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The analytical framework regulating the efficiency of the public health system

The purpose of this publication is the comprehensive study of the peculiarities of the analytical framework to determine the level of efficiency of functioning of the state of health care in regional and national scale. The article deals with the formation of analytical database for determining the efficiency of the public health system. We investigate the analytical potential of satellite accounts of spending on health care, compared methods for estimating cost effectiveness in preventing disease of population. The system of measures to improve the level of distributive justice health care costs among members of a society at the regional level was worked out. It is proved that for determining the fair distribution of benefits and results of operation of the health care system among members of a society is necessary to introduce monitoring of financing and use of government programs of public health at the regional level.
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Аналітична база регулювання ефективності державної системи охорони здоров'я

Статтю присвячено вивченню особливостей формування аналітичної бази визначення рівня ефективності функціонування державної системи охорони здоров'я в регіональному та національному масштабах унітарної держави. Досліджуються аналітичний потенціал системи сателітних рахунків витрат на охорону здоров'я, порівнюються методи оцінювання ефективності витрат по запобіганню захворювань населення. Розроблено систему заходів по підвищенню рівня справедливості розподілу витрат на охорону здоров'я між членами суспільства на регіональному рівні
державна система охорони здоров'я, рахунки витрат на охорону здоров'я, рівень ефективності витрат на охорону здоров'я

Problem statement. All countries form and maintain health care system (HCS), which is defined as the set of all measures aimed, primarily, at improving, restoring and maintaining health. HCS of the specific country mobilizes and allocates resources between organizations and uses them for collective and individual consumption. This creates a flow of consumer goods to the population, resulting in a new level of achievement of its creation or stock. However, today the EU HCS barely covers its expenses, which, moreover, is rapidly increasing. In addition, there is no system of integrated indicators of funds for health care (HC), which adequately testified the effectiveness of the use, provided the possibility of analyzing material ongoing expenses directly indicated their relevance and adequacy.

The analysis of resent research and publications. Important means of information for the analysis of HCS efficiency from an economic point of view is carried out on a regular basis of the national satellite health accounts (NSHA) [2, 3]. On an ongoing basis the following accounts in the format NSHA of the UN OECD are conducted in Ukraine. There are also continuous attempts to do so in the Lebanese Republic.

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Objectives. The purpose of this publication is the comprehensive study of the peculiarities of the analytical framework to determine the level of efficiency of functioning of public health system at national and regional scale of the unitary state, the study of the analytical potential of satellite accounts for HC expenses, comparison methods for assessing cost-effectiveness in preventing disease of population.

Main material. It is possible to meet all current requirements in the formation of an analytical framework for determining the effectiveness of spending on HC in the national (regional) scale due to a combination of NSHA four categories of information:

– functional classification of areas of use by individuals or institutions of knowledge and technologies in the field of medicine, nursing and paramedicine to achieve the objectives set out by HCS [4, *29,130 – 29,132*];

– information about HC providers, each of which can be applied to one or more institutional sectors [4, *29.133 – 29.134*];

– on the cost of steps - the amount of end-use products and services of HC consumers plus gross accumulation in their providers [4, *29.135 – 29.136*];

– data source funding of activities with the release of public sector, private sector and the rest of the world [4, *29.138*].

Thus, for the transition from the standard SNA aggregates to NSHA should be taken a number of preparatory activities which are completed by formation of four additional accounts [2, *p.417*] as well as tables and use of resources [2, *pp.422, 426*].

Collective evaluation of HC costs for the analysis of their performance at the international, national and regional levels is appropriate to conduct according to three factors:

– total cost of the individual (for individual people) HC (as opposed to the costs of collective and public HC);

– the total operating costs of HC (the sum of the individual costs of medical care, the costs of collective health services, the costs of the activities of organizations that finance HC);

– total expenditure on HC (the sum of total current expenditure plus capital accumulation organizations - HC providers).

The structure of SNA indicators for Ukraine, calculated on the basis NSHA are given in [5]. The system of indicators is given in [2*, p.347*; 3, *p.21*].

The effectiveness of the health care system covers several facets of activity: first, the impact on public health; secondly, the degree of financial protection from catastrophic health care costs in case of serious illness; third, distributive justice benefits and outcomes of functioning health systems among members of society. However, by themselves Health Accounts do not reveal effective or ineffective spending. To do this, they should be considered together with data containing information on epidemiological, demographic, etc. state of a society.

In the first case, the cost effectiveness analysis can be used to compare the dynamics of personal costs of treatment of the dynamics of diagnoses according to the International Classification of Diseases (causes of death epidemiological characteristics) (ICD) [6]; dynamic changes in diagnostic- related groups (DRG), diagnostic-related groups for health (HRG), homogeneous group of diseases that can be consolidated into separate clusters: infectious, non-contagious, trauma; distribution of outpatient treatment in 17 groups, objectives, defined by the International Classification of first aid (ICPC) [7]; volume sub NSHA (reproductive health, child health, AIDS, tuberculosis, malaria, etc.) (Egypt, Sri Lanka, Brazil, Rwanda) [8], the cost of types of diseases [9], types of drugs [10].

To determine the degree of financial protection from catastrophic health care costs in case of serious illness is a suitable criterion for allocating costs to HC among groups of individuals, households (options: equity contributions and benefits received per capita;

proportionate contribution opportunities, proportionality received benefits needs, equality of health status). Analysis of the range of recipients of benefits provides a more accurate measurement of costs for HC. Drafting of summary tables that allow comparing data from population parameters such as finance managers, suppliers, functions and funding sources constitute the most complete picture of HC. For example, the analysis of the allocation of different managers of funding among different groups shows that the share of health care, its getting by the poor, funded by government agencies and what proportion of directly funded most low-income households.

Methodology of analytical procedures for the allocation of HC spending by household income quintile is described in details in [5, 11].

Possible approaches to assess cost-effectiveness of health care can be determined by:

– social efficiency at the macro level – the level of mortality from causes that are subject to management influence, the initial transfer to disability, temporary disability because of illness etc., implemented by legislative and executive authorities with the participation of civil society organizations and the public;

– structural efficiency – characterized by indicators of the state guarantee program by medical care (emergency, inpatient, outpatient, hospital replaceable), carried out at the level of health of the municipality or the region in general local government;

– medical and economic efficiency – characterized by indicators of achievement in the treatment of various diseases in case of various methods and treatment schemes carried out at the level of health facilities by the government.

At each level of government can be used one of the four methods of analyzing cost-effectiveness: minimization of size; "cost – effectiveness" method; "cost – benefit" method; "cost – utility" method [12, 13].

Using these methods provides the ability to conduct a parallel analysis of information on the social population losses as a result of certain diseases and their groups, as well as financial information, which is formed by a special scheme that ensures comparability cost regional health system on prevention, treatment and rehabilitation of population considered each disease.

The purpose of the analysis is to develop the efficiency of the overall budget costs of the health care system that is focused on results – reducing social losses from the disease. Thus the total cost is recommended to include not only the costs of health care for preventive, curative and rehabilitative activities, but also the costs associated with other forms of social activity, which helps to prevent the occurrence and development of disease of the population. These kinds of activities can be classified as social protection, the development of physical culture and sports activities of state and public services and the organization of associations of healthy recreation and more.

Universal indicator of loss of health of the population is an indicator of its death. Moreover, for each of the primary indicators: mortality (frequency, time and spatial distribution), the incidence of short-term and long-term disability, assessment of functional status and reserves adaptability, it is possible to calculate parameters related, respectively – the life expectancy for a particular age, life expectancy without disability, the distribution of the population according to the criteria of physical, mental and social well-being and integral parameters characterizing the socio-economic aspects of health: the lost years of potential life due to premature mortality from specific causes of lost years of active life due to illness and disability, life expectancy with adjustments for quality.

In order to establish priorities and monitoring the performance of the health value of the applicable index of “lost years of potential life” which is calculated for specific illnesses

based on the basic level of life expectancy that is 65 years. This basic level is the most realistic for the vast majority of regions and municipalities of modern Ukraine.

Despite the fact that over a long period of time some of the country publishes regional estimates of expenditure on HC (Australia, Canada, Mexico, China, Philippines, Spain, Sri Lanka, USA) for the introduction of a similar system in Ukraine should solve methodological problems:

– identification of regional units for allocating costs of HC (options: cost accounting in accordance with the place of residence of the recipient of services, cost accounting on the location of services);

– ordering procedures for assessing costs of HC (options: collection of baseline data at the regional level and their subsequent aggregation at the national level, the implementation of national estimates of disaggregated into regional components (Mexico);

– restrict the range of costs for HC, subject to investigation by the recommendations of the International Classification of Health Accounts;

– determine the parameters of population classification scheme based on national surveys of household (age and gender, socio-economic status of the household, geographic location (city – country));

– create the tables of combined allocation for HC in three categories (direct household spending on personal services, the cost of individual services funded by other units, the cost of collective services or services at the community level).

Conclusion. To determine the degree of fairness of distribution of benefits and results of operation of HC among members of society is necessary to introduce monitoring of the funding and use of health care at the regional level.

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Аналитическая база регулирования эффективности государственной системы охраны здоровья

Целью публикации является всесторонне изучение особенностей формирования аналитической базы определения уровня эффективности функционирования государственной системы охраны здоровья в региональном и национальном масштабах.

Статья посвящена вопросам формирования аналитической базы данных для определения уровня эффективности функционирования государственной системы охраны здоровья. Исследуются аналитический потенциал системы сателитных счетов учета расходов средств на охрану здоровья, сравниваются методы оценивания эффективности расходов по предотвращению заболеваемости населения. Разработана система мероприятий по повышению уровня справедливости распределения расходов на охрану здоровья между членами общества на региональном уровне.

Доказано, что для определения степени справедливости распределения выгод и результатов функционирования системы охраны здоровья между членами общества необходимым является внедрение мониторинга состояния функционирования и использования средств государственных программ охраны здоровья населения на региональном уровне.
государственная система охраны здоровья, счета расходов на охрану здоровья, уровень эффективности расходов на охрану здоровья

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Теоретичні засади розгляду інноваційної складової розвитку трудового потенціалу суспільства

У статті проаналізовано теоретичні засади розгляду інноваційної складової розвитку трудового потенціалу суспільства по ключовим напрямкам: методологічні підходи до вивчення трудового потенціалу та його складових; розробка категоріального апарату; розробка критеріїв, що дозволяють оцінити ступінь розвиненості явища; система індикаторів, завдяки яким можливо відслідковувати ступінь та напрямок змін. Методологічний підхід базувався на розгляді теорій двох рівнів: теорій, що стосуються загально-цивілізаційного прогресу, методологічні підходи до визначення суті трудового потенціалу суспільства та підходи до розкриття його інноваційної складової. При розгляді категоріального апарату було дано визначення інноваційного розвитку національної економіки як такої стадії розвитку, коли за рахунок реалізації інноваційних проектів у всіх

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