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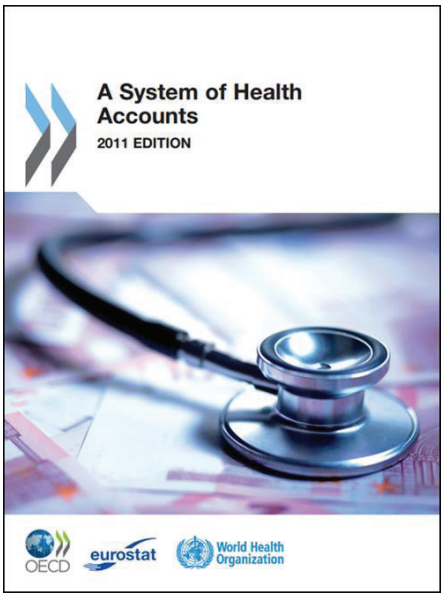
System of Health Accounts 2011

What is SHA 2011 and How Are SHA 2011 Data Produced and Used?

Health resource tracking is the process of measuring health spending and the flow of financial resources among health sector actors. Health resource tracking is a vital component of health systems strengthening as it provides stakeholders with information on the value of health care goods and services purchased and patterns in the financing, provision, and consumption of health care resources.

The System of Health Accounts (SHA) is an internationally standardized framework that systematically tracks the flow of expenditures in the health system. The SHA is critical for improving governance and accountability at the national and international levels of policy-making. First published in 2000 (OECD 2000), SHA was then adapted to the developing-country context in a version of the SHA called National Health Accounts (NHA) (WHO et al 2003). Over 100 developing countries have completed NHA estimations, many with support from USAID, to inform health policy and measure health system performance. Most recently, OECD, EUROSTAT, and WHO produced an updated version of the SHA (OECD et al. 2011). The SHA 2011 statistical manual improves upon the original by strengthening the classifications to support production of more detailed results and by introducing new classifications that expand the scope of the analysis and provide a more comprehensive look at health expenditure flows. The purpose of this brief is to present the main features of the SHA 2011 framework as well as discuss the process of its implementation and, ultimately, institutionalization within routine government operations.



Inside

Key Features and Components of the SHA Framework

International Standardization Allows for Cross-Country Comparisons: The SHA 2011 is standardized for international application through classifications that are comprehensive in their inclusion of all entities, financing mechanisms, providers, and types of health care goods and services that occur globally. The SHA 2011 statistical manual (OECD et al. 2011) provides detailed discussion of these categories and classifications, as well as the underlying concepts and principles that define the framework. This manual ensures that each country engaged in the estimation exercise classifies country-specific flows in a uniform way and produces comparable results.

Expenditure Tracking Provides an Accurate Indicator of Consumption: The SHA 2011 framework uses expenditures to describe the health system. Expenditures measure the value of goods and services at the point of consumption in monetary units. Compared with other monetary units (e.g., commitments, disbursements, budgetary projections, revenue), expenditures are preferred for tracking past spending because they are closer to the actual point of consumption and thus a more accurate indicator of the value of that consumption. For example, though a development partner might commit to spending US$10 million to support a country's HIV program, a changing political landscape in the partner country may cause the actual value of funding disbursed to be less than originally stated; or limitations in absorptive capacity in the recipient country may cause the actual value of funding allocated to various programs to be less than budgeted. Focusing on expenditure allows for another important policy application: the comparison of actual to planned spending to increase accountability and strengthen budgeting processes.

Functional, Time, and Space Boundaries Contribute to Standardization: A central concept to the SHA 2011 is that a specific expenditure is classified based on the goods and services consumed with it. Health expenditures are defined as money spent with the purpose of improving, maintaining, or preventing the deterioration of individual or population health status and to mitigate the consequences of ill health. This "functional definition" of health care means that the categories listing types of health care are organized in terms of the type of care received (e.g., curative, rehabilitative, and preventive). The spending captured in these categories covers all costs incurred in the final consumption of the good or service, including operational and on-the-job training costs. This approach to health accounting is inclusive of health spending from all sectors (public, private, external) within the health system. By including all sectors, the SHA 2011 allows countries to consider the level of interaction and comparative importance of the sectors at different stages of the resource flows. Including all sectors also allows SHA 2011 results to answer critical questions about the burden on, and behavior of, households in the health system.

In addition to defining health expenditures, the SHA 2011 also defines time and space boundaries, which is essential to making the approach internationally standardized. The SHA 2011 time boundary specifies that each analysis covers a one-year period and includes the value of the goods and services that were consumed during that period. The time boundary is necessary in making the distinction between current and capital spending: SHA 2011 restricts core spending to only spending on health care goods and services entirely consumed during the one-year accounting period ("current" health spending); investment in goods and services whose value lasts beyond the accounting period is considered "capital" spending and is tracked separately. The SHA 2011 space boundary specifies that each analysis covers one country and restricts health care goods and services to those consumed

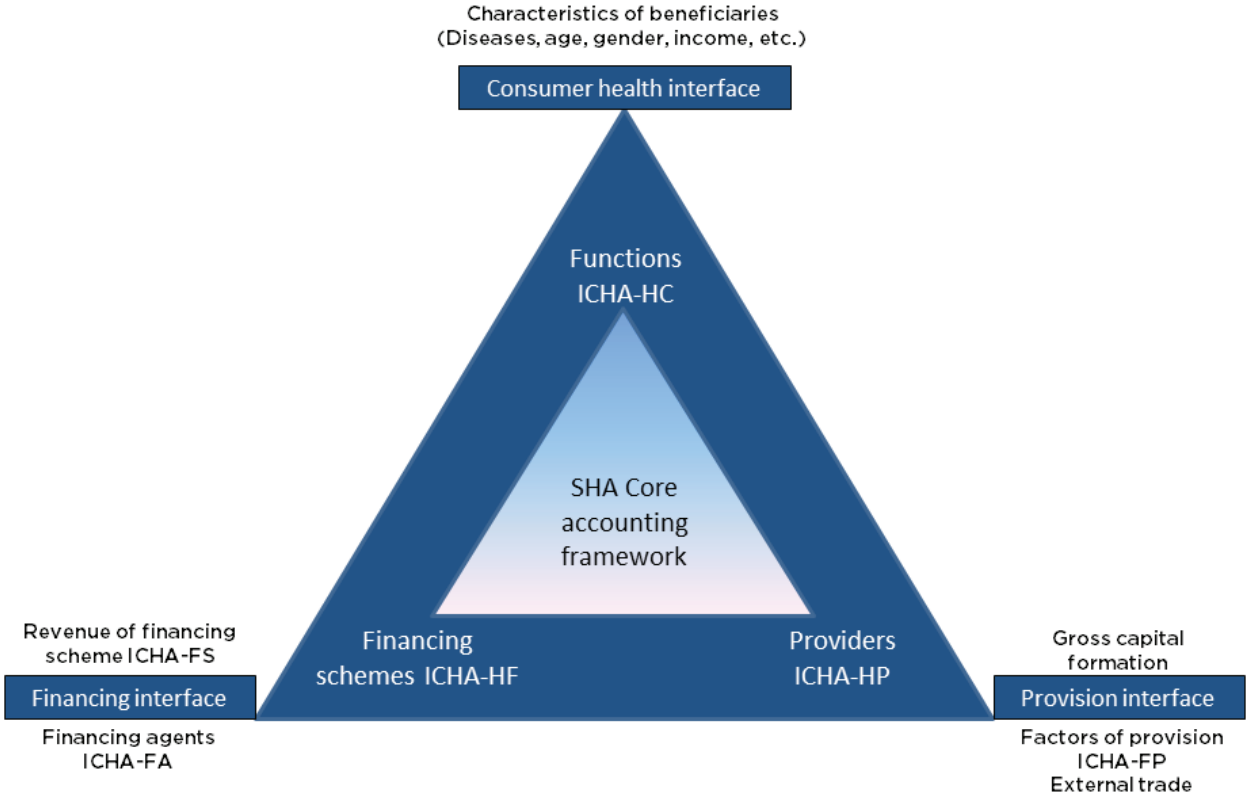
by residents of the country, that is, citizens and established foreign nationals.

Core and Extended Accounting Framework: As Figure 1 shows, SHA 2011 tracks health resources in magnitude and along their pathway from origin to end use. SHA has at the core of its framework three classifications: health care functions, which show the types of health care consumed; providers, which show who delivers health care services; and financing schemes, which show how goods and services consumed and provided are financed. See Table 1 for more detail on these core classifications.

In addition to these core classifications, the SHA 2011 framework proposes additional classifications that are linked to the core classifications. These additional classifications are beneficiaries, which show health care consumption by population groups (divided by age, disease burden, income quintile, etc.); factors of provision, which show the inputs used by providers to deliver health care services; and revenues of financing schemes, which show the sources of funding for each financing scheme. The SHA statistical manual includes these classifications as part of the "extended accounting framework," The manual also includes the capital formation classification, which compiles investments by health care providers, as part of the extended framework. Table 2 provides more detail on the additional classifications.

Organizing complex spending information into these classifications allows the SHA 2011 to characterize the financing and purchasing mechanisms associated with health resource flows in the country while also providing a snapshot view of the health resources at

Figure 1. SHA Tri-Axial Framework



OECD et al., 2011

Table 1. Classifications under the Core Framework

Financing schemes	• *Definition:* main types of financing arrangements through which people receive health care • *Questions answered:* "How are health resources managed and organized?" "To what extent are resources pooled" • *Examples:* Government programs run by the Ministry of Health, National AIDS Commission; voluntary insurance
Health care providers	• *Definition:* organizations and actors that, either primarily or as part of the multiple activities in which they are engaged, deliver health care • *Questions answered:* "What is the organizational structure that is characteristic of the provision of health care within a country?" "Who provided the goods and services to consumers?" • *Examples:* Hospitals, clinics, health centers, pharmacies
Health care functions	• *Definition:* Types of health goods and services consumed and activities performed • *Questions answered:* "What types of health care goods and services were consumed?" • *Examples:* Curative care, information, education, and counseling programs, medical goods such as supplies and pharmaceuticals, governance and health system administration (includes national-level surveys)

Table 2. Classifications under the Extended Framework

Revenues of financing schemes	• *Definition:* Types of revenue received or collected by financing schemes • *Questions answered:* "How much revenue is collected?" "In what ways was it collected?" "From which institutional units are revenues raised for each financing scheme?" • *Examples:* Direct foreign financial transfers; voluntary prepayment from employers; transfers from the ministry of finance to other governmental agencies
Financing agents	• *Definition:* Institutional units that manage health financing schemes • *Questions answered:* "Who manages the financing arrangements for raising revenue, pooling/managing resources, and purchasing services?" • *Examples:* Ministry of Health, commercial insurance companies, international organizations
Factors of provision	• *Definition:* Types of inputs used in producing the goods and services or activities conducted inside the SHA 2011 "health" boundary • *Questions answered:* "What mix of production inputs do providers of health care goods and services use?" • *Examples:* Wages, utilities, rent, materials, and services used
Beneficiary characteristics (age, gender, socio-economic group)	• *Definition:* Characteristics of those who receive the health care goods and services or benefit from those activities • *Questions answered:* "What is the value of health care goods and services consumed by various population groups?" • *Examples:* Age, gender, socio-economic group
Beneficiary characteristics: (disease)	• *Definition:* Characteristics of those who receive the health care goods and services or benefit from those activities • *Questions answered:* "What percent of total health resources went to Reproductive Health?" "What were the main sources of funding for HIV?" "Who provided Malaria prevention services?" • *Examples:* Disease by ICD-10 classifications
Capital formation and related	• *Definition:* Types of investments that health providers have made during the accounting period that are used for more than one year in the production of health services • *Questions answered:* "What types of assets have providers acquired?" • *Examples:* Infrastructure, machinery, and equipment (capital formation); formal training, Research and Development (related items)

each stage of their journey. SHA 2011 results can show how revenues are raised, how health funds are managed or pooled, and how goods and services are purchased, highlighting the movement of funding from one stage (e.g., revenue raising) to the next (e.g., managing and pooling). Stakeholders can then focus on one dimension – for example, the sources of health resources or the Revenues of Financing Schemes dimension – to determine how dependent a country's health system is on external institutions.

Tri-axial accounting of health expenditures: The SHA 2011 uses a tri-axial recording of each transaction to enable understanding of resource flows between financing, provision, and consumption. This approach ensures that the value of all health care goods and services consumed equals the value of health care goods and services provided and financed.

Tables 1 and 2 provide definitions, questions answered, and examples for the dimensions, both core and extended, that make up the SHA 2011 framework.

Completing Estimations with SHA 2011

Completing resource tracking exercises in-country according to the SHA 2011 framework typically has four stages. The process is country-driven, though it sometimes requires external assistance. The stages are summarized in Figure 2 below.

Figure 2. Process for Completing SHA 2011 Estimations

Planning, Scoping, and Launch

A unit within the government (typically the Ministry of Health) identifies technical staff responsible for completing the exercise, and a steering committee to manage the process and provide high-level input on the policy questions to be addressed. The technical staff and steering committee consult health stakeholders from all sectors on the key questions that resource tracking can answer. With steering committee and stakeholder guidance, the technical team can customize the SHA 2011 codes and define the parameters of the exercise (i.e., which extension dimensions to include).

- Engage stakeholders
- Establish technical team and steering committee
- Define parameters and questions; create work plan

Data Collection

Countries can draw upon secondary data from the health information system and other sources if they are available. If not, countries can conduct primary data collection for institutions (donors, NGOs, insurance companies, and employers). Even with primary data collection, technical teams may realize that surveyed institutions do not have the quality of data or level of detail needed. Data gaps identified will need to be addressed in a standardized way. A major task is collecting household data, ideally done through a national survey. Household data are typically collected every five years.

- Gather secondary data
- Collect primary data

Data Analysis and Validation

Once data are collected, the technical team turns to data analysis, a process that involves mapping all health expenditures to their corresponding SHA codes for each of the dimensions included in the exercise. This stage is often done as a workshop. The team will need to use other secondary data to define allocation ratios for splitting some expenditures into units that match the SHA framework. The technical team should meet with the steering committee and stakeholders to validate results and to identify and resolve any data gaps and conflicts. The technical team should produce final tables summarizing the results of the analysis

- Review data and apply weights
- Map health expenditures to SHA codes at all dimensions

Report-Writing and Dissemination

Finally, the team disseminates "briefs" that summarize the main findings and policy implications. The team can also produce tailored dissemination products, including PowerPoints, brochures, and additional policy briefs, for targeted audiences.

- Present results of report to technical team
- Generate information products for wider consumption

Institutionalizing SHA 2011

Though many lower- and middle-income countries have conducted a single SHA or NHA estimation to analyze their health expenditures, relatively few countries produce them regularly. Producing SHA on a routine basis is important to ensure that the health expenditure information remains up-to-date and relevant to policy discussions. It allows for more powerful analyses, as data over time will illuminate trends in health spending, and for more meaningful application of results, as more stakeholders will be aware of the results and how to use them effectively. Producing SHA on a routine basis can also result in higher quality data, as the systems for gathering needed inputs and the technical capacity of the SHA team will improve with each round of estimations. The process of establishing SHA as an integral and sustained part of government operations is called "SHA Institutionalization."

While desirable, institutionalizing SHA can be technically and politically complex and can take many years before the proper technical and governance systems are in place. In response to these challenges, international development partners have developed strategies and tools to facilitate the process. Examples include the Health Accounts Production Tool, which streamlines the production process, and the Analysis Tool, which automates basic analysis of results. International development partners have also identified key characteristics of institutionalized resource tracking systems (presented in Table 3). Though the process for institutionalizing SHA will also vary country by country, countries can still reference these key characteristics in order to strategize actionable plans for moving forward.

Table 3. Key Characteristics of Institutionalized Resource Tracking Systems

Officially mandated	The government recognizes the value of SHA estimations and provides an official mandate to conduct SHA estimations on a regular basis.
Incorporated in budgets	SHA is incorporated as an item in the government's annual budget.
Housed in-country	SHA is housed in a stable institution that will promote application of the results to policy. Traditional locations include: the Ministry of Health, the Ministry of Finance, a central statistical bureau, or a local university.
Proper team capacity	The country SHA team has the capacity to plan, manage, and monitor the SHA estimation process.
Stakeholders engaged	A wide group of stakeholders and steering committee members are actively engaged in the production, dissemination, and institutionalization processes relating to SHA.
Systematic data collection	A systematic process for collecting necessary health expenditure data exists including, if possible, incorporating SHA household survey questions into existing national surveys.
Coordination	Mechanisms are in place to coordinate SHA estimations with other stakeholders and resource tracking activities.
Reporting of results	Results are analyzed, disseminated, and used by a wide range of stakeholders to inform relevant policy discussions and increase system transparency.

Key Differences between NHA (based on SHA 2000) and SHA 2011

Disease-specific Spending Tracked Through "Global Burden of Disease" Classification: Prior to 2011, countries used the "subaccount" methodology to track spending in priority diseases (e.g., HIV/AIDS) or health areas (e.g., Family Planning). Subaccounts gathered more detailed information on these subsectors and measured them as a percentage of total spending on health in the country. SHA 2011 has replaced subaccounts with a comprehensive classification, Global Burden of Disease (GBD), that is based on the International Classification of Disease (ICD-10). Using GBD to classify expenditures in the Beneficiary Dimension with other characteristics (e.g., age, gender, and socioeconomic status) will ultimately allow for more policy application of interest to a wider group of stakeholders.

"Health Financing Scheme" Dimension Identifies How Funds are Managed: In the NHA , the financing agent dimension answered questions about who managed health resources as they flowed from their origins to end use (providers and functions). In SHA 2011, financing agents are complemented with Health Financing Schemes (HF), which answers how funds are managed. Health Financing can also be defined as rules for satisfying the three financing functions: raising revenue, pooling and managing resources, and purchasing services.

"Current Health Spending" Represents Spending on Final Consumption: NHA produced the aggregate Total Health Expenditure (THE), which covered all health spending in a country's health system during the accounting period. THE included spending on health care goods and services entirely consumed during the accounting period, as well as health system investments whose value lasted beyond the accounting period. The SHA 2011 separates these two types of spending, using Current Health Expenditure (CHE) as a new indicator. CHE represents only spending on final consumption; capital spending is tracked and aggregated separately.

About HFG
A flagship project of USAID's Office of Health Systems, the Health Finance and Governance (HFG) Project supports its partners in low- and middle-income countries to strengthen the health finance and governance functions of their health systems, expanding access to life-saving health services. The HFG project is a five-year (2012-2017) global health project. To learn more, please visit www.hfgproject.org.

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Benefits of the Updated Framework - SHA 2011

Updating the SHA has benefited the health resource tracking community in many important ways:

Improvements in Data Quality: Clarifying boundaries that NHA practitioners identified as confusing allows for greater accuracy in the tracking of expenditures. For example, Family Planning had an unclear boundary between prevention and curative care, which often resulted in pre- and postnatal care being considered as curative outpatient by some and as prevention for Maternal and Child Health by others. SHA 2011 clarified the boundary by creating a new prevention category, Healthy Condition Monitoring Programs (HC.6.4) and clearly identified pre- and postnatal care as part of this category.

Ability to Reflect Financing Mechanisms: the addition of the Health Financing Schemes dimension has made SHA 2011 better able to reflect growing interest in and complexity of financing mechanisms that characterize countries' health systems.

Linked to Other International Classifications: SHA 2011 also ensures that the SHA is consistent with other international classifications such as ICD-10 classifications and the International Standard Industry Classification.

More Comprehensive: SHA 2011 has given countries a larger toolbox to use when conducting estimations. For example, the extension dimensions were added (see Table 2) as well as instructions for tracking imports and exports and adjusting data for inflation in trend analysis.

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