

System of health accounts – methodological notes

System of Health Accounts is being developed as a statistical system with repetitive current calculations and production of statistical information in accordance with a harmonized methodology and standard classifications. System of Health Accounts is an internationally accepted statistical system for description, classification and analysis of health care expenditure and sources of funding. The application of this statistical system aims to assess all health care expenditure - both public and household, spending of non-profit organizations - foundations, associations, private health insurance funds of enterprises for activities in labour medicine.

The main objectives of the System of Health Account are:

- to provide internationally comparable information in a system of standard matrices;
- to define harmonized health sector boundaries and to apply harmonized definitions;
- to distinguish the main functions of the health sector from the functions related to healthcare;
- to analyze the healthcare system from an economic point of view in accordance with the methodological principles of the macroeconomic (national) accounts and in accordance with the International Classification of Health Accounts.

SHA provides statistical information at national level on health expenditure by type of provider; by functions according to the aims of the medical activities (curative care, rehabilitation, clinical laboratory, sanitary transport, etc.) and according to the financial sources.

The definitions and classifications of the System of Health Accounts, Manual v.1.0. are followed for the period from 2010 to 2013, and for 2011 - 2022 data - the definitions and classifications of the System of Health Accounts, ver. 2011. In addition, 2011 and 2012 data are revised following the requirements of "System of National Accounts, 2010" (SNA2010) and revisions done.

During the process of 2018 data compilation, a revision was made in respect to the 2013 – 2017 data due to the inclusion of a new data source and the additional methodological work performed regarding the household expenditures estimation in order to improve the quality and comparability of the data. During the process of 2019 data compilation, a revision was made in respect to the 2017 NHIF data. In accordance with the requirements of Commission Regulation 359/2015 and Eurostat methodological guidelines the expenditure in the revised tables are provided on an "accrual" principle, i. e. in the year when the activities were carried out, not when they were paid for.

Since 2020 - Expenditures on providing personal assistance for people with disability in accordance with the Personal Assistance Act (new legislation) are included. Expenditure on aids, devices, equipment and medical devices outside the scope of the compulsory health insurance, determined individually with a medical document issued by the medical advisory committees on the basis of their specific needs, regulated in the Persons with Disabilities Act are included as well.

Since 2020, EU funds are also included, including those aiming to overcome the consequences of the Covid-19 pandemic.

Since 2021 - expenditure on the service "Assistant support" in accordance with the Social Services Act as well as households' expenditure for outpatient establishments for health care' expenditure (Medical-Treatment Facilities Act) are included. Expenditure on providing non-invasive rapid antigen tests to detect SARS-CoV-2 for students in schools which, according to the methodological requirements, fall within the scope of the study are also included.

During the process of 2022 data compilation, a revision was made in respect to the 2021 data and the costs of the purchased doses of COVID-19 vaccines placed during the reporting year has been added.

The System of Health Accounts is built using the International Classification for Health Accounts by applying three specific classifications:

- Classification of Health Care Functions (ICHA-HC);
- Classification of Health Care Providers (ICHA-HP);
- Classification of Health Care Financing Sources (ICHA-HF) (SHA, ver.1.0);

- Classification of Health Care Financing Schemes (ICHA-HF) (SHA, ver. 2011).

Methodology and classifications have been developed by Eurostat, the Organisation for Economic Cooperation and Development and the World Health Organization.

Health care boundaries

Determining the health care boundaries is supposed by the objectives of the SHA as a statistical system for representing the health expenditure of society as a whole and not just the healthcare system. The main criteria for defining the health care boundaries are as follow:

- defining the final use of health care goods and services according to the SHA classification of the functions;
- determining the boundaries between health and social care and
- classification of the healthcare expenditure by functions and providers.

The development of the SHA methodologically starts with the definition of the goods and services whose final consumption forms the Healthcare sector. According to the SHA methodology the total health expenditures measure the final use of these goods and services plus capital investments in institutions providing health services - those where healthcare is a predominant activity. The difference with the system of national accounts is that the health accounts include institutional and analytical statistical units that have functions according to the SHA classification of functions, regardless of whether they are in the statistical practice units of the Health sector as economic activities. All primary and secondary healthcare providers has to be included, regardless of whether they are classified by national statistics as statistical units of the Health sector.

System of Health Accounts is being developed in three subsystems. Subsystems are designed so that the aggregated tables are obtained by a detailed allocation of expenditure by function, by providers and allocation of functions by providers in separate tables.

The total expenditure is the sum of current and capital expenditure.

Total health expenditure includes both expenditure made by the public and private sectors.

The expenditure of the public sector includes general government, including public social security funds:

- Expenses of the state budget;
- Central government - ministries and institutions;
- Local government - municipalities;
- Social insurance funds - National Health Insurance Fund (NHIF) and the National Social Security Institute (NSSI).

According to the methodological requirements of the SHA, ver.1.0 the expenditure of the private sector include:

- Individual consumption expenditures of households on regulated payments for medical, dental and dental technical services, supplies, and other therapeutic goods. Also included are the payments in the system of retail trade in pharmacies, optical and sanitary shops.
- Claims paid by the voluntary health insurance companies;
- Expenditures of non-profit institutions serving households - as these expenses can not be allocated in detail by functions and by providers, they are allocated to non-classified activities.
- Expenditure of enterprises and organizations for activities related to labour health care for employees.

According to the methodological requirements of the SHA, ver. 2011 expenditures for Voluntary health care insurance and enterprises' and organisations' expenditures for labour medical activities are separated from private sector in a separate Voluntary Health Care Payment Schemes.

Classification of healthcare providers (ICHA-HP)

Classification of healthcare providers aims reclassification of national institutions in the health sector in internationally comparable and relevant categories of providers of health services. Classification of

providers of health care services includes units in which the production of health services is a major activity and those in which the production of health care is a secondary activity. As providers of health services in SHA are also classified the households in the case of care for a sick family member and care of nursing type.

Classification of Health Care Functions (ICHA-HC) essentially contains two classification attributes:

1. Main purpose/type of medical care or activity:

- Curative care;
- Rehabilitation;
- Ancillary services;
- Medical goods for patients in outpatient care;
- Prevention and public health;
- Administrative costs for health administration and administration of health insurance.

2. Mode of provision

- Inpatient care;
- Outpatient care;
- Day care;
- Home based care.

Through this classification the expenditures on personal and collective healthcare goods and services are analysed. Health care combines (includes) personal health services provided directly to the individual and collective health services which relate to the implementation of tasks of public health such as prevention, prophylactic, health administration and health insurance administration.

Data sources:

- Ministry of Finance – Report on the State Budget Execution of the Republic of Bulgaria, Statement of the Cash Execution of the Budget and detailed information on the Function “Health” expenditures by paragraphs and sub-paragraphs of the Budgetary Classification; Decree of the Council of Ministers on the activities delegated by the state and financed by the municipality budgets - as regard the expenditure on the service "Assistant support". As regards COVID-19 related costs, additional reports are used as data source for the period 2020 - 2022 - Report on measures to prevent the spread of COVID-19 and its treatment, business support measures and social measures (other ministries data except the Ministry of Health); Report on expenditures and sources of their funding in connection to the measures to prevent the spread of COVID-19 - concerning expenditures payed by the municipalities.
- National Health Insurance Fund - Report on NHIF budget execution; in addition detailed administrative information on the expenses of the NHIF according to the SHA methodology is provided;
- Ministry of Health - Report on MH budget execution; in addition detailed administrative information on the expenses of the MH according to the SHA methodology is provided;
- National Social Security Institute – „State Social Security“
- Social Assistance Agency at the Ministry of labor and social policy – detailed administrative information on the expenses of the SAA according to the SHA methodology is provided
- Generally the National Accounts estimation on household’s individual consumption of health services is taken into account and a cross-validation between results obtained from NSI annual business statistical surveys and national accounts estimate is done. Disaggregation and reclassification of expenditure by providers and functions is done by combined using of data from statistical surveys in the field of business and health statistics as well as Household Budget Survey;
- National accounts - final consumption expenditure of non-profit institutions serving households for Health;
- Business statistical surveys:
 1. Accountancy and statistical reports of Private health - insurance funds, by 'medical packages';

2. "Annual report of non-trade enterprises" - accountancy and statistical reports of Health establishments applying double-entry accounting as well as those applying single-entry accounting (that do not prepare balance);
 3. Survey on domestic trade - Retail sales by group of goods.
- National Center for Public Health and Analyses - statistical data on the immunizations and reimmunizations carried out in medical and health care facilities.

Construction of the System of health accounts is done by usage of "bottom-up" approach, i.e. working with primary data by making a compilation, balance sheet according the three classifications.

Rules of arithmetic and logical sequence hitch between the three subsystems are applied.

Household expenditures estimation

Business statistical surveys (annual records on accountancy and statistical reports) conducted by NSI are the basic data source:

1. All enterprises in the country that submit "Annual report of non-trade enterprises" and are classified in 86, 87 and 32.50 according to the Classification of Economic Activities (NACE.BG-2008) are exhaustively covered.
2. Units are reclassified in specially developed tables in accordance with the Classification of healthcare providers (ICHA-HP). For assessment of the coverage of the units as well as the correct classification of providers according to the methodological requirements of the SHA, information from the NSI exhaustive survey "Inpatient and outpatient health establishments and other health establishments" is used. For establishments outside the business statistical surveys coverage, information is based on expert estimation.
3. Data are proceeded case by case in order to classify the revenue from population data in accordance to the Classification of Health Care Functions (ICHA-HC).
4. Generally the National Accounts estimation on household's individual consumption of health services as well as HBS data on household expenditure are taken into account and a cross-validation between results obtained from NSI statistical surveys is done.
5. Concerning HC5 Medical goods estimation - Estimations are done based on retail sales by group of goods for the group "Pharmaceuticals, medical and orthopedic goods" according to the Classification COICOP and NACE code of the enterprises. NACE codes that are covered: 21, 26, 46, 47.1, 47.2, 47.73, 47.74, 47.78. The estimation is based on the methodological requirements of the SHA 2011 Manual.
6. Since 2020 - Register of persons performing activities for the provision of medical devices and aids, devices and equipment for people with disabilities is used in order to verify the expenditures estimation for medical devices (HC5.2) payed by the households (HF3).
7. Since 2021, statistical data from the National Center for Public Health and analyzes at the Ministry of Health on the immunizations and re-immunizations carried out in medical and health facilities are used to estimate household expenditure for voluntary vaccinations.
8. Household expenditures information broken down by providers and by function should be balanced.