



STATISTICAL ASSESSMENT OF THE RELATIONSHIP BETWEEN HEALTH SATELLITE ACCOUNTS AND THEIR COST PERFORMANCE WITH INTERNATIONAL STANDARDS

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The article describes the creation of health satellite accounts, its principles, stages, classification of financing and costs, as well as the interdependence of health expenditure indicators in the health accounting system of the Organization for Economic Cooperation and Development.

KEYWORDS: *statistical assessment, economically active population, employment, employment models, health expenditure indicators, economic cooperations, factors affecting employment.*

INTRODUCTION

The Organization for Economic Co-operation and Development Health Accounts System is methodologically coordinated with the 1993 System of National Accounts, based on concepts and accounting rules. These calculations provide a link to other Socio-Economic Statistics data [3].

In general, the difference between satellite health accounts is not conceptually calculated, but is determined by the analysis of costs to the national economy and the priority of solving computational tasks. The main difference is the difference in the approach to using the database. The SCO envisages extensive use of all available sources of information to analyze the provision of health services and their

funding. At the same time, satellite calculations envisage closer coordination of their indicators with important aggregate aggregates, as well as with resources and utilization schedules. Such compliance not only helps to improve the computational quality of indicators, but also health accounts, but it requires more resource costs than building an health accounting system [5].

Both intend to abandon some additional requirements and concepts adopted in the central structure of:

if an institutional unit produces a product other than health services (e.g., social services), it is necessary to ensure that they can be segregated;

it is necessary to provide for its employees the opportunity to determine the prices for health services provided by employers, which are not included in the structure of the the central structure of production and final consumption, but are also considered as ancillary activities of enterprises; their costs are reflected in the intermediate consumption of enterprises;

services for long-term care of elderly and sick members of households are included in health products in the amount of social benefits paid in cash for these purposes;

the price of health products is determined by subsidies paid to suppliers of goods and services; In the central structure of the SME, the price of this product is determined by the final buyer price, ie without taking into account the subsidies allocated to the products [6].

The correlation between health expenditure indicators in health satellite accounts and health accounting system is shown in Table 1.

Satellite calculations use the category of “characteristic products” for any research activity as an important concept. They are divided into two groups: typical products; mixed products (costs associated with the delivery of typical products).

Although this terminology is not used health accounts, it still refers to the goods and services reflected in Articles NS.1-NS.7 of the functional classification of this system in terms of the importance of products specific to health products. In this case, the typical products are medical care, nursing care (NS.1-NS.3) and health care.

management services; mixed products include goods consumed outside health facilities (NS.5), health

care services (NS.4), pharmaceuticals, and other medical goods.

Thus, the consumption of goods and services characteristic of health satellite accounts corresponds to the current health expenditures in accounts [4].

The characteristic consumption of goods and services in satellite accounts consists of actual final consumption and intermediate consumption. Intermediate consumption refers to the cost to employers of providing health care to workers. It is divided into accountable and non-accountable in the central structure of the MHT.

Intermediate consumption, which is taken into account in the central structure includes the services provided by health facilities to enterprises - medical examinations, vaccinations of workers, etc. includes payment for services. These services are considered in the central structure of the SNA as the production of health services [6].

Intermediate consumption of health goods and services, which are not taken into account in the central structure of the SME, includes the costs of enterprises, such as the maintenance of medical facilities, the provision of medical care to workers. These costs are not included in health production volumes in the central structure of the SME.

Health goods and services in the SCO are not divided into actual final consumption and intermediate consumption, but all costs for these purposes, including the cost of providing health care to enterprises and transfers from social security agencies to care for sick and elderly family members, are included in “health care. current expenses”.

Table 1
Health Satellite Accounts and health Expenditure Indicators in the Accounting System
Interdependence

	Health expenditures in satellite accounts	Health expenditures accounts
1	Consumption of health goods and services by residents	Current health expenditures (taking into account the health services provided by employers to workers and family members)
1.1	Actual final consumption	<i>Not used</i>
1.1.1	Marketable product	Marketable product
1.1.2	Non-marketable product	Non-marketable product
1.2	Intermediate consumption	<i>Not used</i>
1.2.1	MHT is taken into account in the central structure	<i>Not used</i>
1.2.2	Not taken into account in the central structure of the MHT	<i>Not used</i>

2	Accumulation of capital in characteristic goods and services of health care	<i>Not used</i>
3	The accumulation of products that are not characteristic of the health sector	Gross capital accumulation in healthcare
	The sum of the substances ranges from 1 to 3	General health expenditures
4	Characteristic current transfers (Not related to Article 1)	Health-related transfers (social benefits in the form of cash to households)
5	Characteristic capital transfers (not related to items 2 and 3)	<i>Not used</i>
	Total health expenditures of residents	Total health expenditures and health-related household transfers
6	Current expenses of residents financed by the outside world (-)	<i>Transfers are reflected in the matrix</i>
7	Capital expenditures of residents financed by the outside world (-)	<i>Not used</i>
8	National health expenditures	<i>Not used</i>

Health goods and health services capital expenditures in health satellite accounts include expenditures on health goods and services. These are seen as funds directed to human capital, namely a component such as health status. The central structure does not provide for the use of such health goods and services. Because all of them are taken into account in the final or intermediate consumption structure. This issue can be interpreted differently in satellite accounts, but the content of this category and its difference with the category of consumption of health goods and services is not yet fully understood and requires further work in this regard [6].

In health satellite accounts, non-health product inventories include gross fixed capital formation, changes in working capital reserves in health care providers, as well as non-financial assets not produced by them (e.g., land, patents, copyrights, etc.). covers pure possessions.

A similar category in the USSR corresponds to Article NS.R.1 of the functional classifier (i.e., which includes changes in the working capital stock of fixed capital and health care providers); net possession of non-produced non-financial assets is not included. In this case, it is recommended to divide the gross fixed capital stock by types of fixed assets (buildings, equipment, etc.).

Satellite accounts provide for the typical categories of current and capital transfers. If these transfers serve to finance the costs of purchasing goods and services included in components 1–3, then they should not be taken into account in the calculation of

the total cost of health care to avoid duplication. However, it is advisable to collect and analyze data on all current and capital transfers that are characteristic of health care and present them as data sources [2].

Current transfers typical for health care may include, but are not limited to:

- subsidies paid by the state to market producers to compensate for losses incurred as a result of providing health goods and services (subsidies) at reduced prices in the field of health care or for the use of certain factors of production (other subsidies to production);

- deductions (discounts) for health insurance;
- social benefits in the form of money for health purposes;

- health insurance premiums and premiums.

Health capital transfers include various in-kind and cash transfers for the purchase of fixed assets, such as investment subsidies from the state to health organizations, grants from the outside world, compensation for losses caused by natural disasters, catastrophes, and so on.

It is recommended that the study social benefits in the CIS in the form of money for health purposes, such as the appearance of the most important transfers for the population. It is not intended to represent other characteristic current and capital transfers [5].

In both systems, the total health expenditures collected from unit-residents for consumption and health fund savings are determined. However, from the

above, it follows that the concept of “savings” is more broadly defined in satellite accounts.

Satellite accounts include the category of "National Health Expenditures on Health", which is determined by deducting current and capital expenditures financed by nonresidents. There is no such category in the CIS, which focuses on the study of current and overall health expenditures. Currently, the financing of current expenditures by nonresidents is represented in the transfer matrix, which is recommended to compile for the analysis of health expenditure financing.

According to our analysis, compiling full-scale health satellite accounts is a complex task. This task requires huge material, financial and labor resources. It may take a relatively long time to introduce satellite calculations into continuous statistical practice. Therefore, in the first place, it is advisable to gather forces to compile health accounts in accordance with the more simple system of the Organization for Economic Co-operation and Development and to do this step by step [5].

In the first stage, the following organizational issues need to be addressed:

- identify the parent organization responsible for compiling health accounts;
- addressing funding issues;
- determine the scope of ministries and agencies involved in this work;
- establishment of an interagency working group;
- training of health accounting professionals: 2008 categories and classifiers, study of the health accounting system, introduction to general concepts, procedures and international experience in this field.

The problem of compiling health accounts cannot be solved by the power of the statistical service alone, because to solve this problem it is necessary to have a good database on all aspects of the health sector and special knowledge about the functioning of the industry.

One of the options to solve this problem is to organize work on the creation of health accounts in the Ministry of Health. However, in this case, it should be taken into account that the staff of this ministry has not learned to work with macroeconomic categories and concepts. Thus, in any case, in compiling health accounts, the statistical service should work closely with the staff of the Ministry of Health, the Ministry of Finance, the treasury and the medical and social insurance funds, as well as organize relevant training courses.

The establishment of an interagency group on the development and implementation of national health accounts is aimed at facilitating the crossing of interagency barriers and the collection of information.

It would be expedient to include in this group not only representatives from the above-mentioned ministries and departments, but also heads and specialists of all ministries and departments functionally related to health.

In the second stage, a methodology for compiling basic tables of national health accounts on the basis of system should be developed, taking into account the characteristics of the organization and financing of the national health accounting system. These include the National Classification of Health Functions, Suppliers, and Sources of Funding, and based on them, various aspects of current and total health expenditures include health expenditures (types of goods and services), current expenditures by suppliers and sources of funding, and current expenditures on health by suppliers and sources of funding. requires the development of a chart of tables A1-A5, which reflects the current expenditures on health functions (types of goods and services) and sources of funding, and total expenditures on health by sources of funding.

The third step is to analyze the existing database and collect and process the information as part of the pilot project, as well as to compile basic tables of health accounts. Based on the analysis of the obtained results, it is expedient to prepare recommendations for improving the database and determine the methodology for compiling the main tables.

Gathering data to create health accounts is the hardest part of this job. In general, health activity is characterized by a large number of natural indicators. Value indicators are developed to a limited extent and mainly relate to paid medical services provided to the population. Thus, there is no systematic information on financial flows in the health sector.

The main sources of information for health accounts are: [3]:

- data from regular statistical observations (statistical report on the activities of health care organizations);
- public finance statistics: reports on the replenishment of the state budget, reports of compulsory health insurance funds and social insurance funds;
- departmental reports of the Ministry of Health, other ministries and departments;
- reports of insurance companies;

information obtained on the basis of special requests and sample checks;
expert assessments.

It is advisable to improve the existing regular statistical reporting form or develop a new one for all organizations engaged in the provision of health services as the main type of activity.

This source of information should be supplemented by the collection of data from periodic sample checks on specific programs that encourage the filling of an existing gap in the database; this applies to the provision of health services to organizations that are considered secondary activities, non-profit organizations, the costs of households in the non-health activities.

Expert assessments are also used for this purpose.

Establishing and improving the database for health accounting is a gradual expansion, on the one hand, in line with changes in the accounting and reporting system, on the other hand, in accordance with the system of health accounting, their level of mastery and regular implementation is a continuous process that requires constant attention to the requirements.

In the fourth stage, experimental compilation of health accounts for the national economy and individual regions will be carried out: data collection and processing; create basic tables; analysis of the obtained results; elimination of shortcomings in the methodology is carried out.

In the fifth stage, the implementation of health accounting for countries and regions will be carried out on a regular basis.

In summary, the vast experience gained in improving the database for compiling national health accounts and compiling health accounts based on the

7. .

IHRT system will enable the implementation of health satellite accounts with a much more complex structure in the future. It is recommended to do the following:

create tables that reflect the intersecting group of the cost component by funding sources and user categories;

compilation of main accounts for different manufacturers of health products (units engaged in various types of economic activities in this area);

creating health product resources and utilization schedules, and more.

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