

HEALTH RESOURCE TRACKING MODULE

1. Objective of the Module

This module is aimed at introducing students to health resource tracking with a focus on system of health accounts. The module provides students with the theory behind the National Health Accounts Production Tool as a stepping stone to use of the tool in undertaking a national health accounts estimations and ultimately analysis of results.

1.1 Teaching and Learning Methods

The module will be delivered using 4 approaches: lectures, facilitated discussions; small group work; large group discussions, individual reflection, and practical sessions.

1.2 Module Assessment

Assessment will be in the form of a 3-hour examination, 2 assignments (1 from the lectures and another from the practical sessions). These will carry 20% of the whole coursework total.

1.3 Module Outline

The module has 5 sections. Section 2 provides an introduction to health resource tracking. Section 3 describes the various approaches to health resource tracking (SHA, NASA, PER, and PETS) while Section 3 provides the conceptual overview of system of health accounts. Section 4 describes the key ingredients of system of health accounts and Section 5 explains the key steps of SHA 2011.

2. Introduction to Health Resource Tracking (1 Hour)

2.1 Rationale for Resource Tracking

Health resource tracking is the monitoring of the flow of financial resources within the health sector. Monitoring of flow of financial resources within the health sector helps to inform health financing decisions, monitor health sector performance, and in exercising stewardship of the health system. Health resource tracking involves collection of data on budgets, commitments, disbursements and expenditures

There is a lot of dynamism in the health sector due to many changes related to technology, demographics, disease burdens, patterns of morbidity and mortality, and socioeconomic factors. Furthermore, healthcare provision involves a complex mix of actors who are continuously changing in terms provision quantity, quality and ownership structure. Such an environment calls for more efficient resource utilization to enhance likelihood of achieving best possible outcomes given resource constraints that enhances

health system performance. Decisions that enhance resource utilization however require reliable information on the sources and use of health funds in a country.

Information on health fund flow within health systems enable health policy makers to make decisions that achieve the goals of a health system effectively and efficiently by shedding light on important factors such as financing, fund utilization, fund distribution, beneficiary structure of funds, financing burden, and resource utilization. Health resource tracking thus enhances evidence-based decision making by policy makers that has high likelihood of achieving best possible health outcomes with constrained resources. Health resource tracking furthermore provides useful evidence that can strengthen health system performance through being used for strategic planning, priority setting, monitoring and evaluation, and advocacy.

Readings

Cleverley, W.O., Cleverley, J.O. and Song, P.H. (2011). Essential of Healthcare Finances, 7th edition. Jones & Bartlett Learning.

Donaldson, C., Gerard, K., Jan S., Mitton, C., and Wiseman, V. (2004). Economics of Healthcare Financing: the Visible Hand, 2nd edition. Palgrave.

Levine, R, Blumer K (2007). Following the Money: Toward Better Tracking of Global Health Resources. Washington, DC: Center for Global Development. Available at: <http://www.cgdev.org/publication/following-money-toward-better-tracking-global-health-resources>

3. Approaches to Health Resource Tracking (1 Hour)

Health resource tracking concentrates on providing information for various geographical levels. There are 3 approaches to health resource tracking based on the level at which resource tracking provides information, namely country level, global level, and a combination of country and global levels. Table 1 shows methodologies under the different levels.

Table 1: Health Resource Tracking Methodologies

Country Level	Global Level	Both
<ul style="list-style-type: none"> i. National Health Accounts /System of Health Accounts ii. Health Accounts/Satellite health accounts iii. OECD Health Data (for the developed countries) iv. National Health Expenditure Database v. Public Expenditure Reviews vi. Public Health Expenditure Tracking Surveys vii. National AIDS Spending Assessments 	<ul style="list-style-type: none"> Creditor Reporting system database on Aid Activities 	<ul style="list-style-type: none"> i. Global TB Control: Surveillance, Planning, Financing ii. WHO's Global Health Observatory

There are a wide range of country level resource tracking approaches which examine expenditures for a standardized set of activities in a given area for a given time period. Health resource tracking focuses on all health activities or health related activities undertaken nationally or sub-nationally within a fiscal year. There are various approaches to health resource tracking such as National Health Accounts (NHA), National AIDS Spending Assessments (NASA), Public Expenditure Reviews (PER), and Public Expenditure Tracking Systems (PETS).

3.1 Public Expenditure Reviews

Public expenditure reviews (PERs) are tools for analyzing the level and pattern of public expenditures in a country. PERs usually provide in-depth analyses of spending in social sectors, with specific chapters dedicated to discussing public spending in sectors like health and education. The World Bank developed PERs to complement poverty reduction

strategies through examining the extent to which resources are directed towards intended goals and policy priorities. Analysis in PERs thus improves expenditure allocation and management decisions and enhances the capacity of budgets to deliver policy priorities.

3.1.2 Objectives of Public Expenditure Reviews

- a) To examine the appropriateness of policies and reforms in developing countries to achieve poverty reduction
- b) To examine effectiveness, efficiency, and equity impacts achieved or not achieved through public investment in the sector under review
- c) To examine the sustainability of expenditures according to the macroeconomic framework and the managerial capability of institutions to execute plans and budgets

PERs address key policy questions pertaining to government priorities, linkage between budgetary allocations/public expenditures and strategic priorities, efficiency and effectiveness of public funds, and macroeconomic consequences of revenues and expenditures. PERs on health can answer questions pertaining to level and patterns of health expenditure in a country, effectiveness and equity of public spending in the health sector, bottlenecks to spending in the health sector, and impact of sources and levels of revenue on equity.

PERs differ from other resource tracking methodologies in several aspects:

- 1) It is not limited to the health sector
- 2) Primarily focuses on public sector spending
- 3) No standard classifications, which limits cross country comparisons

3.1.3 PER in Tanzania

The main objective of Health Sector Public Expenditure Review for fiscal year 2010/11 was to assess the budgetary allocations and expenditures to inform stakeholders about progress made in key health financing milestones between 2006/0 and 2010/11. Key findings were:

- 1) Stable spending and reduced spending on health in nominal and real terms respectively
- 2) Declining health expenditure as a percentage of total government expenditure
- 3) Government funding still remains the dominant source of public health financing
- 4) Reduced recurrent and development budget performance
- 5) Less than 60% of foreign funds budget is executed
- 6) Reduced performance of non-basket fund

3.2 National AIDS Spending Assessment (NASA)

National AIDS Spending Assessment (NASA) was developed by UNAIDS to monitor the annual flow of funds used to finance response to HIV/AIDS. It was developed in response to the need to track fund flow specific to HIV/AIDS spending resulting from increased funding of HIV/AIDS programs. NASA answers questions pertaining to source of funds, management of funds, service providers, service functions, objects of expenditure, and beneficiaries.

NASA differ from other resource tracking methodologies in the following aspects:

- 1) Designed to track HIV/AIDS budget and spending
- 2) It goes deeper into tracking the non-health resource flows related to HIV/AIDS
- 3) It uses standardized classifications outlined in two key documents: National AIDS Spending Assessment (NASA): Classifications and Definitions and the Guide to Produce National AIDS Spending Assessment (2009)

NASA has 2 policy goals, namely to inform the HIV/AIDS resource gap estimation process and to facilitate country reporting on the financial indicator used to monitor the progress made toward the goals of the Declaration of Commitment on HIV/AIDS, adopted at the UNGASS on HIV/AIDS in 2001

3.2.1 NASA in Tanzania

NASA in Tanzania has been undertaken for fiscal year 2005/06. The key findings were:

- 1) High donor dependence on financing of HIV programs
- 2) Bulk of HIV expenditures was managed by the public sector
- 3) Public providers provided 7 times more services than private providers
- 4) Program management, prevention and treatment programs accounted for the bulk of HIV expenditures
- 5) Program management accounted for 41% of HIV expenditures
- 6) Health workers, the general population and PLWHA were the main beneficiaries of HIV spending

3.3 Public Expenditure Tracking Survey

Public Expenditure Tracking Survey (PETS) is a resource tracking tool that traces the flows of resources through the various levels of government bureaucracies down to service providers by examining the manner, quantity, and timing of releases of resources to different levels of government, particularly to the units responsible for the delivery of social services such as health and education. PETS thus help to identify sources of leakage in the system and assess the extent to which resources reach intended beneficiaries.

The World Bank developed PETS and first used it in Uganda in 1996 to track budgeted funding for schooling and clinics. PETS is used to:

- 1) To identify effective allocation of resources
- 2) To assess whether funds are used as intended
- 3) To determine the extent to which resources actually reach the target groups.

PETS differ from other resource tracking methodologies in the following aspects:

- 1) It examines budgets and expenditures
- 2) It serves a diagnostic purpose i.e. to identify bottlenecks and leakages

3.3.1 PETS in Tanzania

PETS were undertaken in Tanzania for education and health in 1999 and 2001 with the objectives of tracking government pro poor expenditures, assessing efficiency of budget execution, and improving monitoring of pro poor expenditures. The key findings were:

- 1) Substantial delays in disbursement of funds at all levels of the government, particularly in non-wage expenditures and rural areas
- 2) Rural district received smaller shares of intended resources compared to urban districts
- 3) Ignorance of beneficiaries about their monthly allocation/entitlement amounts

3.4 System of Health Accounts/National Health Accounts

System of Health Accounts (SHA/NHA) is a tool for assessing the flow of resources from financing sources to financing agents who are intermediary players who control allocation of funding to providers. From the financing agent level, SHA/NHA then tracks the flow of funds from financing agents to health care service providers by examining the purpose and specific types of health care services (functions) for which resources at the provider level are actually spent. National Health Accounts thus measures the pulse of a country's health system by providing information on its performance that is a very useful input in health systems strengthening initiatives.

Being the pulse of a country's health system, SHA/NHA provides information on important policy and planning questions, which helps to improve health planning by making it more evidence based. SHA/NHA answers questions pertaining to:

- 1) Who pays for healthcare
- 2) How much they spend on the various types of services
- 3) Distribution of funds across different health services
- 4) Beneficiaries of health expenditures
- 5) Burden of financing on households
- 6) Extent of resource utilization in comparison with national healthcare policies and

strategic plans

SHA/NHA emerged within the broader framework of SHA of OECDs and was adapted to developing-country contexts in late 1980s and early 1990s. The methodology has evolved over time from the first SHA 1.0 (System of Health Accounts) (2000) to NHA (extension of SHA) (2003) and finally to the latest SHA 2011. SHA 1.0 (System of Health Accounts) (2000) covered 3 healthcare dimensions; financing agents, providers and functions. NHA (extension of SHA) (2003) was SHA for developing countries as it extended SHA classifications of health expenditures to developing country contexts by adding subcategories. Furthermore, it added financing sources as a fourth healthcare dimension while financing agents, providers and functions classifications was linked to the SHA.

SHA 2011 is a new standard for developing and developed countries alike as an update of SHA 1.0 based on SHA 1.0 and NHA practitioners' experience and new trends in health systems. It furthermore covers four "core" dimensions: revenues of financing schemes, financing schemes, providers, and functions and provides other dimensions for additional analytical power.

SHA differ from other resource tracking methodologies in the following aspects:

- 1) Limited to health sector
- 2) Tries to track/capture actual spending
- 3) Comprehensive within the health sector (tracks all spending/from all sources to the health sector); includes public, private, and donor spending
- 4) Uses International Classification for Health Accounts (IHCA) of SHA of OECD
- 5) Flexible to accommodate country data needs by inserting sub-classifications

Readings

Deolalikar, A. B. (2008). Lessons from the World Bank's Public Expenditure Reviews, 2000-2007, for Improving the Effectiveness of Public Spending, Brookings Institution.

Levine, R. and Blumer, K. (2007). Following the Money: Toward Better Tracking of Global Health Resources. Washington, DC: Center for Global Development

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Ministry of Health and Social Welfare (2012). Tanzania National Health Accounts Year 2010 with Sub-Accounts for HIV and AIDS, Malaria, Reproductive, and Child Health, Ministry of Health and Social Welfare, United Republic of Tanzania

Powell-Jackson, T and Anne Mills, A. (2007). A Review of Health Resource Tracking in

Developing Countries. Health Policy and Planning 2007:22.

OECD, Eurostat, WHO (2011). A System of Health Accounts, OECD Publishing
DFID (2001). Understanding and Performing Public Expenditure. Guidelines for DFID
(Version 1).

4. Conceptual Overview of System of Health Accounts (4 Hours)

Health accounts provide a systematic description of financial flows in the health sector related to the consumption of healthcare goods and services from an expenditure perspective. Health expenditures are thus at the core of health accounts. System of Health Accounts (SHA) provides a standard for classifying such health expenditures according to the three axes of consumption, provision and financing. SHA provides a framework for international comparisons of health expenditures and health systems analysis; provides a tool for monitoring and analysis health systems; and defines internationally harmonized boundaries of healthcare for tracking expenditure on consumption.

Since health accounts describe financial flows in the health sector from an expenditure perspective, the entry point of SHA is the consumption of health services and goods by residents of a geographical location. There is an emphasis on geographical areas because health accounts are intended to aid health planning decisions that can only be pertinent if they are for specific geographical locations or jurisdictions.

Since SHA focuses on health expenditure tracking, production of healthcare services or goods is irrelevant until such goods are consumed within a geographical location as only consumption of health can impact health outcome rather than the mere availability of health services. Since expenditure is the result of consumption of health services and goods, it reflects the actual amount of money that goes into the health sector.

Expenditure data actually reflects financial cost of health as opposed to budget information that merely estimates future health sector needs that may not always be met. Expenditure data can however feed into the budgeting process by revealing the extent of resources that have been utilized to provide health services. Since expenditure is the outcome of health consumption (the entry point of SHA), which takes place in any health system, it enables SHA to be independent of the structure of a country's health care financing system.

The fact that SHA organizes and presents financial information about the health system through its focus on health expenditures implies it focuses only on the financial dimension of a health system without considering the effectiveness of expenditures in improving or maintaining health outcomes. SHA is thus most useful in answering policy questions pertaining only to the financial dimension of a health system and not non-financial policy questions that require a combination of financial information from SHA and non-financial information from other sources.

4.1 Boundaries of System of Health Accounts

SHA records the flow of financial resources in the health system. A health system is however quite diverse since it entails all activities whose primary purpose is to promotion, restoration or maintenance of health. However, the fact that health is at the core of life implies many things that are done or not done can affect it. This is tantamount to saying that any activity under the sun affects health making the distinction between health and non-health activities difficult.

Despite the difficulty in dividing health and non-health activities, it is necessary to have rules demarcating transactions that are counted or excluded with regards to health expenditure to facilitate cross-country comparability of health expenditure estimates and comparability over time within a country's accounts. SHA is based on a functional approach based on selected healthcare activities that promote, restores or maintains health that can be captured by transactions and thus registered as expenditures. Transactions recorded in SHA thus relate to healthcare goods and services provided and consumed to improve the health status of individuals and of the population as a whole.

The general boundary of SHA is based on the notion of national health expenditure which encompasses all expenditures for activities whose primary purpose is improving, maintaining and preventing the deterioration of the health status of persons and mitigating the consequences of ill-health through the application of qualified health knowledge [medical, paramedical and nursing knowledge, including technology, and traditional, complementary and alternative medicine (TCAM)].

The key component of the definition of healthcare expenditure is the '*primary purpose*' part as this is the demarcation of activities that can be included in SHA. Primary purpose entails the following groups of healthcare activities:

- 1) Promoting health and preventing disease;
- 2) Curing illness and reducing premature mortality;
- 3) Caring for persons affected by chronic illness who require nursing care;
- 4) Caring for persons with health-related impairment, disability, and handicaps who require nursing care;
- 5) Providing and administering public health; and
- 6) Providing and administering health programs, health insurance and other funding arrangements.”

Possession of a basic level of medical, paramedical and nursing knowledge is one of the main demarcation criteria in carrying out primary purpose activities. This is in most cases but not exclusively refers to national standards of accreditation, licensing and other

regulation or practices related to health care personnel and care givers which qualify them to practice their medical and nursing knowledge as well as to provide more complex services within an institutional framework. Table 1 shows examples of activities that may be included in or excluded from national health expenditure

Table 2: Example of Activities that May be Included In or Excluded from National Health Expenditure.

Type of Activity	Likely to be health-related	Unlikely to be health-related
Water supply and hygiene activities	Surveillance of drinking-water quality; construction of water protection whose primary purpose is to eliminate water borne disease	Construction and maintenance of large urban water supply systems whose primary purpose is access to water for the urban population
Nutritional support activities	Nutritional counselling and supplementary feeding programme to reduce children's malnutrition	General school lunch programmes and general subsidies for food prices, whose primary purposes is income support or security
Education and training	Medical education and in-service training for paramedical workers	Secondary school education received by future physicians or health workers
Research	Medical research; health services research to improve programme performance	Basic scientific research in biology and chemistry

4.2 Space and Time Boundaries of System of Health Accounts

An activity-based boundary for SHA ensures only activities whose primary purpose is to restoration, improvement and maintenance of health for a nation and for individuals. Delineation of activities that make up health expenditure however still leave SHA as a general accounting framework that is difficult to apply. It is thus necessary to make SHA more specific by adding location and period parameters to it i.e. space and time boundaries.

4.2.1 Space Boundary of Health Accounts

The space boundary of SHA captures health expenditure for a geographical location (country in most cases). The demarcation of the space boundary is however not activities undertaken within the boundaries of a geographical location but rather activities of residents of a geographical location. In this regard, SHA captures spending on healthcare by residents (whether citizens or non-citizens) who are temporarily abroad, as well as spending of external agencies (such as bilateral aid agencies) on inputs to healthcare within that country. SHA however exclude spending in a geographical location by non-resident foreign nationals.

4.2.2 Time Boundary of Health Accounts

The time boundary of SHA involves the period aspect of health accounts. It has two elements: a period within which primary purpose health activities took place and a distinction between when an activity took place and when the transaction that paid for it took place. The time boundary of health accounts usually encompasses a fiscal year or a calendar year.

The time boundary also involves demarcating between when an activity took place and when it was paid hence involving a choice between accrual accounting and cash accounting with health accounts using the former accounting method. Accrual accounting entails attributing expenditures to the time period during which economic value was created rather than the cash method in which expenditures are registered when the actual cash disbursements took place. This implies SHA accounts for health goods and services in the period they are provided rather than in the period they are paid for.

The time boundary also enables distinction of current and capital spending by allowing SHA only to capture spending on healthcare goods and services whose value only lasts within a single accounting period rather than healthcare goods and services goods and services whose value lasts beyond more than a single accounting period.

4.3 Classification of Health Expenditures by Function

The boundary of the health accounts emanates from the nature of the activities being performed to achieve the goals of a health system. It is however necessary to identify nature of the healthcare goods and services produced by the various actors who undertake primary purpose activities. The OECD's International Classification for Health Accounts functional classification of health care (ICHA-HC) categorizes the types of goods and services produced by health care providers and by institutions and actors engaged in related activities to health care. Table 2 shows the ICHA-HC classifications.

Table 3: International Classification for Health Accounts Scheme for Healthcare Functions (ICHA-HC)

ICHA Code	Description
HC.1	Services of curative care
HC.1.1	Inpatient curative care
HC.1.2	Day cases of curative care
HC.1.3	Outpatient curative care
HC.1.3.1	Basic medical and diagnostic services
HC.1.3.2	Outpatient dental care
HC.1.3.3	All other specialized medical services
HC.1.3.4	All other outpatient curative care
HC.1.4	Services of curative home care
HC.2	Services of rehabilitative care
HC.2.1	Inpatient rehabilitative care
HC.2.2	Day cases of rehabilitative care
HC.2.3	Outpatient rehabilitative care
HC.2.4	Services of rehabilitative home care
HC.3	Services of long-term nursing care
HC.3.1	Inpatient long-term nursing care
HC.3.2	Day cases of long-term nursing care
HC.3.3	Long-term nursing care: home care
HC.4	Ancillary services to medical care
HC.4.1	Clinical laboratory
HC.4.2	Diagnostic imaging
HC.4.3	Patient transport and emergency rescue
HC.4.9	All other miscellaneous ancillary services
HC.5	Medical goods dispensed to outpatients
HC.5.1	Pharmaceuticals and other medical nondurables
HC.5.1.1	Prescribed medicines
HC.5.1.2	Over-the-counter medicines
HC.5.1.3	Other medical nondurables
HC.5.2	Therapeutic appliances and other medical durables
HC.5.2.1	Glasses and other vision products
HC.5.2.2	Orthopedic appliances and other prosthetics
HC.5.2.3	Hearing aids
HC.5.2.4	Medico-technical devices, including wheelchairs
HC.5.2.9	All other miscellaneous medical goods

ICHA Code	Description
HC.6	Prevention and public health services
HC.6.1	Maternal and child health; family planning and counseling
HC.6.2	School health services
HC.6.3	Prevention of communicable diseases
HC.6.4	Prevention of non-communicable diseases
HC.6.5	Occupational health care
HC.6.9	All other miscellaneous public health services
HC.7	Health administration and health insurance
HC.7.1	General government administration of health
HC.7.1.1	General government administration of health (except social security)
HC.7.1.2	Administration, operation and support of social security funds
HC.7.2	Health administration and health insurance: private
HC.7.2.1	Health administration and health insurance: social insurance
HC.7.2.2	Health administration and health insurance: other private
HC. nsk	HC expenditure not specified by kind
HC.R.1–5	Health-related functions
HC.R.1	Capital formation for health care provider institutions
HC.R.2	Education and training of health personnel
HC.R.3	Research and development in health
HC.R.4	Food, hygiene and drinking-water control
HC.R.5	Environmental health
HC.R.nsk	HC.R expenditure not specified by kind

4.4 Core and Extended Frameworks of SHA

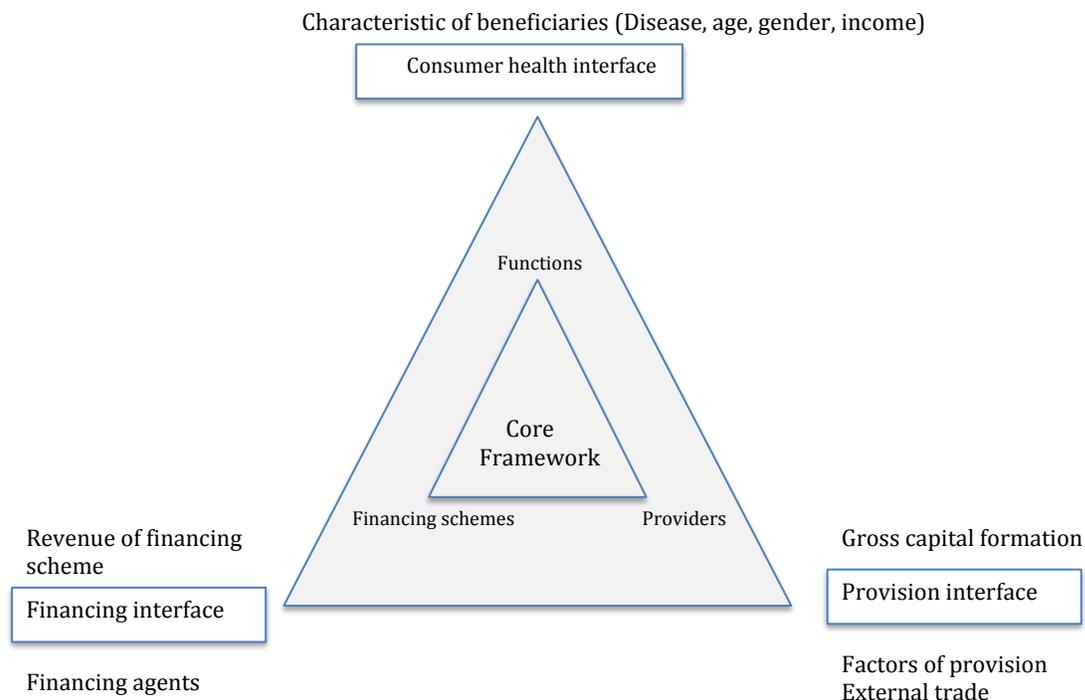
One advantage of SHA as a health resource tracking tool is its ability to facilitate international comparisons pertaining to the amount and the structure of expenditures for healthcare goods and services. In light of this, it is necessary to have a framework with a common boundary of the health system that can facilitate international comparison. Central to this framework is the classification of the health system in terms of healthcare functions, provision and financing (core framework) which facilitates analysis of revenue (resources) raising, modalities of managing (pooling) the raised revenue, and the utilization of resources to pursue the goals of a health system.

The healthcare functions of ICHA-HC refer to the health purpose of activities and determine the boundaries of healthcare consumption in the strict sense. Transactions are related to (i) consumption of healthcare goods and services (ii) capital formation, education and training, and research and development for future healthcare provision. The first group of transactions involve current health expenditure geared towards

promoting, developing and maintaining the health while the second group of activities are geared towards resource generation intended to support healthcare provision by developing technology, human resources and capital formation.

The core accounting framework is organized around a tri-axial system for the recording of health care expenditure, namely classifications of the functions of healthcare (ICHA-HC), healthcare provision (ICHA-HP), and financing schemes (ICHA-HF). Fig.1 shows the core health expenditure accounts of SHA 2011 and their extensions

Fig.1: Core and Extended Accounting Framework of SHA 2011



The core framework address 3 basic questions pertaining to kinds of healthcare goods and services consumed, healthcare providers delivering healthcare goods and services, and financing scheme paying for healthcare goods and services. The ultimate goal of data compilation of the core framework is to answer the above questions with respect to each transaction that incurs health care expenditures.

The three core framework in the middle of this figure represent the consumption of health care goods and services, which equals their provision and financing i.e. what is consumed has been provided and financed (total consumption = total provision = total financing).

4.4.1 Functions

The starting point to achieving the tri-axial perspective is measurement of consumption using a health functional approach that describes the direct consumption by the population according to the type of health purpose. Functions refer to groups of healthcare goods and services consumed by final users (households) with a specific health purpose.

The focus of the core framework is estimation of current spending on healthcare goods and services and entails contact with the health system for the purpose of satisfying health needs i.e. curative care, rehabilitative care, long-term care (health), total pharmaceutical expenditure, traditional complementary alternative medicines etc.

4.4.2 Providers

These are organizations and actors that deliver healthcare goods and services as their primary activity, as well as those who provide healthcare as one of their various activities. Healthcare providers are classified based on the principal activity they undertake and address the question pertaining to the organizational structure that is characteristic of the provision of health care within a country.

There are primary and secondary providers with the former being those whose principal activity is to deliver health care goods and services and the latter being providers those that deliver healthcare services in addition to their principal activities, which might be partially or not at all related to health.

4.4.3 Financing Schemes

Health financing systems mobilize and allocate money, within the health system, to meet the current health needs of the population (individual and collective). The accounting framework for healthcare financing provides a clear and transparent picture of a country's key transactions (flows) and the structure of its health financing system

The structure of a healthcare financing system consists of financing schemes (such as national health service, social health insurance and voluntary insurance etc.) and institutional units (financing agents, such as government units, a social security agency, private insurance corporations etc.) that operate the financing schemes. The key components of financing schemes are healthcare financing schemes, types of revenues of health care financing schemes, and institutional units of health care financing systems.

Healthcare financing schemes are the main types of financing arrangements through which health services are paid for and obtained by people. Financing schemes also include the rules for other functions such as the collection and pooling of the resources of the given financing scheme. Types of revenues of health care financing schemes pertains

to the approach used to identify, classify and measure the mix of revenue sources for each financing scheme. Institutional units of healthcare financing systems are units that play the role of providers of revenues for financing schemes and/or the role of financing agents that manage one or more financing schemes

4.5 Extended Framework

Each of the three dimensions of the core framework provides interfaces to further dimensions. There are three main interfaces that offer further breakdowns of expenditure and link the core health expenditure account to a broader set of statistical areas. These are the consumer health, provision, and financing interfaces.

4.5.1 Financing Interface

The financing interface aims to provide a more comprehensive picture about financing flows in health care by providing answers pertaining source of money and instruments used for fund raising. It can track back funds at the disposal of financing schemes and the way healthcare funds are collected.

4.5.2 Consumer Health Interface

This involves the breakdown of healthcare expenditures by various characteristics of beneficiaries in order to facilitate understanding of the observed distribution in overall health spending. The characteristics are age, gender, socioeconomic status (SES) and geographic area along the dimensions impacting health differences among individuals and population groups.

4.5.3 Provision Interface

The provision interface involves delivering of healthcare goods and services for final consumption. The interface however does not involve delivering of healthcare goods and services for intermediate use. The provision interface involves factors of provision which are factor inputs providers use to produce the goods and services consumed. The boundary for measuring factors of healthcare provision is derived from the outputs of healthcare providers.

Capital formation is an important factor in the provision of healthcare goods and services by healthcare providers and in the enhancement of their quality. Capital formation deals with changes in the equipment, buildings and instruments used by providers, including amongst other things the acquisition and application of new medical technology. Gross capital formation is measured in the capital account by the sum of three components: gross fixed capital formation plus changes in inventories plus acquisitions less disposals of valuables.

Readings

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5. Key Ingredients of System of Health Accounts: Financing, Provision and Consumption Interfaces (4 Hours)

The three dimensions of the core framework provide interfaces to further dimensions. There are three main interfaces that offer further breakdowns of expenditure and link the core health expenditure account to a broader set of statistical areas, namely the consumer health, provision, and financing interfaces.

5.1 Consumer Health Interface

This involves the breakdown of healthcare expenditures by various characteristics of beneficiaries in order to facilitate understanding of the observed distribution in overall health spending. The characteristics are age, gender, socioeconomic status (SES) and geographic area along the dimensions impacting health differences among individuals and population groups. It focuses on the kinds of healthcare services and goods consumed e.g. curative care, preventive care, drugs, health education etc.

The fact that the consumer health interface focuses on the types of healthcare services and goods consumed necessitates a clear definition of boundary of the term healthcare. Healthcare entails activities whose primary purpose is improving, maintaining and preventing the deterioration of the health status of persons and mitigating the consequences of ill-health through the application of qualified health knowledge (medical, paramedical and nursing knowledge, including technology, and traditional, complementary and alternative medicine (TCAM)).

Primary purpose activities in the definition entail the following groups of healthcare activities:

- 1) Promoting health and preventing disease;
- 2) Curing illness and reducing premature mortality;
- 3) Caring for persons affected by chronic illness who require nursing care;
- 4) Caring for persons with health-related impairment, disability, and handicaps who require nursing care;
- 5) Providing and administering public health; and
- 6) Providing and administering health programs, health insurance and other funding arrangements.”

The definition of healthcare is based on the functional approach to healthcare accounting. Consumption is the starting point of the tri-axial framework. It describes the direct consumption by the population according to the type of health purpose in the functional approach context. Classification of functions by the functional approach refers to groups of healthcare goods and services consumed by final users with a specific health purpose.

The functional approach has the following uses:

- 1) A grouping of healthcare goods and services by purpose
- 2) A cross-classification of these groups with other relevant health accounting classifications
- 3) The generation of indicators, such as relative shares of preventive/curative expenditure, the ratio of inpatient to outpatient spending, and other indicators from cross-classifying with financial or provision information, such as: private spending on groups of healthcare goods and services (e.g. medical goods paid as out-of-pocket spending) or services by mode of provision (e.g. inpatient/outpatient).

Functional healthcare classification is shown in Box 1.

Box1: The Classification Of Healthcare Functions at the First-Digit Level

HC.1 Curative care
HC.2 Rehabilitative care
HC.3 Long-term care (health)
HC.4 Ancillary services (non-specified by function)
HC.5 Medical goods (non-specified by function)
HC.6 Preventive care
HC.7 Governance and health system and financing administration
HC.9 Other health care services not elsewhere classified (n.e.c.)
Memorandum items: reporting items
HC.RI.1 Total pharmaceutical expenditure
HC.RI.2 Traditional complementary alternative medicines
HC.RI.3 Prevention and public health services (according to SHA 1.0)
Memorandum items: health care related
HCR.1 Long-term care (social)
HCR.2 Health promotion with a multi-sectoral approach

5.2 Categories of Healthcare Consumption by Purpose

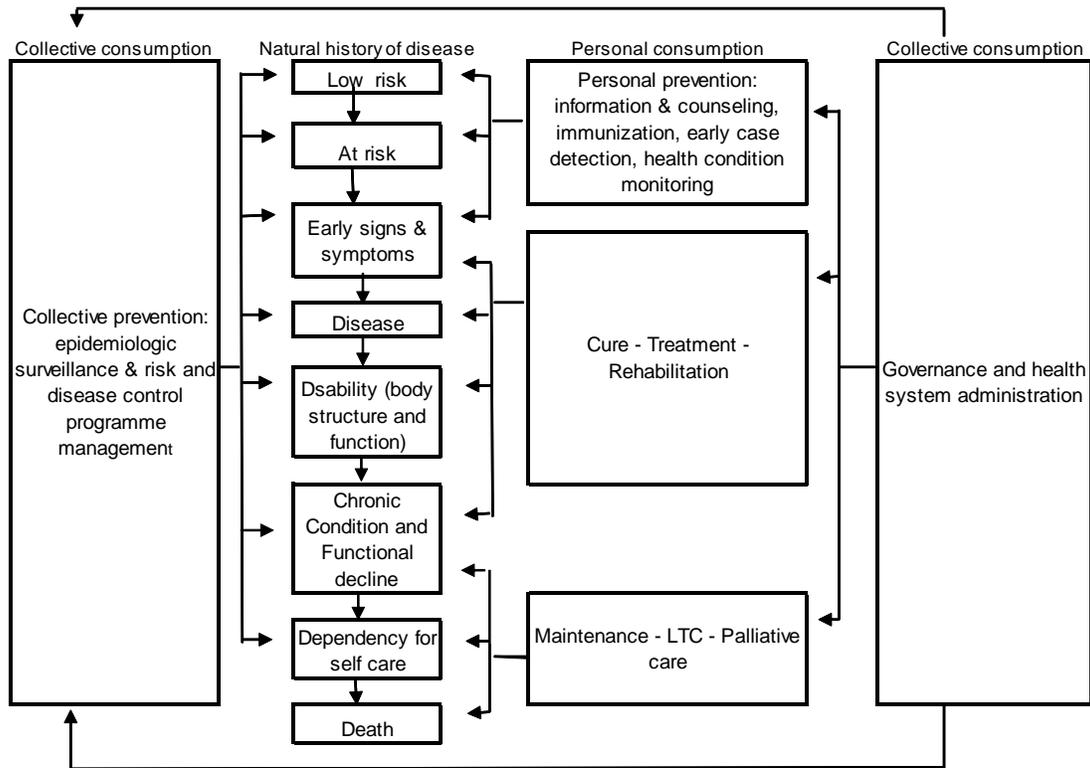
The first-level categories of the functional classification aim to distribute health consumption according to the type of need the consumer has (curative, preventive etc.)

When an individual seeks healthcare he comes into contact with the health system. Such contact has a standard set of components that are disaggregated into a sequence designed to:

- a) Establish a diagnosis;
- b) Formulate a prescription and therapeutic plan;
- c) Complement the process with imaging, laboratory and functional tests for diagnosis and assessment of the clinical evolution;
- d) Complement the therapeutic plan to include pharmaceuticals and other medical goods as well as procedures such as surgery;
- e) Monitor and assess the clinical evolution.

The natural history of disease qualifies the various components of the health system contact and allows a breakdown by specific type of service. It displays a rationale for the progression of a disease or other health condition (disorder, injury, ageing), from the moment of exposure, incident or onset, to the factors that cause health conditions (causal agents) until recovery, functional decline or death, and it determines the purpose of each contact with the health system. Interventions by the health system are intended to handle each of the stages in such a way that the development of the health condition is stopped, and when this is not feasible, it is delayed, or its effects reduced. Fig. 1 shows the natural history of disease and purpose of healthcare.

Fig.2: The Natural History of Disease and the Purpose of Healthcare Goods and Services



5.3 Mode of Provision Categories

The categories relating to cure, rehabilitation and long-term care are broken down at the second level of classification in terms mode of provision that is based on the specific organizational and technological arrangements of the services consumed. The Mode of provision approach has several advantages. First, it responds to particular policy interests and recognizes the structure of national data sources. Second, it can differentiate between products that are similar but have different quality in terms of the technology utilized and the intensity, length and continuity of the healthcare interaction.

The identified Mode of provision are categorized as inpatient, day care, outpatient and home-based care. The main criteria for differentiating the categories are:

- i. Inpatient care and day care involve formal admission to a health care facility, whereas outpatient and home-based care do not;
- ii. Inpatient care involves an overnight stay after admission, whereas day care requires the patient to be discharged on the same day;
- iii. Outpatient and home-based care can be differentiated based on the location from where the services are provided; home-based care is provided at the patient's place of residence, whereas outpatient services are delivered from the health care

providers' premises.

5.4 Healthcare Goods and Services Non-Specified by Function

Healthcare is complemented by other goods and services that can be related to preventive care, curative care, rehabilitation or long-term care but whose purpose is unknown. Such goods and services can be directly consumed as a result of a prescription or individual initiative or self care. In the case of self-care, there is often no record linking the treatment to other parts of the health care system, only a transaction linked to a retail sale.

There are two categories of direct consumption: ancillary services and medical goods. Ancillary services are broken down into laboratory services, imaging services, and patient transportation and emergency rescue. Medical goods are broken down into pharmaceuticals and other medical non-durable goods, and therapeutic appliances and other medical durables. Pharmaceuticals are then sub-divided into prescribed and over-the-counter (OTC), with a separate subclass for other nondurable goods, while therapeutic appliances are separated into four main goods categories.

Features of SHA 2011 Functional Classification

The following refinements of SHA 1.0 have been introduced into the functional classification in

SHA 2011.

- 1) Functional nomenclature. An effort has been made to enhance the functional approach both in the labels and definitions of the first-level purpose categories. In that regard, individual consumption categories previously linked to mode of provision categories have been renamed on a more functional basis, although the content remains unchanged [e.g. medical goods (HC.5) and ancillary services (HC.4)].
- 2) Current spending. Capital formation is acquired as a means of production, and is an investment. In order to refocus the measurement to that of final consumption, the expenditure associated with capital formation has been moved to a specific capital account. The re-structuring also includes human resource formation and research and development services, which do not fit the final consumption purpose and are thus excluded from this classification. The focus on final consumption improves the operation of the tri-axial approach.
- 3) Prevention. The functional category has been better aligned to the purpose of consumption, i.e. one of the objectives of contacting the health system is to receive preventive care. The boundary criteria (as described in Chapter 4) have been applied to better differentiate health prevention from the health care-related

categories (HC.R) of SHA 1.0. Refined definitions should ensure comprehensive, exhaustive and mutually exclusive categories and increase the comparability of HC classes across countries. The “prevention and public health” class of SHA 1.0 has been unclear in its content, because the categories were based on a mix of criteria: “public” referred at the same time to government-financed services, place of delivery (public-owned services) and the beneficiaries involved (population priority groups). Thus, “preventive and public health” has been restructured into a preventive class, which is better distinguished by purpose from the curative components.

- 4) Memorandum items have been created to allow further analysis of policy and resource allocation. Two groups are presented, based on their content:
Reporting Items identify policy relevant categories that are not identified through a specific HC class even though their content falls within the health care boundary: for example, the total expenditure on pharmaceuticals (including that of inpatient care), or an alternative grouping of health care goods and services that are not separately identifiable in the main HC classification, such as TCAM
Health care-related classes also identify policy relevant areas that are related to health but go beyond the health care boundary. This is the case, for example, for programs that come under the social part of long-term care (LTC) or areas involving cross-sectoral health promotion.
- 5) Research and development is not part of the population’s health final consumption. It has been excluded from the health care-related classes⁷ and is now a memorandum item of the capital account in SHA 2011.
- 6) Education and training of human resources for health (HRH) is not part of health final consumption by the population. It has been excluded from the health care-related classes and is now a memorandum item of the capital account in SHA 2011.

5.5 Characteristics of Beneficiaries

These are characteristics of those who receive the healthcare goods and services or benefit healthcare activities. These characteristics help determine the value of healthcare goods and services consumed by different population groups which facilitates understanding of the observed distribution in overall health spending.

The characteristics are age, gender, disease by ICD-10 classifications, socioeconomic status (SES) and geographic area along the dimensions impacting health differences among individuals and population groups. Characteristics of beneficiaries reveal

information about social disparities, resource allocation issues, health system sustainability, and specific MDGs, which are useful in health planning and evaluation.

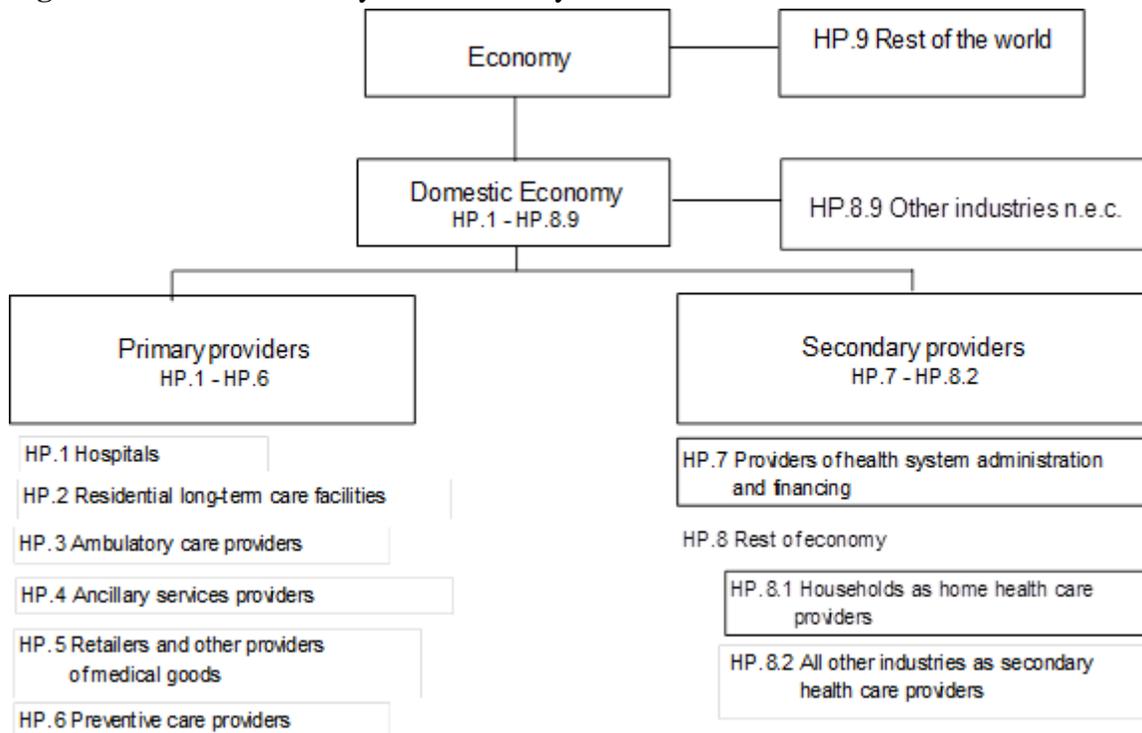
5.6 Provision Interface

Health providers are organizations and actors that deliver healthcare goods and services as their primary activity, as well as those who provide healthcare as one of their various activities. Health providers are classified based on the principal activity they undertake and address the question pertaining to the organizational structure that is characteristic of the provision of health care within a country. The principal activity exercised is the basic criterion for classifying healthcare providers. The provision interface addresses questions pertaining to characteristic of the provision of healthcare within a country and who provides health goods and services to consumers.

There are primary and secondary providers with the former being those whose principal activity is to deliver healthcare goods and services (offices of general and specialized physicians, units of emergency ambulance services, acute and psychiatric hospitals, health centers, laboratories, nursing care facilities, pharmacies and so on) and the latter being providers that deliver healthcare services in addition to their principal activities, which might be partially or not at all related to health (residential care institutions; supermarkets that sell over-the-counter pharmaceuticals; and healthcare facilities/professionals that provide healthcare services to a restricted group of the population). There are two special categories of secondary providers, namely: (i) providers of health care system administration and financing and (ii) households as providers of home healthcare

Fig. 3 presents an overview of primary and secondary providers.

Fig. 3: Overview of Primary and Secondary Providers



Since SHA focuses on the final consumption of healthcare goods and services by residents, it narrows the universe of healthcare providers to those that deliver final healthcare goods and services directly to consumers who are residents rather than intermediate goods or final goods to non-residents. The provision interface has no memorandum items, but it has a subclass that offers possibilities to capture other industries involved in the provision of health related functions that are linked to memorandum items in healthcare related and capital formation related spending.

5.6.1 Factors of Provision

Factors of provision are the valued inputs used in the process of provision of healthcare. Factors of provision enable determination of how much health providers spend on the inputs needed to produce healthcare goods and services. The boundary of health care determines the boundary of healthcare provision. Provision furthermore involves a mix of factors of production such as labour, capital and materials and external services to provide health care goods and services.

Healthcare provision involves only payments linked to healthcare provision and thus excludes payments for inputs related to non-health, health related goods, capital formation, and exported health services. Furthermore, the factors of provision interface only include transactions incurred in consuming healthcare goods or services that are documented implying inputs linked to own consumption are excluded. Box 2 shows

classification of factors of healthcare provision.

Box 2: Classification of Factors of Healthcare Provision

Code	Description
FP.1	Compensation of employees
FP.1.1	Wages and salaries
FP.1.2	Social contributions
FP.1.3	All other costs related to employees
FP.2.	Self-employed professional remuneration
FP.3	Materials and services used
FP.3.1	Health care services
FP.3.2	Health care goods
FP.3.2.1	Pharmaceuticals
FP.3.2.2	Other health care goods
FP.3.3	Non-health care services
FP.3.4	Non-health care goods
FP.4	Consumption of fixed capital
FP.5	Other items of spending on inputs
FP.5.1	Taxes
FP.5.2	Other items of spending

5.6.2 Capital Formation

This is the creation of productive assets by health providers during the accounting period that are used for more than one year in the production of health services and expand providers' capacity to produce health goods and services. Capital formation reveals what types of assets providers have acquired e.g. infrastructure, machinery and equipment, formal training, research and development.

5.6.2.1 Gross Fixed Capital Formation

Gross fixed capital formation in the health system is measured by the total value of the fixed assets that health providers have acquired during the accounting period (less the value of the disposals of assets) and that are used repeatedly or continuously for more than one year in the production of health services. Assets are "a store of value", or a means of carrying forward value from one period to another. By holding or using the assets, the owner can accrue benefits. Fixed assets are assets that can be used repeatedly or continuously in production for more than one year.

Capital formation involves only assets legally owned by the healthcare providers. Acquisitions and disposals of fixed assets are recorded when ownership is transferred to

or from a healthcare provider who intends to use the asset in production or who previously used the asset in production. There are however exceptions for financial leasing and construction of fixed asset spanning long periods of time. Box 3 shows classification of gross fixed capital formation in health systems.

Box 3: Classification of Gross Fixed Capital Formation in Health Systems by Type of Asset

HK.1.1.1	Infrastructure
HK.1.1.1.1	Residential and non-residential buildings
HK.1.1.1.2	Other structures
HK.1.1.2	Machinery and equipment
HK.1.1.2.1	Medical equipment
HK.1.1.2.2	Transport equipment
HK.1.1.2.3	ICT equipment
HK.1.1.2.4	Machinery and equipment n.e.c.
HK.1.1.3	Intellectual property products
HK.1.1.3.1	Computer software and databases
HK.1.1.3.2	Intellectual property products n.e.c.

5.6.2.2 Inventory

These are raw materials, work in progress goods and completely finished goods that are considered to be the portion of a healthcare provider’s assets that are ready or will be ready for sale. Inventories are produced during an existing accounting period or earlier.

Inventories in the context of SHA pertain to inventories of considerable value to be used during catastrophic events. Change in inventory is the difference between value entries into inventories and the sum of value of withdraws from inventories and value of recurrent losses of goods held in inventories during the accounting period.

5.6.2.3 Capital Account

The capital account reveals the amount of funds and assets invested by healthcare providers to cover health capital costs. It thus shows which financing mechanisms have been used to cover health capital costs. The financing mechanisms may be:

- 1) Net savings
- 2) Capital transfers
- 3) Investment grants
- 4) Other capital transfers
- 5) Net lending/borrowing
- 6) Memorandum items: loans, accumulated savings and public-private partnerships

- 7) Loans
- 8) Accumulated savings
- 9) Public-private partnerships

5.6.2.4 Other Memorandum Items

Expenditure on research and development in health and education and training of health personnel are considered as investments and as such are recorded as additional memorandum items to the capital account. In SHA 1.0 these items were included as health care-related expenditure.

Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications. R&D covers three distinct activities: basic research, applied research and experimental development.

Education and training of health personnel entail government and private provision of education and training of health personnel, including the administration, inspection or support of institutions providing education and training of health personnel. This corresponds to post-secondary and tertiary education in the field of health (according to ISCED-97 code) run by central and local government, and private institutions such as nursing schools run by private hospitals.

5.7 Financing Interface

The financing interface is concerned with the financing of the final consumption of healthcare goods and services. The interface provides a clear picture of the structure and flows of funds (transactions) in a health system.

Health financing systems mobilize and allocate money within the health system to meet the current health needs of the population with a view to expected future needs.

Healthcare financing systems consists of financing schemes (such as national health service, social health insurance and voluntary insurance, and so on) and institutional units (financing agents, such as government units, a social security agency, private insurance corporations and so on) that in practice operate the financing schemes.

5.7.1 Financing Schemes

These are the main types of financing arrangements through which people can get access to healthcare. Apart from playing a key role in purchase of healthcare, financing schemes also pertain to the rules for other functions, such as the collection and pooling of the

resources of the given financing scheme. A financing scheme may raise its revenues from one or more sources, and it can be operated by more than one type of institutional unit (financing agents).

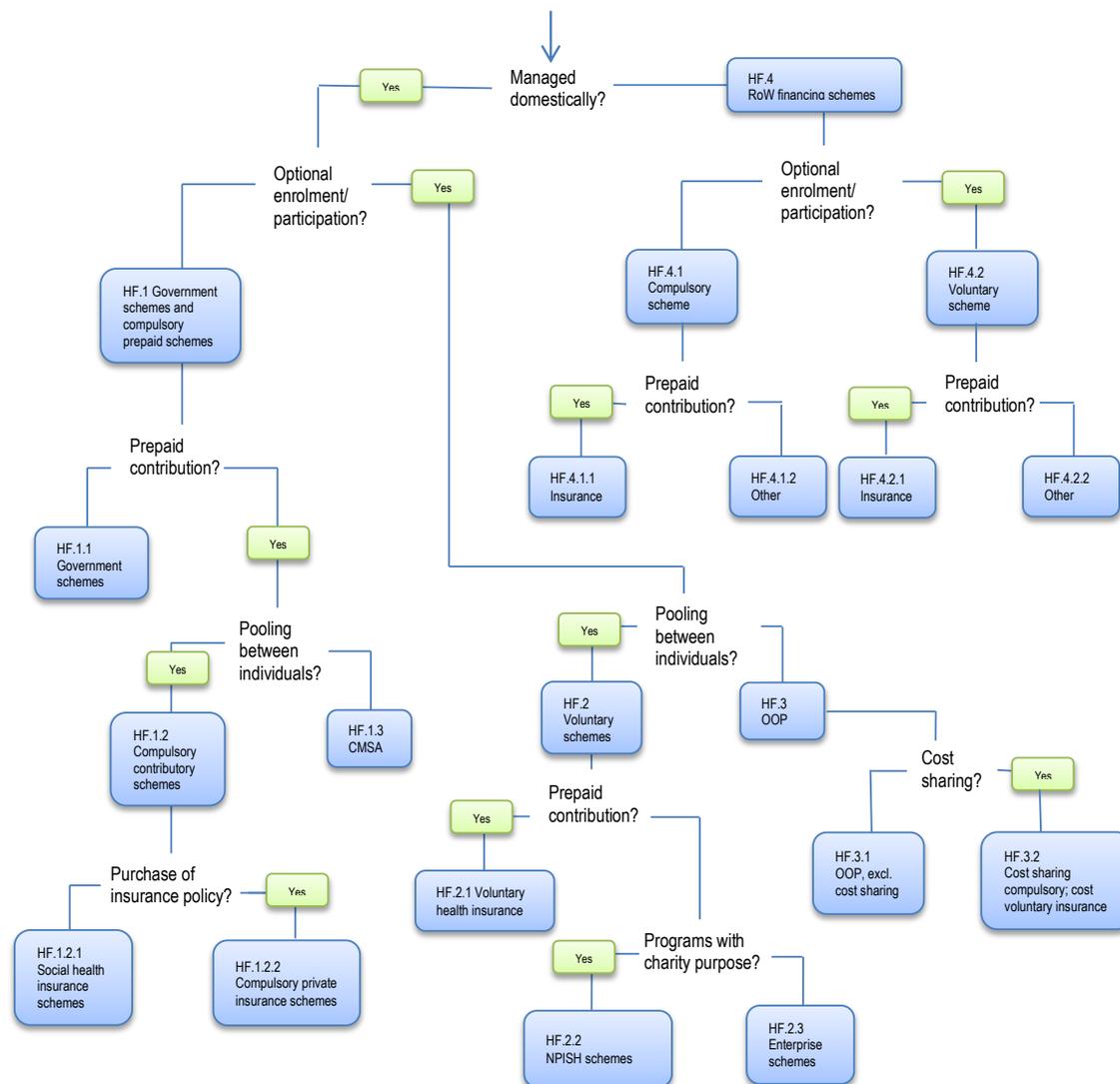
The main features of health financing are: the collection of funds, the pooling of funds and the purchasing/paying for health services (i.e. the allocation of funds to providers and services). Financing schemes are distinguished using the following criteria:

- 1) Resident or non-resident (foreign) scheme with mandatory or voluntary coverage (mode of participation);
- 2) Entitlement – contributory or non-contributory (basis for entitlement);
- 3) Compulsory or voluntary contributions;
- 4) Contribution prepaid or made at the time of service use;
- 5) Pooling is interpersonal or solely for the individual or family;
- 6) Purchase of insurance policy needed or not

The key distinguishing characteristics from a policy perspective, are whether participation is compulsory by law (or government regulation) or voluntary and whether or not entitlement is based on a contribution (made by or on behalf of the covered individuals) or on another criterion such as citizenship, residency, income/ poverty status, etc. Apart from describing which entities manage funds, financing schemes also reveal how funds are managed.

Health care financing schemes include direct payments by households for services and goods and third-party financing arrangements. Third party financing schemes are distinct bodies of rules that govern the mode of participation in the scheme, the basis for entitlement to health services and the rules on raising and then pooling the revenues of the given scheme. Fig. 4 shows the criteria tree for health financing schemes.

Fig. 4: Criteria Tree for Healthcare Financing Schemes



The classificatory criteria should be as clear as possible so that each scheme can be classified in only one position. The initial question is whether the scheme is based in the country or abroad. The rest of the world financing schemes refer to schemes set abroad (generated and regulated abroad). Resident schemes are classified regardless of the origin of their resources.

The next classificatory criterion (for both cases, resident and foreign (rest of the world schemes)) is based on the mode of participation. Notably the compulsory coverage is related to government schemes and compulsory pre-paid schemes. Their further classification is based on whether the characteristics of the benefit entitlement are based on contributions. The voluntary inclusion is classified based on the prepayment and its

coverage, i.e. linked to contributions, and to cost sharing.

Government is considered in a wide sense to incorporate the whole public sector (e.g. including public enterprises) while aid and development schemes operated on a permanent basis (longer than one year) are NPISH schemes (domestic schemes). Furthermore, schemes should be analysed beyond national labels as a scheme can nest several schemes.

5.7.2 Revenues of Financing Schemes

This is type of revenue collected by financing schemes. Revenue is an increase in the funds of a health care financing scheme, through specific contribution mechanisms. Revenues of financing schemes reveal how much revenue is collected, methods of collecting revenue, and from which institutional units are revenues raised for each financing scheme.

5.7.2.1 Classification of Revenues of Healthcare Financing Schemes

Transfers from Government Domestic Revenues

Funds allocated from government domestic revenues for health purposes.

Transfers Distributed by Government from Foreign Origin

These are transfers originating abroad (bilateral, multilateral or other types of foreign funding) that are distributed through the general government.

Social Insurance Contributions

These are receipts either from employers on behalf of their employees or from employees, the self-employed or non-employed persons on their own behalf that secure entitlement to social health insurance benefits.

Compulsory Prepayment (other Than Social Insurance Contributions)

This includes compulsory private insurance premiums and payments to compulsory MSAs.

Voluntary Prepayment

This includes voluntary private insurance premiums which are payments received from the insuree or other institutional units on behalf of the insuree that secure entitlement to benefits of the voluntary health insurance schemes.

Other Domestic Revenues

Includes domestic revenues of financing schemes not included in the above classifications.

Direct Foreign Transfers

Revenues received directly from foreign entities in terms of direct foreign financial revenues earmarked for health and direct foreign aid in kind (health care goods and services).

Memorandum Items

There are two main memorandum items: loans and institutional units. Loans are categorized as loans taken by government, loans taken from international organizations (concessional/non-concessional), and other loans taken by government. Institutional units providing revenues to financing schemes are categorized as government, corporations, households, NPISH, and rest of the world.

5.7.3 Financing Agents

Financing agents are institutional units that manage financing schemes i.e. Ministry of Health, private insurance companies, public enterprises, households, international organizations etc. Financing agents tell us who manages the financing arrangements for raising revenue, pooling/managing resources, and purchasing services. Financing agents are key statistical units in producing national health accounts as they provide data concerning the relevant healthcare transactions

There are countries where there is a one-to-one correspondence between financing schemes and financing agents. However, the relationship between financing schemes and financing agents are usually complex in many countries. The same actor can serve as a financing agent for more than one financing scheme (e.g. private insurance corporations, besides offering voluntary insurance, may be involved in managing the social insurance scheme). Furthermore, actors belonging to different institutional sectors of the economy can serve as financing agents for the same financing scheme (e.g. the compulsory social insurance scheme can be managed at the same time in a given country by both a social insurance agency and private insurance corporations).

Readings

OECD, WHO (2013), Guidelines for the Implementation of the SHA 2011 Framework for Accounting Health Care Financing. OECD Publishing.

OECD, Eurostat, WHO (2011), A System of Health Accounts, OECD Publishing.

Available at: http://www.who.int/nha/sha_revision/en/

WHO, USAID, World Bank (2003), Guide to Producing National Health Accounts: with special applications for low-income and middle-income countries.

6. Key Steps of SHA 2011 (2 Hours)

Any health accounting work must begin with preliminary work focused on gaining a mandate, establishing the project, involving the key institutions, funding and staffing the project, and developing a plan with a timetable. In general, a stepwise approach is recommended for the whole process.

Step 1: Planning and Scoping

It is necessary to start by spending some time to understand how the national health care system of a country works before considering data collection and calculation methods. This involves the preparation of a list of the financing schemes and the institutional actors (enterprises, government units, NPISH, households, rest of the world), along with their roles in allocating financial resources (collecting, pooling and purchasing) as well as of a list of providers of health care.

Once the national healthcare system of a country is well understood, the next phase is to lay the groundwork by identifying country stakeholders, partners and SHA team members, forming a SHA Steering Committee, and building stakeholder demand for SHA results. This is followed by engaging the SHA Steering Committee to define policy priorities that should guide the SHA, get stakeholders involved in the SHA, sign off on overall plans and timelines, and mobilize resources for the SHA.

Setting the boundaries of National Health Accounts and clarifying any differences between the national boundaries of the health care system and SHA boundaries has to be done by defining parameters of the SHA estimation. This has to be done because the SHA definition and boundary of healthcare is likely to be different to varying extents from the definitions and boundaries of healthcare used in national systems of health accounting due to differences in institutional arrangements, payment systems and country traditions. It is therefore important to identify the points of divergence between the two systems after agreeing on process, classifications, and boundaries in collaboration with health sector stakeholders.

Once National Health Accounts boundaries are set primary and secondary data sources are identified. This involves identifying and cataloguing the available data sources along with their main characteristics, and an assessment of their quality that can potentially provide information on the dimensions that they might serve. Identification of data sources involves examining each data source with the aim of finding out what the main content is, what information is provided, what questions are answered and what the original purpose of the source is.

Identification of data sources is followed by training of the SHA technical team and data collectors is undertaken in order to introduce or re-train SHA methodology, approach and parameters. Developing a detailed work plan for the SHA estimation process follows training and involves identification of SHA tasks needed, strategies and actions needed for completion of tasks, person responsible for each task, and timeline for completion.

Step 2: Launch

Launch of a health accounts project follows the planning and scoping phase. This involves an official launch event geared at sensitizing stakeholders on the project by providing an overview of the SHA concept, purpose, team, timeline, data needs, and deliverables. The official launch event is also aimed at soliciting stakeholder input on policy objectives for the SHA in terms of policy questions to be answered.

Step 3: Data Collection

Data collection follows a data plan that focuses on several questions. For each of the dimensions of the health accounts, which data sources are to be contacted, and who is responsible for that contact. What types of information are needed, including the time period covered and the desired detail of the data? What is the tentative timeframe within which the data will be acquired?

Data collection involves identification and collection of relevant secondary data and defining survey samples for donors, NGOs, insurance companies and employers and collecting their data. Secondary data is entered in spreadsheets with careful consideration of all sources, references, and calculations in order to note multiple sources for the same data.

The NHA Production tool is used to customize and export survey templates for donors, NGOs, employers, and insurance companies after which organizations are contacted to explain what data are needed. Sending out surveys and following up follow this with respondents to get complete data follows organizations are contacted. Once survey instruments are returned, sources, references and calculations are documented.

Step 4: Data Analysis and Validation

This involves reviewing survey and secondary data to identify errors, missing data or conflicting data. Furthermore, primary and secondary data sources are reviewed to resolve errors, conflicts, and missing data (handling double counting, triangulation). Data is then imported, corrected for double counting and weighting is applied to survey data.

Health expenditures are mapped to their corresponding SHA codes, including

- a) Revenues of financing schemes (FS)
- b) Health financing schemes (HF)
- c) Health care provider (HP)
- d) Health care function (HC)

Splitting rules to dimensions are undertaken and the assumptions documented.

Data analysis is followed by review and validation of financial flows with the technical team, respondents, and key stakeholders with the objective of identifying and resolving any remaining data gaps and conflicts

Step 5: Report Writing and Dissemination

A Health Accounts report includes (i) a number of tables and indicators that will inform sound national policy and good governance (ii) country background information to provide the context to better understand the health accounts findings, including reference information for computing indicators (iii) brief documentation of the health accounts data (iv) any methodological information that is important to properly interpret the health accounts results

Results are presented in a report that is presented to technical team and key stakeholders to answer relevant policy the questions. Results are analyzed based on the sense they make based on experience and their relevance for a country's health policy.

Tailored dissemination products for target audiences are developed to complement the main report. These products enable targeted users to grasp results and findings of National Health Accounts without going through the whole main report that can be long. The dissemination products are workshops, media, brochures and policy briefs.

Readings

OECD, WHO (2013), Guidelines for the Implementation of the SHA 2011 Framework for Accounting Health Care Financing. OECD Publishing.

OECD, Eurostat, WHO (2011), A System of Health Accounts, OECD Publishing.

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