Health Information System Strengthening:
Standards and Best Practices for Data Sources

MODULE 12:

Health Accounts

This module is one of 12 HIS data source modules in *Health Information System Strengthening: Standards and Best Practices for Data Sources*. The full series of modules (available at https://www.measureevaluation.org/resources/publications/tr-17-225) is intended to provide health authorities and other health information stakeholders with a reference guide that, along with other sources, can help align the HIS data sources with international standards and best practices.

Type of Data Generated: Healthcare Spending by Financing Source, Provider, and Healthcare Consumption

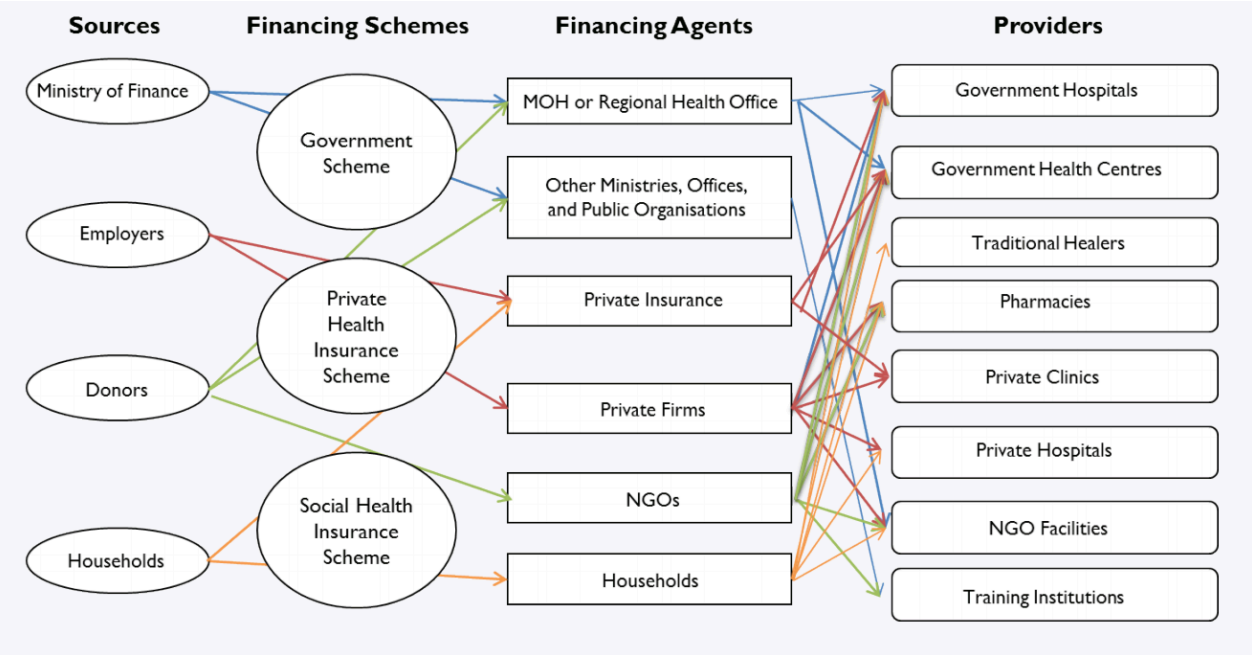
Description

Health accounts measure healthcare spending and track funds that flow through the health system, from their origin, to agencies that pool and distribute the money, to providers who engage in healthcare activities, and finally to beneficiaries of the activities. The System of Health Accounts (SHA) is an international framework that improves accountability and governance of health resources by defining standard criteria for classifying expenditures and answering policy-related questions about how resources are mobilized and managed (Cogswell & Dereje, 2015).

Health accounts' health expenditures encompass all activities whose primary purpose is to restore, improve, and maintain health for the nation and for individuals during a defined period of time (WHO, 2000). Records of expenditures for these activities, or a basis for estimating them, are required regardless of the type of institution or financing entity, which includes traditional, complementary, and alternative medicine. It also includes preventive and long-term care.

Health accounts also track the flow of health resources by using financial data compiled from various entities in the health system. These funding sources include the government, development partners, employers, and households; insurers and other pooling mechanisms; financial agents paying for healthcare activities; and healthcare providers (Figure 5).

Figure 5. Flow of health resources in the health system



Source: Cogswell & Dereje (2015)

Evolution of the Health Accounts Framework

The Organisation for Economic Co-operation and Development developed a standardized methodology for health accounts based on the underlying principle of health consumption: "what is consumed (expended) has been provided and financed." The principle was developed into the ICHA and published in *A System of Health Accounts, Version 1.0* (OECD, 2000). This triaxial classification system enabled OECD member countries to produce comparable results on healthcare consumption, healthcare provision, and healthcare functions.

Several countries outside of the OECD also adopted the SHA v1 as a means to compare the level and structure of their healthcare spending with those of other countries. However, given that the original framework did not include a way to capture the multitude of financiers of the health sector in developing countries separately, the World Bank, the WHO, and the U.S. Agency for International Development (USAID) added a source of funding classification. In 2003, they published the *Guide to Producing National Health Accounts, with Special Applications for Low-Income and Middle-Income Countries*, referred to as the national health account Producer's Guide (World Bank, WHO, & the United States Agency for International Development, 2003).

Since 2007, OECD, Eurostat, and WHO, along with other development partners, updated the SHA v1, and incorporated the financing sources from the Producer's Guide, to produce a single global health accounting standard. *A System of Health Accounts,* published in 2011, is currently the international standard for comparing national spending levels and structures (OECD, Eurostat, & WHO, 2011). Although there are a few key differences between SHA v1 and SHA 2011, the triaxial approach remains the fundamental classification scheme for expenditures (Cogswell, et al., 2013).

There are several advantages to SHA 2011, which include the following:

- The classification system can be used in countries regardless of their health system structure and income level.
- The system is compatible with other national classification systems so that countries can produce results using the national system and/or map expenditures to the international standard.
- The system is compatible with other standard classifications, including the International Classification of Diseases-10 to code diagnoses, the International Standard Industrial Classification to code economic activities, and the System of National Accounts, which is the standard structure for broader economic accounting (e.g., gross domestic product and other macroeconomic measures).

Institutionalizing Health Accounts

In order to maximize the potential of health accounts to track financial flows, monitor health system performance, and benchmark healthcare spending with other countries, they should be produced on a regular basis, ideally annually (Cogswell & Dereje, 2015). Health accounts that rely heavily on survey estimates for out-of-pocket expenditures, for example, will be conducted less regularly because of the time it takes to conduct the surveys and obtain the results (WHO, 2010). To ensure regular production of the health accounts, the central government, such as the ministry of health or central statistics office, should establish a health accounts team that ensures sufficient human capacity, the necessary hardware and software, and access to data. The cost of sustaining regular production depends on the availability of data from the financial information system and other sources, and the extent of external expertise needed to process the data. Implementing a health account for the first time is the costliest step, but over time, as financial information systems are improved and analytical capacity is strengthened, both the quality and efficiency of health accounts will improve.

Alternative Data Sources

None.

Types of Indicators

The data that are compiled and processed from the SHA 2011 are reported in a systematic way in a series of standard tabulations (OECD, Eurostat, & WHO, 2011, pp. 353–369). The basic set of tables includes cross-classifications of the main ICHA classifications (HCxHF, HCxHP, and HPxHF), and more detailed tables can be produced according to the country's needs. The data in these tables are used to present and compute health expenditure indicators.

Some key indicators are computed directly from data in the tables (e.g., expenditure levels, percentage share to total, ratios of one health accounts component to another), and others are computed in combination with additional financial data (e.g., share of gross domestic product, per capita values, values converted to purchasing power parity).

The WHO Global Health Expenditure database defines 20 global health expenditure indicators, all generated in accordance with the SHA 2011 methodology (WHO, 2014).

Examples of key indicators from the basic SHA 2011 tables include the following:

- Share of prevention in hospital services
- Ratio of inpatient and outpatient spending financed by government
- Level of capital spending in publicly owned hospitals
- Total amount of out-of-pocket health expenditures
- Total amount paid to hospitals
- Total amount spent for prevention
- Total amount spent on pharmaceuticals (adding inpatient use of pharmaceuticals to outpatient use)
- Total amount spent on long-term care (adding the healthcare and the social parts)

Table 14 presents selected indicators produced from the SHA 2011 tables.

Table 13. Selected examples of indicators used in healthcare analysis

Axis	Indicator	Mln NCU	USD or EUR	PPP	% GDP	Per capita NCU	Per capita USD or EUR	Per capita PPP	Percentage of CHE
General	Total current health expenditure	X	X	X	X	X	X	X	
	Total current health expenditure plus capital spending[5]	X	X	X	X	X	X	X	
Health functions	Preventive spending								X
	Curative spending								X
	Inpatient spending								X
	Outpatient spending								X
	Health expenditure on long-term care	X	X	X					X
	Total LTC spending	X	X	X	X	X	X	X	
	Total pharmaceutical spending	X	X	X	X	X	X	X	X
Financing schemes	Government health schemes								X
	Compulsory contributory health insurance schemes								X
	Voluntary health insurance schemes								X
	Out-of-pocket expenditure on health								X
Providers	Hospital health spending								X
	Ambulatory health spending								X
Revenue of schemes	Externally funded expenditure on health								X
	Publicly funded expenditure on health								X
	Privately funded expenditure on health								X
Factors	Expenditure on human resources								X
Beneficiaries	Expenditure on health on non-communicable diseases	X	X	X	X	X	X	X	X
	Expenditure on health on injuries	X	X	X	X	X	X	X	X
	Expenditure on health age 65 and over	X	X			X	X		X
Capital formation	Total public spending on capital formation	X	X						X
	Total private spending on capital formation	X							X
	Spending on capital formation by hospitals	X							X

LTC = long-term care

CHE = current health expenditure

Source: SHA, 2011, p. 347

From the most recent information available on the WHO Global Health Expenditure Database website (see "Document Center"), 53 countries have completed the collection and classification of health expenditure data for at least one year, using the SHA 2011 system. Another 34 countries are undertaking the production of SHA 2011 data for the first time (WHO, 2014).

Standards

The SHA 2011 is the internationally recognized framework on which health accounts can be developed, or mapped, for national use and international comparisons (OECD, Eurostat, & WHO, 2011).

SHA 2011 is organized around three axes defined by the ICHA: healthcare functions, healthcare provision, and healthcare financing. The results inform the country on the kinds of healthcare consumed, the providers that deliver the healthcare, and the financing source that pays for the healthcare (Cogswell, et al., 2013; Cogswell & Dereje, 2015).

Tools

The Health Accounts Production Tool (HAPT) is a software application developed by USAID and WHO that supports countries undertaking a health accounts exercise. The HAPT facilitates the production of health accounts by mapping national health expenditures by the SHA 2011 core and any defined country-specific classifications (Health Finance and Governance Project, 2014). The Health Account Analysis Tool complements the HAPT by automatically producing graphs and charts for informing the policy process. Both tools are available for download from the WHO website (WHO, 2016).

Best Practices

Best practices are adapted from the Health Finance and Governance Project (Cogswell, et al, 2013; Cogswell & Dereje 2015):

- The government mandates that health accounts are **institutionalized** in a central government agency or a local university.
- The regular production of health accounts is an **item in the government's budget.**
- A health accounts **technical team is established** to plan, manage, and monitor the estimation process, including mapping expenditures to the SHA 2011.
- The country's **key health expenditure indicators** are produced from standard health accounts tables.
- Health accounts are packaged in a **format that informs policy** and planning.
- A health accounts steering committee and other stakeholders promote the **dissemination and use** of results.

References: Module 12

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This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of the MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government. TR-17-225L

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