level of management.

- 8. The structural elements of a comprehensive public healthcare system are:
  - A. Bodies and institutions of medical and social services.
  - B. Relevant healthcare and social welfare agencies.
  - C. Relevant international organizations (WHO, UNESCO, UNICEF, ILO).
- The Law of Ukraine "Fundamentals of the Legislation of Ukraine on Healthcare" defined the basic principles of healthcare in Ukraine. Name 2-3 principles and briefly describe them.
- 10. Based on the territorial and administrative division of the country and in accordance with the requirements of the approximation of medical care to the direct consumer, three levels of therapeutic and preventive care are distinguished. Qualified counseling, prevention and treatment, which is carried out by specialist doctors is:
  - A. Primary health care.
  - B. Secondary (specialized) medical care.
  - C. Tertiary (highly specialized) medical care.
  - D. Sanatorium treatment.

# Situational tasks

#### Situational task

#### "Theory of organizations and management of the healthcare system"

In order to better understand how functioning healthcare organizations, let's look at the allegorical images of healthcare organizations.

According to the classification of G. Morgan, there are eight allegorical images: machine or mechanism, head, tyrant, playground, mental prison, biological mechanism, political system, hologram.

Which view is more appropriate?

#### Mechanism

Classical bureaucratic theories depict an organization through a mechanism. Indeed, employees can talk about an organization as



a "well-oiled mechanism." In this allegory, an organization is depicted as a set of interconnected parts with well-defined functions that are mounted in such a way that they ensure the work of the organization. To perform many tasks in medical care, it is important to be a well-oiled mechanism, performing admission of patients to hospitals, clerical work, work of issuing bills for patient care, conducting laboratory tests, passing the procedure for obtaining permits, etc.

The disadvantage of this allegory is that machines age quickly and cannot be flexible with increasing demands and changing circumstances. An organization based on a mechanism sees order and stability where they are not even close, and therefore quickly becomes organizationally and technically obsolete.

#### Tyrant

Organizations can also behave like tyrants or act as instruments of domination. In fulfilling their assignment, they may lose sight of basic human values and exploit their employees both unconsciously and intentionally. This may underlie the fear of many doctors that they feel before large and complex healthcare institutions, such as, for example, systems and networks of medical services, the number and size of which are increasing. The imaginary images that arise in the minds of many doctors correspond to the images of tyrant organizations that restrict their freedom and autonomy and make unilateral decisions without asking the opinion of doctors. The allegorical image of a tyrant is the shadow side of the functioning of an organization, and the leaders of organizations should be on guard to prevent their organization from becoming such a tyrant.

#### Head

The allegorical image of the head emphasizes the importance of learning, intelligence and information processing. It partly corresponds to the cybernetic theory based on four basic principles:

1. Systems have the ability to sense, perceive and track important aspects of their environment.

2. Systems can compare information with the norms governing their behavior.

3. Systems can detect significant deviations from these norms.

4. Having detected a discrepancy, the systems are able to proceed with corrective actions.

When these conditions are met, there is a process of long-term information exchange between the organization and the outside world, which allows the system to function spontaneously, carrying out self-correction. Such work is characterized by training, followed by a revision of the studied experience, which allows you to look at the situation from the outside and question the relevance of the provisions that form the basis of the work.

The allegorical image of the head is especially useful for healthcare institutions in terms of maximizing the ability of individuals and groups to learn from the examples offered by the environment and using information to create innovative programs and services. It is in tune with the school of human relations, noting the personal growth and development of employees.

#### Playground

Organizations can be viewed as playgrounds or stages where people demonstrate their "art". For healthcare institutions, it is often associated with complex work performed by many talented individuals. These are professionals – doctors, nurses, physiotherapists, technologists, scientists, managers and many others. They have a highly developed sense of professionalism and professional pride. When representatives of one culture begin to emphasize the greater importance of their beliefs and values compared to others, they often come into conflict with each other. As a result, an "internecine war" often breaks out, which needs to be extinguished. The problem is to develop a common sense of belonging to the organization for each of its employees, which could absorb the individual culture of different medical professionals. When this is done and the goals proclaimed by the school of human relations are achieved, people are able to work effectively on the implementation of interrelated tasks.

#### Mental prison

Organizations can also be viewed as places where people fall into the trap of their own perception of the world, their ideas and beliefs, consciously or unconsciously. This often manifests itself in a tendency to avoid conflicts, avoid situations involving hassle, or because of an attempt to maintain a sense of self-respect and high self-esteem. Such issues can be especially important for healthcare institutions, because, as noted above, individuals are very often identified with their responsibilities. This is the negative side of the school of human relations emphasizing the importance of personal professional growth and development.

#### **Biological organism**

Recently, it has become popular to think of organizations as biological organisms, that is, as different species forced to adapt to

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the environment during birth, development, aging and subsequent death. This concerns the question of how organizations adapt to the environment. The organization, as it is considered in the theory of situational conditioning, the concept of strategic management, the theory of population ecology and institutional theory, can largely be figuratively compared with a biological organism. The theory of situational conditionality emphasizes, first of all, the importance of the internal structure and its correspondence to the purpose, and the theory of strategic management emphasizes the correspondence of the internal strategy to the environment of the organization. The approach from the standpoint of population ecology emphasizes the importance of the influence of external forces, which inevitably select the most adapted to survival from various types of organizations. The institutional theory suggests that the only way in which organizations can succeed in order to maintain the necessary legitimacy of their actions and trust from the authorities and the environment is imitation or "fitting" to the values and norms that guide this environment. The allegorical image of an organization as a biological organism highlights the interconnectedness of the organization and the environment, which over time can become very useful for managers of healthcare institutions in their work. Organizations that vary in size and are at different stages of their own existence require different resources and different strategies to achieve success.

#### Political system

In addition, organizations can be viewed as political systems in which different groups compete with each other for the right to control important resources. The organization is run by the one who controls these resources and decides how to use them to meet the interests of different groups. Considering that many different professionals work in healthcare institutions or cooperate with these institutions, the allegorical image of the organization as a political system is especially expressive. Doctors, managers, nurses, scientists and other groups of workers often struggle for control over important resources in order to push their point of view on what is good for the organization. This allegorical image is very closely correlated with the allegory of the playground, when the organization is a playground or a battlefield for control over resources. When the situation gets out of control, healthcare institutions can turn into mental prisons or tyrants. The theory of resource dependence is consonant with the allegory of the political system, since it focuses on the ways in which an organization acquires and controls resources.

#### Hologram

A hologram is an object, even a small element of which contains all the information about the object or image depicted on this hologram. A hologram is an object, even a small element of which contains all the information about the object or image depicted on this hologram. Although the allegory is often used in combination with the allegory of the head, it is believed that by considering it separately, one can better consider its specifics. The idea is embedded in the allegorical image of the holographic structure: to embed the whole into the parts and create the whole in such a way that the entire set of functions can be performed faster, and not just one specialized type of them. The creation of healthcare institutions based on the hologram principle emphasizes the need for flexibility, creativity and innovation. The culture of the organization, its structure and information processing improves the properties of the hologram. This allegory is consonant with the concept of strategic management in the sense that it considers the organization as a whole when placing individual elements in such a way that they can interact with the outside world, recognizing the relationship between the forces of the external environment and the internal components of the system. The idea is to see the strategy of the organization expressed through the tasks and functions of individual employees, as well as in the accumulation of employees' activities when performing a multidimensional task, that is, through the relationship of "part to whole." Viewing healthcare institutions as holograms can provide a deep understanding that will contribute to the need to combine the many components of healthcare institutions into a more coherent whole.

An example at the micro level can be the training of workers in related professions so that one person can perform more functions and cope with more tasks.

At the macro level, an example may be the development by some healthcare institutions of a vertically integrated regional healthcare system to provide more coordinated care in a wide range of patient needs.

As stated in the above allegories, the essence of management is to encourage individuals and groups to perform technical tasks in order to achieve the goals of the organization and at the same time to update the organization for long-term survival and development as it makes its way into the future.

*The purpose of allegories* is to encourage the reader to think about the problems of healthcare organizations. Although they are presented

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in sequential order and by category, it is important to note that they constitute a continuum of concepts that can overlap each other.

After reading about them, come back again to the question:

Which view is more appropriate?

Have your views on these issues changed?

# PERSONNEL MANAGEMENT OF HEALTHCARE INSTITUTIONS. FUNDAMENTALS OF REMUNERATION IN HEALTHCARE

- 1.2.1. Basic principles of personnel management in healthcare institutions.
- 1.2.2. Personnel policy in healthcare institutions.
- 1.2.3. Features of the selection of medical personnel.
- 1.2.4. Evaluation and certification of doctors.
- 1.2.5. Forms and systems of remuneration of medical personnel.
- 1.2.6. Motivational mechanisms of medical personnel management.

# 1.2.1. Basic principles of personnel management in healthcare institutions

Personnel management is an integral element of healthcare management in general. It is subordinated to the general organizational goals and is aimed at achieving the objectives of the general management system of healthcare institutions.

In management theory, there are many definitions of personnel

management that reflect the evolution of the process and the interpretation of this concept at the appropriate points in time.

## Personnel management is:

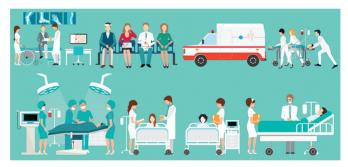
1. The activities of the organization aimed at the effective use of personnel to achieve goals, both organizational and individual (personal).



2. The type of activity that represents the management of people and is aimed at achieving the goals of a firm, organization, enterprise or institution by using the labor, experience, talent of these people, taking into account their satisfaction with work.

It follows from this that the **concept of personnel management has two main aspects**: (1) functional; (2) organizational.

From the functional position in personnel management, it is understood to perform such important tasks as: definition of the general strategy of personnel management; formation and implementation of personnel policy; planning of personnel requirements taking into account the working personnel; recruitment, selection and evaluation of personnel; adaptation of personnel; training and development of personnel; promotion system (career management); dismissal of personnel; construction and organization of work, in particular, the definition of workplaces, functional and technological links between them, the content and sequence of tasks, working conditions; formation and implementation of the policy of wages and social services; management of personnel costs.



From the organizational point of view, personnel management covers all employees of the organization and all its structural units responsible for working with personnel.

**Personnel management of a healthcare institution** is a continuous dynamic process of human resource management, the purpose of which is the optimal use of the potential of personnel based on personnel planning, selection and selection, placement, adaptation, professional development, motivation and stimulation, as well as regular objective monitoring and evaluation of the activities of the institution's staff to achieve its goals, both organizational and individual.

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Consequently, *the strategic goal of modern management of healthcare institutions* is the development of a strategy for the formation of healthcare personnel. This is confirmed by the fact that effective personnel management serves to solve the complex task of improving the quality of medical services to citizens of the country, which is the main goal of the existence of the national health system.

*The main task of personnel management* is the continuous search for tools to increase productivity and labor efficiency, implemented through the use of modern management tools and the rational use of existing human resources – personnel.

Personnel in the modern socioconditions economic of the development of the world economy act as the key factor in the competitiveness of any organization, regardless of the form of its ownership and the size of the industry in which it operates. In healthcare, an extremely important role is assigned to medical personnel, and especially doctors, because they are the most important subjects in the process of providing medical services to citizens of the country. Consequently, medical personnel directly influence



the national healthcare system and its upward development, using their abilities and acquired competencies, striving for selfimprovement and motivated to fruitful professional activity. All this acts as the main task of the personnel management system of a modern healthcare institution.

What is staff? Is there a difference between the personnel and the staff of the organization?

The personnel are the entire personnel of the organization, all permanent and temporary employees, and representatives of qualified and unskilled labor. The term "personnel" should be distinguished from the term "staff."

The concept of **staff** is understood as full-time (permanent) qualified employees who have undergone preliminary professional training, have labor skills, work experience, special knowledge in the chosen field of activity and are in labor relations with the

management of the organization. However, most often in practice we identify these categories.

The personnel structure refers to the ratio of the number of different categories of employees, for example, managers and ordinary performers, workers engaged in manual and mechanized labor, etc. The structure of the company's personnel can be: staffing, organizational, social and role.

*The staffing structure* of the personnel reflects the quantitative and professional composition of the staff, the amount of remuneration and the salary fund of employees.

*The organizational structure* of the personnel characterizes its distribution depending on the functions performed.

*The social structure* of the company's personnel characterizes it as a set of groups classified by: job content, level of education and qualifications, professional composition, work experience, gender, age, nationality, direction of motivation, standard of living and employment status.

*The role structure* of the personnel determines the composition and distribution of creative, communicative and behavioral roles between individual employees.



Does the category of "personnel" in the field of healthcare have its own characteristics?

Unlike other branches of the economy, in the medical industry, the main subject of relations is a medical worker or a healthcare worker.

Medical and pharmaceutical workers (healthcare workers) are

an established legal concept that is used both in the acts of current legislation and in the scientific literature. This is a separate category of workers whose professional activity is aimed at the prevention, diagnosis and treatment of diseases or rehabilitation of patients, the implementation of other healthcare measures.

Consequently, the *medical professional* is a person who has acquired professional medical training and works in a healthcare institution (or is engaged in individual medical practice).

Modern healthcare institutions are characterized by versatility and represent complex socio-economic and functional systems.

They consist not only of medical and paraclinical departments that ensure the appropriate process of providing medical services to the consumer, but also other professional and qualification groups, each of which participates in the activities of this institution.



among which it is necessary to distinguish auxiliary (service) services, such as administrative, economic, engineering, legal and economic (transport, washing, catering, security, etc.).

In general, the structure of medical personnel, on the basis of professionalism and the work they perform, it can be represented as follows:

- higher medical staff (doctors of different functional areas);

- secondary medical personnel (in particular, paid nurses, manipulative nurses, laboratory assistants of clinical laboratories, X-ray laboratory assistants, nurses of physiotherapy rooms, etc.);

- pharmacists;

- junior medical staff.

The specifics of the professional activity of the staff of the healthcare institution according to the classification of categories of employees are regulated by law, in accordance with the list of professions and positions of medical workers approved by Order of the Ministry of Health of Ukraine No. 117 dated 29.03.2002 amended on 29.07.2022) "Handbook of qualification (as characteristics of professions of workers", "Healthcare" magazine, issue No. 78. Thus, the following types of professions belong to the category of workers in the healthcare industry: (1) chief managers; (2) medical professionals (except dentistry); (3) dental professionals; (4) professionals in the field of pharmacy; (5) professionals in the field of preventive medicine; (6) other medical professionals; (7) specialists; (8) laboratory assistant (medicine); (9) laboratory assistant (pharmacy); (10) technical employees; (11) workers.



Depending on these categories and positions, the level of wages, allowances and surcharges is set.

The healthcare personnel are very heterogeneous, which complicates the process of managing it.

Medical personnel are the key system due to the fact that they

element of the national healthcare system due to the fact that they are the "producer" of healthcare services. Consequently, medical personnel create quality medical services and highly qualified medical care. Accordingly, the medical and socio-economic efficiency of the industry depends on medical personnel, and the results of their activities depend on an adequate personnel policy implemented in healthcare institutions.

## 1.2.2. Personnel policy in healthcare institutions

In general, the personnel management process of a healthcare institution should consist of the following subsystems (personnel measures, that is, actions aimed at achieving compliance of personnel with the tasks of the organization):

- forecasting and planning of the quantitative and qualitative composition of the personnel, taking into account the existing staff;

- labor market research;
- recruitment and selection of personnel;
- personnel adaptation;
- definition and organization of work;
- formation of salary policy and social package for employees;

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- training and professional development of personnel;

- conflict management;

 management of an effective system of motivation and stimulation of activities;

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- career development planning and organization (career management);

- labor productivity management;
- monitoring and evaluation of activities;
- dismissal of personnel.

All these subsystems are elements of the personnel policy of the organization.

**Personnel policy** is the key element of the overall development strategy of a healthcare institution and the mechanism for implementing state personnel policy in the field of healthcare at the micro level.

The personnel policy of the healthcare institution is the master plan for working with personnel that defines a set of rules, standards, norms and tools for personnel work and has a long-term nature of action. The effectiveness of the personnel policy of any organization (enterprise, company, institution) is determined, before all, by the interaction and mutual agreement of different qualities of the organization's policy in relation to personnel as human capital.

**Human capital** is understood as the stock of knowledge, skills, competencies, health and motives created and accumulated by a person as a result of investments, which can be expediently used in a certain area of social production, lead to an increase in labor productivity and the efficiency of the production process, consequently, they have an impact on the increase in the amount of the person's income and the profit of the organization (enterprise, company, institution) in which the person works. Thus, the costs of healthcare, education, knowledge, profession, development of professional competence, etc. represent investments in human capital. Thus, human capital is the set of knowledge, competencies, skills, abilities, as well as motives that the person possesses, acquired during educational and practical activities, which are used for a certain period of time to implement the production process.

Accordingly, human capital is one of the key values of an organization (enterprise, company, institution), since its main components are education, knowledge, competence, cognitive abilities of individuals, the level of culture and morality, the motives used by them and the subject of economic activity to obtain social and economic benefits. Yes, the formation and development of human capital is the main task of the personnel policy of any organization.

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The development of personnel policy determines management decisions of all structural divisions of the organization (enterprises, companies, institutions). The components of the personnel policy are the personnel measures that we listed earlier. It involves, first of all, the formation of a personnel management strategy, that is, the personnel strategy.



The personnel strategy (HR strategy) is a promising comprehensive plan of measures for human capital management based on the HR policy and development strategy of the institution. Thus, the personnel strategy is an integral part of the strategically oriented policy of the organization (enterprise, company, institution). At the same time, it is advisable to consider the strategy and tactics of working with personnel as the single system.

The formation of personnel policy and HR strategy are reflected in the charter and philosophy of the healthcare institution, the collective agreement, internal regulations, basic provisions on the personnel work of the institution, etc. The personnel policy and HR strategy provide for a new qualitative stage in the formation and development of personnel of a healthcare institution, which is aimed at ensuring the sustainable development of this institution, in particular, and improving the quality of medical care in general.

When forming the personnel management policy and strategy in healthcare institutions, the number of characteristics of the management system of this industry in Ukraine should be taken into account, which have a direct impact on the implementation of personnel management functions, in particular:

- monopolism of the Ministry of Health of Ukraine as the central executive authority in healthcare;

- rigid system of subordination;

- bureaucracy of management, including in the system of division of labor;

- rigid hierarchical structure;
- rigid specialization of activity;

- the focus of the institution's activities, first of all, on the consumer of medical services;



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- the diversity of the staff of the healthcare institution.

The key principles of building the personnel policy in the field of healthcare are:

- focus on a strategic approach;

- definition of personnel as the main factor of competitiveness and efficiency;

- giving priority to democracy and partnership in social relations;

- investing in the training and professional development of the institution's staff;

- increasing the level of psychological comfort in the exercise of labor activity.

The tools of personnel policy include:

1) personnel planning;

2) current personnel work;

3) implementation of personnel management;

4) personnel training and development activities;

5) measures to resolve social contradictions;

6) mechanism of motivation and stimulation.

The personnel policy is reflected in the main documents of the healthcare institution: the charter, philosophy, collective agreement, development strategy of the institution, collective agreement, internal regulations, basic provisions reflecting the activities of the personnel management system (among the main ones are the Regulations on Remuneration, the Regulations on Personnel Certification, the Regulations on Training and Professional Development, etc.).

Types of personnel policy:

1) According to the level of influence of the management apparatus on the personnel situation:

Passive personnel policy is characterized by the following features:

a) the administration of a healthcare institution does not have a clear program of personnel actions, and personnel work consists in eliminating negative consequences;

b) the lack of a forecast of personnel needs and methods for evaluating the work of personnel, diagnosing the personnel situation;

c) the administration of a healthcare institution works in emergency response mode to conflict situations, strives to eliminate



them by any means without analyzing the causes and possible consequences.

The reactive personnel policy consists of the following:

a) the administration of a healthcare institution monitors the symptoms of a negative state in working with staff, the causes and the situation of the development of a crisis state;

b) the lack of motivation for high-performance work;

c) the personnel service has the means to diagnose the situation, and, if necessary, provides emergency assistance;

d) problems arise with medium-term forecasting.

Preventive personnel policy consists in:

a) the healthcare administration has reasonable forecasts of the development of the personnel situation, but has no means of influencing it;

b) the personnel service owns not only the means of personnel diagnostics, but also forecasts of the personnel situation for the medium term;

c) the main disadvantage of this is the lack of targeted personnel programs.

The active personnel policy consists in:



a) the administration of a healthcare institution has not only forecasts, but also means of action on the situation;

b) the personnel service develops anti-crisis personnel programs, monitors the

situation, it regulates the implementation of programs in accordance with changes in the internal and external environment;

c) the administration of a healthcare institution has high-quality personnel work programs with options for their implementation in different situations.

The adventurous personnel policy is as follows:

a) the administration of a healthcare institution does not have a qualitative diagnosis of personnel policy, but seeks to influence the situation;

b) the personnel service does not have the means to predict the personnel situation, but personnel work plans are included in the development programs of the institution, providing for the timely elimination of possible consequences from a change in the situation;

c) plans are based on emotional, poorly reasoned measures without prior and comprehensive consideration, and with sudden changes in the market situation, they are unable to quickly retrain personnel to work in new conditions.

#### 2) According to the degree of openness, the formation of personnel can be as follows:

The open personnel policy is characterized by the fact that a healthcare institution is transparent to potential employees at any level, you



can come and start working both from the lowest position and from a position at the top management level. The institution is ready to hire any specialist if he/she has the appropriate qualifications, without taking into account work experience in this or related institutions. This type of personnel policy is characterized by modern private clinics that are ready "to buy" people of any position, regardless of whether they worked in their specialty. This type of personnel policy can be adequate for new organizations leading an aggressive policy of market conquest, focused on rapid growth and rapid entry to the forefront in their industry;

*Closed personnel policy* is characterized by the fact that healthcare is guided by the fact that the replacement of personnel occurs only from the staff of this institution. This type of personnel policy is typical for healthcare institutions that are focused on creating a certain corporate atmosphere, creating a special spirit of involvement, and even, possibly, working in conditions of a shortage of human resources.

The comparative characteristics of the open and closed personnel policy are given in Table 1.1.

The algorithm of personnel policy development can be represented as a sequence of interrelated actions and stages schematically presented in Fig. 1.1.

The process of forming the personnel policy of the healthcare institution is subject to the general principles of strategic management.

#### Table 1.1

-	-	
HR process	Open personnel policy	Closed personnel policy
Recruitment of staff	In the labor market – there is high competition among specialists	In the labor market - high labor places shortage, lack of influx of new specialists
Personnel adaptation	The possibility of quick inclusion in professional activities	Effective adaptation due to a well-thought-out adaptation mechanism: training, high team cohesion
Personnel training and development	As a rule, it is carried out in external training centers	As a rule, it is carried out in its own training centers
Personnel promotion Low rates of career growth, as the trend of recruiting new staff prevails		Promotion of own employees from the personnel reserve
Motivation and stimulation	Preference is given to staff incentives	Preference is given to staff motivation issues

Comparative characteristics of open and closed personnel policy

The rational organization of the process of forming the personnel policy of the healthcare institution requires compliance with the following requirements:

- ensuring the compatibility of personnel policy and the overall development strategy of the institution;

- ensuring the compatibility of its structural elements (directions, sections, principles, tools and plans);

the use of cross-cutting indicators characterizing the effectiveness and efficiency of personnel policy in all areas of activity;
 consistency in the development of measures for the implementation of the main stages and the achievement of the goals and objectives of the personnel policy, which is provided for in the main documents of the institution.

The central element of the personnel policy is the personnel management strategy of the organization, the mechanism of which represents a choice from a set of alternatives, taking into account the existing advantages, disadvantages of the personnel management process and consistency of actions. It consists of a common set of elements inherent in the strategy, namely: systems of priority goals (mission, vision, goals, and tasks), priority areas of activity, systems of functional strategies, methods of

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formation and redistribution of resources, action plan/program, strategic controlling and feedback systems.

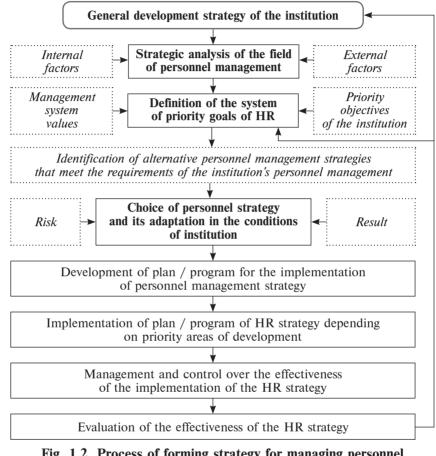


## Fig. 1.1. Stages of formation of personnel policy of a healthcare institution

In general, the process of forming a personnel management strategy is presented in the form of a model in Fig. 1.2.

The personnel management strategy depends on the overall development strategy of the institution and the strategic management process established in the institution, on the management structure and management mechanisms chosen by the management, the level of financial support of the institution. The system of priority goals of personnel management directly depends MANUAL

on the general and priority areas of the institution's activities, as well as the values to which the institution's management system is subordinated. Its formation is influenced by both internal and external factors of the institution's activity.



## Fig. 1.2. Process of forming strategy for managing personnel of healthcare institution

The personnel management process involves a wide range of functions provided for in the personnel strategy and plans/programs for its implementation. The development of a personnel management strategy requires a detailed approach and analysis of the specifics of the activity, careful forecasting of the result of the management

impact on the staff and the risks and negative consequences that may arise as a result of this influence.

There are many types of personnel management strategies. Let's look at some of them.

*The personnel strategy* of ensuring low costs is applied by healthcare institutions that provide standard medical services of standard quality and expand sales markets due to low prices.

To ensure leadership in spending, a healthcare institution should focus primarily on attracting and securing medium-qualified medical specialists in common nosology – general practice, otolaryngologists, cardiologists, etc. There is no need to attract highly qualified personnel with a high level of scientific and creative potential. Managers are expected to have administrative properties.

The personnel strategy of ensuring differentiation is applied by healthcare institutions that provide various types of high-quality medical services for a market with diverse demand. To ensure the implementation of this strategy (conducting marketing research, product development and promotion for each market segment), highly qualified specialists and highly qualified specialists of different profiles are needed. Managers are expected to have leadership qualities and an entrepreneurial approach to management. This strategy is usually used by private multidisciplinary clinics.

The personnel strategy of ensuring focus is applied by healthcare institutions that focus their efforts on individual market segments (patient groups, services, needs, etc.). In this case, institutions need specialists of a narrow specialization who perfectly know the target segment,



the needs of patients (clients), etc. This strategy is usually used by ophthalmological clinics, private maternity hospitals.

In their development, all organizations go through several stages: the beginning of activity, dynamic growth, stabilization (maturity), reduction and liquidation. To ensure the main development strategy, different variants of the personnel management strategy are used at each stage, in particular:

*The personnel strategy at the beginning* of the organization's activity (e. g. development of a new line of activity, start of a new business,

creation of a new organization). The strategy is typical for healthcare institutions that are just starting out on the market (they have enough projects, but few resources to implement them), and for institutions that can afford to invest financial resources in high-risk projects.

To ensure the staffing of this strategy (it is also called the entrepreneurship strategy), the organization needs innovative employees who make decisions quickly, take responsibility for risks, agree to work long and intensively, support the ideas and policies of the institution.



Recruitment is carried out mainly from young initiative people with high potential and competence. The evaluation of the activity is little formalized and is carried out mainly based on individual results.

Remuneration is provided

through the involvement of employees to participate in the implementation of the institution's strategy, in the development of management decisions.

Professional development is encouraged. Opportunities for growth and individual development are quite important, because the organization's strategy is based on the high individual potential of employees.

The personnel strategy of the organization with dynamic growth. This strategy is characteristic of young healthcare institutions, regardless of their field of activity, striving to become leaders in the medical industry in the shortest possible time. They are characterized by constant and high rates of business scale increase. This strategy provides the competitive advantages of the company through active penetration into new markets, diversification of services, constant innovation.

The personnel strategy with the dynamic growth of the organization should ensure the involvement of highly qualified personnel with creative and entrepreneurial qualities. The issue of assigning personnel to positions is not so important at this stage, since in many cases the staff is still in the process of formation. The most important points:

creating an effective system of remuneration and motivation;

- formation of a favorable moral and psychological climate in the organization;

- continuous professional development of personnel;

- providing opportunities for professional and professional growth.



The problems of retraining, social guarantees in the framework of the implementation of this personnel strategy are not of great importance.

The personnel strategy with stable growth of the organization. At the stage of stable growth (maturity), healthcare institutions expect to receive a constant profit through a well-established process of providing high-quality medical services. The main task at this stage is to provide more medical services while minimizing costs.

The personnel strategy for ensuring the stable growth of the organization has the following features:

- the use of clear procedures and rules, regular and strict control in the recruitment and selection of personnel;

- only those specialists are accepted, in whose competence the institution is currently interested, and who are ready to immediately begin performing their official duties;

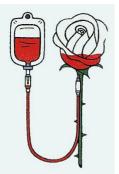
- the involvement of personnel to participate in management is not encouraged and is used only when the quality of products deteriorates, profits decrease to solve these problems;

- the processes of internal movement of personnel, their retraining, strengthening of social guarantees, and dismissal of employees of retirement age are becoming more important for healthcare institutions.

To implement a personnel strategy of this type, managersadministrators who work effectively in bureaucratic organizations are required.

The personnel strategy for the reduction, liquidation of the organization's business has the following features:

- the staff is not involved in the development and implementation of solutions;



 additional recruitment of specialists is not carried out, professional development of workers is not organized;

- remuneration of employees is carried out exclusively in accordance with official salaries, no other forms of incentives are applied;

- the assessment of specialists is based on criteria developed taking into account the need to reduce entire areas of activity;

- conducting mass layoffs, assistance in finding employment, encouraging early retirement, preserving the most valuable part of the staff that meets future areas of work.

This type of HR strategy requires a combination of entrepreneurial and administrative qualities of managers, rigidity, allowing to save the organization from collapse.

The personnel policy together with the personnel strategy allow:

1) to provide the healthcare institution with the necessary human resources, taking into account the strategic goals and priorities of the institution's development;

2) to form an internal environment of the institution aimed at the result;

3) to implement an effective



system of motivation and stimulation of personnel;

4) to form and develop the human capital of the institution through a comprehensive system of training and professional development of personnel;

5) to develop professional competencies of senior personnel at all levels of management;

6) to provide information and psychological support for staff support during all types of activities of a healthcare institution.

MANAGEMENT IN HEALTHCARE

**FEXTBOOK** 

### **1.2.3.** Features of the selection of medical personnel

*Proper planning of the staffing needs of a medical institution* is the main factor in improving the quality of medical services, reducing personnel costs and reducing downtime of medical equipment. It is the heads of healthcare institutions which are responsible for planning the need for personnel and staffing with employees.

Optimization of staffing of a medical institution increases the efficiency of its activities. Understaffing leads to excessive workload of employees, emotional burnout, fatigue, and, accordingly, to a decrease in the quality of medical services, loss of the business image of a healthcare institution, an increase in the number of complaints and dissatisfied patients with treatment.

The analysis of the provision of a medical institution with personnel is carried out in the following areas:

#### 1. Analysis of the number of personnel (quantitative analysis).

For such an analysis, it is necessary to compare the planned indicators with the actual ones for the analyzed period and with similar indicators for the previous period. The analysis is carried out in the following categories: doctors, secondary medical personnel, junior medical personnel, other personnel, non-medical personnel – administrative and managerial (managers, professionals, specialists): general director, director, medical director, chief accountant, economist, lawyer, human resources inspector, labor protection inspector, etc. and economic personnel (technical employees, workers): boiler room operator, housekeeper, territory cleaner, janitor, security guard, driver, etc.).

When making a budget for personnel costs, first of all, it is necessary to correctly determine the need for personnel by categories

of personnel. To do this, you should set a planning period (a year or a longer period). Based on the analysis of the movement of personnel, and their turnover, as well as in accordance with the strategic development plan of the institution, it is possible



to predict the acceptance and retirement rates of personnel, and staffing indicators.

Planning the need for personnel will optimize the costs of it. To plan the need for administrative and managerial personnel, the following regulatory documents can be used:

- Planning the number of human resources inspectors. Intersectoral standards for the number of employees engaged in recruitment, placement, advanced training (retraining) and personnel accounting, approved by the Order of the Ministry of Labor and Social Policy of Ukraine No. 341 dated 18.12.2003. For example, with the number of employees up to 200 people and structural divisions – up to 20, the standard number of human resources inspectors is 1.3, and with the number of employees from 400 to 500 people – 2.0.



- Planning the number of accountants. Intersectoral standards for the number of employees accounting approved bv the Order of the Ministry of Labor and Social Policy of Ukraine No. 269 dated 26.09.03 (for example, with the number of employees from 150 to 200 people, the standard number of accountants, depending on the number of structural divisions, ranges from 3.3 to 5.3). should also be remembered that It in

accordance with the Law of Ukraine No. 996-XIV "On Accounting and financial reporting in Ukraine" dated 16.07.1999, the position of chief accountant is introduced in an organization subject to the creation of an accounting service (accounting department). According to the Directory of qualification characteristics of the professions of employees, approved by the order of the Ministry of Labor and Social Policy of Ukraine No. 336 dated 29.12.2004, the chief accountant refers to managers and organizes the work of the accounting service. To confirm the creation of the accounting service, an order is drawn up on the organization of accounting, which assumes that accounting is assigned in the organization to the accounting service headed by the chief accountant. In addition, the Economic Code of Ukraine defines the obligation to draw up a regulation on a structural subdivision. The Regulation on the accounting service establishes the procedure for creating a structural unit, its tasks, functions, rights and obligations, organization of work and relationships with other

structural units of the enterprise. The regulation is signed by the head of the department, approved by a lawyer (if available), approved and put into effect by the head of the enterprise. Therefore, when creating an accounting service, determining its functions, even if there are vacant positions, a chief accountant can be appointed to lead the work of this service.

- Planning the number of employees of the legal service. Intersectoral standards for the number of employees of the legal service, approved by the order of the Ministry of Labor and Social Policy of Ukraine No. 108 dated 11.05.2004.



- Planning the number of economists for financial work. Intersectoral standards for the number of employees for work performed by financial economists were approved by Order of the Ministry of Labor and Social Policy of Ukraine No. 459 dated 07.12.2006. For example, with an average number of employees from 150 to 200 people (depending on the number of structural divisions) the standard number of economists ranges from 0.9 to 1.5.

- Planning the number of inspectors for military accounting. The procedure for organizing and maintaining military records of conscripts and persons are liable for military service was approved by Resolution of the Cabinet of Ministers of Ukraine No. 921 dated 07.12.2016. According to this Resolution, according to the number of conscripts and persons are liable for military service: from 501 to 2.000 people – one inspector of military registration; up to 500 people – the implementation of military accounting can be additionally assigned to another employee (accountant, personnel officer), or the post of an inspector for accounting and booking of military service can be separately introduced.

- Planning the number of labor protection inspectors. The Law of Ukraine "On Labor Protection" No. 2694-XII dated 14.10.1992 provides: if the company employs more than 50 people, then it is necessary to create a labor protection department, if there are less than 50 employees, then the responsibilities for the organization of



labor protection can be assigned to a responsible person who may be part of the personnel department.

- Planning the number of persons on civil defense issues. The Civil Defense Code of Ukraine No. 5403-VI dated 02.10.2012 provides that officials on civil defense issues are appointed in healthcare

institutions with a total number of employees and persons under treatment from 200 to 3.000 people.

#### 2. Analysis of staffing.

At this stage, the staffing of medical and non-medical personnel is calculated by: categories of personnel; staff positions; actually employed staff units; percentage of staffing.

#### 3. Analysis of part-time staff.

#### 4. Analysis of personnel by age composition (qualitative analysis).

In the course of such an analysis, the number of employees of a medical institution is estimated by age categories: up to 20 years; from 20 to 30 years; from 30 to 40 years; from 40 to 50 years; from 50 to 60 years; pensioners – and changes in the structure of personnel for the analyzed period are determined.

#### 5. Analysis of the level of training and certification of personnel.

Influence of the effectiveness of the personnel recruitment system on the staff availability. We will focus separately on the personnel selection system and its impact on the availability of personnel. The increase in the volume of work, the quality of medical services, the effective use of medical equipment, the growth of the company's image and the improvement of performance depend on the provision of a medical institution with professional personnel.

When analyzing such security, it should be borne in mind that an effective personnel selection system depends on how quickly the employee's activities will recoup the costs incurred during the selection of personnel, therefore, the new employee must meet the requirements for professional standards of medical care as much as possible.

Taking into account the high requirements for the medical profession from the standpoint of professional standards of medical care and moral principles, an **effective personnel selection system**  should be applied in healthcare, which will take into account not only the qualification aspects, but also the psychological portrait of the future candidate for the position.

Since we have touched upon the topic of psychology, we note that when selecting candidates for medical positions, it is advisable to check the psychological qualities of the future candidate. To do this. various methods are used. the



most common among which are: the Shmishek Questionnaire, the Five-factor Personality Questionnaire or the Big Five, developed by American psychologists R. McCrae and P. Costa.

The creation of a personnel selection system should be preceded by a comprehensive work on the evaluation of indicators:

- staff movement, staffing, level of concurrency, staff turnover, staff qualifications;

- the presence of errors in the work of the accepted medical staff associated with unprofessionalism, since mistakes lead to a loss of the image of healthcare, to a conflict between a doctor and a patient, to complaints, and in the worst cases - to the death of a patient and criminal cases;

- the number of employees who have not passed the test, their inconsistency with the position they have been accepted for or the work performed during the test period has been established;

- the number of employees who do not meet the position or work performed due to insufficient qualifications;

- the number of employees who do not meet their position for health reasons, which prevents the continuation of this work (especially for doctors working with dangerous infectious diseases, radiologists, radiologists, ultrasound doctors);

- the number of violations of labor discipline by accepted employees. The procedure for applying penalties for violation of labor discipline is defined by the Labor Code of Ukraine. Types of violations of labor discipline: systematic non-fulfillment by an employee without valid reasons of the duties assigned to him by



the employment contract, absenteeism, appearance at work in a drunken state, in a state of narcotic or toxic intoxication, committing theft at the place of work, the one-time gross violation of labor duties by the head of the enterprise, his deputies,

the chief accountant, the commission by an employee performing educational functions of an immoral offense incompatible with the continuation of this work; being late for work, spontaneous abandonment of the workplace (just here it is appropriate to use the data of the absenteeism coefficient);

- an increase in occupational injuries of new medical personnel as a result of non-compliance with safety regulations for handling medical equipment, chemicals, etc.

Evaluation of the above indicators will help to identify gaps in the personnel selection system and identify the main ways to improve it.

An effective personnel selection system is a selection depending on certain needs in the number of personnel, qualifications, experience, age, health status; depending on the psychological profile of the candidate for quick adaptation in the team. To do this, the healthcare institution must:



- establish clear requirements for candidates for the position (gender, age, experience, marital status, health status, the possibility of business trips, including long-term ones, the ability to quickly adapt in a team);

- develop a questionnaire with questions, the answer to which will give the manager an overall picture of the level of business qualities (qualifications, experience, ability to learn quickly, efficiency, patient interaction skills, organizational skills, etc.) and personal qualities (non-conflict, diligence, attentiveness, discipline, decency, punctuality, etc.);

- determine the list of questions that will be asked to the candidate in the interview;

- identify ways to find candidates for the position (advertisement, online recruitment, on the website of a medical institution, educational institutions, HR agencies, an employment center, according to recommendations from employees, acquaintances or reservation of personnel) depending on the financial capabilities of the medical institution. HR agencies can pick up a highly professional specialist, but such services are not cheap. Therefore, if the strategic plan of the organization provides for the expansion of the staff, the costs of staff selection should be reflected in the financial plan;

- determine the obligation (non-obligation) of a resume or recommendations for a previous job; develop a system for evaluating the work of an employee for the period of the test.

Analysis of the rational use of labor resources of a medical institution will allow:

- correctly identify the need for personnel;

- reduce staff turnover;

- correctly make a budget for personnel expenses;

 develop an effective recruitment system;

- avoid conflicts among employees;



- reduce the number of complaints and dissatisfaction of patients with treatment and doctors;

- avoid unnecessary costs for the continuous selection of personnel due to its turnover;

- avoid the costs of adapting personnel who do not correspond to the position held;

- increase the efficiency of the use of the wage fund;

- improve the efficiency of the health care institution.

### 1.2.4. Evaluation and certification of doctors

Evaluation and certification of personnel occupies an important place among the functions of personnel management.

**Employee evaluation** is the process of determining the value and usefulness of specific individuals for an organization. The value of different employees for the organization varies. According to special studies conducted by the Gallup American Institute of Public Opinion in many countries of the world, 55 % of employees are passive performers of work duties, 16 % are actively sabotaging tasks, and only 29 % are passionate about their work and actively



support both current goals and strategic objectives of the organization. With these data, the Pareto conclusion known to managers also goes back: the achievements of the organization are 80 % provided by 20 % of the staff, the remaining 80 % of employees provide only 20 % of the success of the team.

The process of personnel evaluation and certification is implemented for:

- efficient use of available labor resources through optimal placement of employees in workplaces (the competence of the employee corresponds to his functional responsibilities);

- identification of the needs for current and advanced training of employees;

- planning and organization of personnel development;

- formation of a personnel reserve to fill vacant positions;

- planning a business (official) career;

- professional qualification (career) promotion of workers;

- organization of effective material and moral encouragement of employees in accordance with the contribution to the results of collective work, etc.

If the organization does not pay due attention to the evaluation of employees, then it is useless to hope for high performance in a long time.

#### The main tasks of personnel evaluation:

- creation and permanent updating of a reliable database of competence and mobility of employees as an important prerequisite for flexible maneuvering of labor resources in the interests of the organization;

- monitoring the degree of compliance of qualifications, knowledge and skills of employees with the characteristics of the complexity of work, quality standards and productivity;

- obtaining operational information on the quantitative and qualitative parameters of the planned tasks (from variable daily to monthly), as well as urgent orders;

- obtaining information about the attitude of employees to the goals of the organization, as well as

the state of performance and labor discipline;

- systematization of information on the degree of satisfaction of employees with their position in the organization (content and working conditions, level of labor income, prospects for promotion, etc.).

A properly organized assessment process is required not only by the employer, but also by employees, as it provides reliable, unbiased information about their own professional capabilities, competencies and opportunities for professional development and career growth.

Do the evaluation process and certification of medical personnel have their own characteristics? The answer is obvious - yes.

The norms of the Law of Ukraine "Fundamentals of Legislation of Ukraine on Healthcare" No. 2801-XII dated 19.11.1992 provide for training, retraining and advanced training of medical and pharmaceutical workers. This law establishes that medical workers have the right to advanced training, retraining at least once every five years in the relevant institutions.

**Certification of medical workers** is a check and assessment of the business qualifications of employees regarding their compliance with the position held or the work carried out. The certification of medical workers is aimed at improving the activities of healthcare institutions of all forms of ownership to further improve the provision of medical care to the population.



The procedure for certification of doctors was approved by the Order of the Ministry of Health of Ukraine "Some issues of continuous professional development of doctors" No. 446 dated 22.02.2019. Certification of doctors is an integral part of continuous professional development (CPD).



Issues of professional development, retraining, certification are regulated by a number of regulations:

- the Regulations on postgraduate training of doctors (pharmacists), approved by the Order of the Ministry of Health of Ukraine No. 166 dated 22.07.1993 – specialization courses, thematic improvement cycles, information courses and internships;

- the Regulations on the procedure for the certification of pharmacists, approved by the Order of the Ministry of Health of Ukraine No. 818 dated 12.12.2006 – certification to determine the level of knowledge and practical skills with the assignment (confirmation) of the specialty "pharmacist-specialist"; certification for the assignment of a qualification category; certification to confirm the qualification category;

- the Regulations on the certification of junior specialists with medical education, approved by the Order of the Ministry of Health of Ukraine No. 742 dated 23.11.2007 – certification for the assignment of a qualification category; certification in confirmation of the qualification category;

- some issues of continuous development of doctors approved by the Order of the Ministry of Health of Ukraine No. 446 dated 22.02.2019 - certification for the determination of knowledge and practical skills with the assignment (confirmation) of the title "specialist doctor"; certification for the assignment of a qualification category; certification in confirmation of a qualification category;

- the Regulations on specialization (internship) approved by the Order of the Ministry of Health of Ukraine No. 291 dated 19.09.1996;

- the Order of the Ministry of Health of Ukraine "On advanced training of junior specialists with medical and pharmaceutical education" No. 198 dated 07.09.1993.

During the analysis of training, retraining and certification of medical workers, it is necessary to estimate the number of employees who have completed advanced training courses and certification, by type of training and changes in dynamics. Such an analysis will provide information about the qualification level of medical workers, the number of employees who develop their skills, business qualities, deepen their knowledge and practical skills in their specialization. It should also be recalled about the training on labor protection provided for by the Law of Ukraine "On Labor Protection" No. 2694-XII dated 14.10.1992. Thus, officials whose activities are related to the organization of safe work, when hiring and periodically, once every three years, undergo training, as well as knowledge testing on labor protection issues with the participation of trade unions. Employees are not allowed to work, including officials who have not been trained, instructed and tested their knowledge of labor protection.

Two types of certification of doctors are legally distinguished:

- for the assignment of a qualification category;

- to confirm the qualification category.

The legislation also provides for a separate



section on the restoration of medical practice for doctors: (1) those who have not passed the certification for the qualification category in a timely manner; (2) who have been denied certification for assignment or confirmation of a qualification category; (3) who have not worked for more than three years in a medical specialty.

Uncertified doctors must pass the test, and then undergo an internship or specialization courses in postgraduate education institutions or institutes (faculties) of postgraduate education institutions of higher education. The reason for this is the referral from the place of work.

The procedure for certification of doctors. Certification for assignment or confirmation of the qualification category is carried out at the request of the doctor. Modern requirements for doctors require a constant process of continuous professional development (CPD), which makes it possible for the constant development and



improvement of professional skills, and therefore, is aimed at forming a competitive specialist in the labor market. At the same time, it is necessary to confirm the qualification category 5 vears. Extraordinary everv certification of doctors mav occur earlier. If the doctor has

the appropriate work experience and fulfills the requirements for continuous professional development (CPD), he can be certified within a year after the preliminary certification.

Qualification categories are usually assigned in the following sequence: the second; the first; the higher. The certification commission may assign a category to a doctor without observing this sequence. That is, instead of the first one – immediately above. However, this option is possible provided that the doctor: has relevant work experience; demonstrates various types of activities in his personal educational portfolio and significantly exceeds the minimum requirements for the number of continuous professional development (CPD) points per year.

In order for a doctor to receive a certain qualification category based on the results of certification, he must have a minimum work experience in the specialty: the second category is 5 years; the first category is 7 years; the highest category is 10 years.

The doctor displays all the attended continuous professional development (CPD) events and points for them in his personal portfolio. If he is certified in several specialties, he creates an appropriate number of portfolios. Doctors engaged in professional

activities are required to submit a personal educational portfolio for review annually and confirm at least 50 points of continuous professional development (CPD).

A personal educational portfolio with the results of the continuous professional development (CPD) is created by the doctor himself, and the



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head of healthcare institution testifies during the period for which these points are taken into account. Doctors registered as individual entrepreneurs and practicing medicine in the relevant medical specialty, take into account the points themselves.

The HR Department: monitors that the doctor provides a portfolio on time; checks whether the doctor has filled out the document correctly; lists whether the doctor has accurately taken into account the minimum number of points for the corresponding annual period. The HR department employees have no more than 14 working days to check their personal educational portfolios after the deadline for submission. Based on the results of the audit, the personnel department provides for approval to the head of healthcare institution:

- proven personal educational portfolios;

- summary report on the provision of personal educational portfolios by doctors;

- list of persons who must pass the certification in the current year.

Based on these documents, the head of the healthcare institution decides who and when to send for certification.

#### 1.2.5. Forms and systems of remuneration of medical personnel

#### Traditional forms and systems of remuneration for medical workers.

It is easiest to express labor costs in the amount of products produced per unit of time. However, such a meter cannot determine the result of a medical worker's activity, the purpose of which is the patient's health. The concept of "health" is difficult to reflect in value form, especially since such a result is not always the ultimate goal: there are incurable diseases, neglected cases. Mental, physical, nervous expenses of a medical worker also have nothing to measure. That is, the specifics of the profession of medical worker suggest that the criteria for the effectiveness and efficiency of the work of a medical worker are objectively blurred.

The criteria for the doctor's labor costs are determined by the following:

1. *The amount of work* that can be determined by conventional units of labor intensity (ULI), when 1 ULI is taken as the amount



of work of a doctor in the treatment of a disease of this nosological form, taken as a unit (for example, the amount of work of a doctor when applying a seal for medium caries; when visiting a cardiologist on an outpatient basis for therapeutic and diagnostic purposes).

2. *The time* determined by a fiveday or six-day working week (for example, a working week is 38.5 hours:

with a six-day working week, a doctor's working day lasts 6 hours 30 minutes in a hospital; with a fiveday week -7 hours 42 minutes; and for narrow specialists, the working week is 33 hours, the working day with a six-day working week lasts 5 hours 30 minutes).



3. *The quality of work*, which is reflected in such a concept as a qualification category (higher, first, second, specialist doctor).

Although the criteria for the doctor's labor costs are imperfect, however, it is necessary to focus on them when characterizing the forms and systems of remuneration for medical workers, which must fully comply with the principle of payment in terms of quantity and quality of labor, take into account the specific contribution of each employee to the final results of activity. Of all labor standards, time standards are fundamental, all other norms and standards are derived from this indicator.

#### The main forms and systems of remuneration of medical workers:

1. *Hourly wages* depend on the amount of time worked. Its calculation can be made by multiplying the hourly tariff rate by the time actually worked. The low-level tariff coefficient is assumed to be equal to one. *There are two hourly wage systems:* 

- a simple hourly system: the calculation depends on the tariff rate, or salary, and time worked - is a common system of remuneration for specialists and employees;

- the hourly bonus system provides for receiving a bonus for achieving certain quantitative and qualitative indicators in addition to earnings at the tariff rate (salary).

The hourly form has the disadvantage that the employee has a reduced economic incentive to increase the intensity and productivity of labor. On the one hand, it is not difficult to calculate weekly and monthly salaries, expenses for it in a healthcare institution, and on the other hand, hourly wages require more control over the employee,



makes it necessary to have staff controlling his work, who also receive a salary, and this increases the price of medical services.

2. *Piecework wages* are considered more flexible, the payment scheme assumes payment either simply for the quantity or for the degree of performance of the work. *The payment systems for the piecework form are as follows:* 

- *direct piecework system remuneration* is calculated by dividing the tariff rate of the discharge by the corresponding rate of production or multiplying the tariff rate of the discharge by the corresponding rate of time;

- *indirect piecework system* of remuneration is used to stimulate the work of auxiliary personnel serving the main technological process (for example, nurses). The rate of the auxiliary employee is multiplied by the average percentage of compliance with the norms of the main employees or is found by multiplying indirectly-piece rates by the actual number of medical services provided by the main employee – doctor. Then the rate is determined as a fraction of the division of the nurse's tariff rate paid under this system by the total rate of output of the doctors she serves;

- *piecework-premium system* of remuneration. The system includes a combination of a direct piecework system of remuneration with bonuses;

- *piecework-progressive system* of remuneration combines a direct piecework system with payments at increased rates in case of production in excess of standards without reducing quality;

- *accord-piece system* of remuneration establishes payment for the entire volume of work, and not for a separate operation, plus bonuses for shortening deadlines. For example, such a system can be used to evaluate the work of dental technicians;

- *collective piecework system* of remuneration - either individual rates or collective piecework rates are applied according to the final results of work. When using the system of collective contracting, payments are made only according to the final result and include basic wages, bonuses from the material incentive fund, individual bonuses and payments;



official svstem of used for salaries \_ managers. specialists and employees. Such wages can be divided into 2 parts: tariff (payment at tariff rates and official salaries) and super-tariff (additional payment). Additional wages are understood as compensatory

surcharges: for work at night; for work on holidays and weekends; payment of regular (annual) and additional vacations (compensation for unused vacation); additional payment for work with interns, compensation for women who are on partially paid parental leave; severance payments; payment of time for on-the-job training in the system of advanced training and retraining of personnel; the bonus paid from the wage savings fund, etc.

With permanent work, employees are provided with additional benefits: payment of sick leave; pension provision; some organizations subsidize meals and transportation costs, conclude health insurance contracts, pay for legal advice, etc.

The traditional approach to providing additional benefits is that employees of the same level have the same benefits. The individual value of additional benefits for an employee depends on some factors such as age, marital status, family size, etc. Some organizations grant the employee the right to choose, within the established limits, the package of benefits that most suits him. As a rule, this form of remuneration is practiced in the non-governmental sector, including in the relevant healthcare structures. In a budgetary medical institution, an employee enjoys a standard set of benefits extended to the public sector of the economy.

Data for calculating the labor costs of medical workers:

- approved staffing table of employees of the medical institution;

- tariff lists of employees compiled according to the approved form with a separation by categories of personnel

(doctors, secondary, junior medical personnel, administrative and managerial personnel);

- normative annual fund of working hours of medical personnel.

The calculation begins with determining the average salary of employees of the division (excluding vacant positions) who perform the same amount of work. When calculating the wage costs, the salary costs of the main medical staff and the general staff providing the work of the main staff are calculated separately.

In commercial medical institutions, the forms of remuneration of medical workers are selected independently. In budgetary institutions, the remuneration systems of medical workers are focused on payments set by budget financing.

**Individual wage systems** are the modern trend in the development of forms and systems of remuneration for medical workers. This became possible due to the transition to the formation of market conditions of management in medicine. The work of medical workers requires not only an



increase in the volume of services provided, but even better is the use of equipment, quality improvement, economy, rational use of raw materials and materials (for example, in dentistry, this is due to the use of new technologies for processing gold and other metals). Individual wages assume that the main (permanent) part of the remuneration is 1/3 part, and the variable is 2/3 part.

**Multifactor salary systems** are designed to take into account not only the physical, but also the mental and nervous energy of a medical worker. A typical example of a multi-factor salary



system is an analytical assessment of work. It combines an hourly wage system. а method of labor rationing, method of а its qualitative assessment and a method of professional selection of employees. In this case, the entire labor process is divided into a number of factors grouped in a certain order, namely, the degree of responsibility and working conditions are taken into account, and subjective personal assessments of the employee by the head of the medical institution are included.

Medical institutions that provide partial paid medical services mainly use traditional forms of remuneration: hourly wage and piecework, including their different systems. Obtaining additional income by a medical professional in these conditions is associated with paid medical services. In the price of each medical service, by whatever method this price is calculated, there is an element of costs in the form of basic wages. As a rule, the basic salary in the cost of medical services is 35 % in general clinics and 25 % in dentistry. This percentage ratio reflects the general scheme of expenses for the provision of medical care by a medical institution. Having deducted the wage fund from the cost of paid medical services, it can be distributed according to the methodology adopted in a medical institution among medical workers participating in work on a paid basis in addition to the guaranteed minimum determined by uniform labor standards. It is also advisable to merge these funds into a single wage fund and thereby encourage the team to work not only on a paid basis, but also under free medical care programs. In any case, the remuneration of medical workers will be higher than guaranteed by budget allocations.

In medical cooperatives, the remuneration of hired medical workers is determined by an employment contract with them, and the founders of the cooperative receive a share of profit in proportion to their share, unless otherwise provided by the founding contract. In other words, the cost of material costs, wages of employees are deducted from the turnover of the organization, funds are formed (reserve, development, etc.), taxes are paid, interest on loans, etc., and the balance of net profit is divided between the founders.

An individual entrepreneur in the person of a private practitioner receives income on a residual basis, that is, the material costs of the doctor are deducted from the turnover (the volume of paid medical services per year), the income received is taxed, and the remainder amount is paid to the doctor.

A medical company (for example, a joint-stock company) provides an opportunity for shareholders to have three sources of income: wages, dividends and payments from the material

incentive fund. The founders (individuals or legal entities) also receive a statutory profit.

The use of incentive labor payment systems solves the problem of staffing with medical personnel, reduces the need for part-time working employees, to improve a number of qualitative indicators included in the list of coefficients that increase or decrease the salary of a medical worker.

# 1.2.6. Motivational mechanisms of medical personnel management

In order to meet the economic needs and interests of the institution (achieving financial stability, meeting the necessarv profitability standards) and the team (achieving certain development priorities), which will ultimately lead to the



competitiveness of the institution, it is necessary to use appropriate tools, incentives, levers, that is, components of the *motivational mechanism of personnel management*.

Qualitative transformation of forms and systems of remuneration and change of views on staff motivation occurs under the influence of the following factors:

- change of motivational concepts in close connection with radical political, economic, social, spiritual, environmental changes in the world;

- processes of globalization, conditions of a developed competitive environment;

- deep transformations of an industrial society into an informational (post-industrial) one, where knowledge, intelligence, and innovation should play the main role.

The essence of the motivational mechanism is determined by the totality of relations arising both inside the medical institution and in

the external environment - in the relationship of the enterprise with other business entities and the State.

**External relations** (relations with the external environment) are modeled as service-industrial and socio-economic relations that arise in a medical institution in the course of its activities. They do not depend on their activities of the medical institution (in other words, they are static at any given moment).



**Internal relations** are quite mobile, since they are formed under the influence of a clearly defined policy of a medical institution, which itself can change based on the specific needs of medical workers in a given period of time.

Strategies of modern medical institutions can provide for a whole range of goals that require the use of not one, but several motivational mechanisms for managing medical personnel. The structure of motivational mechanisms of medical personnel management should be considered together with the specifics of the economic situation, factors affecting the labor activity of the medical institution staff.

*Example.* The tasks of increasing the volume of medical services in a certain segment of the medical market require the functioning of a motivational mechanism to ensure labor efficiency, which is directly related to the increase in this volume and the growth of profits.

*Example.* The emergence of competitors forces the functioning of the mechanism to ensure the competitiveness of medical services. Such a mechanism, in turn, should introduce somewhat different levers of influence on medical personnel, which will encourage employees to increase the competitiveness of their own workforce by increasing the level of education, qualifications, improving the culture of patient care, and carefully studying consumer demand in the market.

Classification of motivational mechanisms of medical personnel management by types and types (Table 1.2).

Subsystems of the motivational mechanism can act as independent links of this mechanism and simultaneously form it.

## Classification of types and types of motivation mechanisms for personnel management

N⁰	Classification feature	Motivation mechanisms
Types of motivational mechanisms		
1	In relation to the subject of management	<ul> <li>Internal type of mechanism.</li> <li>External type of mechanism.</li> </ul>
Types of motivational mechanisms		
1	By the object of influence in the system of social and labor relations	<ul> <li>Mechanisms of motivation of employees.</li> <li>Mechanisms of motivation of the employer.</li> </ul>
2	According to the content of levers that affect the needs	<ul> <li>Economic.</li> <li>Social.</li> <li>Psychological.</li> <li>Organizational and cultural.</li> <li>Administrative, etc.</li> </ul>
3	By the power of influence on the state of motivation of the individual	<ul><li>Active.</li><li>Passive.</li></ul>
4	By duration of action	<ul><li>Short-term.</li><li>Long-term.</li></ul>
5	By the scale of the action	<ul><li>Individual.</li><li>Collective.</li></ul>
6	By level in the management hierarchy system	<ul> <li>Personal.</li> <li>Microeconomic.</li> <li>Mesoeconomics.</li> <li>Macroeconomic.</li> </ul>
7	According to the direction of the action	Motivational mechanisms: – performance of activities; – ensuring the quality of staff work; – ensuring the competitiveness of services; – increase of entrepreneurial activity; – increasing innovation activity and others.
8	According to the final result	<ul><li>Effective.</li><li>Inefficient.</li></ul>

The most important of them are the follows:

- *property relations* and the relations of ownership, disposal, use, responsibility, independence, economic growth, etc. generated by them;

- *distribution relations* and corresponding labor relations that determine the degree of labor contribution of an employee to the activities of a medical institution;

- relations of the planned organization of the provision of medical services within a medical institution - cost planning, strategic planning, marketing, management, etc.;

- relations of competition - relations of competition of internal manifestation (between separate structural divisions of a medical institution, between its employees, etc.), relations of competition of external manifestation (with other medical institutions, laboratories, etc.).

The object of motivation of medical personnel is their work.

The purpose of creating a motivational mechanism in a medical institution is the high-performance work of medical workers, and all links of the motivation mechanism should be configured in such a way that the need for work prevails over other needs of the individual, formed on the basis of the coincidence of the interests of the medical institution and the medical worker.

With the transition to market relations, the essence of incentives that affect labor motivation and its components – remuneration and income formation of medical workers – fundamentally changes. In this regard, the achievement by a medical institution of an increase in the volume of medical services, an increase in efficiency and labor productivity depends on the motivational management mechanism and incentive system.

The motivational mechanism is a component of the mechanism of interest in achieving maximum economic and social results of a person's labor activity. It is considered as an ordered set of motives formed under the influence of motivating factors for achieving complex goals.

The motivational mechanism as a system should have the properties



of rational integrity and isolation of its elements, the interrelation of which requires changing some elements to change others in order to maintain the effectiveness of the effectiveness of the motivational mechanism. At the same time, there is a certain degree of isolation of elements in order to

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compensate for the change in the content of any element by other elements of the motivational mechanism for the effectiveness of its action. Such elements may be working conditions and differentiation of pay depending on the conditions.

The motivational mechanism as an increase in labor efficiency is understood as a set of methods and techniques of influencing employees from the management system of the organization, which encourages them to a certain behavior in the course of work in order to achieve the goals of the organization and meet personal needs.

At different stages of the market transformation of the economy, the motivational mechanism will certainly have its own specifics.

The influential effect motivational of the mechanism is not limited purely influencing to medical professionals. The motivational mechanism should provide for the such levers action of that would stimulate the employers actions of in a specific direction,



creating certain motives for behavior in the labor market. At the same time, the construction of a motivational mechanism should be adequate to the qualitative characteristics of labor potential, should take into account the peculiarities of the national labor mentality.

The motivational mechanism as personnel management is multicomponent system of economic, social, psychological, а organizational and administrative measures and methods of influencing the satisfaction of actual needs of personnel in the interests of achieving individual and collective goals of employees and the organization, the growth of its competitiveness.

The interests of medical institutions have a direct impact on the public goal, and the motives of their activities directly affect the formation of social needs, since they are in a state of interdependence and condition each other. In addition, the interests of the medical institution influence the formation of incentives – potentially and with a certain temporary effect, given the possible divergence of the interests of the organization with the goals of society.

The ideas about the conditions for the formation of the management model of the motivational mechanism and its essence are shown in Fig. 1.3.

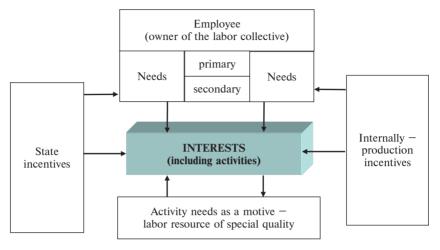


Fig. 1.3. The model of the motivational mechanism of personnel management

This scheme shows that stimulation at all its levels can have an impact simultaneously on all needs and interests (including activities). The very need for activity, as an internal need, is deeply realized as a motive, is formed at the individual level. If it exists, we have a labor resource of a special quality that will have a higher price in the labor market. The presence of such a resource on the market does not mean its implementation at the level of individual medical institutions: for this, an internal mechanism of labor motivation is needed, in the interaction of which links the need for labor (activity) is born in this particular medical institution.

The motivational mechanism of medical personnel management is a set of motivating reasons and conscious ways of economic attitude to the activities of a medical institution, as well as economic actions of collectives and various social groups of medical institutions.

The development of the motivational mechanism of medical personnel management enhances the possibilities of achieving competitive success through the formation of business synergy, as an effect of

combining the creative potentials of professional managers/managers and manifested direct participants in production processes:

- in improving the working capacity of medical personnel;

- quality and competitiveness of medical services;

- efficiency, flexibility and competitiveness of a medical institution.

*Each member of the staff of a medical institution* has the right to have the opportunity not only to ensure their material well-being, but also to realize their professional knowledge, to fully reveal their individual abilities. The realization of this right is the best form of social motivation. The management of the team will be most effective if the expectations and hopes of its members are necessarily fulfilled, and they will not be disappointed with the results of their work.

An experienced manager is always a subtle psychologist and is well versed in the true motives and needs of his various employees. Achieving absolute satisfaction of the needs of each member of the team is almost impossible, but the responsibility of the head is to create such a motivational management mechanism that would most fully implement the tasks set, provided that the main task is



to achieve the competitiveness of the medical institution.

A general idea of the place of the motivational mechanism in the management system of a service sector institution, including a medical institution, presented in Fig. 1.4.

The formation and functioning of the motivational mechanism is always a function of three components:

- results of monitoring external demand for services;
- organization development strategies;
- personnel development strategies.

Depending on the priorities of the activity, the organization should offer the staff a package of incentives (social and economic), actively influencing the needs, and using various economic, psychological, administrative and other levers to adjust the labor behavior of the staff in the necessary direction. The validity and effectiveness of the motivational mechanism depends on taking into account the factors affecting it. In practice, there is a wide variety of factors in medical institutions that can influence the motives of employees' behavior both positively and negatively. The task of management structures is to identify the largest set of factors and to form an internal mechanism of labor motivation based on an optimal combination of positive factors and leveling negative ones.

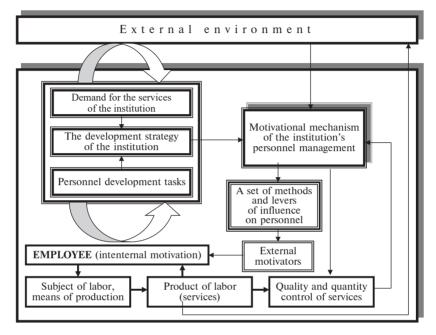


Fig. 1.4. The place of the motivational mechanism in the management system

The main importance in the formation of the mechanism of labor motivation is the relationship of ownership. The strongest need for



activity arises when a person works for himself and it is not at all necessary that independent activity in itself is a motive.

In a market economy, there are different types of organizations that formalize different types of ownership. But, despite the fact that different

forms of ownership differentiate the typology of organizations, there are common features:

- firstly, the management system of these organizations necessarily contains two role functions, which are personified in one or two persons - the owner and/or manager;

- secondly, the functions of ownership, disposal and use of property, the management system and principles are basically the same for all organizations - this is explained by the fact that property and management are in modern conditions the main fundamental structures of the organization as a whole.

The salary estimates the daily labor costs of a medical worker, and not the results of the combined labor of all medical workers of a medical institution.

The results of the activity of the medical institution are evaluated in the market of relevant services and are reflected in the amount of profit received. A part of the salary paid from the profit can be received by an employee in a double capacity: and as an element of the total labor force and, additionally, as a co-owner who has his share in the total capital of a medical institution. Choice by medical professional: or does he receive only wages plus profit based on the results of the institution's work; or wages plus profit based on the results of the work of the entire institution plus a percentage of its share of the total capital; or just wages. All this is possible only in conditions when the medical institution is a joint-stock company.

There are three categories of medical workers who can work in private medical institutions:

1. *The first group* is employees who do not have a share in the total capital, but work in good faith and have the right to receive additional income if the organization has a profit, but do not receive interest on capital due to the absence of such.

2. *The second group* is employees – owners, each of whom has his own share in the total capital. Their income consists of several components: this is a salary, which, in turn, is divided into two parts: the main one, due to the tariff rate or norms, and an additional one, the size of which depends on the profit.

3. *The third group* is workers whose earnings consist only of basic wages, they are not owners, as a rule, they are temporary workers.

In budgetary medical institutions, the profit of the institution and its medical workers does not consist of the above parts.

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Economic factors are basis. the foundation the for creating a motivational mechanism for managing medical personnel. At the same time, the primacy of economic motives is always associated with social motives. Moreover. when hasic material needs are satisfied.

people's activities are more determined by **social motives**. It is obvious that when a certain level of well-being is achieved, both in society as a whole, and at the level of a particular individual, the social motives of activity begin to prevail.

In a market economy, both an ordinary medical worker and the head of a medical institution need motivation. An ordinary medical worker - at least by increasing the amount of earnings, for a manager - perhaps not only economic motives are important, but also social ones.

In modern conditions, the importance of social factors tends to constantly increase, which allows us to conclude about the socioeconomic orientation of the motivational management mechanism adequate to the market model.



#### **Control questions**

- 1. What are the main criteria according to which the labor costs of medical workers are determined?
- 2. Give a description of such a form and system of remuneration of medical workers as hourly wages.
- 3. Give a description of such a form and system of remuneration of medical workers as piecework wages.
- 4. Describe the traditional approach to providing additional benefits to medical professionals.
- 5. Explain the essence of individual wages for medical workers.

- 6. Explain the essence of the multifactor salary system for medical workers.
- 7. Explain the essence of the motivational mechanism, its external and internal relations.
- 8. Provide a classification of motivational mechanisms of medical personnel management by types and kinds.
- 9. Describe the motivational mechanism of personnel management as a system.
- 10. Describe the model of the motivational mechanism of personnel management.
- 11. Uncover the place of the motivational mechanism in the organization's management system.
- 12. What are the main components of the formation and functioning of the motivational mechanism of personnel management?
- 13. Describe the importance of property relations in the formation of the mechanism of labor motivation.
- 14. What are the forms of income that medical workers employed in the private and public healthcare sector can receive?
- 15. Explain the problems of paying medical workers and the importance of social motivation factors.

#### Tests



- 1. The criteria for the doctor's labor costs are determined by the following three norms. Which of them is currently fundamental?
  - A. Scope of work.
  - B. Working time.
  - C. Quality of work.
- 2. In what form of remuneration does a medical worker have a reduced economic incentive to increase the intensity and productivity of labor:
  - A. Direct piecework remuneration system.
  - B. Multifactorial remuneration system.
  - C. Indirect piecework remuneration.
  - D. Collective piecework remuneration.
  - E. Simple hourly wage.

- 3. In budgetary institutions, the existing wage systems are focused on the limitations set by budget financing. For managers, specialists and employees, it is mainly used:
  - A. Direct piecework payment system.
  - B. The system of official salaries.
  - C. Indirect piecework remuneration.
  - D. Multi-factor labor remuneration system.
  - E. Simple hourly wage.
- 4. Under what wage system is it possible to take into account the mental, physical and nervous expenses of a medical worker:
  - A. Direct piecework remuneration system.
  - B. Multifactorial remuneration system.
  - C. Indirect piecework remuneration.
  - D. Collective piecework remuneration.
  - E. Simple hourly wage.
- 5. The use of multifactorial payment systems is possible in the case of:
  - A. Only budget financing of medical services.
  - B. Only commercial payment for medical services.
  - C. In the conditions of providing partially paid medical services.
  - D. This system is not applicable at all in any case.
- 6. External relations (relations with the external environment) that determine the essence of the motivational mechanism of personnel management are:
  - A. Mobile relationships formed under the influence of a clearly defined policy of a medical institution, based on the specific needs of medical workers in a particular period of time.
  - B. Service-industrial and socio-economic relations that arise in a medical institution in the course of its activities, and do not depend on own activities of the medical institution.
  - C. The totality of relations arising from the relationship of a business entity (medical institution) with other business entities and the state.
- 7. According to the content of levers affecting the needs, the mechanisms of motivation of personnel management can be as follows:
  - A. Active and passive mechanisms of motivation of personnel management.
  - B. Personal, microeconomic, mesoeconomical and microeconomic mechanisms of motivation of personnel management.

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- C. Economic, social, psychological, organizational, cultural and administrative mechanisms of motivation of personnel management.
- D. Effective and ineffective mechanisms of motivation of personnel management.

### 8. Briefly describe the purpose of creating a motivational mechanism in a medical institution.

#### 9. The most general concept of a motivational mechanism is:

- A. The set of methods and techniques of influencing employees from the management system of the organization, which encourages them to a certain behavior in the course of work in order to achieve the goals of the organization and meet personal needs.
- B. Component of the mechanism of interest in achieving maximum economic and social results of human labor activity.
- C. The system of economic, social, psychological, organizational and administrative measures and methods of influencing the satisfaction of actual needs of personnel in the interests of achieving individual and collective goals of employees and the organization, the growth of its competitiveness.

### 10. Effective development of the motivational mechanism of medical personnel management is manifested in:

- A. Improving the working capacity of medical personnel.
- B. Increasing the price of medical services.
- C. Improving the quality and competitiveness of medical services.
- D. Improving the competitiveness of a medical institution.
- E. Reducing the flexibility of a medical institution.
- F. Reduction of remuneration of managers of medical institutions.



#### Situational tasks

# Situational task "Multifactorial system of remuneration of medical workers - a system of analytical evaluation of work"

Calculation of remuneration of medical workers in the system of analytical evaluation of works.

Let's group the main factors (indexes) that are used to calculate the remuneration of medical workers when applying the system of analytical evaluation of work in Table 1.

Table 1

Factors	Sub-factors	Notes	Points
1	2	3	4
1. Professional training	a) education	<ul><li>a) secondary</li><li>b) specialized</li><li>secondary</li></ul>	1 2
		c) higher d) PhD e) MD	3 4 5
		f) graduated Faculty of Advanced Medical Training	+1 for each
	b) qualification category	<ul> <li>a) higher education</li> <li>b) first</li> <li>c) second</li> <li>d) specialist doctor</li> </ul>	5 4 3 2
	c) work experience	for 1 year	1
2. Mental	a) test	a) 10 questions	10
requirements	b) non-standard situation	a) solved b) did not solve	10 0
3. Physical requirements	a) age groups	a) 18-30 years b) 31-45 years	4 3 2
		<ul><li>c) 46-55 years</li><li>d) 56 years and older</li></ul>	1

## Calculation of remuneration of medical workers in the system of analytical evaluation of works

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End of Table 1

1234b) health factora) healthy2b) not healthy1c) output per unita) fulfills the norm10	
b) not healthy 1 c) output per unit a) fulfills the norm 10	
c) output per unit a) fulfills the norm 10	
of time b) does not fulfill the 0 norm	
c) exceeds the norm +1 for each over exceeds	
4. Degree of a) for the 1 responsibility equipment	
b) for materials	
c) in compliance 1	
with the technology	
(method of treatment)	
d) for the staff for each subordinate 0.2	
5. Working a) normal 1	
conditions production	
b) complicated 2	
production	
conditions	
c) degree of risk a) special cases 5	
b) familiar 1	
Merit assessments (personal assessments)	
6. Quality of work 1 7. Rational use of materials 1	
8. Careful attitude to the equipment	
9. Maximum use of working time	
10. Reliability, cooperation	
11. General behavior 1	
12. The possibility of extension 1	
Total quantity of points	

Such an assessment is carried out by the head (for example, the chief doctor) or the certification commission annually, and they may decide to revise the remuneration of a medical worker. During the analytical evaluation of the work, the net income of the medical institution received as a result of work on paid terms is distributed in proportion to the number of points scored by each medical worker.

Let's assume conditionally that the staff of a medical institution providing paid medical services is a chief doctor, a doctor, a nurse. We will add points to each medical worker so that: the chief doctor scored -47 points, the doctor -30 points, the nurse -22 points.

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Let's assume that the wage fund formed through paid medical services amounted to UAH 9900.

Task:

Calculate the cost of one point.

Calculate the amount of surcharges that will be accrued in this case to the nurse, doctor and chief doctor of the medical institution.

The above mentioned analytical assessment of the work is basic and may vary depending on the specifics of the medical institution (dentistry, psychiatry, surgery).

We use the configuration of the basic model of a multifactorial system for evaluating the work of medical workers in connection with the specifics of the medical institution – the evaluation of the work of medical workers in the department of a psychiatric hospital, broken down into middle, junior and medical staff of the department (Table 2 and 3).

Table 2

№	Factors	Sub-Factors	Points (+/-)
1	2	3	4
1	Professional	1. Education	
	training	unfinished	0
		middle	1
		secondary special	2
		2. Qualification category	
		high	5
		I	43
		II	3
		without category	1
		3. Completion of advanced training	
		courses with a duration of:	
		1.5-2 months	1 (for each)
		to 1 month	0.5 (for each)
		4. Participation in advanced training in	3 (for each
		patient care	performance)
		5. Mastering new techniques and	2
		methods of diagnosis and treatment	
2	Degree of	1. For the staff	0.2 (for each
	responsibility		subordinate)
		2. For medical equipment and	1
		household inventory	
		3. For materials, medicines	1

#### Multifactorial system for evaluating the work of secondary and junior medical personnel in the department of a mental hospital

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1	2	3	4
		4. While preserving material values (sister – hostess)	4
3	Working conditions	Attack personnel by sick patient – without disability – with disability	$     \begin{array}{c}       0 - 1 \\       1 - 3     \end{array} $
4	Labor intensity	<ol> <li>Combining rates:         <ol> <li>Combining rates:</li> <li>S rate</li> <li>Performing the duties of an employee who is absent from work</li> </ol> </li> </ol>	1 3
		1 week 2 weeks 3 weeks 4 weeks	1 2 3 4
		3. Assistance to other employees of the department	2
		4. Development or implementation of new techniques and methods of patient care	5
		5. Performing individual professional tasks	1
		6. Approximate state of the workplace, working object	1
		7. Active participation in the public life of the department	1
5	Gratitude	Gratitude from patients, relatives, employees (including the administration) of the hospital or other persons associated with the work of the department	
		- orally	23
6	Violations	<ul> <li>in writing</li> <li>1. Violation of labor discipline:</li> <li>for appearing at work in a drunken state</li> <li>absence from work without a valid reason</li> </ul>	Loses the bonus -5
		<ul> <li>truancy</li> <li>violation of medical ethics and deontology (including rudeness to patients or staff)</li> </ul>	-5 -5
		2. Violation of the sanitary and epidemic regime	-3-5
		3. Violation of safety rules	-5

Continuation	of	Table	2

End of Table 2

1	2	3	4
7	Refusals	1. Refusal to fulfill the instructions	-3
		of the management 2. Refusal to help other employees of the department	-2
		3. Refusal to use new methods of work, professional development	-5
8	Complaint	Complaint from patients, relatives, employees (including the administration) of the hospital or other persons related to the work of the department – orally	-2
		– in writing	-3
9	Others		
		Total points	

Table 3

#### Multifactorial system for evaluating the work of medical personnel in the department of a psychiatric hospital

№	Factors	Sub-Factors	Points (+/-)
1	2	3	4
1	Professional training	<ol> <li>Education: higher Candidate of Medical Sciences Doctor of Medical Sciences</li> <li>Faculty of Advanced Medical Training, courses of duration: at least 1.5 months. up to 1 month</li> <li>Qualification category high I</li> </ol>	3 4 5 1 (for each) 0.5 (for each) 5 4
		II specialist doctor 3. Participation in advanced training in patient care 4. Mastering new techniques and methods of diagnosis and treatment	3 2 3 (for each performance) 2
2	Degree of responsibility	For the staff	0.2 (for each subordinate)
3	Working conditions	Attack personnel by sick patient – without disability – with disability	0-1 1-3

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Continuation	of	Table	3

1	2	3	4
4	Labor intensity	1. Combining rates:	-
		0.25 rate	1
		0.5 rate	3
		2. Assistance to other employees of the	2
		department	~
		3. Development or implementation of	5
		new techniques and methods of patient	
		care that are important for the unit 4. Performing individual professional	1
		tasks	1
		5. Approximate state of the workplace,	1
		working object	
		6. Active participation in the public	1
		life of the department	
5	Gratitude	Gratitude from patients, relatives,	
		employees (including the	
		administration) of the hospital or other	
		persons associated with the work of	
		the department – orally	2
		- in writing	23
6	Violations	1. Violation of labor discipline:	5
	VIOIdelollis	- for appearing at work in a drunken	Loses the
		state	bonus
		– absence from work without a valid	-5
		reason	
		- truancy	-5
		– violation of medical ethics and	-3-5
		deontology (including rudeness	
		to patients or staff) 2. Violation of the sanitary and	-5
		epidemic regime	
		3. Violation of safety rules	-5
7	Refusals	1. Refusal to fulfill the instructions of	-3
		the management	
		2. Refusal to help other employees of	-2
		the department	
		3. Refusal to use new methods	-5
	0 1 1 1	of work, professional development	
8	Complaint	Complaint from patients,	
		relatives, employees (including the administration) of the hospital or	
		other persons related to the work of	
		the department	
		- orally	-2
		– in writing	-3

End of Table 3

1	2	3	4
9		Number of patients treated by a doctor	
	work performed	1-10	1
	<u>^</u>	11-20	3
		21 and more	5
10	Others		
		Total points	

This system of evaluation of the work of medical personnel can be used to distribute the fund of surcharges and bonuses formed due to the savings of the wage fund in the hospital as a whole as a result of an increase in the intensity of employees' work.

In the psychiatric department, the number of points for each medical worker is calculated, then, the total number of points for all employees of each category is calculated. Since the economic service of the hospital according to the standard scheme has already determined the amount of additional payments (bonuses) in general for secondary and junior medical personnel, the monetary expression of 1 point is calculated in the department for each category of employees. Then the bonuses for each medical employee of the department are calculated.

Let's assume conditionally that the staff of doctors of the psychiatric department: the head of the department and the doctor. We will add points to each person so that: the head of the department scored -47 points, the doctor -30 points.

Let's assume that the bonus fund for one month for the employees of the department amounted to UAH 11.927.

Task:

Calculate the cost of one point. Calculate the amounts of monthly bonuses (surcharges) that will be accrued in this case to the head of the department and the doctor.

#### Situational task "Multifactorial system of remuneration of medical workers – a system of using incentive coefficients"

For a city clinical hospital, the following formula is used to calculate the *actual salary* (AS) of family doctors:

AS = BS + SPS,

where: AS - actual salary of the doctor;

BS - basic salary;

SPS – stimulating part of the salary.

Salary calculations are based on the labor standards of family doctors.

The basic salary (BS) is calculated according to the formula:

 $BS = (T \times SV \times N) : 12,$ 

where T -the tariff rate per one visit;

SV - the standard of visits per inhabitant per year;

N – the number of the attached population for each doctor's site.

The tariff rate per one visit (T) is determined between the family doctor and the hospital administration. The annual salary fund for each doctor individually is established by the agreement. Its value depends on the financial reserves of the medical institution, the qualification category of the doctor, and his attitude to work. The annual salary fund (determined by agreement) of the doctor is divided into the planned number of visits per year (the function of the medical position).

The standard of visits per inhabitant per year (SV) to a family doctor is calculated for each medical institution, taking into account the indicator for previous years, the sex and age composition of the population, the level of morbidity.

*The number of the attached population for each doctor's site* (N) is determined by the census of the population at each site.

For example, calculate the basic salary as follows:

(4 UAH  $\times$  1.8 visits  $\times$  1.700 people) : 12 months = = 1.020 UAH.

This technique makes it possible to differentiate wages depending on the number of the attached population, and not on the actual number of visits to the doctor. With a population of 2.000 people on the site, the monthly basic salary of a doctor without a category will be 1.200 UAH.

*The stimulating part of the salary* (SPS) is calculated according to the formula:

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 $SPS = BS \times SC$ ,

where SPS – stimulating part of the salary;

BS - basic salary;

SC – the stimulating coefficient.

*The stimulating coefficient* (SC) can be calculated as the sum of the increasing (+C) and decreasing (-C) coefficients:

SC = (+C) + (-C).

The criteria for increasing (+C) and decreasing coefficients (-C) for each medical institution or for each doctor individually are established taking into account the specific tasks facing the healthcare institution and set before the doctor.

For example, you can give the following list of criteria and a ranking option for calculating coefficients:

The increasing coefficient (+C):

1) completeness and timeliness of dispensary observation -+0.2;

2) vaccination, immunization of the population -+0.3;

3) completeness of clinical examination in preparation for hospitalization -+0.2;

4) knowledge of ECG reading methods - +0.1;

5) coverage of the fluorography examination of the relevant population -+0.2.

*Decreasing coefficients* (-C):

1) complaints -0.2;

2) discrepancy of clinical and polyclinic diagnoses -0.2;

3) neglected cases of tuberculosis -0.2;

4) neglected cases of cancer -0.2;

5) deaths of patients who were not observed by a doctor -0.2.

Each criterion is ranked according to its significance. The sum of the rank values should not exceed 1 (or 100 %).

Let's assume that at the end of the month, the sum of the increasing and decreasing coefficients was:

$$SC = (+0.9) + (-0.5) = +0.4 \text{ (or } +40 \%).$$

Task:

Calculate the size of the stimulating part of salary at base salary of 1.020 UAH.

Calculate the amount of the actual salary.

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### FUNDAMENTALS OF HEALTHCARE FINANCING

- 1.3.1. The essence of financial and economic relations in healthcare.
- 1.3.2. Basic fundamentals of efficiency in healthcare.
- 1.3.3. Financial resources of healthcare institutions.
- 1.3.4. Healthcare financing models and systems.

## 1.3.1. The essence of financial and economic relations in healthcare

Among the financial and economic processes taking place in healthcare, the action of the **market economy** is becoming important:

1. Firstly, the market commercializes the medical business as a whole, as well as the attitude of each person



(patient) to their health. This leads to a change in the paradigm of healthcare, the formation of qualitatively different types of economic thinking, styles of practical economic behavior of subjects of the medical industry.

2. Secondly, there is an increase in the volume of paid and semipaid (medical insurance) medical services provided to the population.

3. Thirdly, the economic status of the medical institution is being changed. At the same time, the medical institution is increasingly acquiring the economic features of an enterprise that produces and provides services.

4. Fourth, changes in the status of medical institutions lead to a change in the nature of financial and economic relations arising in their activities (economic agent).

5. Fifthly, there is an extraordinary variety of forms of ownership and types of management in medicine.

6. Sixth, as a result of the implementation of economic activity in various economic forms, the economic condition of the medical worker himself is changing under the influence of the market.



With any organization of the provision of medical services – a State-owned enterprise or a private individual medical practice (in this case, this difference does not matter significantly), there is an immediate inclusion in a *certain circle of financial and economic relations or business contacts*, without which such

activities are simply not feasible.

Having accepted the above thesis as the initial one, it is necessary to deal *with several groups of problems* that logically follow one from the other:

1. *The first group* of problems is expressed by the question: what and how to do? In other words, what medical services, to whom and using what organizational and legal forms to provide? To solve these problems, it is necessary to carefully consider the conditions and methods of farming at all stages of the therapeutic and preventive process.

2. The second group of problems is related to finding out with what resources it is really possible to start providing a certain type of medical services and what resources will still need to be purchased for this in addition. To solve these problems, a thorough study of the factors of economic activity in medicine is necessary. We are talking about the study of the material and technical base, the use of which is possible to a greater or lesser extent under these specific circumstances. Having found out the structure of resources, it is also necessary to find the composition and percentage ratio of the main and working capital of the organization, to identify the features of their implementation, the uniqueness of the economic movement, the specifics of depreciation. Further, the solution of issues of staffing the activities of a medical institution, the structure of labor potential and economic forms of attracting qualified specialists to work in the institution comes to the fore. The most important element of this set of issues is the definition of possible incentives and motivations for

work, including the optimal combination of material and moral and psychological incentives.

3. The third group of problems is expressed by the question: who will pay for the medical services provided? To solve these problems, it is necessary to carefully study the possibilities and types of the investment process in the field of medicine. Three main groups of investors invest their funds in ensuring the functioning and development of healthcare: the patients themselves. the government and insurance



organizations. These three groups of investment sources correspond to the three most common health financing systems: private, budgetary and insurance.

4. The fourth group of problems is related to finding out what the expected result of professional and at the same time financial and economic activity can be. Having objectively limited material, labor and financial resources to provide a certain set of medical services, it is necessary to clearly define the goals that can be achieved. At the same time, it is necessary to have an idea of economic optimization. that is, the ways of rational use of the available material and energy factors of medical labor, money, attracted workers of various specialties and different qualifications. It is also important to analyze the degree of compliance of resources with the achievements of scientific and technological progress and the established practice of their professional and economic use. Depending on what resources a medical institution owns - outdated, physically and morally worn out, standard, widespread in their equipment in medical institutions of this type, the advanced – one can assume what the result of their use will be. The question of the possible effectiveness of the use of resources is very important. In general, the study of efficiency is a separate economic problem. At the same time, it should be noted that for medicine, the issue of effectiveness becomes particularly complex and specific due to the fact that the effectiveness of healthcare cannot be unambiguously determined.

5. The fifth group of problems is related to the determination of the actual result of the activity received - the provision of medical



services. It is known that the distance from the desired to the actual is sometimes verv large. This is more typical for healthcare. where achieving the set goal encounter may a significant number of the most unexpected obstacles. However, despite all the uncertainty and unpredictability of healthcare. it is still possible to calculate the actual results. To solve these

problems, it is necessary to carefully develop the financial and economic regulatory framework of the medical industry. A certain system of natural, cost and relative indicators has been created and is constantly being improved, quantitatively characterizing the results of both medical professional work and economic activity in healthcare. This regulatory framework is used for the following purposes: to determine the starting conditions for the functioning of a medical institution as a business entity; to analyze the current financial and economic condition of a particular medical institution or a private practitioner. The system of characteristics is used not only to fix the economic situation at any given moment, but also to control the dynamics of configurations of certain characteristics of the activity of a medical institution. The system of characteristics is used not only to fix the economic situation at any given moment, but also to control the dynamics of configurations of certain characteristics of the activity of a medical institution. The same analysis can be carried out for the medical industry as a whole, a sub-sector or a region. Knowing the content of the characteristics under consideration, having an idea of the calculation methodology, it is possible to generally find the configuration in the health status of the population or a group of patients and perform socio-economic adjustments.

6. *The sixth group* of problems is how to manage the financial and economic processes taking place in medical institutions. Labor, production that are financial and economic activity as such, being a conscious purposeful process carried out by a person, should be manageable. It is only a matter of the degree and conditions of manageability, methods of management activities. As for healthcare,

it is an industry that initially tends to be managed at different levels and in different forms. To solve these problems, a thorough study of medical management, economic and administrative-legal regulation of the economic mechanism of the medical industry is necessary.

7. *The seventh group* of problems can be formulated as follows: how to achieve economic success? To solve these problems, a thorough study of medical marketing issues is necessary, such as: demand, supply, pricing in the field of medical services, advertising,



economic emblematic (trademarks, brand names, symbols), consumer psychology, etc.

#### 1.3.2. Basic fundamentals of efficiency in healthcare

Improving the level of public health, the quality and effectiveness of medical care are the main tasks of healthcare. The most important direction in this regard is to determine the effectiveness in medicine, including therapeutic and preventive, sanitary and anti-epidemic and research measures in the field of public health.

From the point of view of financial and economic relations in medicine, a modern medical institution should be considered as:



1) firstly, as a specific economic entity endowed with all the basic financial and economic rights and obligations;

2) secondly, as an independent participant in

market relations, taken in all their complexity and contradictions and, at the same time, taking into account all the specifics of healthcare.

The main approaches to determining the effectiveness of wellness work:

- effective-target (comparison of the result with the final goal, standard, plan);

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- effective-expenditure (comparison of the result with the cost of obtaining it).

Three types of efficiency are defined as the ratio of costs and results in medicine: social, medical and economic.

**Social efficiency** consists in increasing the public role of health care, which is directly related to improving the level of health and medical care. Social efficiency is expressed precisely in lowering the negative characteristics of the population's health (morbidity, disability, mortality) and increasing the positive ones (physical development, fertility, average life expectancy).

*Social efficiency* is an assessment of improving the health of the population.



Medical effectiveness consists in evaluating the effectiveness of various diagnostic methods, therapeutic procedures, including medicines, and, finally, various preventive measures, in particular

specific ones (for example, vaccinations). Medical efficiency can be expressed due to various indicators of the quality and efficiency of medical institutions – reduction of the average time of diagnosis, the average duration of the disease, the duration of the patient's stay in the hospital, etc. Medical efficiency is also indicated by an increase in the percentage of favorable results of treatment of diseases, a decrease in the level of disability and mortality, optimal use of the bed fund, medical equipment, labor and financial resources.

*Medical efficiency* is the degree of achievement of the set tasks in the field of prevention, diagnosis, treatment and rehabilitation of patients.

Assessment of social and medical effectiveness is a priority for healthcare.

**Economic efficiency** is expressed in determining the cost of additional products, services rendered or the amount of financial resources saved, as well as in determining the economic damage from increased morbidity, disability, premature death of patients, etc. It is defined as the ratio of the result (in value terms) to the costs. When assessing the economic effectiveness of healthcare measures at work, methods of prevention, diagnosis and treatment, the number

of days (the difference before and after the introduction of new methods) saved as a result of the prevention of diseases, injuries, disability, mortality of patients and the cost of each day are calculated.

*Economic efficiency* is direct and indirect indicators of



the impact of health care on the country's economy by improving the health indicators of the population and carrying out preventive measures.

The problem of economic efficiency can be considered:

- firstly, from the point of view of the impact of healthcare on the growth of labor productivity and national income;

- secondly, from the point of view of increasing the economic efficiency of the use of resources in the field of healthcare itself.



If anyone economic and mathematical methodology can be applied to the calculation of costs, then the results in healthcare (by its specificity) may not only be different, but they are not always quantifiable. For example, the

costs of providing services to an incurable patient, from a medical point of view, are absolutely ineffective. It is impossible to cure the disease the evil in this case (according to the definition of Hippocrates) surpasses the means of medicine. Thus, there is no medical effectiveness here. Economic efficiency is also impossible to find here, since the patient will not only not return to the number of full-time employees, he will not participate in the creation of profits, the production of national income, etc., but in many cases simply he will not be able to pay for his treatment. But, from the point of view of social efficiency, these seemingly unpromising costs acquire a very special meaning and have a very definite result, embodied in a humane moral atmosphere. Therefore, in this case, social efficiency in terms of expected results should be put in the first place, medical - in the second place, and economic, respectively, in the last third place. *It is this arrangement of priorities* 

with their practical combination that is characteristic of any stage of the development of medicine at the macroeconomic level.

The situation is complicated with these same priorities at the microeconomic level. If a medical institution or a private practitioner puts economic efficiency at the forefront, then their functioning as economic entities takes place according to the usual model of any commercial enterprise. If medical and social efficiency become a priority, then the economic agent inevitably returns to the group of problems: who will pay for all this?

The main reasons that negatively affect the activities of the health care system are the following:

- negative trends in demographic processes, unfavorable forecast of the demographic situation;

– lack of the necessary legislative framework for healthcare – shortcomings of the regulatory framework that ensures the normal operation of medical institutions in the conditions of new market relations;



- imperfection of the management system, manifested in the organizational disunity of many medical structures dealing with public health issues;

- shortcomings in the planning system caused by radical changes in political and socio-economic conditions;

- crisis phenomena in the system of financing of the medical industry, including acute shortage of financing of medical sciences;

- imperfection of the medical care infrastructure, shortcomings in the functioning of the main links;

- imperfect innovation and personnel policy in the medical industry with increasing requirements for the professional level of medical workers, licensing and certification;

- inconsistency and disunity in the activities of State, public and religious organizations dealing with health issues.

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#### 1.3.3. Financial resources of healthcare institutions

#### In economics, resources are usually divided into four groups:

- 1. Natural (land, water, solar energy, air, forests, etc.).
- 2. Material (buildings, equipment, raw materials, etc.).
- 3. Labor (workers, employees, managers, etc.).
- 4. Financial (profit, authorized funds, cash, etc.).

Natural, material and labor resources are characteristic of any production, organization, institution, any field of activity and, therefore they are called *basic resources*. Financial resources arose at the market stage of the development of social production and, therefore they are referred to as *derivative resources*.

Material resources are a combination of natural and invested resources. Structurally, they include: medicines, medical equipment, facilities, medical instruments, dressings and patient care products, etc.

Human resources are medical personnel: doctors, nurses, etc.

**Financial resources** are a set of funds (own, borrowed, attracted) that are in financial and economic circulation and they are used in the process of entrepreneurial activity of a medical institution.

Financial resources are usually divided into 3 groups:

1. Own monetary resources are the basic part of all monetary resources of the organization. They are formed at the time of its creation and are available throughout the entire period of activity. These are the authorized fund (capital), contributions of participants and shareholders, profits remaining at the disposal of the organization, depreciation deductions, staff payments, budget financing and targeted financing from extra-budgetary special funds (on an irrevocable basis), charitable contributions, humanitarian aid. Due to the lack of its own sources of financing, the organization uses other sources of financing and turns to loan and borrowed funds.

2. Loan financial resources are mainly loans from various financial and credit institutions issued at interest on a repayable





and time-urgent basis. They cover the temporary additional need of the organization for funds. Loans are often used more efficiently than own funds, because they carry out a faster cycle, have a purpose, they are issued for a specified period and they are accompanied by interest collection. These reasons force the organization more closely monitor the movement of

loan funds and the effectiveness of their use.

3. Attracted financial resources – this group of funds includes the balances of funds and reserves of the organization itself, temporarily unused for their intended purpose, reserves for future payments, etc. All these funds will be used for their intended purpose in due time, therefore, only the remnants



of these funds and reserves can act as a source of financing and only for a period of time preceding their intended use.

Financial and economic support for the activities of a medical institution should be based on certain principles. *The production resources of a medical institution* are of great importance in effectively solving the problem of meeting the needs of a medical institution for financial resources.

The production resources of a medical institution are the material basis of the organization's activities.

In the most general sense, the production resources of a medical institution consist of fixed and working capital.

**Capital** is the relationship between people regarding the creation and distribution of specific economic forms of income of an enterprise based on hiring staff. By financial definition, capital is called all assets (funds) of an institution. By functional definition, capital is only a real object, that is, means of production. Capital as a means of production is divided into means of labor and objects of labor and, depending on the turnover of these parts, is divided into fixed capital and working capital.

The scheme of the fixed and working capital of the medical institution is shown in Fig. 1.5.

The capital value advanced on the means of labor (buildings, structures, machines, machines, equipment, etc.) retains a certain natural form in the production process, in which it acts throughout the entire period of operation. The means of labor enter into circulation gradually, in parts, to the extent that their value is transferred to the cost of the product produced or the service provided. Due to this feature, this part of the capital takes the form of fixed capital.

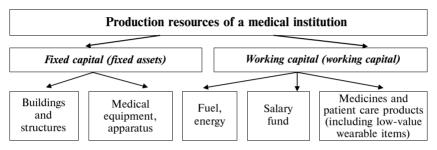


Fig. 1.5. Fixed and working capital of a medical institution

#### Fixed capital:

- fully participates in production and retains its consumer value for a long time;

- its cost is transferred in parts to the manufactured product/ service throughout the entire period of use and returned to its owner also in parts, as the finished product is sold or services are provided;

- it is not materialized in the finished product or service;

- it is restored after physical and moral wear and tear after several cycles.

Fixed capital is characterized its structure: land plots: bv capital expenditures land on improvement; buildings, structures and transfer devices; machinery and equipment; vehicles; tools, appliances, inventory (furniture); working and productive livestock; perennial plantings; other main assets.



Otherwise, a part of the capital advanced on labor items and labor force turns around. The cost of purchased raw materials, auxiliary materials and fuel is fully included in the cost of the goods or services produced, and when be sold, it is fully refunded in cash to the business entity. This part of permanent capital takes the form of working capital.



#### Working capital:

 during one period of production, it loses its old consumer value and can be materialized in the created product or service provided;

its value is fully transferred to the cost of the goods produced or the service provided and is fully returned to its owner in monetary form after the sale of the goods, services;

- working capital is reimbursed after each cycle.

Working capital is characterized by its structure: raw materials, materials, semi-finished products, auxiliary materials, fuel reserves, spare parts for repairs, stocks of low-value and wear-out items, work in progress, stocks of finished products in stock, cash balances in the bank account and cash register.



In the conditions of formation and development of the medical services market, medical financial relations are of particular importance. They are implemented in a certain financial environment.

The main structural elements of the financial environment of medical institutions are shown in Fig. 1.6.





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Financial support for the activities of medical institutions is a determining factor of financial stability, solvency, and most importantly the competitiveness of medical services. The basis for this is **financial resources**, which can be classified as follows:

1. In practice, financial resources appear in two main types:

- long-term financial resources (mainly in the form of fixed assets - capital, buildings, structures, medical equipment);

- short-term financial resources (mainly in the form of revolving funds - medicines, fuel, energy, wages, that is, resources for current activities).

2. Financial resources are distinguished by sources of formation:

- internal sources of financial resources formation - authorized capital, profit, depreciation charges;

- external sources of financial resources - subsidies, grants (budget), loans, compulsory and voluntary medical insurance, sponsorship, charity, etc.

3. According to the form of ownership, financial resources are divided as follows:

- budgetary (State) resources - State and local budgets, compulsory medical insurance;

 extra-budgetary (nongovernmental) resources – voluntary medical insurance, paid services, charitable contributions.

ntributions. 4. According to the degree of ownership, financial resources can be:

- own financial resources:

- loan (attracted) financial resources.

*Own financial resources* are the total resources that are in economic circulation and belong to a medical institution. Their movement is ensured by internal sources of development. These include retained earnings and depreciation charges. They are stable, but limited by the service life of medical apparatus and equipment, the speed of cash turnover, the amount of current costs and the growth rate of medical services.

Loan (attracted) financial resources are resources that do not belong to a medical institution, but are temporarily at its disposal



along with its own. These include bank loans, share issues, own debt obligations, etc.

#### 1.3.4. Healthcare financing models and systems

In most developed foreign countries, extensive experience has been accumulated in the formation of the resource potential of healthcare, including financial resources.

The established models of healthcare in the world practice are based on three main systems of healthcare financing in terms of organizational and financial features:



- State system (budget model/system, national, "Beveridge model" or Beveridge system, English model, as well as socialist model): up to 90 % of funds come from budgetary sources, the main provider of medical services is the State, they are provided as

a public good, financing is carried out through universal taxation, management and control by government bodies, equal access to medical care for all citizens (Great Britain, Denmark). The principles of socialist healthcare largely coincide with the Beveridge systems, but unlike them they are characterized by a comprehensive role of the State in the organization of healthcare from above – centralization of management (the principles were developed by N. A. Semashko and established as the basis of healthcare in the USSR).

- Social health insurance system (budget insurance model/ system, "Bismarck model" or Bismarck system, German model): financial resources of healthcare are formed at the expense of insurance premiums of entrepreneurs, working citizens and State subsidies, while the main one is financing from extra-budgetary health insurance funds; the role of the government in such a system is limited, it determines the list of basic services that should be provided to the insured, establishes the groups of the population that should be insured, regulates the amount of the insurance premium,

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considers controversial issues and defines the basic "rules of the game" (Germany, Spain, France, Sweden, Japan).

- **Private system** (insurance model/system, American model, private medicine): provides that the activities of medical institutions are financed mainly by voluntary health insurance contributions and the sale of paid services to population; puts the main task not public, but individual responsibility for health; it has a developed system of private health insurance, a wide variety of programs covering

a significant part of the population, – among the main State programs, we can single out – for the old people, for the poor people, for the military servicemen, for the military servicemen who are retired; programs



for the middle class population are mainly carried out by private insurance companies (the USA, Switzerland, Japan, the Netherlands).

Among the **models in transition (the stage of reform)**, you can single out the health care systems of post-Soviet countries, which historically were based on the model of N. A. Semashko, and are now making a full or partial transition to insurance financing mechanisms.

Modern reform of healthcare financing in Ukraine involves the construction of a budget-insurance model, namely:

- transition from budget financing of healthcare by individual items of expenditure to financing by long-term stable standards that take into account the specifics and focus of the activities of medical institutions;

- combination of budget financing of medical institutions with the development of insurance medicine and services to the population, servicing enterprises and organizations under contracts;

- strengthening the independence of medical institutions, the growth of the initiative of labor collectives to address issues of economic activity and social development;

- establishment of direct dependence of wages, social development, material incentives on the final results of the activities of medical institutions, the quality of medical services, labor efficiency;



the use of various forms of management, including rental relations, individual labor activity.

The mechanisms for the financial formation of the potential of healthcare in each country have their own characteristics, but at the same

time there are certain general principles that allow for sufficient financial support for the medical industry.

Depending on the sources of financing, countries can be characterized as shown in Table 1.3.

Table 1.3

2         3           3         1           1         1           1         1	mandatory 3 1 1 - -	voluntary 4 2 2 3 2 2	Private financing 5 3 3 2
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3	1	2	3
1	—	2	2
1	1	2	3
_	1	2	3
3	1	2	3
3	2	1	3
3	1	2	3
1	_	3	2
_	2	1	3
3	1	2	3
		$ \begin{array}{c cccc} - & 1 \\ 3 & 1 \\ 3 & 2 \\ 3 & 1 \\ 1 & - \\ - & 2 \\ \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

- second in importance and volume of financing; 2

3 - third in importance and volume of financing.

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Despite the existence of different systems of healthcare financing, the sources of financial resources formation in the countries of the world are similar (Fig. 1.7). Thus, the formation of resource potential in the developed countries of the world is determined not only by the model of the organization of the health system, but also by the level of development of the mechanism on which this model is based.

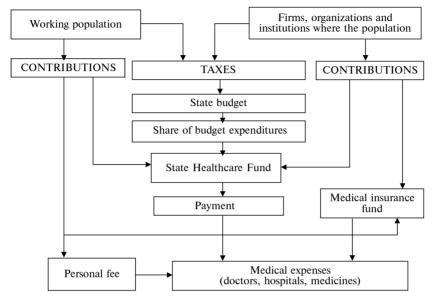


Fig. 1.7. Sources of healthcare financing in the developed countries of the world

#### Methods of financing medical institutions at the macro level.

*The method of financing* is a way of distributing funds from a source of funds between manufacturers of medical services.

In general, there are three methods of financing healthcare:

1. The budget by articles – the budget formed based on the increment of budget indicators – it is determined by how much in the proposed budget expenditures for a particular item are growing compared to the budget of the current year. The item-by-item budget focuses on organizational units and objects of expenditures (correctness of expenditures, not expediency of results), performance and efficiency indicators can be applied, since they are more difficult to justify in the item-by-item budget process.

*Advantages*: strict centralized control over the use of funds, the medical institution does not need to "puzzle a head" over their rational use, the risk to the medical institution is minimized.

*Disadvantages*: does not allow medical institutions to flexibly adapt to non-standard conditions or local situations; there are no direct incentives to increase the efficiency and productivity of medical work; there is a tendency for the deterioration of medical care; in conditions of budget deficit, only the following items are financed: wages, food, purchase of medicines and utility costs, which are far from contributing to the development of the industry.

2. *The total budget* is the total payment to cover the predetermined expenses of a medical institution for a certain time.

*Advantages*: relatively low administrative costs, free redistribution of available resources if necessary, the ability to use economic incentives to improve the efficiency of medical work.

*Disadvantages*: avoiding treatment of complex cases of the disease, reducing the quality of medical care due to insufficient, limited budget compared to the needs of a medical institution. Sometimes the advantage of the method – the free redistribution of resources can become a disadvantage: an increase in the number of personnel and their meager wages will prompt a deformation of the ratios in the expenses of a medical institution.



3. *Financing per capita* is a payment to cover the cost of a certain package of services for a certain time for each resident.

*Advantages*: projected costs that stimulate the medical institution to work more efficiently, not to

provide unnecessary services; relatively low administrative costs.

*Disadvantages*: high financial risk, which can lead a medical institution into bankruptcy; decrease in the quality of medical services due to a large amount of work, which leads to decrease in the price of ordinary medical services.

There is no ideal, flawless method of financing medical institutions. Any method should correspond to the specific situation and goals facing the healthcare system. *Mixed systems of financing and* 

payment for medical services are the most universal and allow using different methods of financing in each case with maximum efficiency.

In Ukraine, the basis for determining the guaranteed volume of medical care is social standards and financial norms in the field of healthcare.

*Social standards* are designed to establish a guaranteed volume of medical care in terms and serve as the basis for calculating expenditure standards (financial standards) in this area.

Domestic legislation establishes the following groups of social standards in the field of healthcare:

- list and scope of the guaranteed level of medical care in State and municipal healthcare institutions;

- standards of medical care, including the scope of diagnostic, therapeutic and preventive procedures;

indicators of the quality of medical care;

- standards of preferential provision of certain categories of the population with

medicines and other special means;

- standards for providing inpatient care;

- standards of sanatorium-resort provision;

- standards for the provision of medicines in State and municipal healthcare institutions;

- standards for the provision of food in State and municipal healthcare institutions.

Expenditure norms (financing) - indicators of current and



capital expenditures from budgets of all levels to ensure that needs are met at a level not lower than State social standards and norms.

Domestic legislation defines the following types of expenditure norms (financing):

 norms for financing current expenses per resident, and for certain types of social services – per person subject to this type of service;



- norms for financing current expenses for the maintenance of a network of healthcare and education institutions, enterprises, organizations, institutions of socio-cultural, housing and communal services and consumer services;

- norms of State capital investments for the construction of healthcare and education institutions, enterprises, organizations, institutions of socio-cultural, housing and communal services and consumer services.

According to the legislation, the guaranteed volume of medical care provided by State and municipal healthcare institutions must be determined in kind and in value terms per inhabitant of the country.



The main components of the guaranteed volume of medical care are as follows:

- the list and volume of medical services, the gratuitousness of which for the population is guaranteed by the State, in other words, the guaranteed volume of medical care;

- the volume of medical provision;

- the volume of providing patients with food and other non-medical services.

The guaranteed volume of medical care can be considered as a complex of medical and non-medical services, the free provision of which is guaranteed by the legislation of the country to citizens in case of deterioration of their health. This volume should meet a scientifically-based need and provide State guarantees to the population in the field of healthcare.

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## **Control questions**



- 1. Explain the essence of the financial and economic processes taking place in healthcare in a market economy.
- 2. Describe the range of problems that arise in financial and economic relations in medicine.
- 3. Describe the medical institution as an enterprise.
- 4. Uncover such a type of efficiency in relation to healthcare as social efficiency.
- 5. Uncover such a type of efficiency in healthcare as medical efficiency.
- 6. Uncover such a type of efficiency in relation to healthcare as economic efficiency.
- 7. Explain the location of efficiency priorities in medicine at the macroeconomic level.
- 8. Explain the location of efficiency priorities in medicine at the microeconomic level.
- 9. Describe the main groups of resources in the economy.
- 10. Provide a classification of the main financial resources of the medical institution.
- 11. Describe the fixed capital of the medical institution.
- 12. Describe the working capital of a medical institution.
- 13. Name the main structural elements of the monetary environment of medical institutions.
- 14. Give a description of the healthcare model based on the State financing system.
- 15. Give a description of the healthcare model based on the social health insurance system.
- 16. Give a description of the healthcare model based on a private financing system.
- 17. Reveal the essence of reforming healthcare financing in Ukraine of the budget-insurance model.
- 18. Name and describe the main methods of financing medical institutions at the macro level.

- 19. Give a description of social standards in the field of healthcare in Ukraine as the basis for determining the guaranteed volume of medical care.
- 20. Give a description of financial standards in the field of healthcare in Ukraine as the basis for determining the guaranteed volume of medical care.



Tests

- 1. Direct and indirect indicators of the impact of healthcare on the country's economy by improving the health indicators of the population and carrying out preventive measures determine:
  - A. Social efficiency in healthcare.
  - B. Medical efficiency in healthcare.
  - C. Economic efficiency in healthcare.
  - D. Demographic efficiency in healthcare.
- 2. Indicators of reducing morbidity, disability, mortality of the population and increasing physical development, fertility, average life expectancy of the population determine:
  - A. Social efficiency in healthcare.
  - B. Medical efficiency in healthcare.
  - C. Economic efficiency in healthcare.
  - D. Demographic efficiency in healthcare.
- 3. Financial resources of a medical institution may differ in the sources of formation. The authorized capital, own income (including profit), depreciation charges are:
  - A. Internal sources of financial resources formation.
  - B. External sources of financial resources formation.
  - C. Borrowed (attracted) financial resources.
  - D. Extra-budgetary (non-state) financial resources.

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- 4. Financial resources of a medical institution according to the degree of affiliation can be own and borrowed (attracted). The movement and effective use of any financial resources should be monitored and monitored more closely by the medical institution:
  - A. Monitoring the movement of borrowed (attracted) financial resources.
  - B. For the movement of own financial resources.
  - C. For the movement of long-term financial resources.
  - D. On the movement of short-term financial resources.
- 5. Such production resources of a medical institution as: land plots, buildings, structures, equipment, vehicles, tools, appliances, inventory (furniture), perennial plantings are:
  - A. Fixed capital (fixed assets).
  - B. Working capital (working capital).
  - C. Authorized capital.
  - D. Attracted capital.
- 6. The production resources of a medical institution are divided into fixed and working capital. The working capital (working capital) of a medical institution includes:
  - A. Buildings and structures of a medical institution.
  - B. Fuel, energy.
  - C. Medical equipment, equipment.
  - D. Payroll of medical personnel.
  - E. Medicines and patient care products.
- 7. Resources that are used in one cycle and transfer their cost immediately and completely to the provided medical service, such as stocks of raw materials, basic and auxiliary materials, belong to the category:
  - A. Fixed capital (fixed assets).
  - B. Depreciation charges.
  - C. Working capital (working capital).
  - D. Limited resources.

- 8. In developed countries, there are basic models for the formation of the financial potential of healthcare. The model in which the financial resources of healthcare are formed at the expense of insurance premiums of entrepreneurs, working citizens and state subsidies (at the same time, the main one is financing from extrabudgetary health insurance funds) is:
  - A. State model of formation of financial resources of health care.
  - B. Budget-insurance model of formation of financial resources of health care.
  - C. Private model of formation of financial resources of healthcare.
  - D. Personalized model of formation of financial resources of healthcare.
  - E. Public model of formation of financial resources of healthcare.
- 9. In the world practice, from the point of view of organizational and financial features, models of healthcare have been formed. Which model does this characteristic relate to "...the role of the government in such a system is limited, it determines the list of basic services that should be provided to the insured, establishes the population groups that should be insured, regulates the amount of the insurance premium, considers controversial issues...":
  - A. State system (budgetary, national, Beveridge system, socialist model).
  - B. Social health insurance system (insurance system, Bismarck system, German model).
  - C. Private system (American model, private medicine).
  - D. Healthcare system at the transitional stage of reforming the financing mechanism from insurance to budget.
- 10. Briefly describe the range of problems arising in financial and economic relations in medicine.

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## Situational tasks



### Situational tasks "Determining the need of a medical institution for financial resources"

The average duration of treatment of one patient is established by an expert commission based on the analysis of primary documents for the period, including nosology. As a rule, the commission includes the chief specialists of the medical institution. Costs are determined taking into account the regulatory profitability, part of the value added and the size of the established tax rate.

Task:

Having determined the costs of treating one patient in the context of departments, establish the need for financing of the therapeutic and surgical departments of the hospital.

The reference statistics of the task are as follows (Table 1):

Table 1

for infancial resources for certain period (one year)								
Name of department	Department capacity (average number of beds per year)	Number of days, bed usage per year	Average duration of patient's treatment (days)	Number of people treated per year (persons, plan)	The cost of 1 bed – day in the department (UAH.)	The average cost of treatment of one patient per year (UAH)	Planned amount of financial resources (UAH)	MANAGEMENT IN HEALTHCARE
	Nb	Nd	ADT	Npt	Cb	ACT	PAFR	
1	2	3	4	5	7	8	9	HO
Therapeutic	30	340	12	?	127.7	?	?	ARE

## Determination of the need of a medical institution for financial resources for certain period (one year)

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End of Table 1

1	2	3	4	5	7	8	9
Surgical	30	340	16	?	194.2	?	?
Total by hospital (amount)	?	?	?	?	?	?	?

Note:

total for the hospital – calculated as an arithmetic sum, not counting the formula.

The formulas for calculations are as follows:

 $Nb = Nb \times Nd/ADT$ ,  $ACT = ADT \times Cb$ ,  $PAFR = Npt \times ACT$ .

When calculating, remember that the planned number of people (persons) treated per year is determined taking into account the average number of beds, the duration of bed use per year and the average duration of treatment of the patient. The average cost of treatment of one patient per year depends on the average duration of treatment of the patient in days and the cost of 1 bed – day. The planned amount of financial resources is set taking into account the planned number of people treated per year and the average cost of treatment per patient per year.

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## FUNDAMENTALS OF STRATEGIC MANAGEMENT IN HEALTHCARE

- 1.4.1. Basic fundamentals of strategic management in healthcare.
- 1.4.2. Basic concepts in strategic management in healthcare.
- 1.4.3. Strategic planning of healthcare institutions.

## 1.4.1. Basic fundamentals of strategic management in healthcare

In the field of healthcare, the key provisions are the need to move from operational management to strategic management, when the need is formed:

- shift of attention to the management of dynamic changes in the environment in order to quickly adapt healthcare institutions to these changes;



- ensuring the effective use of available resources (often limited) in the face of increasing competition for them;

- formation of a strategic vision of the institution's activities to ensure its long-term survival in the healthcare market or its specific segment;

- taking into account the processes of globalization in the field of healthcare;

- in changing the role of the patient, as there is a transformation of the patient's position as a consumer of medical services: the transition to a patient-centric model of the organization of the activities of healthcare institutions;

- formation of new opportunities for the implementation of medical business within the framework of ongoing reforms in the healthcare sector;

- taking into account the rapid development of the market of innovations in the field of healthcare and the subsequent implementation of modern technologies in practice.

In this regard, there is a change in the management paradigm, within the framework of which there is a transition of management from operational to strategic. In such conditions, *strategic management becomes the main tool of healthcare management*, which is an active dynamic process of forming and implementing the strategies of the institution, taking into account constant changes in the external environment. Consequently, the strategy of a healthcare institution, like any other organization, is its "impulse" to dynamic changes.



**Strategic management** is the implementation of certain goals, which are reflected in achieving the desired state of relations with the environment through the redistribution of resources, which allows the organization and its divisions to act efficiently and effectively (D. Schendel, K. Hutten)

**Strategic management** is a management process to achieve

the mission of an organization by managing the interaction of an organization with its environment (J. Higgins).

That is, strategic management is understood as the process of determining the organization's relationships with its environment. However, there are other visions of strategic management.

**Strategic management** is a set of decisions and actions for the formulation and implementation of strategies developed in order to achieve the goals of the organization (J. Pierce, R. Robinson).

According to the resource approach to the definition of strategic management, **strategic management** is the process of effectively choosing the most productive non-trivial resources and ways to develop implicit key organizational capabilities. The traditional resource approach to strategic management coincides with the tasks

of implementing effective competition in relatively weak industries, and the concept of dynamic opportunities takes into account the time factor and the entrepreneurial nature of decisions.

**Strategic management** is an active process that allows strategic plans to develop and be formed, taking into account changes in the environment. It is characterized by the implementation by the management of the organization of the process of setting strategic goals, developing and implementing a strategy, as well as timely and appropriate adjustments to strategic goals in a constantly changing environment.

The peculiarity of strategic management in the field of healthcare is that it is closely related to the concept of quality of management organization, since the essence of medical activity is not only in



process management, but also in achieving economic, social and medical performance indicators of efficiency, and, as a result, are focused on improving the health of the population. It is designed to ensure the economic, social and scientific advantage of the institution in the healthcare market, sustainable effective functioning and its continuous development in the long term against the background of meeting the expectations of all stakeholders (consumers, staff, investors, the state, etc.).

Strategic management in the activities of healthcare institutions allows:

 to form the strategies of the institution on a rational basis and determine the need to apply a particular strategy in certain conditions of activity;

- find alternative ways to develop activities and choose the best ones;

- predict the consequences of decisions;

- place and use the resources of the institution more efficiently and effectively;

- take into account the totality of various risks and situations of uncertainty in the development of the institution's activities;



- stimulate and motivate employees of the institution within the framework of a strategic vision based on the ratio of individual and organizational goals for individual staff development;

 overcome resistance to change and form an innovative organizational environment.

The main advantages provided by the use of strategic management for the organization of activities by healthcare institutions are:

- focus on the general strategy of the institution's use of all available resources;

- orientation of management personnel to promptly respond to changes, new opportunities and potential threats in all sectors of the healthcare market, in the environment of the institution;

- the use of unambiguous and adequate criteria for evaluating various investment options in the development of the institution's activities, as well as the development of existing staff;

- decision-making based on the principle of consistency at all levels of management of a healthcare institution.

The toolkit of strategic healthcare management is a set of management technologies used in organizational forms of healthcare and aimed at improving the effectiveness of healthcare as a socioeconomic entity. The degree of effectiveness of the use of strategic management tools is determined by the correctness of determining the strategic goals of the institution, the formation of priority development strategies and strategi implementation programs, which requires the formation of a strategic model of healthcare management. It should be noted that in the practice of medical management, the



use of all known strategic management tools is significantly limited by the specifics of the activities of healthcare institutions.

The introduction of the principles of strategic management into the practice of management of healthcare institutions involves:

1. Implementation of organizational changes: reduction of rigidity and hierarchy of management structures, development of programtargeted management, flexibility of the organizational structure (attention to the autonomy of activities, delegation of authority, teamwork and project management).

2. Focusing on the coordination function of management related to the forecasting of activities, the process of managerial decision-making, coordination of work to ensure interaction between various structural units - inside the institution and outside with affiliated persons, stimulating activities.

3. Implementation of risk management and risk management mechanisms.

4. Innovation management and stimulation of innovative activities of healthcare institutions with the provision of individual initiative of staff and ensuring the development of leadership qualities.

5. Stimulating the continuous process of staff development of the institution and the transition to a model of self-educational organization.

6. Focusing on improving the quality of all types of activities of the institution, as well as its effectiveness, ensuring the formation and development of a culture of effectiveness of the institution.

7. The tendency to increase the role and importance of the organizational culture of the healthcare institution, which allows the best implementation of the strategy, with the involvement of personnel in the formation of the development strategy, management of the institution, the formation of a new quality of medical services by improving the mechanism of motivation and incentives, as well as labor organization.

8. The direction of the operational activity of a healthcare institution to create a medical service of higher quality or with new properties while reducing its cost.

9. Introduction of the principles of intellectual and innovative leadership based on the development of emotional and practical intelligence in employees, competence approach, critical thinking, and creative management. 10. Formation of management capital that ensures the effectiveness of the management system of a healthcare institution.

Business practice (including medical practice) confirms that there is *no single, universal strategy for all companies*, just as there cannot be a single, universal strategic management of an institution. Each institution is unique, so the process of developing a strategy for this institution is unique, since it is determined by the institution's position in the medical services market and access to other healthcare markets, the dynamics of its development and potential, the behavior of its competitors, the state of development of the economic, social and cultural environment, etc. At the same time, the generalized principles of strategic management are a tool for the development and adequate management of healthcare institutions and the development of strategic management in them.

## 1.4.2. Basic concepts in strategic management in healthcare



The key tool of strategic management is strategy.

In general, the strategy is a master plan for achieving the main goal, which involves determining directions the of using limited resources (individual. organization, region, country). Strategic decisions should result in longterm competitive advantages

(of an individual, organization, region, country).

There is quite a wide variety of definitions of the concept of "strategy" (Table 1.4).

The strategy of a healthcare institution is a comprehensive management program containing a combination of methods of organizing medical business and the formation of competitive advantages aimed at achieving the organizational goals of the institution in a dynamic business environment.

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## Table 1.4

Approaches to the demittion of the concept of strategy					
Author	Definition	Main elements of the strategy			
Ansoff I.	A strategy is one of several sets of rules for making a management decision on the behavior of an organization.	A set of rules and principles of managerial decision-making.			
Akmaeva R.	A strategy is a long-term plan to achieve a specific long-term goal based on the condition that all changes in the environment can be foreseen, determined and submitted to full control and management.	<ul> <li>Long-term goals.</li> <li>Long-term plan.</li> <li>Long-term control.</li> <li>Long-term management.</li> </ul>			
Kleiner G.	The strategy is a set of interrelated decisions that determine the priority directions of resource use and the efforts of the enterprise to implement its mission.	<ul> <li>Decision.</li> <li>Priority areas.</li> <li>Resources.</li> <li>Mission.</li> </ul>			
Minzberg G.	A strategy is a plan, a certain type of deliberately designed actions. Strategy is a trick, a trick that is aimed at deceiving an opponent in a competitive struggle. Strategy is a position, the relationship of an organization with the external environment.	<ul> <li>Plan.</li> <li>Sequence of actions.</li> <li>The trick.</li> <li>Position.</li> <li>External environment.</li> </ul>			
Porter M.	Strategy – a plan of measures to counteract industry competition.	<ul> <li>The Five Forces of Competition.</li> <li>Competitive strategy.</li> </ul>			
Tompson A.	Strategy is a set of actions and approaches to achieving certain performance indicators.	<ul><li>Actions.</li><li>Approaches.</li></ul>			
Kamel G.	Strategy is a way to develop an organization's key competitive advantages.	Key competitive advantages.			
Chandler A.	Strategy is a method of determining the long-term goals of an organization, its action program and priority directions for resource allocation.	<ul> <li>Long-term goals.</li> <li>Action program.</li> <li>Priority areas.</li> <li>Resources.</li> </ul>			
Chub B.	A strategy is a master plan of action that defines the priorities of strategic tasks, resources and the sequence of stages for achieving strategic goals.	<ul> <li>Plan.</li> <li>Strategic objectives.</li> <li>Strategic objectives.</li> <li>Resources.</li> <li>Sequence of stages.</li> </ul>			

Approaches to the definition of the concept of "strategy"

The general classification of strategies that can be developed within the framework of the health department is presented in Table 1.5.

Table 1.5

Classification attribute	Types of strategies	Characteristic			
1	2	3			
Implementation	Short-term strategy	Strategy providing for an action plan up to 1 year			
period	Long-term strategy	Strategy that provides for an action plan for more than 1 year			
<b>C</b>	Strategy that uses its own financial sources				
Source of funding	Strategy using exter	rnal financial sources			
or funding	Strategy using mixed	ed financial sources			
Type of	Diversification strat	tegy			
financial nolicy of the	Concentration strat	tegy			
policy of the organization	Integration strategy	7			
Reaction to the influence of environmental factors	Passive strategy	The organization changes its strategy only after the forced influence of the external environment, in particular: legislative authorities, state administrative structures, judicial authorities, etc.			
	Active strategy	The organization tries to respond to adverse changes in the external environment only after they have occurred: practical activity changes only under the pressure of the external environment			
	Proactive strategy	The organization tries to prevent possible changes in the external environment: it can partially use changes in the external environment to its advantage			
	Interactive strategy	The organization accepts changes in the external environment and combines them with its own goals			
The organization's development cycle	Growth strategy (growth)	The main strategy showing the desire to increase the volume of products, profits, capital, etc. is characteristic of newly created or at the "peak" of scientific and technological progress organizations			

Classification of strategies of organization

## Continuation of Table 1.5

1	2	3
1	2	-
	Stabilization strategy (moderate growth strategy: internal, external)	The strategy of the organization's activity in conditions of stable sales and income. It is inherent in organizations that have been on the market for a long time and/or operate in traditional areas of production/ provision of services
	Scaling down strategy (survival)	It is typical for organizations that aim to provide competitive advantages in stagnant markets. It is used in conditions of an imbalance of economic and economic activity and a state close to bankruptcy
	Offensive strategy	It is characterized by the processes of diversification of production, its cooperation or intensification of the market. Associated with a high level of risk
The nature of the strategy	Offensive- defensive strategy (stabilization)	It is implemented in the conditions of «restructuring» of the organization's activities by exiting unpromising, unprofitable areas, sales of non-core units, modernization and expansion of existing production and products
	Defensive strategy (survival)	It provides for the reorganization of all areas of the organization's activities on the basis of strict centralization
Coverage	Corporate strategy	The strategy of the organization as a whole
scale (the level of strategic	Business strategy	Strategy of a separate strategic division of the organization
decisions made)	Functional strategy	Strategy of the functional management area
Competitive approach (according to M. Porter)	Spending leadership strategy	Leadership of the organization and obtaining additional profit by reducing resource prices, reducing production costs, expanding the scale of production or market share
	Differentiation strategy	Concentration of the organization's efforts in some priority areas, where it tries to achieve an advantage over others due to uniqueness. Leadership of the organization due to the innovation of the product/service and entry into new markets (market segments)

End of Table 1.5

	,				
1	2	3			
	Focusing strategy	Concentration of the organization's efforts on one market segment and achieving silent competitive advantages on it through the use of cost leadership or differentiation strategies			
	Administrative strat	tegy			
	Production strategy	1			
Functional	Financial strategy				
approach	Market Strategy (n	narketing)			
(according to	Resource strategy				
I. Ansoff)	Innovative strategy				
	Organizational strategy				
	HR strategy				
According to B. Karloff	Portfolio strategy	It is characterized by the regulation of financial and resource management processes in order to redistribute capital in an organization to achieve a synergistic effect. It provides a focus on the production and sale of a wide range of products that are at different stages of the life cycle to ensure stable income at any time			
	Business strategy (product-market, resource and production)	It is aimed at achieving long-term competitive advantages by the organization, ensuring optimal profit			

The classification of reference business development strategies is presented in Table 1.6.

Table 1.6

## Classification of reference business development strategies

Basic strategy	Specific type of strategy	Characteristics of strategy
1	2	3
Concentrated growth (growth) – is associated with changes	Market strengthening strategy (horizontal integration)	The organization tries to take the best positions in the market and establish control over its competitors, improving the product/service and expanding the sales market.

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End of Table 1.6

1	2	2
1	2	3
	Market development strategy	It is characterized by the search for new markets for a product/service that already exists in the organization.
	Product development strategy	Expansion of the range and manufacturer of a new product/ provision of a new service in the market that is mastered by the organization.
Integral growth (growth) –	Reverse vertical integration strategy	The organization expands its activities by acquiring or strengthening control over the supplier, as well as by creating subsidiaries.
associated with the expansion of the organization due to new structures		The organization expands its activities by acquiring or strengthening control over the structures that are located between the organization and the end user (i. e. over distribution and sales systems).
Diversified growth (growth)	Strategy of centered diversification	The organization uses the additional capabilities of the existing business to produce/provide new goods/services, at the same time, technology and the market do not change.
	Horizontal diversification strategy	The organization is looking for new growth opportunities in the existing market due to new products/services that require new technology.
	Conglomerate diversification strategy	The organization is expanding through the production/provision of new products/services, using new technology and entering new markets.
	Cost reduction strategy	The organization optimizes its activities by reducing costs.
Reduction strategy	Strategy of own reduction (reorientation of activities)	An organization closes or sells one or more divisions or types of businesses in order to implement a long-term change in the boundaries of business.
	"Harvest" strategy	The organization provides for the rejection of a long-term view of the business, maximizing income in the short term.
	Liquidation strategy	The organization is liquidating its business.

There is no single model of strategic management of healthcare institutions.

Different types of management strategies can be used at several levels, namely:

*I. Basic (corporate) development strategy* – at the corporate level.

II. Business line strategies - for different areas of activity.

III. Functional strategies - for functional divisions.

The hierarchy of levels of healthcare institution strategies is shown in Figure 1.8.

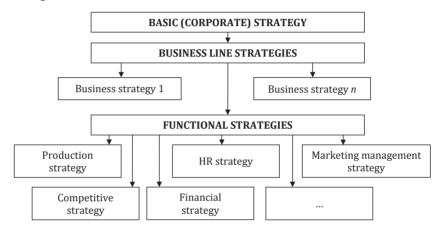


Fig. 1.8. Hierarchical structure of healthcare institution strategies

Consider the hierarchy of strategies within frame of healthcare institution.

*I. Formation of a basic (corporate) strategy for the development* of a healthcare institution, that is, determining the general direction of the development of the institution's activities and specifies the direction of "resources – opportunities." This strategy is the main strategic vector of the institution's activity and development. It characterizes the development of the institution as a whole, it is formulated at the highest level of management and is mandatory for implementation in all structural divisions of the institution.

To implement the basic development strategy, a healthcare institution must form certain components:

- the main elements of the general direction of development (goal setting);

 strategic areas of activity of the institution, where he will work and allocate available resources;

- methods of achieving the set goals.

Such a strategy should combine the strategies of structural units and is the highest level of strategic planning. It should take into account:



- improving performance indicators, efficiency and effectiveness of activities (in various areas: social, medical, economic);

- improving the financial performance of the institution;

- establishment of investment priorities of the institution;

- setting priorities for the redistribution of resources in favor of the most promising areas of activity;

- directions of mastering and strengthening positions in the healthcare market.

The basic (corporate) strategy of healthcare management should be aimed at:

- maximizing the value of medical services for patients by obtaining the best results at the lowest cost;

- transition from the treatment process to the management of a healthcare institution, its clinical, financial and other processes;

- interactive management of the external environment and development within its dynamic changes.

The healthcare institution, forming an adequate basic (corporate) management strategy, creates conditions for effective economic activity, while maintaining competitiveness in the healthcare market, minimizing production losses and maximizing the value of its business. The institution can maintain its integrity, successfully carry out its activities and develop only with a properly formed basic (corporate) development strategy that provides a synergistic effect of activities at all levels of management. So, the basic (corporate) strategy is not the sum of the strategies of its divisions, but the synthesis of strategies for the development of each structural element of the institution, on the basis of which the institution reaches the new level of development.

II. The business strategy (business lines or business units) is developed when there are several independent, autonomous or semi-autonomous



strategic business units in a healthcare institution (especially in the private sector) that have a full business cycle: "marketing – provision of medical services." The example, of distribution along business lines in the field of healthcare can be grouping by areas of medical care: primary

outpatient medical care, emergency medical care, clinical medical care. Within the framework of the business lines strategy, management personnel determine the strategies of production/provision of services, pricing, marketing, personnel strategy and development strategy. They are developed on the basis of the basic (corporate) strategy and are subordinate to it. This set of strategies determines the directions and areas of activity that the institution develops.

**III.** Development of functional strategies for the activities of a healthcare institution Within the complex organization of the environment (which is associated with the multi-sectoral nature of the healthcare market, integration processes, dependence on the world economy, increased pressure on the world market of medical services and the pharmaceutical market, etc.) and in the context of reforming the national healthcare system, there is the need to develop and implement the set of functional strategies of the institution. The main objective of these strategies is to implement the basic principles

of business lines and the basic (corporate) strategy. A functional approach to grouping strategies allows to form specific vou and objectives for the goals development of certain functional of an institution (for units example, innovation management, organizational changes, etc.).



At the same time, attention should be focused on the expediency of choosing the following types of reference strategies within the framework of the functional approach:

- as part of the response of healthcare institutions to changes in the external environment - the interactive strategy when the management of the institution focuses on managing changes; - in the framework of countering competition - the competitive strategy of the institution, when the management chooses the strategy that will best form the line of struggle with competitors;

- as part of ensuring long-term survival - business development strategies and functional strategies. At the same time, functional strategies are detailed in competitive strategies that make it possible to achieve specific objectives of the institution's development in specific conditions.

An interactive strategy is a type of strategy when an organization (enterprise, institution, institution) is "able to accept changes in the external environment and combine them with its own goals." It is aimed at managing changes and shaping these changes. The use of this type of strategy in the management of healthcare institutions allows to harmonize the relationship



between the institution and society, reducing the gap between the expectations of society and the business activity of the institution, as well as to take into account all the transformational processes that occur in the industry. The use of this type of strategy in the management of healthcare institutions allows to harmonize the relationship between the institution and society, reducing the gap between the expectations of society and the business activity of the institution, as well as to take into account all the transformational processes that occur in the industry. The implementation of such a strategic approach within the national healthcare sector is conditioned by the existing trends in the global healthcare market, namely- the concept of a "smart medical society." As part of the interactive strategy, the external environment and the development strategy of the institution are changing simultaneously and in the same direction. Such a strategy is the most dynamic and effective in the long-term future.

*Competitive strategy*. The competitive strategy will allow to identify and form a sustainable competitive advantage of healthcare. It allows you to determine the principles of the institution's behavior based on the characteristics of the healthcare market (or its segment), as well as the sources of competitive advantages available in the

institution. Therefore, the main objective of the competitive strategy is to form the advantages of the services of a certain institution over the services of its competitors among consumers of medical services that is, it involves not just identifying the competitive advantages of a healthcare institution, but also their transformation from potential to real for the institution. The competitive strategies that a healthcare institution can choose are typical for all industries, spheres and types of activities. These include: Spending leadership strategy, Differentiation and Focus strategy. The general characteristics are presented in Table 1.7.

Table 1.7

Condition (criterion) of application	Spending leadership strategy	Differentiation and Focus strategy	
1. The degree of uniformity of the market	The requests of consumers of the service are almost the same	Consumers have certain desires. Demand is sensitive to the improvement of the characteristics of the service	
2. The degree of uniformity of products (services)	Identical, standardized services	The service has various manifestations	
3. Consumer income level	Low level: for low-income consumers, cost is more important than some characteristics of the service	Medium and high income: consumers are focused on the optimal ratio of cost and quality of services. They can purchase the service for reasons of its prestige	
4. Target market size	There is a significant number of consumers of a certain service, which allows the organization to reduce costs	The institution serves an insignificant segment of the market, the need for the service is insignificant	
5. Possibilities of institution	The institution has access to certain types of resources on favorable terms or has other competitive advantages in achieving low costs	The institution is able to offer the market a special service (product) or issue a product offer in a more attractive way than its competitors	

# Conditions for the application of competitive strategies by healthcare institutions

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These mentioned types of competitive strategies are also chosen based on the principle of market coverage or he separate narrow segment. Thus, according to this principle, there are four types of competitive strategies: Spending leadership strategy, Broad differentiation strategy, Focused low cost strategy and Focused low differentiation strategy.

The application of competitive strategies in the field of healthcare has its own characteristics, described below.

**Spending leadership strategy** is typical for the market with the low level of elasticity of demand and high quality requirements. Within the frame of healthcare market, this segment is represented by clinical, therapeutic medical services, surgical interventions, etc., which are vital for the existence of the consumer, so that the demand for these services does not depend on an increase or decrease in the cost of them. The services provided in this segment are standard and homogeneous, used by all consumers in the same way. Such a strategy is appropriate for use by multidisciplinary healthcare institutions serving a significant number and different groups of consumers with various pathologies. Due to the significant number of such institutions and their lack of unique medical technologies and the possibility of specialization, the strategy of strict standardization of services with savings on direct and indirect costs is optimal for them. The strategy

of spending leadership is more inherent in urban and polvclinic hospital institutions (level Π institutions, state-owned). which traditionally serve geographical а certain niche. With this strategy, there is the predominance of budget funding.



**The differentiation strategy** is inherent in the market with the high level of elasticity of demand and high quality requirements. For such the market, the combination of differentiation strategies is inherent. The differentiation strategy assumes the construction of such the service by a healthcare institution, which will differ significantly from the mass one. These differences may be created due to a unique or scarce medical service that is not included in the list of guaranteed MANUAL

volume of medical services and/or due to the better service. This requires additional financial costs from the institution to create differences and support them. At the same time, the quality of the differences created should be such that the potential consumer has the desire to pay for a more expensive service in this institution, and not go to healthcare with the lower cost of the same service. This strategy is inherent in private sector institutions. It allows you to generate additional financial sources by paying and paying for medical services by consumers, as well as medical insurance.

The strategy of focused spending leadership involves focusing on a narrow consumer segment. It is also typical for the market with the low level of elasticity of demand and high quality requirements. From the point of view of the healthcare organization, such the strategy is suitable for healthcare institutions serving "isolated" geographical segments (for example, the area of a healthcare institution). Such institutions should build a structure for providing standard medical services in such a way that the quality is acceptable to consumers, and the price is so attractive that there is no desire to go to another region to receive standard medical services. At the same time, the institution does not focus on providing highly specialized medical services.

The strategy of focused differentiation is inherent in the market with the high level of elasticity of demand and high quality requirements. This is the segment of the market of additional, complementary medical services (for example, cosmetology services, cosmetic surgery,

> instrumental diagnostics. etc.). It assumes the presence of a narrow consumer segment, however, unlike the strategy of focused spending leadership, it focuses on a group of consumers-patients with related pathologies. It is characteristic highly of specialized healthcare institutions in the medical. functional field of activity. The services of the institution using this

kind of strategy are unique for the region and/or country in terms of the quality of medical and related services. This kind of institution is the innovative leader in its field.



The healthcare institution chooses business development strategies and functional strategies depending on the life cycle, priority goals, tasks and problems that arise at a particular stage of development.

## 1.4.3. Strategic planning of healthcare institutions

Developing strategic а management model for a healthcare institution is not an easy task. This process requires a full understanding of the existing problems in the healthcare market. the needs and level of customer satisfaction, an assessment of the quality of medical services



and the available resources of a healthcare institution. This model assumes a comprehensive, integrated and dynamic approach to the strategic management of a healthcare institution.

Schematically, the process of developing a strategic model of health management is presented in Figure 1.9.

Stages of the process of developing strategic health management model.

The first stage is represented by a strategic analysis of the external and internal environment.

The main tools at this stage are:

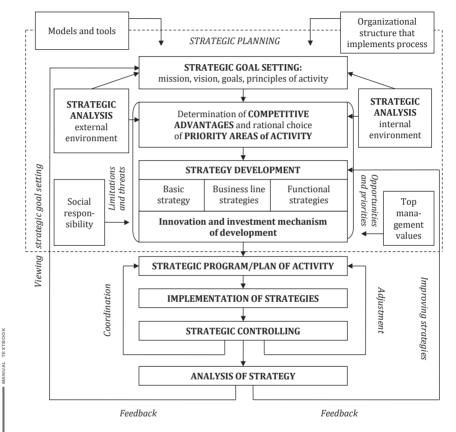
- situational analysis of the SWOT type (analysis of Strengths and Weaknesses, Opportunities and Threats) and PEST (a tool for analyzing Political, Economic, Social and Technological factors affecting the activities of an institution);

- methods of analyzing the strategic position of the institution and competitive analysis (determination of competitive forces, development of a competitive position in the market);

- market segment analysis;

- PIMS business analysis model (analysis of factors affecting the Profit of the Institution in three Main Groups: market attractiveness, competitive position in the market; production structure).

The listed methods and technologies are not exhaustive: the institution can independently choose the set of methods that most fully reveal the essence of its activities. Consequently, at this stage, the initial position of the healthcare institution is determined. Thus, the "problem field" of the strategic management model of the healthcare institution is being formed.



#### Fig. 1.9. Strategic model of healthcare institution management

Strategic analysis of the external and internal environment of *healthcare* is a systematic and multidimensional process. Its peculiarity is that it will contain such areas specific to the healthcare sector as:

- analysis of treatment strategies and technologies (typical, exclusive and non-traditional, using the main national and foreign

competitors of both the public and private sectors of the healthcare market: at the same time, it should be noted the analysis of both existing at the moment and the analysis of promising treatment strategies and technologies) as а basis for ensuring the medical process of the institution:



- analysis of strategic performance indicators of the main competitors (market shares, their ratings, recognition indicators, dynamics of the main financial and economic indicators, consumer reviews, investments, etc.) as a basis for ensuring competitive advantage and potential threats of the institution;

- analysis of the target segment of the healthcare market (analysis of consumer satisfaction, their tastes and preferences, wishes, consumer opinions about the quality of medical care, etc.) as a basis for determining a competitive strategy;

- analysis of the strategic position of the institution in the healthcare market (market share, position in the rating, dynamics of market indicators: market growth rates, assortment renewal rate, etc.) as the basis for the formation of a strategic management model;

- analysis of internal potential of institution (resource provision, human resources, analysis of material and technical base) in order to identify the existing hidden and unrealized opportunities as basis for determination and forming competitive advantages.

All these analytical measures make it possible to determine the position of a healthcare institution in the healthcare market. At this stage, the institution determines the main environmental factors affecting its activities, as well as analyzes internal resources and capabilities. Factors of the external environment in strategic management are considered as threats and opportunities for activity, and internal factors are considered as limitations and promising areas of activity.

The second stage is a process of strategic goal-setting, the formation of a vision by the management of the institution of its "future," as well as determining the values of business activities, after which



the process of developing strategies at different levels of the institution (corporate, business lines and functional units) is carried out, and only then a plan for the implementation of funds to achieve these goals and strategies is developed.

A healthcare institution is a complex socio-economic system with a complex set of goals and objectives. At this stage, the formation and profiling of the mission of a healthcare institution is carried out to determine the vector of its activities (personalized or aggregated) as a "starting element of the model."

At this stage, the vision of activities in the following areas is also determined:

- vision of the existing state of the institution from the outside;
- vision of the existing state of the institution from the inside;
- vision of the future state of the institution from the outside;
- vision of the future state of the institution from the inside;
- vision of the institution's purpose;
- management and restriction requirements.

Also at this stage, the main goals and principles of activity are determined in areas related to the stages of the life cycle of healthcare, and with medical, financial, organizational and innovative activities. Consequently, this stage determines the existing and future institutions, limited by the principles of accountability, continuous improvement, patient-orientation and quality of services.

At the third stage, the competitive advantages of a healthcare institution are determined and a rational choice of priority areas

> of activity is carried out, based on a strategic analysis of the external and internal environment. The choice of competitive advantages and priority areas is determined by the potential capabilities of the institution, as well as ensuring the sustainable development of healthcare. This is the process of strategic planning, that is, the process of making managerial decisions, both structured and unstructured.



The fourth stage is the stage of developing a hierarchical set of strategies, which should be provided with an innovative investment mechanism for development. This is the process of strategic planning, that is, the process of making managerial decisions, both structured and unstructured. Strategic planning is a multidimensional type of activity aimed at forming and maintaining a sustainable competitive advantage of a healthcare institution by: (1) adaptation of the institution's activities to constantly changing environmental conditions, (2) managing the goals of the institution, as well as (3) maximizing the effective use of the institution's capabilities based on the interaction of internal and external processes.

The presence of a clearly formulated hierarchical set of strategies allows you to create an effective and transparent complex "strategy – structure – control."

The fifth stage involves the formation of a detailed, step-by-step program/action plan for the implementation of a hierarchical set of strategies.

The implementation of strategies is the next - the sixth stage of the strategic management model of the institution.

The implementation of the strategy is accompanied by a continuous process of monitoring the implementation of the program/action plan - the seventh stage, leading to the processes of coordination and regulation of the activities of a healthcare institution within a certain program/action plan.

The eighth stage is an analysis and study of the results of the implementation of a hierarchical set of strategies for various sources of information (analysis of financial, personnel, organizational reports, patient complaints, stakeholder comments, a sociological survey, etc.). These data make it possible



to identify key aspects of healthcare business activities, give a clear idea of the effectiveness and efficiency of the institution's activities, and also determine the areas of its strengths and weaknesses.

Based on the conclusions obtained from the results of the analysis, the feedback process integrates the results of the analysis with the strategic management process. The implementation of feedback

within the framework of the strategic management model of the institution is designed to: (1) adjustment/improvement of the goalsetting process of a healthcare institution, as well as (2) adjustment/ improvement of the process of developing a hierarchical set of strategies of a healthcare institution. Feedback allows management to assess the progress made and accept or reject recommended changes in the strategic management model of the institution based on the results obtained.

The implementation of the strategic security management model should take into account the opinion of all stakeholders in the industry, as shown in Figure 1.10.

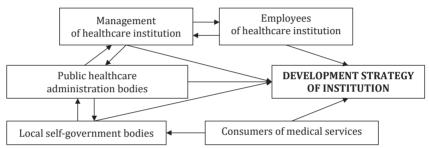


Fig. 1.10. Interaction of participants of the healthcare market in the formation of the strategy for the development of the healthcare institution

Modern medical management needs to develop a scientifically sound strategy for the management and development of healthcare institutions. Mastering the tools and methods of strategic management of healthcare institutions based on the creation and development of an appropriate scientific theoretical and methodological base that takes into account the specifics of healthcare becomes a necessary condition for further reform of the national healthcare sector and the formation of state policy of the industry.

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## **Control questions**



- 1. Explain the essence of strategic management as a process of determining the relationship of an organization with the environment.
- 2. Provide a definition of strategic management based on the resource approach.
- 3. Describe the features of strategic management in the field of healthcare.
- 4. Reveal the main advantages that the use of strategic management provides for the organization of activities by healthcare institutions.
- 5. Explain what involves the introduction of the principles of strategic management into the practice of managing healthcare institutions.
- 6. Explain the variety of definitions of the concept of "strategy."
- 7. Describe the features of the strategy of the healthcare institution.
- 8. Provide a general classification of strategies that can be developed within the health administration.
- 9. Explain the essence of the hierarchical structure of healthcare strategies.
- 10. Explain the formation of the basic (corporate) strategy for the development of a healthcare institution.
- 11. Explain the specifics of developing a business strategy (business lines or business units) in a healthcare institution.
- 12. Explain the development of functional strategies of the healthcare institution.
- 13. Describe interactive and competitive strategies.
- 14. Explain the conditions for the use of competitive strategies by healthcare institutions.
- 15. Explain the specifics of the application of competitive strategies in the field of healthcare.
- 16. What are the main stages of the process of developing the strategic healthcare management model?
- 17. Describe the strategic management model of a healthcare institution.
- 18. Explain the interaction of healthcare market participants in the formation of a strategy for the development of a healthcare institution.



#### Tests

- 1. According to the resource approach, the definition of strategic management is:
  - A. Management process to achieve the mission of the organization by managing the interaction of the organization with its environment.
  - B. A set of decisions and actions for the formulation and implementation of strategies developed to achieve the goals of the organization.
  - C. The process of effectively selecting the most productive nontrivial resources and ways to develop implicit key organizational capabilities.
  - D. An active process that allows strategic plans to develop and be formed, taking into account environmental changes.

## 2. The peculiarity of strategic management in the field of healthcare is that it:

- A. It is characterized by the implementation by the management of the medical institution of the process of setting strategic goals, developing and implementing a strategy, as well as timely and appropriate adjustments to strategic goals in a constantly changing environment.
- B. Coincides with the tasks of implementing effective competition in relatively weak medical industries, and the concept of dynamic opportunities takes into account the time factor and the entrepreneurial nature of decisions.
- C. It is closely related to the concept of quality of management organization, since the essence of medical activity is not only in process management, but also in achieving economic, social and medical performance indicators.
- D. There is no right answer.
- 3. Briefly describe the main advantages that the use of strategic management provides for the organization of activities by healthcare institutions.

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- 4. A comprehensive management program containing a combination of methods of organizing medical business and the formation of competitive advantages aimed at achieving the organizational goals of the institution in a dynamic business environment is:
  - A. Strategy in general (in general).
  - B. Tools of strategic management of a healthcare institution.
  - C. Strategy of the healthcare institution.
  - D. Innovative activity of healthcare institutions.
- 5. The strategy of the organization's activity in conditions of stable sales and income is inherent in organizations that have been on the market for a long time and/or operating in traditional areas of production/ provision of services, this is:
  - A. Growth strategy (growth).
  - B. Stabilization strategy (moderate growth strategy: internal, external).
  - C. Reduction strategy (survival).
  - D. Differentiation strategy.
  - E. Focus strategy.
- 6. When an organization tries to take the best positions in the market and establish control over its competitors, improving the product/ service and expanding the sales market, it uses:
  - A. Strategy of strengthening the position in the market (horizontal integration).
  - B. Market development strategy.
  - C. Product development strategy.
  - D. The strategy of reverse vertical integration.
  - E. The strategy of centered diversification.
  - F. The strategy of liquidation.
- 7. The business strategy (business lines or business units) is developed on:
  - A. At the general organizational level.
  - B. At the level of functional units.
  - C. At the level of different areas of activity.
  - D. At the level of personnel strategy.
  - E. At the level of financial strategy.

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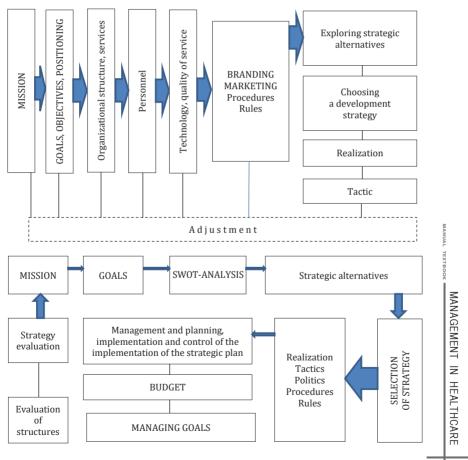
- 8. This strategy allows you to determine the principles of behavior of a medical institution based on the characteristics of the healthcare market (or its segment), as well as the sources of competitive advantages available in the institution. This is:
  - A. Competitive strategy.
  - B. Interactive strategy.
  - C. Corporate strategy.
  - D. Functional strategy.
  - E. Portfolio strategy.
- 9. Such a strategy is typical for highly specialized healthcare institutions in the medical, functional area of activity, whose services are unique for the region and/or country in terms of the quality of medical and related services. This is:
  - A. Spending leadership strategy.
  - B. Broad differentiation strategy.
  - C. Focused differentiations strategy.
  - D. Focused cost leadership strategy.
- 10. At the first stage of the process of developing a strategic management model of a healthcare institution, it is necessary::
  - A. Determine the vision of the existing state of the medical institution from the outside and from the inside.
  - B. To carry out a strategic analysis of the external and internal environment of a medical institution.
  - C. To form a detailed step-by-step action program for the implementation of a hierarchical set of strategies of a medical institution.
  - D. To determine the competitive advantages of a healthcare institution and to make a rational choice of priority areas of activity.

Individual work



Strategic plan for the creation (development/reorganization) of public/private medical institution (with the participation of foreign capital) of form of ownership

I. Development of a strategic plan for a public (private) medical clinic:



Examples of the development and branding strategies of medical clinics can be found on the websites: https://odrex.ua/ua/o-nas/, https://into-sana.ua/about/, https://svekaterina.ua/about/

#### II. Working in groups:

Evaluation of competitors' strategic plans, their critical analysis.

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SECTION 2

# MARKETING IN HEALTHCARE

#### 2.1. FUNDAMENTALS OF MARKETING IN HEALTHCARE

2.1.1. Basic fundamentals of healthcare marketing

2.1.2. Medical services market and marketing research

2.1.3. Medical marketing in modern healthcare

**Control questions** 

Tests

Situational tasks

### 2.2. COMPREHENSIVE MARKET RESEARCH

IN THE HEALTHCARE MARKETING SYSTEM

2.2.1. Comprehensive market research

2.2.2. Marketing models and positioning of goods (medical services)

2.2.3. Medical insurance and their economic aspects

Control questions

Tests

Situational tasks

#### 2.3. FUNDAMENTALS OF PRICING IN HEALTHCARE

- 2.3.1. Basic principles of pricing for medical services
- 2.3.2. The structure of the price of medical services
- 2.3.3. Pricing in healthcare at the state level

Control questions

Tests

Situational tasks

#### 2.4. STRATEGIC MARKETING IN HEALTHCARE

- AND THE BASICS OF STRATEGIC ANALYSIS
- 2.4.1. Marketing strategy in the management system and the process of its development
- 2.4.2. Strategic marketing planning. Quality management
- 2.4.3. Technologies of strategic analysis and methods of marketing business planning

**Control questions** 

Tests

Individual work

**RECOMMENDED LITERATURE TO SECTION 2 "MARKETING IN HEALTHCARE"** 

## FUNDAMENTALS OF MARKETING IN HEALTHCARE

- 2.1.1. Basic fundamentals of healthcare marketing.
- 2.1.2. Medical services market and marketing research.
- 2.1.3. Medical marketing in modern healthcare.

#### 2.1.1. Basic fundamentals of healthcare marketing

The origin of the term "marketing" (etymology) is associated by many scientists with the merger of two English words: market and getting. Thus, marketing is the science of conquering the market. In accordance with the definition of F. Kotler, marketing is a type of activity aimed at meeting the needs of consumers through exchange. A distinctive feature of the marketing concept, respectively, is the orientation to the consumer, that is, to meet demand.

Basic concepts of marketing in medicine:

- shortage;
- need;
- demand;
- product/service;
- exchange;
- operation;
- market.



Stages of the historical development of marketing:

*Production orientation* – marketing was passive, everything was determined by the production condition. Some goods were practically not needed, much was written off. The manufacturer worked out of contact with the consumer.

*Marketing orientation* – products had to be sold, promoted to the market.

*Customer orientation* - the shortest way to make a profit, it is necessary to find out the consumer, the buyer, and then meet their needs. This leads to a thorough study of the market.

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*Orientation to society* is based on the interests of individuals, so companies began to focus on society, economic aspects, people's health, public opinion.

#### Marketing in medicine solves two main tasks:

 orientation of the production of medicines and hygiene and the provision of medical services to meet the existing and potential needs of the population to be healthy and self-confident;

- formation and stimulation of demand for medical services and methods of treatment for people's health and well-being.

Based on the main tasks, the main marketing formulas are formulated:

- to produce what can be sold, and not to try to sell what can be produced;

- the consumer is the king, and we are his faithful servants, and our task is to help him make his choice with respect and the greatest convenience for the consumer;

- who forgets about competitors, the market will forget tomorrow.

*Medicines* are a special category of products, they affect the most valuable thing a person has - his health.



The health of every citizen is a strategic value of any state. The level of trust in the doctor and the clinic as a whole can both simplify and complicate the treatment process. In the latter case, they talk about iatrogenic diseases — caused by the actions or even words of a doctor.

The following groups of subjects operate in the medical activity market:

- manufacturer, seller of medical goods and services - enterprise (pharmaceutical), medical institution (clinic), doctor, medical worker, pharmacist;

- buyer (consumer of the service) - patient (healthy or sick);

- intermediaries - employers of various forms of ownership, dealer companies, mandatory and voluntary medical insurance funds, medical insurance organizations.

The responsibility of medical service providers (medical centers, clinics) to patients is high, the process of providing medical services

and the direct promotion of such services on the market requires compliance with certain rules and regulations.

Specific features and principles of marketing in medicine.

Marketing in medicine is a system of principles, methods and measures based on a comprehensive study of consumer demand and purposeful formation of offers of medical services by the manufacturer.



#### Specific features of marketing in medicine:

1) the priority of social and medical efficiency over economic;

2) the asymmetry of information between the producer and the consumer regarding the consumer properties of the service received;

3) the almost absolute trust in the seller of medical services;

4) the medical service that can be easily sold must be of high quality;

5) the high priority of medical services;

6) the lack of a clear relationship between the labor costs of medical workers and the end result.

Since medical services are quite specific and affect the concept of life and health of patients, implementing a complex of medical marketing, one **should always remember about responsibility and ethical principles**.

Here are some of the following principles of medical marketing:

- *specialized education*: management of medical marketing by specialists without specialized medical education is possible, but in this case it is necessary to involve doctors in monitoring the actions of the marketer;

- *professional ethics*: a marketer should know the moral norms accepted in the medical community and share them;



- *treatment process*: medical marketing cannot be part of the process of providing medical services; in the process of diagnosis and treatment, a doctor cannot perform the functions of a marketer;

*– ethics of communication*: it is unacceptable in the process of communication

in any way to offend the feelings of patients with defects, certain diseases, to intimidate patients, forcing them to make rash decisions, to contrast healthy and sick;

*impartiality*: medical marketing should be independent of any opinions of medical service providers, manufacturers of medicines or medical equipment; it should be based only on opinions accepted in the medical community;

- *informing the patient*: medical marketing should strive to fully inform the patient about the specifics of the diagnosis and treatment process, about possible risks and complications.

#### The main types of marketing in healthcare are:

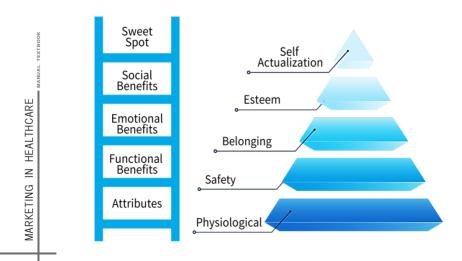
1) marketing of medical and pharmaceutical services, including the process of developing, promoting and selling services taking into account the needs of consumers (population);

2) *marketing of organizations* (creation, support of public relations with a medical institution);

3) *marketing of individuals* (creating, maintaining relationships with a specific specialist: a doctor or pharmacist);

4) *marketing of places* (creation, support of relations of the population with the specific locality where the medical institution is located);

5) *marketing of ideas* (development and implementation of forms and methods of a social nature; formation of a healthy lifestyle, rejection of bad habits, family planning).



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When carrying out activities in the field of medicine, it is necessary to take into account the **circumstances and factors affecting the formation of needs for medical services**:

- The needs for medical services depend on gender, age, social affiliation, profession.

- The needs are characterized by different stages of occurrence - "birth," peak, residual character. The task of the marketer is to identify the growing needs in time, which will ensure success in the market in the future.

- There are partially satisfying needs, so it is necessary to offer new products and services that can satisfy them completely.

- The satisfaction of some needs can lead to the emergence of others. Such needs accompany. Therefore, it is necessary to provide a full range of medical services and additionally offer medical and hygienic goods.

#### 2.1.2. Medical services market and marketing research

The medical services market is a set of medical technologies, products, medical equipment, methods of organizing medical activities, pharmacological agents, medicinal action and prevention implemented in a competitive economy.

#### Medical services market segments:

- geographical: countries, regions, cities, districts, towns, villages;
- demographic: gender, age, family size;
- psychographic: belonging to a social class, lifestyle;

- behavioral variables: depending on their knowledge, attitudes, and the nature of the response to the service.

Initially, the marketing complex consisted of four elements (4P), later became more complicated and, as a result, moved to the 5P and 7P marketing complex.

The components of the 4P marketing mix: **product**, **price**, **location**, **promotion** can be used by any company:



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- The product is the main element of the marketing mix.

- **Price** is considered from the point of view of pricing approaches: price lists, discounts, margins, payment terms, credit, payment terms, etc.

- Place or distribution is the actions that an enterprise performs to ensure the delivery of goods to the target group of consumers at the right place and time. It is characterized by the following categories: distribution channels (sales), intermediaries, sales levels, transportation, inventory, placement, training of sales personnel, etc.

- **Promotion** is the creation of information relationships between a company and its target market (consumers). Here it is implied: public relations, advertising, exhibitions, personal sales, sales promotion, PR, direct sales method, etc.

The **5P mix marketing concept** includes another element – **People** – sellers and buyers of goods (relationship marketing) – development of the company's personnel policy (recruitment and training of personnel focused on the client and entire firms), the formation of potential customers.

There are 3 more elements added to the **7P model**: **Process**, **People and Perceptibility**, which are more appropriate for the B2B market (Business for Business) and are suitable for the marketing complex in the service market.

The information used for marketing research should be:



- high-quality;

- probable (minimal error);

– full;

 accurate (corresponding to the real meaning of the state of affairs);

- up-to-date (fresh information, not outdated);

- valuable and useful

(matching the goal, the market situation).

Among the factors that attract consumers of medical services, the following should be highlighted:

1. The consumer prefers high-quality service and a medical institution that most fully helps to solve his health problems.

2. The patient strives to know as much as possible about the medical institution and the doctors providing medical care. Therefore,

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it is necessary to adhere to the "open door policy," in particular, to participate in exhibitions, conferences, congresses.

3. The patient prefers an atmosphere of goodwill, guaranteed quality and targeted services (only for him).

4. A medical institution should provide for the provision of

interchangeable services. For example, if there are several different methods of treating a certain disease, you should use them all. Thus, the doctor and the patient can choose the most optimal method of treatment within the same medical institution.

Directions and methods of marketing research

*Marketing researchers usually solve the following tasks*: research of market features; measurement of potential market opportunities; analysis of the distribution of market shares between firms; sales analysis; research of business activity trends; research of competitors' products and services; short-term forecasting; research of reaction to a new product and its potential; long-term forecasting; research of the central bank's policy.

*These studies are conducted using two methods:* the first method is the method of expert assessments. the second method is the method of sociological research.

The marketing plan solves the following issues:

- What is the situation with the availability of services (goods) among a certain group of the population or in a certain territory?

- What are the production and transportation costs for the manufacture and delivery of goods (sale of services), that is, what is the cost price?

- What is the consumer value of goods (services) in the local market?

- What is the purchasing power of the population?

- What are the winning, best products (or services) offered in comparison with existing ones on the market?





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- What are the medical, marketing, psychological and advertising conditions for influencing the consumer?

Marketing of medical services takes into account:

- *consumer capabilities* (quantity, concentration, solvency, morbidity structure);

- *possibilities of a medical institution* (equipment, personnel status, licensing of services, armament of new equipment, commercial experience);

- quality, level and availability of medical services (a set of services, their quantity, additional, desired and mandatory services, opportunities for improvement and updating of services, their novelty, practical and medical effect, etc.);

- *competition* (the number of similar services, their quality and efficiency, equipment with the latest technology, the professional level of specialists and their authority in other institutions).

#### 2.1.3. Medical marketing in modern healthcare



The number of people on the planet is increasing, they continue to get sick and need health and beauty. Most are treated with medicines from the pharmacy, unconscious selfmedication succeeds. This is the basis for the improvement and growth of the medical and

pharmaceutical business as a whole. The predominance of elderly people among the population also contributes to an increase in spending on medicine and pharmacy.

Medicine has long been a business. The further deterioration of the situation in public medicine and the uncertainty of the prospects for domestic healthcare contribute to the development of private practice. According to surveys, every third patient chooses a private clinic in Ukraine. When choosing, about 40 % rely on the recommendations of familiar patients. That is why now the most competitive business

model in medicine will be the maximum proximity to the patient while providing high-quality services and high service.

Urgent medicine, various surgical areas (traumatology, transplantology, cardiac surgery, neurosurgery, and oncology), plastic surgery, gene therapy, private laboratories and rehabilitation centers will develop most actively in Ukraine.

In addition, a huge number of medicines are being developed today, which are more affordable in comparison with original medicinal products. They will be most in demand, as pharmaceutical companies will invest their budgets in their promotion (marketing).

For the period 2020–2025, breakthrough innovations are expected in medicine: the introduction of nano-technologies, the development and production of individual medicines and ultra-precise equipment, the improvement of biotechnologies, gene materials, etc.

Taking into account the aging of the population, the potential danger of diseases that most often occur in old age will increase. That is why all medical scientific and practical potential, management and marketing will be directed to the prevention and preservation of severe consequences of diseases of the cardiovascular system, heart attacks, strokes, and oncology. The fight against incurable diseases will also continue.

Medicine will actively develop in the areas of prevention and propaedeutic of diseases arising in the course of life; the ability to control the processes occurring in the body and prevent



their deviation from the norm (for example, biosensors); to take into account individual characteristics of a person as much as possible and promote the introduction of "smart technologies" into everyday life.

The main medical trends in Ukraine in 2020–2025 are as follows: actively attracting investors, introducing new technologies and reforming the healthcare system:

1. The transition from the free of charge to the private medicine. Doctors are interested in the number of patients and providing them with quality services, because the income of the doctor will depend on this. 2. Medicine in Ukraine will increasingly approach international standards. This will be facilitated by the constant exchange of experience and training of professional doctors, as well as the introduction of international treatment protocols into practice.

3. Private clinics will develop even more. Investors from different countries have been showing interest in the medical business in Ukraine for a long time.

4. Active implementation of IT technologies. Now the computer literacy of doctors is increasing - the ability to use a computer will become one of the mandatory skills of medical personnel.



In addition to the goals of efficiency and fairness, the formation of paid and free healthcare sectors based on competition within and among themselves would be a significant step towards the organic unity of the public health market and its separate structure – the medical services market.

The development of healthcare as a socio-economic structure should take place in harmony with the economic and social development of the state.

Therefore, one of the types of strategy in modern healthcare should be a strategy of social and moral marketing, providing for the conduct

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of therapeutic and preventive activities, the sale of goods and services for certain special groups of the population (pensioners, war and labor veterans, single, low-income, large families, people with socially significant diseases, etc.). A program of sponsorship, gratuitousness, price reduction, charity, honesty, and moral orientation must be



provided for in commercial activities. A favorable style of medical organization creates psychological trust and, ultimately, medical and economic benefits.

#### **Control questions**



- 1. The essence of marketing. Basic marketing concepts.
- 2. Stages of marketing development.
- 3. Principles and functions of medical marketing.
- 4. Marketing and the field of medical services.
- 5. The market of medical services and the level of income of the population. Specific features of medical marketing.
- 6. Subjects of marketing activities in the field of healthcare.
- 7. Factors influencing the formation of needs for medical services.
- 8. Medical service.
- 9. The difference between medical services and other types of services.
- 10. Types of medical services.
- 11. Macro- and micro-level of marketing research.
- 12. Channels of movement of medical services from the medical institution to the consumer.
- 13. Stages of the life cycle of medical services.
- 14. Components of marketing MIX 4P, 5P, 7P.
- 15. Prospects of medical marketing in the context of reform.

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#### Tests

- 1. Determine which of the following measures relates to the field of marketing:
  - A. Calculation of the cost of production.
  - B. Forecasting demand volumes.
  - C. Search for potential suppliers of raw materials and materials.
  - D. Establishment of planned production volumes and formation of the production program.
- 2. The orientation of the enterprise to the production of environmentally friendly goods is hierarchical for:
  - A. Concept of product improvement.
  - B. Marketing concept.
  - C. Concepts of social and moral marketing.
  - D. Concepts of interaction marketing.

#### 3. In case of negative demand, the following is used:

- A. Stimulating marketing.
- B. Developing marketing.
- C. Counteracting marketing.
- D. Conversion marketing.
- **4.** The desire of a marketer to always have up-to-date information is: A. Need.
  - B. Request.
  - C. Professional necessity.
  - D. Motivation.

#### 5. "Marketing myopia" is one of the disadvantages:

- A. Concepts of production improvement.
- B. Concepts of product improvement.
- C. Concepts of intensification of commercial efforts.
- D. Marketing concepts.

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#### 6. Marketing, as a science, first appeared:

- A. At the beginning of the XIX century.
- B. In the middle of the XIX century.
- C. At the end of the XIX century at the beginning of the XX century.
- D. In the first third of the twentieth century.

#### 7. What is the purpose of marketing activities in a healthcare institution?

- A. Meeting the needs of consumers.
- B. Increasing the amount of profit.
- C. Reducing the cost of products (medical services).
- D. Correct answers A and B.

#### 8. Find the right expression:

- A. Marketing is aimed at achieving a three-pronged goal.
- B. Product is everything that satisfies demand.
- C. Marketing and the concept of marketing are essentially the same.
- D. Need is a specific form of manifestation of need.
- E. Seller's market is a market in which buyers have more power and where sellers are forced to be the most active "market leaders."

# 9. To which of these products, most likely, counter-marketing can be used:

- A. Cosmetologist services.
- B. Precious jewelry.
- C. Counterfeit medicines.
- D. Air transportation.

#### 10. Promising areas of development of the medical industry are:

- A. Emergency medicine.
- B. Various surgical areas (traumatology, transplantology, cardiac surgery, neurosurgery, oncology), plastic surgery.
- C. Private laboratories and rehabilitation centers.
- D. All options are correct.



#### Situational tasks

#### Situation 1

Using A. Maslow's hierarchy of needs, analyze what needs manufacturers of such products are trying to meet:

- "Rolex" wristwatches;
- "Colgate" toothpaste and mouthwash;
- "Actimel" yogurt;
- "Ariston" washing machine;
- "Samsung Galaxy" mobile phone;
- "Paracetamol" the drug;

- rest in the "Shayan" sanatorium-resort complex, preventive treatment according to the schedule, according to the doctor's appointment;

- "Tibetan tea" non-medicinal homeopathic remedy;
- vacation at the "Bukovel" ski resort.

Please note that each of the products can be oriented to several levels of the pyramid at the same time.

#### Situation 2

Make a list of marketing functions that should be performed by employees:

- city hospital;
- publishing houses that produce educational literature;
- pharmaceutical company;
- automobile corporation;
- travel company;
- private dental clinic.

#### Situation 3

Using the 7P model determine what are the features of service marketing of the following:

- "Odrex" Medical House clinics in Odessa;
- "Odessa Medical Institute" higher educational institution;
- "Pharmacy" chain of pharmacies.

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#### Situation 4

Make a comparative analysis (common features and differences) of these types of marketing:

- consumer and industrial marketing;

- domestic and international marketing;

- marketing of material products (medicines) and marketing of services (medical).

The comparison should be carried out separately for each of the marketing functions: analysis of the marketing environment, development of product policy, development of pricing policy, development of distribution policy, development of communication policy.

#### Situation 5

Analyze the publications of electronic and print media and find examples of environmental protection actions carried out by Ukrainian and foreign enterprises of the medical industry (hospitals, polyclinics, private medical clinics, pharmaceutical enterprises, pharmacy chains) over the past three years.

### COMPREHENSIVE MARKET RESEARCH IN THE HEALTHCARE MARKETING SYSTEM

- 2.2.1. Comprehensive market research.
- 2.2.2. Marketing models and positioning of goods (medical services).
- 2.2.3. Medical insurance and their economic aspects.

#### 2.2.1. Comprehensive market research



# Marketing researchers solve the following tasks:

- research of market features;

- measurement of potential market opportunities;

analysis of the distribution of market shares between firms;

- sales analysis;

- research of business activity trends:

- research of competitors' products and services;
- short-term forecasting;
- research of reaction to a new product and its potential;
- long-term forecasting;
- study of price policy.

#### These studies are conducted using two methods:

1. *The first method* is the method of expert assessments, when the necessary information is obtained by selecting and interviewing experts on the proposed issues.

2. *The second method* is the method of sociological research. Suppose a polyclinic wants to know whether people living in the territory it serves are positively disposed towards it. It is necessary

to obtain information that allows you to make the right decision as a result of the conducted research.

The marketing plan solves the following issues:

- What is the situation with the availability of services (goods) among a certain group of the population or in a certain territory?

- What is the demand for this type of service (product)?

- What are the production



and transportation costs for the manufacture and delivery of goods (sale of services), that is, what is the cost price?

- What is the consumer value of goods (services) on the local market?

- What is the purchasing power of the population?

- What are the winning, best products (or services) offered in comparison with existing ones on the market?

- What are the medical, marketing, psychological and advertising conditions for influencing the consumer?

In addition to marketing research, one of the main rules of marketing activity is the multi-channel distribution and sale of goods (services).

The presence of many groups of consumers of different genders, ages, and social status interested in this type of services can be maintained on the basis of *constant psychological impact on the consumer* (advertising).

A medical service, like any other product, has its *own stages of the life cycle*, the knowledge of which is of fundamental importance in marketing. The main such stages are considered:

1. The stage of introducing the service to the market.

2. The stage of growth.

3. The stage of maturity and saturation of the market.

4. The stage of the decline of need.

#### Marketing of medical services takes into account:

*– consumer capabilities* (quantity, concentration, solvency, morbidity structure);

- *possibilities of a medical institution* (equipment, personnel status, licensing of services, armament with new equipment, commercial experience);

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- quality, level and availability of medical services (a set of services, their quantity; additional, desired and mandatory services; opportunities for improvement and updating of services, their novelty; practical and medical effect, etc.);

*competition* (the

number of similar services, their quality and efficiency, equipment with the latest technology, the professional level of specialists and their authority in other institutions).

# 2.2.2. Marketing models and positioning of goods (medical services)

To date, there are several recognized theoretical models of marketing services, the creators of which are such recognized scientists as L. Berry, A. Pa-Rasuraman, D. Ratmel, L. Eiglie, E. Langeard, V. Zeithaml, M. Bitner, F. Kotler, E. Gammesson, K. Grenroos.

Marketing models help to understand the needs of consumers (potential patients), build a sales funnel, identify the target audience and check (analyze) the strategy.

Let's consider the most effective marketing models and their implementation into the practical activities of a private medical clinic: RACE, 4P-7P and 4C, PESO, Hunt's ladder, RFM, AIDA, SOSTAC.

1. RACE-model planning of communication with the consumer It consists of 4 stages and covers all points of contact with customers: - reach, some marketers indicate research - first the audience gets to the advertisement;

- action - then goes to your website and studies products, services;

- conversion - makes an order;

- engage - gets into your loyalty program or subscribes to your social networks.

The model is used in the promotion of complex and expensive services that are not sold here and now, for example, plastic surgery clinics, dental clinics, comprehensive medical centers.

#### How to apply:

1. The first step is to increase the visibility of your brand by using all channels and contact points.

Channels for reaching the audience can be: search



systems; social networks; publications in the media; contextual advertising; e-mail newsletters.

2. At the next stage, the potential consumer gets acquainted with your offer, compares it with other offers and is ready to make a choice. He does any actions on your site, for example, orders a doctor's consultation in a chat, and fills out a contact form.

In order not to lose a potential client and bring him to a deal, you need to plan **regular communication** with him.

Use channels such as:

- clinic website;
- blog with leading doctors;
- social networks, enter a chain of mailings or prepare regular



letters on the list of medical clinic services. 3. Conversion is the stage when the patient has already used the services of a medical clinic, and now it is necessary to provide him with everything necessary for а comfortable long-term program of using medical services: for example, preventive care, online consultations with leading doctors, online webinars with clinic specialists. Be always in touch with the patient and use remarketing to keep the circle of potential consumers (patients).

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4. Supporting communication with patients will help you increase their loyalty and the possibility of repeated visits. Therefore, continue to communicate with consumers on social networks through useful content, create a community of your brand. For example, patients who have been using the services of a medical clinic for more than 1 year should be offered a loyalty program, which will provide, for example, additional free consultations with a doctor, additional procedures, etc.

#### 2. 4P, 4C, 5P and 7P.

In 1953, Neil Borden, the President of the American Marketing Association, wrote an article "The concept of a marketing mix," in which he proposed **12 tools** for product promotion: product planning (new, subsequent and future products); pricing; branding; distribution channels; sales organization and costs; advertising; promotion; packaging; service; presentation (merchandising); logistics; analytics.

In 1964, Jerome McCarthy, marketer, proposed a model based on the **4P marketing mix**: product, price, place (distribution) and promotion.



- **Product** is the main element of the marketing mix.

- **Price** is considered from the point of view of pricing approaches: price lists, discounts, margins, payment terms, credit, terms of payment, etc.

- **Place** or distribution is the actions that an enterprise performs to ensure the

delivery of goods to the target group of consumers at the right place and time. It is characterized by the following categories: distribution channels (sales), intermediaries, sales levels, transportation, inventory, placement, training of sales personnel, etc.

- **Promotion** is the creation of information relationships between a company and its target market (consumers). Here it is implied: public relations, advertising, exhibitions, personal sales, sales promotion, PR, direct sales method, etc.

The **5P** marketing mix concept includes another element – People – sellers and buyers of goods (relationship

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marketing) – development of the company's personnel policy (recruitment and training of personnel focused on the client and entire firms), the formation of potential customers.

Three more elements are added to the **7P marketing mix** model: **Process, People** and **Perceptibility**, which are more appropriate for the B2B market (business to business) and are suitable for the marketing complex in the service market.

According to this model, if the company will produce the right

product or service at the right (suitable) price and sell it in the right place with competent advertising support, then this company will have a lot of customers (consumers).

This concept focuses on manufacturers and works as long as the choice of goods and services is limited. As soon as competition begins to grow, the tasks of manufacturers shift: they



think about how to stand out and please the buyer (consumer).

The process of interaction between the consumer and the brand. Process answers the question: "How to optimize the process of providing services (including medical) and communicating with patients?"

*Physical characteristics* – *the atmosphere, the environment in which a medical institution provides a service.* Physical evidence answers the question: "How can the situation in a medical institution affect the decision of the patient (consumer)?"

In 1990, Robert Lauterborn, American Advertising Professor, proposed a new approach -4C model, describing the promotion



of products from the consumer's perspective.

4C model:

- customer value;
- cost to the customer;
- communications;
- convenience to buy.

As the **focus shifted from the product to the buyer (consumer)**, the 4C model changed the 4P–7P models. MARKETING IN HEALTHCARE

### 3. PESO.

The **PESO model** was proposed by Jeanie Dietrich, Marketing and Public Relations Expert, in 2014.



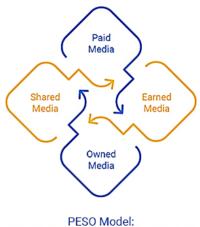
1. *Paid* – channels with the ability to place content "on the rights of advertising." This is a media where you can publish paid publications about the company: partner materials, banners on websites, placement in influencers, native articles.

2. *Earned* – channels in which the brand is mentioned: comments from your company's experts, press releases, news about your project. The material or comment is published in the media for free and causes more trust from users than advertising.

3. *Shared* – channels in social networks and blogs on external resources, for example, on blog platforms Habr.com or Yandex.Zen. This direction also includes user content that tells about your brand – customer reviews.

4. *Owned* – brand's own channels: the company's website, corporate blog, e-mail newsletters and other platforms controlled by the brand. Only he decides what the content looks like, in what format it is published and with what submission.

The model helps to comprehensively promote the brand and select the appropriate communication for each channel. The PESO model is often used for planning in content marketing and PR.



What is the PESO Marketing Model?

### 4. Hunt's Ladder.

This Concept was described by Ben Hunt, Marketer, in his book "Website Conversion: Turning visitors into buyers!" in 2010. He suggested ranking potential customers according to their awareness of the brand and its products.

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1. Stage of Indifference. At this stage, you are not selling, but forming a need. Tell the client that there is a problem. Use content marketing.

2. Awareness stage. When the client has realized the problem, explain to him that there are several solutions: show the research data or an infographic with statistics.



3. Comparison stage. At this stage, consumers are looking for a solution. As a seller, you have to provide comprehensive content that will answer their questions. You should not immediately sell your product. Your goal is to help potential customers. At this stage, it is important to demonstrate your expertise knowledge so that users believe in the company's professionalism. Optimize the site for SEO promotion, set up contextual and targeted advertising so that potential buyers recognize your product.

4. *Selection stage* is the best time to show a potential customer the benefits of your product. Reviews and comparisons work best at this stage. The consumer is ready to buy the product and is looking for a company that sells it more profitably. At this step, you can tell him about promotions and discounts in order to motivate the choice of your company as much as possible.

5. RFM-analysis.

In 1995, the article "The optimal choice for direct mailing" was published in the Marketing Science journal. It is believed that it marked the beginning of the RFM model for customer segmentation.

The model was used by American companies selling goods by catalogues. RFM analysis helped them to weed out customers to whom it was pointless to send catalogs and offer discounts. This saved the costs of paper, printing and logistics.

The abbreviation RAM stands for:

- *Recency* - the time with the last activity of the client, for example, purchases, site visits or opening an email.

- Frequency - the frequency of customer purchases.

- *Monetary* - the amount of money he spent on the company's goods and services.

RFM analysis is required to predict the behavior of the client taking into account his past actions. For example, a customer who bought something expensive from your company or made an order recently is more interested in your advertising than other buyers.



6. AIDA.

The AIDA model was described by Elias St. Elmo, American Advertising Strategist, in 1896 as a formula for creating successful advertising. The AIDA model describes four stages that a consumer goes through before making a purchase:

- Attention.
- Interest.
- Desire.
- Action.

At each of the 4 stages, marketers place sales triggers and stimulate the audience to move through the sales funnel:

1. At the first stage, you need to get the attention of a potential buyer.

2. Then warm up the interest. Describe the advantages of the product, tell us how it solves the problems of users A Carter Parts A Carter A Cart

and show the differences from competitors.

3. At the next stage, you need to awaken the desire to buy. Show a potential customer how his life will change when he buys your product.

4. In the end, you need to push the user to purchase. Clearly formulate a call to action, specify what the consumer needs to do to purchase the product.

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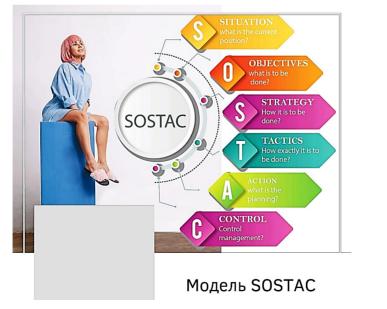


The AIDA model does not rely on the "headaches" of consumers. Advertising made from this model motivates buying because of positive emotions.

### 7. SOSTAC.

The SOSTAC model was developed by Paul Smith, British Expert of the Royal Institute of Marketing, in the 1990s. In 2004, he described it in his book "Marketing Communications". This model of effective planning of marketing strategies is based on 6 components:

- Situation analysis analysis of the current situation;
- Objectives the goal to come to;
- Strategy strategy, how we are going to achieve the goal;
- Tactics tactics: what will we use to achieve the goal;



- Action - specific actions, tasks and deadlines;

- Control - control by which indicators we will understand that we have achieved the goal.

The SOSTAC model is used to develop a marketing plan. It helps to choose adequate goals and find ways to achieve them.

# 2.2.3. Medical insurance and their economic aspects

**Medical Insurance** is a form of personal insurance that guarantees citizens to receive medical care upon the occurrence of an insured event at the expense of accumulated insurance funds.

From a socio-economic point of view, health insurance is one of the most important components of national healthcare systems. The relevance of compulsory medical insurance is that medical insurance is a form of protection against risks that threaten the most valuable in personal and social terms – human health and life.

Medical insurance as a form of social protection in the field of healthcare is a guarantee of providing medical care in all circumstances, including in connection with illness and accident.

To date, three main types of healthcare financing have been defined: state, compulsory and voluntary health insurance and a mixed form.

Healthcare financing is usually carried out in a mixed form.

In different countries of the world, depending on which form of financing is dominant, the health care system is called state (England, Ireland, Italy, Scotland), compulsory medical insurance (Austria,

> Belgium, the Netherlands, Germany, Sweden, Japan) and mixed (budget insurance) (USA), where about 90 % of the country's population uses the services of private insurance companies.

Ukraine, implementing market transformations in this area, seeks to form a mixed budget and insurance system for financing healthcare. Not having its own experience of mixed

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financing of healthcare, Ukraine is adopting this experience from other countries of the world.

Germany is considered to be one of the first countries where medical insurance was introduced (1881):

- Decentralization, the content of which consists in the fact that there are more than 1.000 insurance offices in the country: professional, territorial and ersatz cash registers;

- Compulsory nature of medical insurance.

The British model is characterized by the following features:

- high level of centralization. 1/3 of the country's population is covered by compulsory health insurance;

- prevalence of the budgetary system of financing;

- payment by patients of 10 % of the cost of treatment.

The American model of health insurance is characterized by the following features:

- accumulation of funds in a centralized insurance fund;

- distribution of funds of the centralized fund on the basis of the legally established form of settlements. This system covers more than 20 % of the population;

- voluntary group insurance at the place of work covers about 60 % of the population.

In Canada, the features of the national health insurance system are as follows:

- compulsory medical insurance;

- more than 90 % of all costs for inpatient and outpatient treatment are reimbursed from public funds. Due to progressive taxation, 25 % of all healthcare costs are reimbursed;



- voluntary insurance covers only medical services that are not covered by the national insurance system.

The Japanese model of health insurance is characterized by:

- presence of two compulsory health insurance programs: state and public;

- health insurance coverage for all employees in enterprises with five or more employees, as well as their family members;

- accrual of insurance premiums (contributions) according to the standard monthly earnings.

From the above models, it can be seen that in a very small number of countries, the State can afford to take responsibility for almost complete provision of medical care exclusively on a budgetary basis. In most countries, they are trying to combine different systems of financing the health system.

This is primarily due to the fact that in modern conditions the volume of threats to the health of citizens is growing:

- globalization processes have revived the migration of the population, spreading infectious diseases unusual for entire regions;

- extremely rapid pace of life, the development of information technology, in addition to positive changes in the economy, generate a number of stressful situations that negatively affect the health of the population;

- terrorist acts, emergency man-made accidents, etc. increase the need for medical care;

- prolongation of life expectancy is accompanied by the aging of the population, which generates additional costs for providing assistance in connection with diseases of aging, etc.



Medical insurance is divided by forms into Compulsory Medical Insurance (CMI) and Voluntary Medical Insurance (VMI).

**Compulsory medical insurance** is carried out through compulsory medical care programs. It is of particular importance because

it is comprehensive, universal. This is extremely important due to the fact that any person lives in society, and as a living being has the right to receive assistance in case of loss of health, regardless of whether he can pay for this assistance. But in this way, society cannot provide assistance in the case of a disease, the treatment of which requires too much money; the provision of highly comfortable treatment conditions, etc. That is why the CMI system is complemented by the VMI system.

Voluntary medical insurance is a form of protecting the interests of citizens in case they lose their health for any reason. It is connected with the compensation of citizens for expenses caused by the payment of medical care and other expenses related to the maintenance of health:

- visiting doctors and outpatient treatment;

- purchase of medicines;

- hospital treatment;

- receiving dental care, dental prosthetics;

- carrying out preventive and health measures, etc.

A voluntary medical insurance contract may, in particular, provide for:

- broader right for the insured patient to choose medical institutions, doctors to serve;

 improvement of the conditions of the insured's detention in hospitals, sanatoriums, dispensaries;

- provision of sports and health services

and other means of prevention;

- prolongation of the duration after hospital patronage and patient care at home;

- diagnostics, treatment and rehabilitation using alternative medicine methods;

- development of the family doctor system.

The popularity of the VMI in Ukraine is growing from year to year, as evidenced by the growth in both the number of contracts concluded and the amount of insurance payments.

Currently, about 30 insurance companies operate in the VMI market, the average level of payments is more than 60 %. Insurance companies have different capabilities, experience and credibility. Each insurance company strives to bring something of its own to the insurance business, which will be beneficial to distinguish it from competitors.

The programs offered by insurance companies for the VMI can be divided into four main categories:

- polyclinic services, including pharmacy;
- stationary service;
- emergency ambulance services;
- dentistry.



Despite the fact that medical insurance has ceased to be an exclusive service, the VMI policies are still quite expensive. The cost of the cheapest economy class products is about \$US 300 per person per year, provided that it includes a full set of necessary services: hospital treatment, emergency care, outpatient care and provision of medicines at all stages of treatment.



However. it has not vet become widespread in the domestic insurance market, which is confirmed by domestic statistics, according to which the share of voluntary medical insurance services in the total volume of the insurance market is only 2.6 %, with the total number of insured by this type of insurance in 2 % of the total population. However, the quality of these services does not always meet expectations. For example, difficulties may arise when you need to buy medicines and you expect to be reimbursed for their cost from an insurance company. Internal inconsistencies and the

absence of contracts between insurance companies, hospitals and pharmacies should not affect the interests of consumers of insurance and medical services.

The draft law "On compulsory State social medical insurance" No. 2597 dated 19.03.2013 can be attributed to the main legislative acts that create the basis for the development of healthcare. Its introduction will have a significant impact on the well-being of the population and public health.

There are too many hopes associated with the introduction of health insurance in our country, so the draft of this law causes a lot of controversy among specialists and the public. Despite

some obvious advantages and disadvantages of this project, it can be said that the introduction of health insurance is unreasonably delayed.

Ukraine is currently at the stage of implementing compulsory State social medical



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insurance. The CMI will provide an additional 7.54 billion UAH per year to the budget part of the financing. Despite the noticeable advantages, its introduction in Ukraine is being slowed down, and there is no uniform approach to the draft law on compulsory medical insurance.

# **Control questions**



- 1. Tasks and methods of comprehensive research of the medical services market.
- 2. Give an example of a marketing research plan.
- 3. Give an example of the stage of the life cycle of a medical service.
- 4. Describe and compare the RACE and PESO models.
- 5. Describe and compare the 4P-7P and 4C models.
- 6. Describe and compare the models of the Hunt and SOSTAV stairs.
- 7. Describe and compare the RFM and AIDA models.
- 8. Describe and compare the AIDA and 7P models.
- 9. Define health insurance, its forms and economic aspects.
- 10. Compare the forms of the CMI and the VMI and indicate the disadvantages and advantages of each form.
- 11. Analyze the legal framework of medical insurance in Ukraine.
- 12. Determine the financial aspects and advantages of the introduction of compulsory state health insurance.



### Tests

- 1. The medical clinic in its work strives to maximize the satisfaction of the needs of consumers while simultaneously increasing the standard of living of the whole society and its own profit. What marketing activity management concept does the company use?
  - A. Improvement of production.
  - B. Improvement of the product.
  - C. Intensification of commercial efforts.
  - D. Integrated marketing.
  - E. Social and moral marketing.
- 2. The division of consumers into groups based on differences in needs, characteristics or behavior and the development of a separate marketing package for each of them refers to:
  - A. Analysis of the marketing capabilities of a medical institution.
  - B. Evaluation of the marketing capabilities of a medical institution.
  - C. Segmentation of the medical market.
  - D. Positioning of medical services in the market.
  - E. Marketing control.
- 3. Providing a drug with a clearly separated place from other drugs on the market and in the minds of target consumers refers to:
  - A. Analysis of marketing opportunities.
  - B. Assessment of marketing opportunities.
  - C. Market segmentation.
  - D. Positioning of the medicinal product in the pharmaceutical market.
  - E. Marketing control.
- 4. To which element of the marketing mix does the following definition apply: "this list of medical services is specially developed by a medical clinic for its target consumers":
  - A. Product.
  - B. Price.
  - C. Sales or distribution channels (place).

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- D. Methods of promotion or marketing communications (promotion).
- E. Market.
- 5. The complex of features of medicine is an approach to substantiating the right to self-determination of the theory of medical marketing, based on the following elements:
  - A. Specificity of social and ecological.
  - B. Specificity of health).
  - C. Specificity of licensing.
  - D. Specificity of communications methods.
  - E. All specified elements.
- 6. Marketing activity consists of three main parts: comprehensive research of the medical market, development of a marketing package and functional support of marketing activities. The development of the medical marketing complex does not include:
  - A. Development of medical services.
  - B. Pricing.
  - C. Sales methods.
  - D. Methods of promotion of medical services (medicines).
  - E. Creation of a marketing service.
- 7. The hospital wants to know whether the people living in the territory it serves are positively disposed towards it. It is necessary to obtain information that allows you to make the right decision as a result. This research is carried out using such a method as:
  - A. The method of expert assessments.
  - B. The analysis of sales.
  - C. The analysis of the distribution of market shares between firms.
  - D. The method of sociological research.
- 8. Briefly describe what the marketing of medical services should take into account in a comprehensive study of the market.
- 9. Marketing models help to understand the needs of potential patients, build a sales funnel, identify the target audience and test the strategy. The model of planning communication with the consumer, which consists of 4 stages (coverage, action, conversion, attraction) and covers all points of contact with customers, is:
  - A. RACE.
  - B. Model 4P.

- C. Model 4C.
- D. Model PESO.
- E. Model AIDA.
- F. Model SOSTAC.
- 10. The model based on the marketing mix -4P includes four elements: product, price, distribution and product promotion. The concept of the marketing mix -5P includes another element. This is:
  - A. People.
  - B. Product.
  - C. Price.
  - D. Place.
  - E. Promotion.



# Situational tasks

### Situation 1

Develop a marketing strategy and brand of a private medical clinic based on the RACE model.

Use the following channels: clinic website; blog with leading doctors; social networks; enter a chain of mailings or prepare regular letters on the list of medical clinic services.

### Situation 2

Develop a marketing strategy and brand of a private medical clinic based on the 7P model.

Describe and optimize the process of providing services (including medical services) and communicating with patients. Physical characteristics are the atmosphere, the environment in which a medical institution provides a service (physical evidence).

### Situation 3

Develop a marketing strategy and brand of a private medical clinic based on the PESO model:

 identify your target audience and divide it into groups – by age, interests, and preferences on social networks;

- select publications that are read by the audience; prepare interesting content and publish it in these publications;

- distribute links to materials published on social networks and set up targeted advertising for the target audience.

### Situation 4

Develop a marketing strategy and brand of a private medical clinic based on the HUNT Ladder model (for example).

A potential client of an ophthalmological clinic did not think about the fact that his eyesight was deteriorating, and believed that this was a natural process at his age. One day he came across an article in which they explained that you can completely lose your eyesight if you don't see a doctor in time. After reading the material, the client decided to urgently make an appointment with an ophthalmologist.

So he moved on to the awareness stage, where he was looking for more information about his problem - he consulted with friends and visited a doctor. The ophthalmologist suggested two possible solutions: buy glasses or make a laser correction.

The client moved into the comparison stage, began to study the pros and cons of each of the solutions. And as a result, he chose laser correction.

Then he had to decide which clinic to go to. The client found out that this operation is performed by several clinics, one is expensive, the second does not work on the site, and there are almost no reviews about the third.

During the search, a potential client saw the website of a clinic that runs its blog, talks about vision problems and destroys myths related to operations. The client mentioned that he had already read the materials from this site. He looked through the reviews, prices and made a choice.

At the last stage of Hunt's ladder, the patient went to the clinic for a consultation and signed up for surgery.

### Situation 5

Develop a marketing strategy and brand of a private medical clinic based on the RFM analysis model (for example).

The manager of a private medical clinic decided to segment patients in order to make them personal offers, increase the number of visits to the clinic. He divided the customer base into 15 segments according to indicators: the prescription of visits to the doctor, the frequency of visits, the amount of medical services paid.

### Situation 6

Develop a marketing strategy and brand of a private medical clinic based on the AIDA model.

### Situation 7

Develop a marketing strategy and brand of a private medical clinic based on the SOSTAC model.

How to apply the model:

1. Analyze the current situation in marketing:

- ask yourself: how do you position the company, how do you sell;

- conduct an advertising audit;

- analyze the current situation: the market, competitors and audience;

- identify your strengths and weaknesses.

2. Formulate goals. As a rule, business goals are to make a profit, promote a new product, and develop a brand.

- 3. Break down the goals into tasks:
- identify the main target markets;
- find your excellent advantage;
- formulate the positioning of the product;
- make up goals for marketing.

4. Select tools. For example, if you promote a brand on the Internet, contextual advertising, advertising on social networks and SEO promotion will become tools. Specify the key performance characteristics of each tactic.

5. Describe what needs to be done to implement the plan:

- make a schedule of events;
- appoint responsible persons;
- allocate a budget for the implementation of the plan.

6. Check the KPI. For example, you can estimate advertising costs by the cost of attracting a client or by the return on investment ratio.

#### Situation 8

To start using the 4C model, answer these blocks of questions.

- 1. Who is your client:
- What is the competitive advantage of your product?
- Who are the company's target customers?
- What are their needs and desires?
- 2. At what price is the user willing to buy a product (medical service):
- What price do you set to attract the consumer?
- Have studies been conducted to prove the adequacy of this price?
- Is this price available to your patients?

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- Is it profitable for a medical clinic? Does it cover the costs?

- What else besides the price motivates the patient to use the services of this particular medical institution?

3. How are your communications set up:

- Do you have a strategy for communicating with patients?

- Is there a media strategy for promoting a product (medical service)?

- Is there a connection between communication with customers and sales?

4. Is it convenient for a potential patient to use the services of the clinic:

- What difficulties can a potential patient face?

- Are there any plans to solve these problems?

- Is your website or internet channels simple, accessible and intuitive to users? Is there a mobile version?

- Do users understand the terms of ordering, paying and guaranteeing the quality of medical services provided?

- How many channels provide medical services?

- Does advertising and brand strategy work effectively?

Example: a manager of a private clinic working on the 4C model is interested in building long-term relationships with patients. To do this, he can blog, build a community in social networks. Such a company will communicate with the consumer in several channels – wherever it is convenient for the client.

# FUNDAMENTALS OF PRICING IN HEALTHCARE

- 2.3.1. Basic principles of pricing for medical services.
- 2.3.2. The structure of the price of medical services.
- 2.3.3. Pricing in healthcare at the state level.

# 2.3.1. Basic principles of pricing for medical services

The pricing process is significantly influenced by the position of a medical institution in the market of medical services, the goals that a medical institution wants to achieve in its activities.

The goals of a modern medical institution:

- creation of a well-off system of public health and sanitaryepidemic well-being of the population;

- the best medical services and the best health of citizens due to continuous, safe, high-quality data, modern technologies and knowledge, and convenient digital services that meet the needs of patients, services and managers;

- provision of medical services and implementation of pharmaceutical activities by qualified specialists trained throughout their professional career;

- ensuring the availability, rational prescription and use of safe, effective and high-quality medicines and medical devices by doctors, pharmacists and patients.



If a medical institution occupies a stable position in the medical services market, has a good reputation, its goal may be to maximize profits to ensure a high-quality level of medical services and pharmaceutical activities. In this case, you need to estimate the costs and the amount of demand depending on the price level and

choose a price that ensures maximum profit. This process is called planning and budgeting of financial flows in medical institutions.

If a medical institution aims to gain a leading position in the market in terms of market share, then its pricing policy should be aimed at reducing prices in order to attract more patients.

If a medical institution wants to become a market leader in terms of the quality



of medical services, it is necessary to set a high price to cover the costs of high-quality services.

All medical services provided by a medical institution in accordance with their complexity and volume can be divided into two groups:

1. *Simple medical services*. Simple medical services include unbreakable medical technologies and are provided in a certain city for a limited period of time. An example of a simple service can be: consultation of a specialist doctor, ECG, blood test.

2. *Complicated (complex) medical services*. A complex service can include a preventive examination to issue a certificate of health to the drivers of the vehicle. In this case, the patient must be examined by several specialists, each of these examinations can be considered as a simple service.

### In turn, each simple service consists of several procedures.

For example, such a simple service as a doctor's consultation includes the procedure of contacting the registry, accepting payment, issuing a referral to a doctor, examining a patient by a doctor, filling out an outpatient card, issuing references. To determine the cost of a simple service, it should be divided into separate procedures, determine the cost of each procedure and compile the results obtained. In turn, to determine the cost of a complicated (complex) service, it is necessary to determine and then make up the cost of simple services that are part of it. The time spent on the service as a whole or on individual procedures is determined according to the current time standards, and if there are no such standards, then on the basis of timekeeping conducted by the relevant commission.



The general concept of a service as an economic activity has been developed by the Ukrainian Research Institute of the Ministry of Statistics of Ukraine and is given in the State Classifier of Ukraine "Classification of Types of Economic Activity" (CTEA), approved by the Order of the State Standard of Ukraine No. 441 dated 22.10.1996 and put into legal

effect from 01.01.1997. To describe economic activity, the CTEA is constructed in such a way that the selected entities cover all or almost all types of activities carried out in any branch of the economy.

In the corresponding *section of the CTEA "Healthcare and Social Assistance*," for the first time, a medical service is documented as a separate type of economic activity in the field of healthcare.

According to the robot of some scientists, medical practice includes:

- consulting services and treatment provided by doctors of all specialties in medical institutions (outpatient clinics) and in private practice;

- diagnostic services,
- conducting analyses;
- services of private consultants;
- ambulance and emergency medical services;
- services of sanatorium-resort organizations;
- services of other medical institutions to restore human health.

It also notes that medical services can be short-term and long-term.

World practice proves that in addition to direct payment of doctors' services to the sickest (direct payment), the forms of financing include compensation by insurance companies at the expense of payments from employers and employees (payroll taxation) or budget redistribution of taxes in favor of medicine (general taxation).

Based on the above, *medical services can be classified according to the following classification criteria* given in Table 2.1.



Classification feature	Medical services	
By types of medical practice	<ul> <li>consultations;</li> <li>diagnostics;</li> <li>medical business.</li> </ul>	
At the place of service provision	<ul> <li>hospital;</li> <li>polyclinic;</li> <li>ambulance and emergency care;</li> <li>sanatoriums, dispensaries, etc.</li> </ul>	
By complexity	<ul> <li>simple services;</li> <li>complex services.</li> </ul>	
By execution time	– short-term; – long-term.	
By the number of participants engaged in the provision of the service	<ul><li>sole proprietors;</li><li>group proprietors.</li></ul>	
By the nature of economic relations	<ul> <li>services of public institutions;</li> <li>services of public utilities;</li> <li>services of private sector institutions.</li> </ul>	

Classification features of medical services

A medical service, being a product of the market, differs sharply from any other product or service and is characterized by a number of its own characteristics:

- does not exist before the start of production;

- time-consuming and has no clear cost until the end of execution;

- intangible;

- difficult to calculate;

- personalized;

- intellectual depends on the service manufacturer;

- the quality of the service is variable even when performed by the same doctor;

- building of services sub-subjective and dependent on the specificity of the user, etc.

Market relations express a certain economic isolation of producers and consumers of products and services. In their content, they include a wide range of different elements. The scope of market relations



of certain aspects of the life of society is not a constant value. The market mechanism is the process by which sellers and buyers interact to determine the price and quantity of goods produced, hence demand, supply and price are its elements.

The price of medical services: internal and external causes of action. Price is a monetary expression of value, a market parameter that

characterizes the economic relations between sellers and buyers regarding the purchase and sale of goods and services.

*The price performs the following main functions*: informational, stimulating, regulating, distributive.

*Prices for medical services in Ukraine are regulated by valid legislation*, including Resolution of the Cabinet of Ministers of Ukraine No. 1075 dated December 27, 2017. This Resolution approves the Methodology for calculating the cost of medical services.

*The price system* is a set of types of prices, the interaction of which ensures the effective functioning of the market economy.

Types of prices for medical services:

- *budget estimates*: to finance targeted budget programs of medical care;



- contract prices: include typical actual expenses, as well as profit (15-25%) of the cost price), used in the case of providing medical services to the population on a commercial basis;

*– contractual prices*: approved by direct contracts between medical institutions and customers of services;

- *tariffs*: widely used in the health insurance system;

- *free prices*: formed under the influence of the laws of supply and demand.

*Pricing* is the process of forming prices, determining their level and finding their optimal combination.

Through pricing, the following tasks are solved:

- expansion of the market for healthcare services;

- increase in profits;

- ensuring the balance of supply and demand, the amount of money and the volume of medical services;

- creating conditions for optimal proportionality of consumption and accumulation.

The mechanism of price formation is the process of analyzing the economic situation and developing a pricing policy on this basis, ensuring the achievement of the set goals. It includes the following main elements:

- *definition of the goal*: stimulating the production of health services, ensuring sales, maximizing profits, retaining the market, entering the market, ensuring the long-term development of a medical institution, etc.;

- assessment of market conditions and costs, namely:

• assessment from the point of view demand: the usefulness of the service, the possibility of its replacement, solvency and consumer psychology;

• assessment from the point of view of supply: types of markets, competitor behavior, forecast of possible price changes;

• assessment from the point of view cost: the study examines fixed and variable costs, gross costs, the rate of change in costs, the scale of production of services.

The price regulation system is a set of regulators that influence the movement of prices and provide favorable conditions for the effective functioning of the market system on this basis. It includes the following elements:

- *Self-regulation* is a mechanism of free movement of market parameters (primarily supply and demand).



- *Corporate regulation* or regulation at the level of organizations includes agreements on the distribution of markets and price levels.

- *State regulation* includes price law, price monitoring, indirect regulation (tax maneuvering, money emission, etc.), direct regulation (fixed prices, price reduction, etc.), antimonopoly legislation (prohibition of price collusion, etc.).

Prices for medical services offered by a medical institution are determined by a number of external and internal factors.

### External factors include:

- the regulatory role of the state in prices and pricing;

- characteristics of medical services and the solvency of the population;

- the equilibrium level of competitive prices prevailing in the medical services market;

- characteristics of the market of this type of medical services.

Internal factors determining the price include:

- Priorities of the goals set by the medical institution.

- The level of fixed and variable production costs of a medical institution.

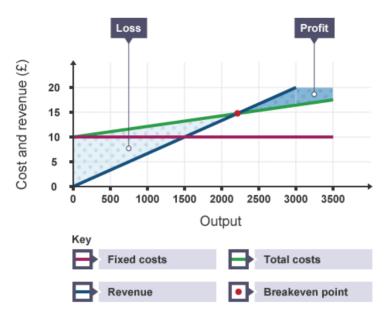
# 2.3.2. The structure of the price of medical services

The level of direct and indirect costs determines the minimum price below which the production of services will be unprofitable. To determine the minimum price, it is necessary to make an estimate of all costs for the technology of providing medical services. The amount received determines the cost of medical services. To get the final price, the amount of profit, the amount of taxes and mandatory contributions to trust funds are added to the cost of medical services.

**Fixed costs** are costs whose absolute value does not change significantly with an increase (decrease) in the volume of services or works (output). The fixed expenses of a medical institution usually include expenses related to the maintenance and management of a medical institution in general and its departments in particular, as well as the costs of providing for the economic needs of the institution (administrative expenses, advertising, marketing, communications, business trips, and rent).

Variable costs include costs whose absolute value increases with increasing volume of services or works (output) and decreases with its decrease. Variable expenses of a medical institution include expenses for medicines, patient care products, dressings, low-value fast-wear items (LVFW), production energy, equipment, funds for the remuneration of medical personnel engaged in the provision of services (with deductions for social events), as well as other expenses.

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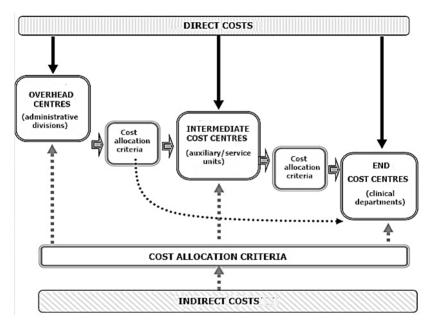
Based on all of the above, you can show the structure of the price:

### Price of medical services = = Expenses (direct + indirect) + Profit + Taxes

The method of step-by-step distribution of expenses "from top to bottom" (Fig. 2.1) provides for economic calculations, the result of which is the distribution of all expenses of a healthcare institution (both direct and indirect) — from administrative and auxiliary units (cost centers) to the main clinical departments (cost centers), for which the final average cost of a unit of medical service is calculated (discharged patient, bed — day in the inpatient department of the hospital, outpatient visit, etc.) on the basis of cost allocation criteria, the list and procedure for the application of which are determined by the Ministry of Health of Ukraine.

The technical implementation of the cost analysis process can be carried out using standard MS Office products such as Excel or using specially developed software. At the same time, the compatibility of the results obtained with systems that support the formation of databases with information about discharged patients should be ensured (statistical Form 066/o "Card of a patient who has left the hospital," approved by the order of the Ministry of Health of Ukraine). To

ensure this compliance, the internal codes of the offices used when filling out the statistical Form 066/o must match the internal codes of the offices that are used in automated cost analysis systems. When filling out the statistical Form 066/o, all diagnoses should be coded in accordance with the International Statistical Classification of Diseases of the 10th Revision (ICD-10) and cases of surgical activity using the industry classifier of medical procedures (services) and surgical operations approved by the Ministry of Health of Ukraine.



# Fig. 2.1. Scheme of step-by-step distribution of expenses "from top to bottom"

**Direct costs** are costs that can be attributed directly to a specific cost object in an economically feasible way. Direct costs include costs associated with the provision of a particular type of service or the provision of a specific type of work (direct material costs, direct labor costs, etc.), which can be directly included in its cost of this service or work.

**Indirect costs** are costs that cannot be attributed directly to a specific cost object in an economically feasible way. Indirect costs

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include expenses related to the provision of several types of services or the provision of several types of work (general production costs), which are included in the cost of services or work using special methods. Indirect costs form complex calculation items (i. e. they consist of costs that include several elements).



*The amount of profit* of non-state medical institutions is determined independently, and for state ones is determined by local authorities (regional administrations) according to the Order of the Cabinet of Ministers of Ukraine, the profit rate should not exceed 30 %.

The amount of value added tax (VAT) is included in the price of the service at the rate of the current legislation. If, according to the current legislation, a medical institution has VAT benefits, then the tax is not taken into account in the price of the service.

Direct expenses of a medical institution.

Direct costs include the costs associated with the performance of services of one type, which are directly included in gross expenses. Direct costs can be calculated directly. The calculation of direct costs is made according to the route map (scheme) of the provision of each service.



To ensure the necessary level of standardization and accuracy of calculations, the mandatory list of direct costs includes:

- salary expenses and related charges;

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- expenses for medicines;

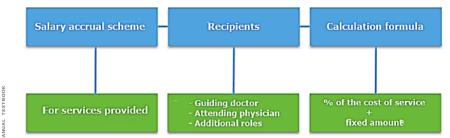
- maintenance and maintenance costs (maintenance) of high-precision equipment;

- utility costs, if possible, direct attribution.

The expenses for the payment of the basic salary of the medical staff directly performing the medical service are determined by official salaries, allowances, surcharges in the amounts established by the current legislation (Fig. 2.2).

Salaries of medical workers directly engaged in the provision of services are included in gross expenses based on the qualifications of the medical personnel providing the service and approved time standards.

The additional salary includes bonuses. The award is established for the intensity of work, for the performance and increase in the volume of work performed on self-financing activities. The maximum limit amount of the bonus as a percentage of the official salary is determined by the administration and approved by the order of the medical institution. The bonus award is determined based on the calculation of employees directly providing medical services, based on the results of self-financing activities for the current month.



## Fig. 2.2. Calculation of the costs of the basic salary of medical staff is made depending on the qualification, category

The reserve for the payment of vacations of the main medical personnel can be up to 10 % of the basic salary. The sum of the basic, additional wages and the reserve of vacations of the main staff is the remuneration fund of the main staff. This expense item is the base for calculating direct costs.

### Indirect general production expenses of a medical institution.

Indirect production costs include costs associated with ensuring production management and creating conditions for the provision of medical services in general.

When calculating, the following items of indirect general production costs are allocated:

- additional payment to the head of the department and the senior nurse for the organization of work;

- depreciation of the premises;
- purchase of hard inventory for long-term use;
- purchase of soft equipment;
- advertising expenses;

- other expenses (purchase of homogeneous low-value medical and household items, etc.).

To calculate the coefficients of indirect costs per square meter of room area, you should have certificates of the main expenses of the medical institution for the current year (Table 2.2).

Table 2.2

# Reference of the main expenses of the medical institution for the current year

№	Name of costs	Amount of expenses
1.	The cost of building of a medical institution (UAH)	
2.	Building area (sq. m)	
3.	The area of the premises for the provision of medical services (sq. m)	
4.	Utilities and other expenses: heat and water supply, electricity, communications, garbage collection, elevator maintenance (UAH)	
5.	The salary fund of the main medical staff (doctors, nurses, paramedics, nurses, laboratory assistants, etc.) (UAH)	
6.	Salary fund for heads of departments (UAH)	
7.	Additional payment Fund for senior nurses (UAH)	
8.	Salary fund of administrative and economic personnel (UAH)	

After calculating the direct and indirect costs, the profit is determined based on a given level of profitability from the value of gross expenses (for example, 20 %) and other contributions to various

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state trust funds, if they are provided for payment, depending on the specifics of the activity of the medical institution (for example, a fee for the special use of aquatic living resources, a fee for the special use of forest resources, a fee for the use of other natural resources, etc.). The value of VAT (20 %) is also included in the price of the service.

# 2.3.3. Pricing in healthcare at the state level

Article 49 of the Constitution of Ukraine enshrines the right of every citizen to healthcare, medical care and medical insurance, and in part three of this article it is established that medical care is provided free of charge in state and municipal healthcare institutions.

The amount of medical care guaranteed by the state to every citizen should be covered by budgetary funds and means of compulsory medical insurance. In order to realize the right to receive free of charge, freely available medical care, approval at the state level of state standards for the quality of medical care is required, as well as the normative design of the procedure for pricing and mutual settlements of state and regional healthcare authorities and mandatory health insurance funds.

The required level of medical care is regulated by the Laws of Ukraine: "On State financial guarantees of medical care for the population" No. 2168-VIII dated October 19, 2017, "On Medicines" No. 124/96-BP dated April 4, 1996.

The system of regulation of economic relations consists of subsystems of budgetary, credit, customs, tax, financial, currency and price regulation.



*The pricing policy of the state* is the activity of central and local executive authorities aimed at achieving three main goals:

consistent implementation of price liberalization;

state regulation of prices (tariffs)
 for certain types of goods (services);

- control over their compliance.

*The price of medical services* acts as one of the regulators of the medical services market. The price of a medical service is the amount of money for which a patient (buyer) can buy, and a doctor (medical institution) is ready to sell a certain medical service.

The basis for determining the cost of medical services is the calculation of gross expenses according to the Law of Ukraine "On Prices and Pricing" No. 5007-VI dated June 21, 2012.

The price level for medical services is determined by the Resolution of the Cabinet of Ministers of Ukraine "On approval of the Methodology for calculating the cost of medical services" No. 1075 dated December 27, 2017.

One of the main tasks facing the state in the medical services market is the formation of a regulatory policy on pricing.

*State regulation of pricing* is the supervision and control of prices, direct (fixed prices, price reduction, etc.) and indirect (tax maneuvering, money emission, etc.) regulation with the application of antimonopoly legislation.

The Law of Ukraine "On Prices and Pricing" defines that state regulation of prices and tariffs is carried out by the following:

- establishment of mandatory for use by business entities: fixed prices; marginal prices; marginal levels of trade surcharges (margins) and supply and sales surcharges (supply remuneration); marginal profitability standards; the amount of supply remuneration; the amount of surcharges, discounts (reducing coefficients);

- introduction of the procedure for declaring price changes and/or price registration.

In general, pricing is the setting of a price, the process of choosing the final price depending on the cost of production. the prices of competitors, the ratio of supply and demand and other factors.

State regulation of the pricing process can be carried out in three main directions, which



are respectively focused on limiting price growth due to the following actions:

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- fixing the price level or using adequate restrictive regulations;

- establishment of tax or other payments that cause the withdrawal of most of the income from the supplier and consumer of products and services;

- State support of prices, incomes of enterprises with the use of subsidies and subsidies.

Methods of state regulation of prices are divided into methods of direct and indirect regulation.



The methods of direct regulation include: administrative price setting; "freezing" of prices; setting the limit value of the price level; regulation of the level of profitability; setting standards for determining prices; declaring prices, etc.

Methods of indirect regulation

*include*: taxation; regulation of monetary circulation; remuneration; credit policy; regulation of government spending; establishment of depreciation rates, etc.

Analyzing the experience of the developed countries of the world, it should be noted that there is no complete freedom in the formation of prices in any country. State regulation of pricing is manifested in one form or another in each of them. The degree of its manifestation depends on the state of the country's economic development, the intensity of monopoly processes, the level of monopolization and competition, the share of the public sector and other factors. The formation of prices for services is carried out on the basis of the same methods as for goods. Mainly used pricing methods based on costs and the current level of price.

The market for healthcare services is mostly local. This is due to the fact that supply and demand in this area are inseparable, and sometimes there is a natural monopoly. The high public importance of medical services often entails the inefficiency of market regulatory mechanisms, and consequently, the need to apply benefits and subsidies to service providers, subsidies to their consumers, as well as the use of market segmentation for certain categories of consumers.

The variety of medical institutions providing medical services and their equipment cause *the need for an individual* (for each service in

a certain medical institution) *calculation of the cost and price* of the service, followed by approval in the price department of regional state administrations or their territorial authorized bodies. It is clear that in this case, medical institutions are fully responsible for calculating the cost of services and prices.

The following types of prices can be used in the medical services market:

- exclusive (set by the service provider);

- nominal, taking into account the cost and minimum profitability;

- wholesale (for enterprises, organizations that provide medical care to their employees on contractual terms with a discount);

- retail, taking into account the allowable margins and benefits of medical and preventive institutions (service provider);



- market (equal to retail, determined by a group of entities producing services, taking into account the increased demand for the service);

- moving prices (set taking into account different conditions);

- fixed prices (determined by the State, consumer associations, contracts).

### Prices for medical services can be calculated in different ways:

- per unit of service consumed (payment for a certain analysis or radiography, etc.);

- integral (the sum of prices for different types of work required to provide a certain service, for example, dental services);

- complex (the sum of complementary services, for example, the price of treatment in an inpatient department, the price of passing a thematic medical examination);

- subscription without volume limitation (the price for using the service for a certain period of time, for example, an examination by an optometrist);

- subscription with a limited amount (subscription for physiotherapy procedures with a price for a certain number of visits).

The State Food and Consumer Service of Ukraine provides control for compliance with the legislation on state pricing policy.



In the course of scheduled inspections of the formation of purchase prices for medicines purchased in whole or in part at the expense of the State and local budgets, if it turns out that the sale of medicines was carried out with the use of inflated supply and marketing

surcharges from 10 % to 30 % exceeding the legal limit by 10 %, penalties are applied.



# **Control questions**

- 1. Objectives of the pricing process of a modern medical institution.
- 2. Stages of the pricing strategy.
- 3. Classification of medical services.
- 4. What services does the medical practice include, respectively, the CTEA "Healthcare and Social Assistance?"
- 5. Classification features of medical services by type, place of provision, complexity, time, number of participants, and nature of economic relations?
- 6. Cost of medical services: internal and external causes of action.
- 7. Legislative and regulatory acts on the regulation of prices for medical services.
- 8. Types of prices for medical services.
- 9. Pricing in medicine and their tasks.
- 10. The scheme of step-by-step distribution of costs "from top to bottom" according to the definition of the Ministry of Health of Ukraine.
- 11. The structure of prices for medical services.
- 12. Items of direct costs in the structure of prices for medical services.
- 13. Items of indirect costs in the structure of prices for medical services.
- 14. Calculation of the cost of the basic salary of medical staff, depending on qualifications.
- 15. State regulation of pricing: functions, methods, legislative framework.

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1. Prices for medical services, which are influenced by the laws of consumption and supply, the law of competition and monetary circulation, are called:

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- A. State prices for paid medical services to the population (list prices).
- B. Budget rates.
- C. Contractual prices for medical and related services by order of organizations and enterprises.
- D. Free prices for paid medical services.
- E. Tariffs for medical services under compulsory medical insurance.
- 2. Prices for medical services offered by a medical institution in a market economy are determined by a number of external and internal factors. External factors include:
  - A. Characteristics of medical services and the solvency of the population.
  - B. The equilibrium level of competitive prices prevailing in the medical services market.
  - C. The level of fixed and variable costs (expenses) of a medical institution.
  - D. Characteristics of the market for this type of medical services.
  - E. Priorities of the goals set for a medical institution by the regulatory role of the state on prices and pricing.
- 3. In order to determine the minimum price for medical services, below which the provision of these services will be unprofitable, it is necessary first of all to determine:
  - A. The level of fixed and variable costs (expenses) of a medical institution.
  - B. The size of non-current and current assets of a medical institution.
  - C. The volume of own, attracted and borrowed capital of a medical institution.
  - D. The size of competitors' prices in the medical services market.

- 4. An important factor in increasing the profitability (efficiency) of a medical institution is to reduce the costs included in the cost of medical services. What costs can be really varied to achieve this goal:
  - A. Taxes, fees and other mandatory payments provided for by legislation.
  - B. Direct gross expenses.
  - C. Indirect (general production and general economic) expenses.
  - D. The basic medical personnel remuneration fund.
- 5. In the structure of the price of medical services, which calculation items relate to the direct gross expenditures of healthcare institution?
  - A. Deductions for social and pension insurance.
  - B. Purchase of hard inventory for long-term use and soft inventory.
  - C. Advertising expenses.
  - D. Depreciation of medical and other basic equipment.
  - E. Remuneration of employees of the management office of a medical institution.
  - F. Ensuring the rules of occupational safety, sanitary and hygienic standards and other special standards.
  - G. Providing employees with special clothing and footwear.
  - H. Expenses for fire and guard protection.
  - I. Remuneration of the main medical personnel expenses for medicines and dressings.
  - J. Expenses for business trips.
- 6. In the structure of the price of medical services, which calculation items relate to indirect general economic expenses of healthcare facilities?
  - A. Deductions for social and pension insurance.
  - B. Purchase of hard inventory for long-term use and soft inventory.
  - C. Advertising expenses.
  - D. Depreciation of medical and other basic equipment.
  - E. Remuneration of employees of the management staff of a medical institution.
  - F. Ensuring the rules of occupational safety, sanitary and hygienic standards and other special standards.
  - G. Providing employees with special clothing and footwear.
  - H. Expenses for fire and guard protection.
  - I. Remuneration of the main medical personnel expenses for medicines and dressings.
  - J. Expenses for business trips.

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- 7. Briefly describe the main directions of state regulation of the pricing process in healthcare, focused on limiting price growth.
- 8. The structure of the price of medical services can be represented by sequential calculation of expenditure items. Name the proposed articles in the required sequence:
  - 3 Indirect general economic expenses.
  - 1 Direct gross expenses.
  - 2 Indirect general production expenses.
  - 5 Value added tax.
  - 4 Profit.
- 9. Expenses related to the maintenance and management of a medical institution in general and its departments in particular, as well as expenses for providing for the economic needs of the institution (administrative expenses, advertising, marketing, communications, business trips, rent), relate to:
  - A. Fixed costs.
  - B. Variable costs.
  - C. Direct costs.
  - D. Indirect costs.
  - E. Unallocated expenses.
- 10. Expenses for medicines, patient care products, dressings, low-value fast-wearing items, production energy, equipment, funds for the remuneration of medical personnel engaged in the provision of services (minus expenses for social events), relate to:
  - A. Fixed costs.
  - B. Variable costs.
  - C. Direct costs.
  - D. Indirect costs.
  - E. Unallocated expenses.



## Situational tasks

#### Situation 1

Provide detailed answers to the questions. Justify your opinion.

1. In your opinion, what is the peculiarity of calculating the cost of a medical service?

2. What, in your opinion, should be modern information provision of marketing activities in the field of health care?

Task.

The company provided medical services to 1.000 people. The price per one service is 20 UAH. The cost of one service is 5 UAH. Determine the profit of the medical clinic.

Task.

Determine the price of the product. The cost of the goods is 10 UAH. The increase is 30 %. The tax is 18 %.

#### Situation 2

Provide detailed answers to the questions. Justify your opinion.

1. In your opinion, which methods of state regulation of prices for medical services are the most effective: methods of direct or indirect regulation?

2. In your opinion, is there competition in the provision of medical services in the public health care sector today?

Task.

Determine which is better: to go to a consultation at a regional hospital 100 km away or to pay for the departure of a consultant doctor to the location of the patient (classify and determine the appropriate expenses).

Task.

A wholesale pharmaceutical company buys a drug at a price of 195 UAH for packaging and sells in the amount of 1.700 packages of this drug weekly at a price of 235 UAH for packaging. According to the results of market research, the marketing department recommends reducing the price by 5 % for one week. Calculate how many packages of the drug the company needs to sell in order to keep its income at the same level.

Provide detailed answers to the questions. Justify your opinion.

1. In your opinion, what is the pricing for medical services, medicines and medical supplies?

2. What, in your opinion, should be pricing policy of private medical clinics?

Task.

To substantiate the concepts of medical marketing used by manufacturing enterprises in the following situations:

- the FTUYR pharmaceutical company has reduced the cost of production of widespread galenic drugs by 10 %, which allowed a reduction in selling prices for them;

- the Latro pharmaceutical company, which sold medicines under an annual agreement through 10 local and regional wholesale pharmaceutical enterprises, formed with a national wholesale intermediary, the marketing structural divisions of which cover all regions of the country, a contractual association for the purpose of constant coordination of economic activities.

Task.

The net profit of the services of a medical private clinic is 2.000 UAH. The volume of sale is 16.000 UAH. The amount of capital investments is UAH 140.100.

Determine the rate of return on invested capital.

#### Situation 4

The cost of the same medical service or patient treatment is separate for each hospital. This forces you to use cost planning for medical services for different health facilities independently. Determine the cost of 1 bed - day in the therapeutic department based on hospital statistics.

The reference statistics of the task are as follows:

#### Conditional indicators for calculating the cost of one bed - day

	Hospital Department therapeutic		
Name of indicators	expenses per month, thousand UAH	number of	expenses per 1 b/d
1. Salary of the main medical staff, including deductions	5180	1200	?
2. Salary of employees of the management office of a medical institution, including deductions	1280	1200	?

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End of Table

3. Expenses for medicines and dressings (according to the established norm)	2400	1200	?
4. Expenses for hard inventory of long- term use (according to the established norm)	3100	1200	
5. Expenses for soft inventory (according to the established norm)	180	1200	?
6. Expenses for the nutrition of patients (according to the established norm)	650	1200	?
7. Depreciation of the premises where medical services are provided (according to the accepted depreciation rate)	10 500	1200	?
Total	?	1200	?

#### Task:

Knowing the cost of 1 bed - day, you will determine the cost of treating one patient in a hospital according to the average duration of treatment. The average duration of patient's stay in bed is calculated as the ratio of the number of bed days spent by patients to the number of patients who have left. This indicator is calculated according to nosological forms. For example, the approximate standard for the duration of stay in a therapeutic bed is 12–14 days.

The gross costs of healthcare facilities consist of direct and indirect costs. Determine the amounts of direct costs, indirect general production costs, and indirect general economic costs. Make conclusions about the role of indirect cost allocation for pricing.

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## STRATEGIC MARKETING IN HEALTHCARE AND THE BASICS OF STRATEGIC ANALYSIS

- 2.4.1. Marketing strategy in the management system and the process of its development.
- 2.4.2. Strategic marketing planning. Quality management.
- 2.4.3. Technologies of strategic analysis and methods of marketing business planning.

## 2.4.1. Marketing strategy in the management system and the process of its development

Healthcare institutions are a complex socio-ecological system that has material, financial and labor resources to meet the needs for medical services. The totality of the possibilities of medical and preventive institutions of State and private ownership forms the potential of the medical services market.



In the market economy, in the management process, it is necessary to achieve not only medical and social, but also economic efficiency by comparing income with costs, to get benefits.

A strategy is a general concept (action program) of how to achieve the goals (results) of an organization, solve various problems and allocate the limited resources necessary for this.

In form, a strategy is a program for the implementation of management and marketing activities, which can look like graphs, tables, descriptions, etc. In terms of content, it is a model of actions, a tool for achieving the goals of the organization. The main task of strategy development is to achieve competitive advantages and profitability of a medical clinic. There are seven types of strategies, MARKETING IN HEALTHCARE

the main one - the general one - reflects the means of accomplishing the tasks set.



Methods and approaches of strategic marketing and management:

1. Genetic approach (comparative analysis) – modeling of the future based on knowledge about events in the past.

2. The normative approach – a direct vision of the future based on real conditions.

3. Extrapolation – the transfer to the future of the trends in the development of the management

to the future of the trends in the development of the management object that existed in the past.

4. "Brain attack."

5. Time series analysis.

6. Development of scenarios in case of unforeseen circumstances.

7. The method of expert assessments is based on the opinions of specialists in the relevant industries and their comparison.

8. Mathematical modeling – identification of cause-and-effect relationships in the control object.

The result of strategic marketing – a purposeful influence on the object of management, based on the general concept of the organization's views on goals and the choice of methods to achieve them in the future under conditions of uncertainty.

On the basis of obtaining a system of qualitative indicators, three types of forecast are formed:

1) optimistic;

2) realistic;

3) pessimistic.

Regardless of the type of forecast, its structure provides for a certain course of action, rules and norms of behavior and a procedure for implementation. From several models, choose the optimal one for this forecast, for example:



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- model No. 1 is a controlled thought process that finds its expression in a system of plans;

- model No. 2 is an intuitive process carried out by a manager based on an understanding of the logic of this activity and knowledge of the situation;

- model No. 3 is an empirical learning process based on experience.

## The implementation of the strategy of healthcare institutions is aimed at fulfilling three interrelated tasks:

1. To prioritize of tasks, the relative importance of which corresponded to the strategy that the organization will implement. This concerns the problems of resource



use, the formation of organizational relationships, the creation of auxiliary systems, etc.

2. To establish a correspondence between the chosen strategy and the internal organizational processes in the healthcare facility, in order to orient the organization's activities towards the implementation of the strategy. Compliance is established by the following characteristics: – organization structure; – motivation and incentive system; – norms and rules of conduct; – qualifications of employees and managers, etc.

3. To choose the appropriate strategy leadership style and to approach to the management of the organization.

## Strategic plans can be:

- general;

- functional;
- economical.

Successful implementation of the strategic plan involves the use of not only general, but also private management and marketing methods: issuing orders, planning tasks; holding operational meetings, meetings; organizational regulation and rationing; economic incentives, etc.

## 2.4.2. Strategic marketing planning. Quality management

A strategic marketing plan is a business document consisting of a description of the company's real positions in the market for the period covered, defining its market goals and tools to achieve them.

To make a marketing plan, you must first have ready: a description of the company's services and products, your target audience, pricing policy and analysis of the competitive environment.



A marketing plan for a clinic is usually not one document, but several. The minimum "package" for the preparation of a marketing plan should include:

1. A map of channels for attracting patients with a list of all the tools that you plan to use this year, the expected conversion and responsible persons. In addition, a tactical plan should be created for each channel, recording specific

activities and their timing.

2. **Budget per year.** If the clinic is just opening, it is usually planned to put 15-20 % of the profit on marketing expenses. For clinics that have entered the market for a long time with the development of the brand, this percentage is gradually decreasing and amounts to 2.5-10 %.

3. Sales plan. According to statistics, only 15-20 % of businesses make sales plans. However, this is exactly the tool that is an additional motivation, an analytical basis and a basis for understanding your capabilities, as well as a compass during a crisis. The sales plan is based on calculations and specific data. These are well-founded figures that characterize income, profit and other indicators. For the calculation there are special techniques that allow you to make the document as adequate and close to reality as possible.

4. **Clinic promotion plan.** This is the instrument that will be your voice. It structures your communications by defining:

- what (messages);
- to whom (target audiences);
- where (platforms and events);
- how (tools and budgets) do you talk about your service.

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Strategic marketing planning is based on the study of health standards and norms.

Healthcare standards are optimal scientifically based quantitative indicators of the market (the state of the environment) (hygienic



standards, sanitary and epidemiological standards of the volume of work on preventive and routine sanitary supervision) and the activities of medical institutions (standards of the population's need for various types of medical care): the number of visits per 1 resident per year, the percentage of hospitalized patients, etc.). These can be indicators of loading of medical personnel (the number of sanitizations, visits per 1 doctor) and the norms of the use of medicines and dressings.

Healthcare norms are calculated characteristics of providing the needs of the medical services market with material and human resources. They characterize the totality of health care facilities necessary to meet the norms of need. Norms are indicators of the healthcare plan, according to which the provision of the population with medical care is assessed. The main regulatory documents of healthcare include:

- norms for the organization of medical and preventive services for the population according to the precinct principle (the number of people per medical site);

- staffing norms of medical personnel in various medical institutions;

- norms for the organization of the activities of various health care institutions;

- norms for the average annual degree of bed occupancy in individual profiles, norms for the average length of stay of a patient in a bed in separate departments;

- norms of funding (for healthcare per 1 resident, expenses for medicines and dressings, food, etc.);

- norms of performance indicators of individual specialists and departments;

- norms of accreditation of medical and preventive institutions;

- quality standards of medical services.



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**Quality** is the exact (according to the standard) performance of various types of medical intervention that are considered safe, financially affordable in a given society and can positively affect the level of mortality, morbidity and irrational nutrition (World Health Organization, 1988). The parameters by which the quality of medical care is assessed are given below (Table 2.3).

Table 2.3

N⁰	Parameter	Content
1	Availability	Can patients receive the necessary medical care?
2	Safety	Is this medical facility safe (for example, fire safety, bomb shelter, etc.)?
3	Accordance	Was the chosen treatment method correct for a particular patient?
4	Technical quality	Were the selected medical services professionally presented?
5	Medical effectiveness	Or has the patient's treatment yielded any positive results?
6	Patient satisfaction	Was the patient satisfied with the services provided to him?

Parameters of the medical care quality



Most often in the world practice, medical and technological standards of the process (examination, consultation, treatment) and the result are used. Such standards are developed for individual clinical and statistical groups (CSG) in accordance with each of the diseases belonging to a certain group. The implementation of the standard

of medical services is assessed both with the help of qualitative characteristics (excellent, good, satisfactory, unsatisfactory) and quantitative (determination as a percentage of the level of quality of examination and treatment relative to the planned one).

In world practice, there are the following ways of applying standards:

- licensing of doctors and nurses (mandatory);

- certification of a doctor by a council whose members are his colleagues (voluntary);

- licensing of inpatient medical institutions and polyclinics (mandatory);

- development and implementation of guidelines for medical practice (voluntary);

- preparation of protocols on medical practice (optional);

- development and implementation of working standards;

- internal instructions (voluntary);

- definition of the goals and objectives of self-improvement of work (voluntary).

**Clinical and Statistical Groups** (CSG) is a formalized set of cases of similar diseases that have on average approximately the same duration, and accordingly the cost of treatment, together with quality standards that provide the list of therapeutic and preventive measures necessary for the patient and the result expected from their use (Table 2.4). In terms of insurance medicine, these groups serve as the basis for determining fixed tariffs for medical services.

Table 2.4

	s)		Standard				
SG n of (days)		the	medical examination				
No. CS	e of ut io C		laboratory diagnostic	advisory	treatment	result	
1	7	Phlegmon of the bottom of the oral cavity	General analysis of blood, urine, culture for the sensitivity of microflora	Surgeon	Surgical intervention, antiseptics, antibiotics, sulfonamides, immunomodulatory	Absence of purulent exudate, healing	

**Clinical and Statistical Group** 

The standard is understood as the minimum level of requirements for medical services, indicators and parameters of the patient's health status at the end of the course of treatment.

## Types of medical care quality standards:

1. Structural (ensure the availability and safety of qualified medical care). These include standards for providing the population with medical personnel, standards for the organization of medical

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and preventive institutions and their structures, equipment, financing, etc.

2. The process (ensure the appropriate level and technical quality of medical care). These are medical and technological standards containing a list of necessary medical manipulations (diagnostics, counseling, treat-

ment, preventive interventions) in individual cases of patient care.

3. Results (ensure medical efficiency and satisfaction of patients' needs).

# 2.4.3. Technologies of strategic analysis and methods of marketing business planning

**Strategic marketing management** is the influence on the level, time and nature of demand in such a way as to help an organization achieve goals. The task of marketing depends on the state of demand, which can be negative, absent, falling, irregular, full-fledged, excessive, irrational.

For example, in society there is a negative demand for vaccination, dental procedures, etc. The task of strategic marketing is to analyze why the market is negative about a certain product or service and whether strategic marketing technologies can change this attitude by: improving the product (medical service), lowering prices, advertising campaigns, aggressive targeting, etc.

An integral element of strategic marketing is the business plan of a medical institution or a separate business process, that is, an appropriate feasibility study of the activities and prospects for the development of healthcare. The purpose of developing a business plan is to organize the medical and economic activities of the organization for the near and distant periods in accordance with the needs of the market and the possibilities of obtaining the necessary resources. The development of a business plan provides the following advantages:

 determination of the perspective of a medical institution, a clearer and more specific definition of goals, ways to achieve them, coordination of efforts;



- a visual demonstration of the duties and responsibilities of all employees of a medical institution, as well as the functional relationships between them;

- analysis and calculation of the necessary indicators of the economic activity of a medical institution.

## Types of strategic marketing:

- advanced market analysis;
- marketing on the basis of anticipating changes;
- solving strategic tasks.

The Goal is to forecast the future situation and ensure on this basis the survival of the institution in the future. The increasing **speed of adaptation** of a medical institution to market conditions. Determination of the performance indicators of the medical institution necessary for consistent monitoring.

The main objectives of the business plan:

1) determining the direction of activity (mission, goals) of a medical institution, target markets and the place of its organization in them;

2) formulation of long-term and short-term goals and objectives;

3) assessment of the material and financial situation of the medical institution, compliance of resources with the set goals.



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### Business planning tasks also include:

- defining strategies and tactics for achieving long-term and short-term goals of a medical institution;

- delegation of authority to employees responsible for the implementation of each strategy;

- establishing a list of medical services that will be provided to consumers, assessing the costs of providing medical care;

- organization of stimulation and motivation of the work of medical workers;

- definition of marketing activities of a medical institution for market research, advertising, sales promotion, sales, etc.

There are many different models for developing business plans, each of which has its advantages and disadvantages. But for the organization of the activities of most medical institutions, the priority areas for the development of business plans are to determine the capacity of the market, the expediency of the services provided, the totality of costs and profits, the identification of errors, the assessment of possible costs for the implementation of medical services (functional cost analysis).

When developing a business plan for a medical institution, it is necessary to take into account:

1) the specifics of the market economy, economic laws (supply and demand, competition, cost, average profit, etc.);

2) the use of marketing to study the problems and conditions of promotion of various types of therapeutic, preventive and wellness services to consumers;

3) economic and financial feasibility of future investments in the development of a healthcare facility.

A Business Plan is a promising document, it is recommended to draw it up for 3-5 years ahead.



For the first and second years, the main indicators are recommended to be given quarterly (monthly), from the third year – annually.

The development of a business plan has four stages:

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I - the formulation of the mission, goals, objectives, the form ofthe results obtained:

**II** – **planning**; use methods (analytical, balance sheet, normative, economic-mathematical. statistical. program-target). types of standards (time, labor, material costs, staff; organizations of healthcare institutions; outpatient and inpatient care, etc.), indicators of plans (sanitary-statistical, technical-economic, organizationaleconomic, financial); to plan the main items of the cost estimate.

III - preparation of a written business plan according to the following structure:

1) capabilities of a medical institution (summary);

2) types of medical services (goods):

3) sales markets for services (products):

4) competition in sales markets;

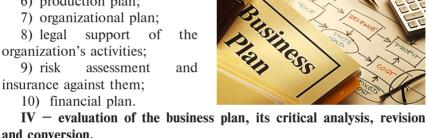
5) marketing plan;

6) production plan;

7) organizational plan;

8) legal support of the organization's activities:

9) risk assessment and insurance against them;



The economic part of business planning involves determining the indicators of cash flow over time. To do this, the current and future value of money (investment) in the project is determined.

**Investments** are all types of property and intellectual values that are invested in objects of entrepreneurial and other types of activity, as a result of which profit, income (financial or social) is created or a social effect is achieved. Investments are long-term or short-term **investments**.



The concept of the value of money over time is that the value of money changes over time, taking into account the rate of return money, which is usually a loan interest or just interest. Inflation and quantitative risk assessment are

also factors of changes in the value of money over time. More often (in management practice), inflation and risk are already taken into account in the amount of the interest rate (and, accordingly, the discount rate). Determine: the future value (the value of cash flow in the future period, taking into account the impact factors) for simple and compound interest and the current value of money (the present future value, taking into account the discount factor) for simple and compound interests.

1. The future value of investments (money) at a simple interest:

$$S = P \times (1 + n \times i), \qquad (2.1)$$

where S – future value of cash;

- P current cash value;
- n number of interest payment periods;
- i the interest rate used.

## 2. The future value of investments (money) by compound interest:

$$S_c = P \times (1+i)^n , \qquad (2.2)$$

where  $S_c$  – the future value of cash (investments) when increasing by compound interest;

P – current cash value (initial investment amount);

i – the interest rate used;

n – the number of intervals (periods) for which each interest payment is made, in the general agreed time period.

#### 3. The present value of cash flows at a simple percentage:

$$P = S \times \frac{1}{1 + n \times i} \,. \tag{2.3}$$

4. The present value of cash flows at a compound percentage:

$$P_c = \frac{S}{(1+i)^n} \,. \tag{2.4}$$

5. The amount of the discount, at a simple percentage (bringing the future value of money to the present):

$$D = S \times \left(1 - \frac{1}{1 + n \times i}\right),\tag{2.5}$$

where D – the discount amount (calculated by simple interest) for the agreed period of time as a whole;

S - cost of funds;

i - discount rate used.

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Based on the present value (the amount of available investments) and calculations of the future value according to the formulas (2.4-2.5), we can determine the main indicator of the investment project (business plan) – net present income (NPV).

Net Present Value (NPV, net present value or net discounted income) is an indicator showing the difference between future receipts (the future discounted value of the project) and the current value of incoming cash flows (project costs, that is, net investments) and for a certain period of time (number of periods: years).



$$NPV = \frac{CF_t}{(1+i)^t} - IC = S_c - P_c , \qquad (2.6)$$

where  $CF_t$  – cash flow, cash settlement flow for the period *t*;

i – the discount rate or the yield that can be earned with an alternative investment;

t - time period number;

IC – investment investments (now the cost of money, capital).

The NPV can take positive and negative values. A positive NPV value  $\geq 0$  indicates that your project has a yield **higher** than the alternative and should be implemented. A negative NPV value of  $\leq 0$ , respectively, indicates a **lower** profitability (the project should be rejected according to the profitability criterion).

**Internal Return of Rate** (IRR, internal rate of return) is an indicator showing the profitability of future investments. In fact, it is a discount rate, the application of which turns the NPV to zero.

$$NPV = \sum_{t=1}^{N} \frac{CF_t}{(1 + IRR)^t} = 0.$$
 (2.7)

The IRR shows the annual percentage of profitability that the project should bring. The higher the IRR, the more attractive the investment looks. Financial analysts when planning the CapEx often use this kind of the IRR as the required rate of return (RRR, required

rate of return). This coefficient shows the minimum required level for the IRR, which makes the idea attractive for implementation.



for interest from reinvestment.

Microsoft offers several standard formulas:

- IRR - for regular cash flows;

- XIRR - for receipts that are irregular in nature;

- MIRR - for regular receipts with the possibility of accounting

**Payback period.** Together with the NPV and the IRR, an indicator such as the payback period (PP) is often used in the analysis, showing the period of time during which the initial costs will return or, in other words, the break-even point will be reached. The shorter the payback period, the higher the feasibility of the initiative. Payback period is the period of time required for the income generated by investments to cover the investment costs. The point at which net income takes a positive value will be the payback point.

$$PP = \frac{Io}{P}, \qquad (2.8)$$

where PP – payback period of the project;

Io - the amount of investment in the project;

P – average annual profit.

**Return on Investments** (ROI, return on investment) is an indicator of efficiency, the ratio of profit or loss from project implementation to implementation costs. Return on investment (ROI) is a financial indicator reflecting the efficiency (ratio) of net profit (annual) to the amount of investments (investments, assets) of the project.

$$ROI = \frac{P}{I} \times 100 \%, \qquad (2.9)$$

where P – average annual profit;

I – investments in the project (business assets).

The PP and ROI indicators are proportional to each other, that is, for example, the profitability of a project of 20 % means its payback period of 5 years.

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We advise you to lay down several scenarios, according to the rules of the management and marketing strategy – optimistic, medium-expected and pessimistic.

The results of business planning are formalized in Table 2.5 with the corresponding calculations and conclusions on the implementation of the project.



Table 2.5

N⁰	Indicators	Designation/calculation formula
1.	Initial investments (investments) P (now the value of money, capital)	$P = S \times \frac{1}{1 + n \times i}$
2.	Future value (CF cash flow) in the period (3–5 years)	$S = P \times (1 + n \times i)$
3.	Discount rate (approximate credit interest), the coefficient of bringing the future value of money to the current	$D = \left(\frac{1}{1+n \times i}\right)$
4.	NPV - the reduced current profitability (efficiency) of investments (investments) Project efficiency condition $NPV \ge 0$ Net income of the project	$D = S \times \left(1 - \frac{1}{1 + n \times i}\right) = S_c - P_c$
5.	IRR shows the annual percentage of profitability that the project should bring	$NPV = \sum_{t=1}^{N} \frac{CF_t}{(1 + IRR)^t} = 0$
6.	PP (payback period) – the payback period of investments (investments)	$PP = \frac{Io}{P}$
7.	Return on investment (ROI) – internal profitability of the project	$ROI = \frac{P}{I} \times 100 \%$

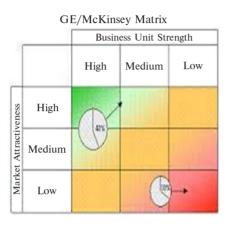
Indicators (incoming/output) of the business plan (Investment attractiveness of the project)

The most common methods of strategic analysis are **matrix methods**. Matrices for strategic analysis are usually two-dimensional or three-dimensional tables, where the boundary values of the factors under consideration are laid down along the axes (an important

condition: there should be no strict functional dependence between the factors). Quadrants are formed by the intersection of the boundary values of both factors. Getting business units into one or another quadrant means the applicability of standard strategic recommendations to them.

## The most well - known methods of matrix analysi:

- 1. BCG Matrix analysis of growth rates and market share.
- 2. MCC matrix analysis of compliance with the business



mission of the enterprise and its key competencies.

3. GE/McKinsey Matrix – analysis of comparative market attractiveness and business competitiveness.

4. Shell matrix – analysis of the attractiveness of a resource-intensive industry depending on competitiveness.

5. Ansoff Matrix – strategy analysis in relation to markets and products.

6. ADL Matrix – Industry position.

life cycle analysis and relative market position.

7. SWOT Analysis Matrix.

The acronym SWOT was first introduced in 1963 at Harvard at a conference on business policy problems Professor Kenneth bv Andrews. SWOT Initially. analysis was based on the image and structuring of



knowledge about the current situation and trends. In 1965, four Harvard University professors – Edmund P. Learned, C. Roland Christensen, Kenneth R. Andrews, William D. Guth proposed the technology of using a SWOT model to develop a strategy for the behavior of the firm. The LCAG scheme was proposed (based on the initial letters of the authors' surnames), based on a sequence of steps leading to the choice of a strategy.

	2	Positive impact		Negative impact	
Interi	Internal environment Stre		engths	Weaknesses	
Exter	External environment Oppo		rtunities	Threats	
	Internal				
Str	Strengths		Weaknesses		
• W	hat do we do well?		• What can we improve?		
iti se	<ul> <li>What have our customers or partners told us they like about us?</li> <li>In what areas do we outpace our competitors?</li> <li>What's unique about our business, products, or services?</li> <li>What assets do we own? (Intellectual property, proprietary technology, capitol)</li> </ul>		<ul> <li>What are our customers or partners dissatisfied with?</li> <li>Where do we fall behind our competitors?</li> <li>Where are we lacking in knowledge or resources?</li> </ul>		Negative
Ор	portunities		Threats		
ta • W va • W ta • A	Anat emerging trends ike advantage of? Ahich of our strengths aluable to potential pa Anat adjacent markets ap into? re there geographic le ith less competition?	a might be artners? a might we	<ul> <li>How could us vulnerabl</li> <li>What marke unprepared</li> <li>What economic</li> </ul>	et trends are we	

This acronym can be represented as a table:

External

The SWOT analysis, together with project **risk analysis**, completes the business planning process.

If we concretize the general definition of risk for the analysis of the project, then **the risk of the project** is the degree of uncertainty in obtaining the expected level of profitability in the implementation of this project.

The purposes of the project risk analysis are:

 providing an assessment of all types of project risks;

- determination of the degree of expediency of the



project implementation in the presence of a risk level and ways to reduce it;

- identification of possible ways to reduce risks.

Project hazards are external and internal. External risks, in turn, are divided into unpredictable and assumed.



## **Control questions**

- 1. Content, goals and objectives of the marketing plan.
- 2. Marketing strategy.
- 3. The company's pricing strategy.
- 4. Definition of the target product segment.
- 5. Determining the need for advertising.
- 6. Sales forecasting.
- 7. Marketing strategy.
- 8. The company's pricing strategy.
- 9. Definition of the target product segment.
- 10. Determining the need for advertising.
- 11. Sales forecasting.



**Tests** 

- 1. According to property relations, the sources of financing of business projects are divided into:
  - A. State investment resources, investment resources of business entities, investment resources of foreign investors.
  - B. Own, attracted, borrowed.
  - C. At the expense of the state, regional and local budgets, at the expense of business entities, foreign investments in various forms.

- 2. Which section of the business plan describes the buyers of the planned product or service?
  - A. Production.
  - B. Company description.
  - C. Summary.
  - D. Marketing analysis and strategy.

### 3. What do they refer to as borrowed sources of financing?

- A. Issue of shares, charitable contributions, crowdfunding, funds of business angels.
- B. Profit of the enterprise, depreciation, insurance amounts of compensation.
- C. Bank loan; issue of company bonds; targeted government loan aimed at a specific type of investment; tax credit; investment leasing.
- D. Venture financing, consortium financing, grant financing.
- 4. What kind of capital is corporatization as a method of financing business projects?
  - A. Own.
  - B. Attracted.
  - C. Loan.
  - D. All answers are correct.
- 5. Which group of indicators include indicators of the Payback Period of the project, Net Present Value, Internal Rate of Return, Return On Investment?
  - A. Profitability indicators of the project.
  - B. Indicators of investment attractiveness.
  - C. Indicators of profitability of the project.
  - D. Project payback indicators.

## 6. The beginning of the project is considered:

- A. Profitability indicators of the project.
- B. Indicators of investment attractiveness.
- C. Indicators of profitability of the project.
- D. Project payback indicators.

## 7. The important part of the marketing plan are:

- A. Preparation of project estimates and definition of areas of responsibility.
- B. Calculation of project performance indicators.

- C. Market segmentation, target audience determination.
- D. Material and technical support of the project.

## 8. The indicator demonstrating the effectiveness of investments is:

- A. NPV.
- B. PP.
- C. IRR.
- D. ROI.
- 9. An indicator that helps determine the time required for the amount of proceeds from the implementation of the project to reimburse the amount of costs for its implementation:
  - A. NPV.
  - B. PP.
  - C. IRR.
  - D. ROI.

## 10. An important part of the organizational plan is:

- A. Preparation of project estimates and definition of areas of responsibility.
- B. Determination of the organizational form and organizational structure of the project.
- C. Market segmentation, determination of the target audience.
- D. Material and technical support of the project.



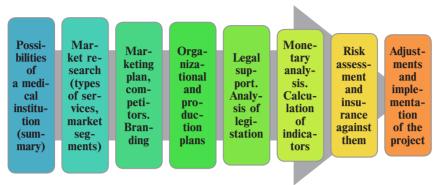
## Individual work

## I. Development of a business plan for a public (private) medical clinic by structure:

- 1. Capabilities of a medical institution (summary).
- 2. Types of medical services (goods).
- 3. Sales markets for services (products).
- 4. Competition in sales markets.
- 5. Marketing plan.
- 6. Production plan.
- 7. Organizational plan.
- 8. Legal support of the organization's activities.

9. Risk assessment and insurance against them.

10. Financial plan.



## II. Working in groups:

Evaluation of competitors' business plan, its critical analysis.

1. Is it possible with the help of a business plan to get a clear idea of the activities of a medical institution and its services?

2. Is there a clear picture of changes in the internal and external environment of this institution?

3. Competition.

4. Are the tasks of the medical institution obvious, what goal is it going to?

5. Are the practical measures correct and sufficient to achieve the goals?

6. Market.

7. What is the level of improvement of the services (goods) provided?

8. What is the level of improvement of the methodology and technology of providing services (goods)?

9. What is the structure of the organization and staff?

10. Economic characteristics.

11. Are there prerequisites for increasing profitability, improving medical, social and economic efficiency?

12. Are all risk factors taken into account?

13. When can we expect the return of the invested funds and the receipt of income by investors? What is its volume?



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Навчальне видання

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## МЕНЕДЖМЕНТ ТА МАРКЕТИНГ В ОХОРОНІ ЗДОРОВ'Я

Навчальний посібник

Англійською мовою

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