

**PRIVATE HIGHER EDUCATIONAL INSTITUTION  
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"  
Department of Social Medicine and Humanitarian Disciplines**

**WORKING PROGRAM OF EDUCATIONAL DISCIPLINE**

**"Social Medicine. Health care Organization and Economics"**

**LEVEL OF HIGHER EDUCATION** Second (master's) level

**DEGREE OF HIGHER EDUCATION** Master's degree

**BRANCH OF KNOWLEDGE** 22 Healthcare

**SPECIALTY** 222 Medicine

Reviewed and approved  
at the meeting of the Academic Council  
Protocol No. 1, dated August 01, 2016

**Kiev 2016**

## Introduction

The program on the educational discipline " Social Medicine, Health care Organization and Economics " is compiled in accordance with the educational and professional program for training specialists of the second (master's) level of specialty 222 Medicine, fields of knowledge 22 Health care, the Law of Ukraine "On Higher Education" dated 07.01.2014. No. 1556- VII (Article 13, Clause 7), the provision "On the organization of the educational process at the International Academy of Ecology and Medicine" PVZ, methodological recommendations approved by the Central Methodical Office of Higher Medical Education of the Ministry of Health of Ukraine regarding the development of programs of educational disciplines in accordance with industry standards of higher education. The discipline " Social Medicine, Health care Organization and Economics " belongs to the Professional training section of the training plan for students of higher education of the second educational (master's) level.

### Description of the academic discipline

Name indicators	Field of knowledge, direction of training (specialty), educational and qualification level	Characteristics of the academic discipline
		full-time education
The number of credits is 2.5	Branch of knowledge: 22 "Healthcare"	
	Specialty: 222 "Medicine", 221 "Dentistry"	Year:
4st		
Semester		
VIII		
Lectures		
The total number of hours is 75		15 hours
	Education level: master	Practical training
		30 hours
		Independent (individual) work
		30 hours
		type of control
		final control

#### EXPLANATORY NOTE

The curriculum of the discipline "Social Medicine, Health care Organization and Economics" is designed for students who study in the specialty "Medicine", "Medical business". The structural and logical scheme of specialization provides for the study of the educational discipline "Fundamentals of economic theories" before the study of other profiling educational disciplines.

The curriculum is designed for full-time students and combines the work program of the course, tasks and recommendations for completing the semester test.

The goal of the course: formation of modern knowledge of the theoretical foundations of health care economics, as well as skills and abilities related to the economic analysis of the activity of the industry at the macro and micro levels, including the analysis of the activities of health care institutions.

The task of the academic discipline "Economics of health care" is the theoretical preparation of students on the following issues:

- basics of healthcare economy;
- peculiarities of the healthcare market;
- the role of the state and market mechanisms in restructuring the industry;
- economic aspects of state policy analysis;
- mechanisms of state management of restructuring of the health care industry;
- basics of economic analysis in the field of health care;
- modern concepts of limited resource management and cost containment, including pharmaceutical costs;
- main types of health care systems and trends in their development; acquisition of practical skills and abilities;
- analysis of the economic situation in the field of health care and treatment and prevention institutions;
- disclosure of pricing principles in health care;
- various types of economic analysis used by economists in the field of health care and their application in solving important problems in politics and health care management;
- market models of health care organization and financing;
- application of state policy analysis in the field of health care;
- science-based approach to health care reform;
- application of quantitative methods of policy analysis (in particular, income and expenditure analysis), determination of policy efficiency and effectiveness;
- use of health care financing forms and mechanisms;
- on the theory and practice of payment methods for medical services;
- from modern pharmacoeconomics.

Semester control of knowledge is conducted in the form of an exam. The discipline exam is aimed at checking the students' knowledge of theory and identifying the skills of applying the acquired knowledge in solving practical tasks, as well as the skills of independent work with educational and scientific literature. The exam ticket consists of two theoretical questions and a practical situational or analytical task.

**THEMATIC PLAN**  
**disciplines**  
**" Social Medicine, Health care Organization and Economics "**

No	Name of content module and topic	Lecture	Practical class	ISW
<b>Content module I.</b>				
<b>Management of the formation, development and use of health care resources</b>				
1	Economic basis of health care	1	2	2
2	Healthcare market	1	3	2
3	Management of resource development in health care	2	3	2
4	State regulation of resources in the field of health care	2	2	2
5	Methods of economic evaluation of programs in the field of health care	1	3	2
6	Mechanisms of allocation of resources in health care systems	1	2	2
<b>Content module II.</b>				
<b>Analysis of the effectiveness of the financial and economic activity of medical and preventive institutions</b>				
7	Characteristics of the main methods of financing medical services	1	2	3
8	Pricing in health care	1	2	2
9	The main forms of health care financing	1	2	3
10	Marketing in health care and pharmaceutical activities	1	3	2
11	Health care management and financing reforms	1	2	3
12	Assessment of the state of the material and technical base of medical and preventive facilities	1	2	2
13	Management of fixed capital of medical and preventive institutions	1	2	3
	<b>In total</b>	<b>15</b>	<b>30</b>	<b>30</b>

CONTENT  
disciplines

" Social Medicine, Health care Organization and Economics "

Content module I.

Management of the formation, development and use of health care resources

Topic 1. The economic basis of health care

Subject and tasks of the course. Features of the economy of the industry and market relations in health care. Health and health care as goods. Economic problems of health care. Demand for health and health care. Offer of medical services. Balance of supply and demand. Factors forming the structure and volume of demand for health and health care. Allocation of health care resources: a theoretical approach. Medical insurance and its features. Prospects for the development of voluntary health insurance in Ukraine.

Literature [28; 32–34; 30]

Topic 2. Health care market

Failure of markets to function effectively as a basis for government intervention. Violation of competition conditions and competition policy. Policy regarding natural monopolies. Public goods: making political decisions in the market of public goods; state provision of public goods. Positive and negative externalities and their internalization: externalities and property rights. Asymmetric information and the problem of uncertainty. Elements of the economic structure in the health care market.

Provision of medical services within the framework of different models of health care systems - Bismarck, Beveridge and market (or private): their advantages and disadvantages.

Expediency and possible negative external effects of the formation of a multi-system market economy (development of all forms of ownership) in Ukraine. Basics of insurance and failure of private health insurance.

Literature [24; 28; 31]

Topic 3. Management of resource development in health care

The main strategies for improving the organizational mechanism of public administration and their classification. Changes in functions and structure. Stimulating strategies for improving the organizational mechanism. Internal restructuring of healthcare facilities.

Characteristics of resources, their importance for the health care industry. Peculiarities of management and planning of labor resources of the industry.

Methods of accounting for the number of doctors and average medical workers in medical and preventive institutions. Application of the normative method of calculating the resources of health care institutions.

The role of management and distribution of the state budget in conditions of limited funding. The essence of financial resources and health care financing. Management accounting and cost control.

Literature [3; 13; 18; 28; 31–34]

Topic 4. State regulation of resources in the field of health care

Stages of state policy analysis. Selection and classification of problems suitable for public policy analysis. Analysis of the definition of social problems. The role of the state and the prerequisites for its intervention in the field of health care.

State intervention in health care markets and introduction to regulation. Economic rationality of state intervention. The need for state intervention.

The main types of state regulation in the field of health care. State regulation of resources and capital investments. State regulation of the quality of medical care. State regulation of the quality of medicinal products. State regulation of medical insurance.

Literature [9; 10; 15; 19; 28; 30; 37; 36]

#### Topic 5. Methods of economic evaluation of programs in the field of health care

Discounting. Net present value criteria. Necessity of applying economic evaluations in the health care system. Measuring quality-adjusted life years. Cost-benefit analysis. Use of the concept of "human capital" in the approach to evaluation.

Literature [24; 28]

#### Topic 6. Mechanisms of resource allocation in health care systems

Inequality of income distribution and poverty as problems for policy. Mechanisms of income redistribution. Concepts of justice.

A question of social choice. A trade-off between fairness and efficiency.

Comparative characteristics of resource allocation mechanisms in health care.

Contractual relations as a mechanism of effective distribution of resources in health care. Types of contracts that use resources in health care. Peculiarities of the application of contracts in countries with a transition economy.

Literature [2; 9; 28]

### Content module II.

Analysis of the effectiveness of the financial and economic activity of medical and preventive institutions

#### Topic 7. Characteristics of the main methods of financing medical services

Itemized budget: features, position of main agents, incentives, advantages and disadvantages. General budget: incentives for providing medical care. Funding per capita. Financing of inpatient and outpatient care adapted to the profile of patients. Fee for service: examples of determining payment rates, setting prices, incentive rules, means of cost control. Payment per inhabitant: types of payment, financing per inhabitant at the regional level.

Literature [3; 26; 27; 28; 38]

#### Topic 8. Pricing in health care

Pricing principles. Definition and concept of producer costs. Classification of costs. Overhead distribution methods. Rational behavior of the producer. Self-sufficiency and profitability. Profitability threshold. Capital expenditure and depreciation.

Literature [2; 28; 32–35]

#### Topic 9. Basic forms of health care financing

Movement of finances in health care systems. The level of health care financing. The main sources of health care financing. Funding from general tax revenues. Social health insurance. Private insurance. Direct consumer payment. Key elements of health care systems. Classification of health care systems. Private, socially oriented and public healthcare systems. Examples of the functioning of these systems in countries with high, medium and low levels of economic development.

Literature [1; 2; 14; 24; 26; 28; 30; 35]

#### Topic 10. Marketing in health care and pharmaceutical activity

Features of marketing in the field of health care. Marketing on the market of services and goods of the medical and industrial complex. Social marketing as a mechanism of influence on individual behavior.

Literature [30; 35]

#### Topic 11. Health care management and financing reforms

The regulated market model: basic provisions. Practical implementation of the regulated market model in Great Britain. Theory and practice of integration of the system of financing and provision of medical care. The main trends and conclusions of health care financing system reforms: foreign and domestic experience. Reforming the UK's National Health Service: preparation, stages of reform, challenges and lessons.

Reforming health care in the countries of the European Union. Health care reform in Canada and the USA. Trends and generalization of the experience of reforming health care in the countries of the world.

Literature [13; 18; 30; 35]



Topic 12. Assessment of the state of the material and technical base of medical and preventive institutions

Treatment and prevention institution as an object of management. Material and technical level of the health care facility. The concept of the fixed capital of a medical and preventive institution. Economic tasks of the medical and technical complex of the institution. The general principle of assessing the economic potential of a health care facility: the cost of a medical facility; the state of fixed assets and their reproduction; quality capabilities of fixed assets; efficiency of use of fixed assets. Indicators of the state of medical equipment. The concept of the effectiveness of management of fixed and working capital of a medical and preventive institution.

Literature [13; 14; 17; 24; 27; 28; 30]

Topic 13. Management of the fixed capital of medical and preventive institutions

General principles of choosing an organizational and legal form for a health care institution. The relationship between the development of the medical and technical complex of the health care institution and the quality of the treatment process. Peculiarities of financing health care institutions with different forms of ownership.

Rent as a source of income or a form of management of fixed assets. Basic principles of interaction between tenants and landlords in the conditions of state health care. Depreciation of fixed assets.

Literature [3; 13; 18; 24; 28; 32–35]

### **METHODOLOGICAL RECOMMENDATIONS FOR THE INDEPENDENT WORK OF STUDENTS**

The main goal of independent work is to activate the systematic work of students, individualize learning, and improve the quality of mastering the academic discipline.

According to with requirements educational and professional programs students should:  
**know:**

- fundamentals of health care economics;
- the role of the state and market mechanisms in restructuring the industry;
- economic aspects of state policy analysis;
- mechanisms of state management of the restructuring of the health care sector;
- features of the market of healthcare organizations;
- existing approaches to the formation of prices for medical services and assistance;
- forms and mechanisms of health care financing;
- basic principles and methods of economic analysis in the field of health care;
- modern concepts of limited resource management and cost containment, including pharmaceutical costs;
- main types of health care systems and trends in their development.

**Be able:**

- to critically analyze medical literature, including in English, and draws conclusions based on the available literature;
- to notice signs of unhealthy and self-destructive behavior and responds appropriately to them;
- to choose treatment that minimizes the social consequences for the patient;
- can identify risk factors for violence, recognize violence and respond appropriately;
- to respect the patient's rights;
- can demonstrate responsibility for improving their qualifications
- and passing on knowledge to others;
- can take into account in the therapeutic process
- the patient's subjective needs and expectations resulting from socio-cultural conditions

**Is ready to:**

- establishing and maintaining deep and respectful contact with the patient, as well as showing understanding for differences in worldviews

- and cultural
- seeing and recognizing one's own limitations and making changes
- self-assessment of educational deficits and needs
- using objective sources of information

Completion of tasks for independent studies is also aimed at acquiring *practical skills and abilities such as:*

- from the analysis of the economic situation in the field of health care and in medical and preventive institutions;
- from market models of health care organization and financing;
- from the application of the analysis of state policy in the field of health care;
- from a scientifically based approach to health care reform;
- on the theory and practice of pricing and payment methods for medical services;
- from the application of quantitative methods of economic policy analysis of institutions, in particular the analysis of income and expenses, determination of the efficiency and effectiveness of the policy;
- from the economic analysis of individual spheres of activity of health care institutions.

*Independent work* on the academic discipline "Economics of health care" includes:

- preparation for practical classes (for full-time students);
- writing tests (for correspondence students). Control work is a complex task, which contains two theoretical and practical tasks, the performance of which develops the independence of analytical processing of economic information;
- preparation for the current control of students' knowledge on certain topics of the academic discipline (for full-time students);
- preparation for border (modular) control (for full-time students);
- preparation for the final control of knowledge on control questions.

Important importance in the management of students' independent work is given to individual and group consultations, their purpose is to help students in studying this or that issue, in the correct organization of independent work on studying the subject.

The success of preparing for practical classes and passing the exam largely depends on the organization of independent work. To carry out independent work, students are recommended to familiarize themselves with the regulatory and legal framework and educational and methodological literature, the list of which is given in the list of recommended literature, as well as publications of periodicals, in particular such as: "Bulletin of Social Hygiene and Health Care Organizations of Ukraine", "Bulletin of Dentistry", "Glavny vrach", "Journal of a practical doctor", "Medical business", "Health care of Ukraine", "Practical medicine", "Economics healthcare of Ukraine", "Bulletin of the National Academy of Public Administration under the President of Ukraine", "Official Bulletin of Ukraine". The recommended literature must be studied systematically, according to the list and in the following sequence:

- a) read the curriculum with the content of each topic;
- b) learn educational material related to a specific topic;
- c) give answers to questions for students' independent work on each topic;
- d) answer the control questions of the relevant topic;
- e) write out all unclear questions for consideration at the consultation.

In the process of studying the educational material, it is necessary to use enterprise reports and other sources of economic information, regulatory and legal documents of Ukraine, analyzing changes in indicators according to the methodology presented in the textbooks.

The main types of control of the level of assimilation of educational material allocated for independent processing by students of full-time forms of education are oral surveys (correspondence forms of education - checking of control papers). Based on the results of the control, students are assigned grades in the journals of current performance according to the point system of the modular rating control. Final control of knowledge



the form of an exam is carried out based on control questions for the exam, which are grouped into 30 tickets, each of which contains two theoretical and one practical question.

II. For each of the topics of the course " Social Medicine, Health care Organization and Economics " the student must complete the following tasks, which are submitted for independent study (before the test/exam):

**Content module I. Management of the formation, development and use of health care resources**

**Topic 1. The economic basis of health care**

1. Economic problems of health care.
2. Distribution of health care resources: a theoretical approach.
3. Basics of insurance and failure of private health insurance.

Literature [28]

**Topic 2. Health care market**

1. Asymmetric information and the problem of uncertainty.
2. Elements of the economic structure in the health care market.
3. Medical insurance and its features in different countries of the world.

Literature [28]

**Topic 3. Management of the development of health care resources**

1. Methods of accounting for the number of doctors and average medical workers in medical and preventive institutions.
2. The role of management and distribution of the state budget in conditions of limited funding.
3. Management accounting and cost control.

Literature [13; 31; 32–34; 13; 18]

**Topic 4. State regulation of health care resources**

1. State regulation of the quality of medical care.
2. State regulation of the quality of medicinal products.
3. State regulation of medical insurance.

Literature [10; 15; 19; 28; 30]

**Topic 5. Methods of economic evaluation of programs in the field of health care**

1. Use of the concept of "human capital" in the approach to the evaluation of programs in the field of health care.
2. Justify the need to use economic evaluations in the health care system.
3. Measurement of quality-adjusted life years.

Literature [24; 28]

**Topic 6. Mechanisms of resource allocation in health care systems**

1. Peculiarities of the application of contracts in countries with a transition economy.
2. How can a compromise be reached in the issue of ensuring the proper balance between the principles of budgetary solidarity and private competition?
3. How is the need for medical assistance determined for concluding a contract?
4. Name the list of mandatory issues that must be specified in the contract.
5. How is the evaluation of the results of the health care institutions that provided medical services (assistance) under the contract carried out?
6. Name the key problems of contractual relations.

Literature [2; 9; 28]

**Content module II. Analysis of the effectiveness of the financial and economic activity of medical and preventive institutions**

**Topic 7. Characteristics of the main methods of financing medical services**

1. Payment per inhabitant: types of payment, financing per inhabitant at the regional level.

Literature [28]

**Topic 8. Pricing in health care**

1. Name the main methods of price formation for medical services.
2. What role do costs play in price formation?
3. Classify health care provider costs.

4. Rational behavior of the producer.

Literature [28]

**Topic 9. Basic forms of health care financing**

1. Private, socially oriented and public healthcare systems.
2. Examples of the functioning of these systems in countries with high, medium and low levels of economic development.

Literature [14; 30; 35]

**Topic 10. Marketing in health care and pharmaceutical activity**

1. Marketing on the market of goods of the medical and production complex.
2. What are the features of social marketing in the field of health care?

Literature [28]

**Topic 11. Health care management and financing reforms**

1. Reforms of the National Health Service of Great Britain: preparation, stages of reform, difficulties and lessons. Practical implementation of the regulated market model in Great Britain.
2. Reforming health care in the countries of the European Union.
3. Health care reform in Canada and the USA.
4. Trends and generalization of the experience of health care reform in the countries of the world.
5. Theory and practice of integration of the system of financing and provision of medical care.

Literature [13; 18]

**Topic 12. Assessment of the state of the material and technical base of medical and preventive institutions**

1. Indicators of the state of medical equipment.
2. The concept of the effectiveness of the management of fixed and working capital of a medical and preventive institution.
3. Depreciation as a source of internal financing of hospital facilities.

Literature [13; 28]

**Topic 13. Management of the fixed capital of medical and preventive institutions**

1. Describe the modern options for choosing forms of ownership.
2. Rent as a source of income or a form of management of fixed assets.
3. Basic principles of interaction between tenants and landlords in the conditions of state health care.
4. The essence and meaning of medical equipment leasing.
5. What is depreciation of fixed assets, its role? Explain the need to reproduce fixed assets.

Literature [3; 13; 18; 24; 28; 35]

## INSTRUCTIONS FOR PERFORMING CONTROL WORK

Control work on discipline " " Social Medicine, Health care Organization and Economics " is carried out in accordance with the curricula of the "Organization Management" specialty of the "Medical and Pharmaceutical Management" specialization.

The main purpose of the control work is borderline control of professionally-oriented knowledge on "Economics and financing of health care", acquired during the independent study of literature and legal acts and analysis of the assessment of the economic potential of a health care object (a specific health care institution 'I). This should bring the theoretical course closer to practical activities, which is especially important for working students.

Individual counseling is provided for the performance and registration of the control work, which can be obtained from a teacher at the Department of Management in accordance with the consultation schedule and by phone. -

The student chooses the number of the test option based on the first letter of his last name (see table).

<b>The first letter of the student's last name</b>	<b>Number of the version of the control work</b>
A B C	1
G, D, E, E	2
Zh, 3, I	3
Y, K, L	4
M, N, O	5
P, R, S	6
T, U, F	7
X, Ts, Ch	8
Sh, Sh	9
Yu, Ya	10

General requirements for the registration of control work. The control work has the following structure: title page, introduction, question that illuminates the content of the problem, conclusions, list of used literature. The test work must be at least 15 pages of text (computer type — 14 point, 1.5 spacing, Times font New Roman ). All pages, except the title page, must be numbered. A mandatory condition for writing the paper is the content containing the assignment questions with page markings, an introduction and conclusions that should reflect the student's own attitude to the material being studied, direct answers to questions without page breaks and indicating references to literary sources, as well as a list of used literature, which should contain at least 10 sources.

If necessary, applications are drawn up.

In the process of preparing for the performance of control work, it is advisable to use enterprise reports and other sources of economic information, analyzing changes in indicators according to the methodology presented in the educational and methodological literature.

Assessment of task performance. During the examination of the control work, the teacher will pay special attention to how the student understands the content of the academic discipline "Healthcare Economics", his ability to connect the categories and theories of the academic discipline with the realities of a specific health care institution, as well as the ability to systematize the material and to express one's own thoughts clearly. Among the specified assessment criteria, the most important is the ability to practically apply knowledge in specific situations.

When checking test papers, the teacher will pay attention to the following parameters:

- the thoroughness of the answers to the questions, which indicates the level of mastery of the theoretical material;
- understanding of the categories of the educational discipline, which is revealed in one's own presentation of the material, and not in rewriting the textbook, as well as in appropriately selected examples from the activities of the health care institution;
- the ability to comment on the given illustrations (or real documents of a medical institution);
- design of the work (structure, headings, links, etc.).

## **OPTIONS OF CONTROL WORKS**

### **Option 1**

1. Economic problems of health care.
2. Contractual relations as a mechanism of effective distribution of resources in health care. Types of contracts used in health care. Peculiarities of the application of contracts in countries with a transition economy.
3. The medical institution plans to provide 600 services per year. The average sales price of a conditional service is UAH 68, the planned amount of fixed costs is UAH 20,000, and variable costs are UAH 7,200. Determine the break-even point of the institution, if the provision and payment of services is carried out evenly over the months.

### **Option 2**

1. Factors forming the structure and volume of demand for health and health care.
2. Material and technical level of the health care facility. The efficiency of the use of the fixed capital of the medical and preventive institution.
3. The cost of the medical institution's equipment is UAH 270,000. Equipment worth UAH 29,000 was put into operation on April 1. Since August 1, equipment worth UAH 16,000 has been decommissioned. Production of conditional services — 12,250, the price of one conditional service — 39 UAH. The production capacity of the institution is 15,000 conditional services. Determine the amount of return on investment and the coefficient of intensity of equipment use.

### **Option 3**

1. Allocation of health care resources: a theoretical approach.
2. The general principle of assessing the economic potential of a health care facility.
3. Determine the payback period of capital investments in new medical equipment, provided that the initial investment is 5,000 UAH and profits are received starting from the third year in the amount of 3,000 UAH per year at a market price of capital of 20% per annum.

### **Option 4**

1. Elements of the economic structure in the health care market.
2. Movement of finances in health care systems. Level of health care financing, main sources of health care financing, financing from general tax revenues, social health insurance, private insurance, direct payment by the consumer.
3. The amount of wear and tear on the fixed assets of the medical center was UAH 1,600,000, the initial cost of fixed assets at the beginning of the period was UAH 7,500,000. Determine the rate of depreciation of fixed assets and the rate of suitability of fixed assets.

### **Option 5**

1. Expediency and possible negative external effects of the formation of a multi-system market economy (development of all forms of ownership) in Ukraine.
2. Financing of inpatient and outpatient care adapted to the profile of patients.
3. Revenue from the implementation of paid services to the population in the reporting year amounted to UAH 800,000. Material costs were UAH 480,000, administrative costs were UAH 70,000, depreciation was UAH 5,000, and other operational costs were UAH 10,000. The asset value of the hospital's balance sheet was UAH 2,850,000. Determine the gross profit and profitability of the gross profit of the health care institution.

### **Option 6**

1. The main strategies for improving the organizational mechanism of public administration and their classification. Changes in functions and structure. Stimulating strategies for improving the organizational mechanism. Internal restructuring of healthcare facilities.
2. Payment per inhabitant: types of payment, financing per inhabitant at the regional level.
3. Determine the maximum level of fixed costs at which it may be appropriate to provide a medical service, if the variable costs for one service are UAH 210, the price of one conditional service is UAH 300, and the number of services that can be implemented at the current technological level is 400 units.

### Option 7

1. Peculiarities of management and planning of labor resources of the industry. Application of the normative method of calculating the resources of health care institutions.
2. Fee for service: examples of determining payment rates, setting prices, incentive rules, means of cost control.
3. Calculate the net profit of a private medical and preventive institution from the implementation of paid medical services, if the surgical department provides 215 such services per year, the average price of one service is UAH 3,000, and the cost of providing the service is UAH 1,800.

### Option 8

1. The role of management and distribution of the state budget in conditions of limited funding.
2. Definition and concept of producer costs. Classification of costs.
3. Determine the amount of losses as a result of the irrational and non-targeted use of the bed fund of a health care institution, if the amount of money spent on maintaining the entire bed fund of the inpatient department is UAH 80,000, the standard bed turnover is 23 days, and the actual occupancy of the bed fund is 344 days per year, the actual average duration of hospitalization is 20 days, the target occupancy of the bed fund during hospitalization of patients is 338 days per year.

### Option 9

1. The main types of state regulation in the field of health care. State regulation of resources and capital investments. State regulation of the quality of medical care. State regulation of the quality of medicinal products. State regulation of medical insurance.
2. Peculiarities of marketing in the market of health care services and goods of the medical and industrial complex.
3. Determine the amount of annual depreciation deductions for restoring the value of the equipment of a medical and preventive institution, if the book value of the equipment is UAH 150,000, the liquidation value is UAH 5,000, and the service life is 8 years.

### Option 10

1. Comparative characteristics of resource allocation mechanisms in health care.
2. Rational behavior of the producer. Self-sufficiency and profitability. Profitability threshold.
3. Determine the best option for a health care institution that implements basic funds: to receive 60,000 hryvnias immediately or in installments of 18,000 hryvnias every year for 4 years with activation of payments at the beginning of the first year. It is known that the market price of capital is 15% per annum.



## *QUESTIONS FOR SELF-CONTROL*

1. Basic issues of health care economics.
2. Features of the economy of the industry and market relations in health care.
3. Health and health care as a commodity.
4. Economic problems of health care.
5. Marketing on the market of services and goods of the medical and industrial complex.
6. Elements of the economic structure in the health care market.
7. The role of the state and market mechanisms in health care.
8. Economic rationality of state intervention.
9. The main types of state regulation in the field of health care.
10. State regulation of resources and capital investments.
11. State regulation of the quality of medical care.
12. State regulation of the quality of medicinal products.
13. State regulation of medical insurance.
14. Necessity of applying economic evaluations in the health care system.
15. Pricing principles.
16. Definition and concept of costs of the producer of medical services.
17. Rational behavior of the producer.
18. Self-sufficiency and profitability. Profitability threshold.
19. Capital expenditure and depreciation.
20. Discounting. Net present value criteria.
21. Necessity of applying economic evaluations in the health care system. Measuring quality-adjusted life years.
22. Cost-benefit analysis.
23. Use of the concept of "human capital" in the approach to evaluation.
24. The main stages of the analysis of economic evaluation in the field of health care.
25. Organizational mechanism of state management of health care.
26. Movement of financial resources in health care systems.
27. National health accounts.
28. Healthcare systems and subsystems.
29. The main sources of health care financing.
30. Key elements of health care systems.
31. Comparative characteristics of placement mechanisms in health care.
32. Classification of health care systems. Private, socially oriented and public healthcare systems.
33. Contractual relations as a mechanism of effective distribution of resources in health care.
34. Types of contracts used in health care, their structure.
35. Peculiarities of the application of contracts in countries with a transition economy.
36. Itemized budget: features, position of main agents, incentives, advantages and disadvantages.
37. General budget: incentives for providing medical care.
38. Financing of inpatient and outpatient care adapted to the profile of patients.
39. Fee for service: examples of determining payment rates, setting prices, incentive rules, means of cost control.
41. Payment per inhabitant: types of payment, financing per inhabitant at the regional level.
42. The main strategies for improving the organizational mechanism of public administration and their classification.
43. Changes in the functions and structure of the provision of health care services.
44. Stimulating strategies for improving the organizational mechanism.
45. Internal restructuring of healthcare facilities.
46. The main types of state regulation in the field of health care.
47. Features of marketing in the field of health care.
48. Social marketing as a mechanism of influence on individual behavior.
49. The regulated market model: basic provisions.

50. Practical implementation of the regulated market model in Great Britain.
51. Theory and practice of integration of the system of financing and provision of medical care.
52. The main trends and conclusions of health care financing system reforms: foreign and domestic experience.
53. Basic strategies for managing limited resources.
54. Treatment and prevention institution as an object of management.
55. Material and technical level of the health care facility.
56. The concept of the fixed capital of a medical and preventive institution.
57. Economic tasks of the medical and technical complex of the institution.
58. The general principle of assessing the economic potential of a health care facility.
59. State of fixed assets and their reproduction; qualitative capabilities of fixed assets.
60. Effective use of fixed assets.
61. Indicators of the state of medical equipment.
62. Effectiveness of management of fixed and working capital of a medical and preventive institution.
63. General principles of choosing an organizational and legal form for a health care institution.
64. The relationship between the development of the medical and technical complex of the health care institution and the quality of the treatment process.
65. Peculiarities of financing health care institutions with different forms of ownership.
66. Rent as a source of income or a form of management of fixed assets.
67. Basic principles of interaction between tenants and landlords in the conditions of state health care.
68. Depreciation of fixed assets.
69. Peculiarities of management and planning of labor resources of the industry.
70. The role of management and distribution of the state budget in conditions of limited funding.
71. Regulatory and legal basis for the development of additional sources of financing of the health care institution.
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81. Peculiarities of financing health care institutions with different forms of ownership.
82. Stages of financial management of medical and preventive institutions.
83. Stages of financial planning of medical and preventive institutions.
84. Normative method of planning financial indicators.
85. Calculation and analytical method of financial planning of activities of medical and preventive institutions.

86. Balance method of planning financial indicators of medical institutions.
87. The main articles of the estimate of expenditures of health care institutions.
88. Differentiated standard per inhabitant taking into account the different sex-age structure of the population: essence and calculation.
89. Funding of medical and preventive facilities based on the determination of costs by clinical and statistical groups (CSG).

#### CONTROL METHODS

## TEACHING METHODS

1. **Verbal** (lecture, explanation, story, conversation, instruction).
  2. **Visual** (observation, illustration, demonstration).
  3. **Practical** (various types of exercises, performing graphic works, carrying out an experiment, practice).
- teaching methods** are also used during the educational process :

explanatory-illustrative or information-receptive , which involves the presentation of ready-made information by the teacher and its assimilation by students;

reproductive , which is based on the performance of various tasks according to the model;

method of problem presentation , which consists in the fact that the teacher poses a problem and solves it himself, demonstrating the contradictions that characterize the learning process, while the students' task is to control the sequence of presentation of the material, the materiality of the evidence, predicting the next steps of the teacher; this method is implemented by training students in problem situations with the aim of successful preliminary preparation for future work in real conditions of practical medical institutions;

partially search or heuristic , aimed at mastering individual elements of search activity, for example: the teacher formulates a problem, students - a hypothesis;

research , the essence of which is the teacher's organization of students' search and creative activity by posing new problems and problematic tasks;

methods that ensure perception and assimilation of knowledge by students (lectures, independent work, instruction, consultation);

methods of applying knowledge and acquiring and consolidating abilities and skills (practical classes, control tasks);

methods of checking and evaluating knowledge , abilities and skills.

## CONTROL METHODS

**Preliminary (incoming) control** serves as a means of identifying the existing level of knowledge of students for their use by the teacher in a practical session as orientation in the complexity of the material. It is conducted in order to assess the strength of knowledge and to determine the degree of perception of new educational material.

**Current control** - control of independent work of students regarding the study of educational materials. It is carried out at each practical lesson in accordance with the specific goals of the topic in order to check the degree and quality of mastering the studied material. In all practical classes, objective control of theoretical preparation and mastering of practical skills is applied in order to check the student's readiness for the class. In the process of ongoing control, the student's independent work is evaluated in terms of the completeness of tasks, the level of assimilation of educational materials, mastering of practical skills of analytical and research work, etc.

**Boundary (thematic) control** mastering the chapter (subchapter) takes place after completing the study of the block of relevant topics through testing and/or oral interview and/or performance of structured tasks. Thematic control is an indicator of the quality of studying the topics of the discipline's sections and students' assimilation of practical skills, as well as the related cognitive, methodical, psychological and organizational qualities of students. It is held in a specially designated - final - session.

**Intermediate control** consists in evaluating students' assimilation of educational material on the basis of their performance of certain types of work in practical (seminar) classes for a certain period. It is conducted in the form of a semester credit at the last practical (seminar) class in the semester.

**Final control** performs a control function, is carried out for the purpose of evaluating the results of training at a certain educational and qualification level or at individual completed stages. It is conducted in the form of a test, a differentiated test or an exam in order to establish the content of students' knowledge in terms of volume, quality and depth, as well as the ability to apply them in practical activities. During the final control, the results of the completion of all types of educational work according to the structure of the work program are taken into account.

## CALCULATION SCHEME AND DISTRIBUTION OF POINTS

During the assessment of mastery of each topic for the current educational activity, the student is given grades on a 4-point (national) grading scale. At the same time, all types of work provided for by the discipline program are taken into account. The student must receive a grade in each topic. Estimates given



on a traditional scale are converted into points. The final grade for the current educational activity is recognized as an arithmetic average (the sum of grades for each class is divided by the number of classes in the semester) and is converted into points according to table 1.

The maximum number of points that a student can score for the current educational activity for admission to the exam is 120 points.

The minimum number of points that a student must score for the current educational activity for admission to the exam is 72 points. The calculation of the number of points is carried out on the basis of the grades received by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (CA), rounded to two decimal places.

**Table 1**

**Recalculation of the average grade  
for current activity in a multi-point scale**

4-point scale	200- point scale	4-point scale	200- point scale	4-point scale	200- point scale	4-point scale	200-point scale
5	200	4.47	179	3.94	158	3.42	137
4.97	199	4.45	178	3.92	157	3.4	136
4.95	198	4.42	177	3.89	156	3.37	135
4.92	197	4.4	176	3.87	155	3.35	134
4.9	196	4.37	175	3.84	154	3.32	133
4.87	195	4.35	174	3.82	153	3.3	132
4.85	194	4.32	173	3.79	152	3.27	131
4.82	193	4.3	172	3.77	151	3.25	130
4.8	192	4.27	171	3.74	150	3.22	129
4.77	191	4.24	170	3.72	149	3.2	128
4.75	190	4.22	169	3.7	148	3.17	127
4.72	189	4.19	168	3.67	147	3.15	126
4.7	188	4.17	167	3.65	146	3.12	125
4.67	187	4.14	166	3.62	145	3.1	124
4.65	186	4.12	165	3.6	144	3.07	123
4.62	185	4.09	164	3.57	143	3.05	122
4.6	184	4.07	163	3.55	142	3.02	121
4.57	183	4.04	162	3.52	141	3	120
4.55	182	4.02	161	3.5	140	Less than 3	Not enough
4.52	181	3.99	160	3.47	139		
4.5	180	3.97	159	3.45	138		

**Assessment of individual student tasks.**

Points for individual tasks are awarded only under conditions of their successful completion and defense. The number of points awarded for different types of individual tasks depends on their volume and importance, but no more than 10-12 points. They are added to the sum of points scored by the student in classes during the current educational activity. In no case can the total amount for the current activity exceed 120 points.

**Assessment of students' independent work.**

Students' independent work, which is provided for by the topic of the lesson along with classroom work, is evaluated during the current control of the topic in the corresponding lesson. The mastery of topics that are presented only for independent work is checked during the final module control. The maximum number of points that a student can score during the exam is 80 points.

The evaluation of the final control is considered passed if the student scored at least 60% of the maximum number of points (for a 200-point scale – at least 50 points).

Determining the number of points a student has scored in a discipline: the number of points a student has scored in a discipline is determined as the sum of points for the current educational activity and for the final control (exam).

Conversion of the number of points from the discipline into grades on the ECTS scale and on the four-point (traditional) scale



Subject scores are independently converted to both the ECTS scale and the national assessment scale, but not vice versa (table 2).

Table 2

**Recalculation of the average grade  
for current activity in a multi-point scale**

4- point scale	120- point scale	4- point scale	120- point scale	4- point scale	120- point scale	4- point scale	120- point scale
5	120	4.45	107	3.91	94	3.37	81
4.95	119	4.41	106	3.87	93	3.33	80
4.91	118	4.37	105	3.83	92	3.29	79
4.87	117	4.33	104	3.79	91	3.25	78
4.83	116	4.29	103	3.74	90	3.2	77
4.79	115	4.25	102	3.7	89	3.16	76
4.75	114	4.2	101	3.66	88	3.12	75
4.7	113	4.16	100	3.62	87	3.08	74
4.66	112	4.12	99	3.58	86	3.04	73
4.62	111	4.08	98	3.54	85	3	72
4.58	110	4.04	97	3.49	84	Less than 3	Not enough
4.54	109	3.99	96	3.45	83		
4.5	108	3.95	95	3.41	82		

**Evaluation criteria  
according to the traditional 4-point and ECTS scale**

Score in points	Rating by national scale	Rating according to the ECTS scale
180-200	Perfectly	A
160-179	Fine	B
150-159		C
130-149		D
120-129	Satisfactorily	E
50-119	Unsatisfactorily	FX
0-49		F

**Evaluation criteria.**

During the evaluation of the mastery of each topic for the current educational activity, the higher education applicant is given grades according to the national (traditional) scale, taking into account the approved evaluation criteria:

**grade "excellent" (5)** - the student flawlessly mastered the theoretical material of the topic of the lesson, demonstrates deep and comprehensive knowledge of the relevant topic, the main provisions of scientific primary sources and recommended literature, thinks logically and constructs an answer, freely uses the acquired theoretical knowledge when analyzing practical material, expresses his attitude to certain problems, demonstrates a high level of assimilation of practical skills;

**grade "good" (4)** - the student has well mastered the theoretical material of the lesson, has the main aspects from primary sources and recommended literature, presents it in a reasoned way; possesses practical skills, expresses his thoughts on certain problems, but certain inaccuracies and errors are assumed in the logic of the presentation of theoretical content or in the performance of practical skills;

**grade "satisfactory" (3)** - the student has basically mastered the theoretical knowledge of the subject, orients himself in primary sources and recommended literature, but answers unconvincingly, confuses concepts, additional questions cause the student uncertainty or lack of stable knowledge; when answering questions of a practical nature, reveals inaccuracies in knowledge, does not know how to evaluate facts and phenomena, connect them with future activities, makes mistakes when performing practical skills;

rating "unsatisfactory" (2) - the student has not mastered the educational material of the topic, does not know scientific facts, definitions, hardly orients himself in primary sources and recommended literature, lacks scientific thinking, practical skills are not formed.

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