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National Health Accounts

Conceptual Framework for Sri Lanka National Health Accounts

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Contents

Objectives

1. To establish and estimate health accounts-based health expenditure estimates for Sri Lanka
2. To establish the institutional mechanisms and capacity for regularly producing reliable, policy-relevant and internationally comparable health expenditure estimates and National Health Accounts for Sri Lanka for the Ministry of Health and Indigenous Medicine.
3. To provide an assessment of the financial flows within Sri Lanka's health care system.

Introduction

Following the deliberations of the previously established MOH/Health Expenditure Survey Committee (HESC), this paper provides an overview of the proposed framework for estimating health expenditures in Sri Lanka, and for establishing a mechanism for future expenditure estimates. As agreed by the HESC, the health expenditure estimates will be developed using a health accounts approach, in accordance with the latest international developments.

The first part summarises the conceptual basis of the National Health Accounts (NHA) approach proposed for the process, which will ensure that the effort is compatible with other international expenditure estimates, as well as ensuring that the Sri Lankan expenditure estimates are compiled in accordance with the latest international recommendations and practice.

Conceptual basis and approaches to health accounts

Relationship to National Income Accounts

In purpose and in many conceptual details, health accounts (or NHA) are similar to the National Income Accounts, but with a more restricted focus confined to the health sector. However, they are not strictly a subset of the System of National Accounts (SNA) established by the UN. The SNA 1993 provides for the development of satellite accounts within the SNA framework, which can include health satellite accounts. Satellite health accounts represent an alternative conceptual method of estimating health expenditures, but they have only even been compiled in a systematic fashion in France and Brazil. While the SNA is an internationally accepted standard for estimation of national income accounts (and by extension satellite accounts), NHA are not yet compiled according to any international standard or uniform set of conventions. Nevertheless, health accounts form the basis for the official health expenditure estimates in the most advanced economies and in an increasing number of Asian territories, including Japan, Hong Kong, Singapore, Australia, New Zealand, China, Korea, Thailand, The Philippines, and Bangladesh. Official NHA systems are currently being established also in Malaysia, Nepal and Taiwan.

OECD standardisation of NHA estimates

NHA in those countries where they are used have always been developed in accordance with the needs of health sector managers and policy makers, and their technical details have been determined somewhat on an ad hoc basis according to specific country needs. For this reason, NHA do not show the standardisation typical of the National Income Accounts. They can differ according to basic definitions, terminology, and estimating conventions. However, recently there have been significant attempts to standardise approaches, with the ultimate objective of developing global standards. The most significant example of this is the OECD (Organisation of Economic Cooperation and Development) attempt to develop a standard approach to health accounts in the OECD countries.

The OECD Secretariat in Paris has been responsible for publishing annual estimates of health expenditures for all OECD member states since the mid-1970s. Based on this experience, the OECD Secretariat has developed a new "System of health accounts for international data collection" (OECD, 1998). This framework has been provisionally approved in October 1998 at a joint meeting of OECD experts and representatives of WHO, World Bank, Eurostat and IPS (representing non-OECD states in Asia). At this meeting, it was agreed that OECD countries would phase in this new standardised system during 1999-2001, and that the OECD Secretariat would enable other interested countries in Asia to participate in parallel in the pilot-testing and revision of the new framework. It is proposed that Sri Lanka uses the OECD 1998 framework as the basis for developing its health expenditure survey, and that Sri Lanka participates in the pilot-testing of the OECD framework. In addition to providing a sound and up to date basis for the Sri Lankan health accounts, participation in the OECD process allows Sri Lanka to have input into any revision of the OECD framework, which is ultimately likely to form the basis for a future international standard.

Conceptual basis and approach to Sri Lanka's NHA

The conceptual framework for Sri Lanka's NHA involves the definition of what constitutes health expenditure, the institutional entities involved, and the specification of the types of disaggregation involved. The structure includes the classifications and nomenclature used to identify and disaggregate expenditures, either by purpose, type or ultimate beneficiary, and the temporal reference period.

The conceptual framework and structure for Sri Lanka's NHA should meet the following criteria:

1. It should be policy relevant and easily interpretable by health sector policy makers
2. It should be compatible with international practice and norms to the extent possible (= OECD 1998)
3. It should be reproducible
4. Categories used in classifications should be mutually exclusive
5. It should be feasible to estimate given secondary data availability, or with limited primary data collection and resources.

The conceptual framework will need to be agreed upon by the MOH Expenditure Survey Committee. This must be prepared in draft form initially before estimations begin, and then a provisional one can be prepared at the conclusion of the study to incorporate adjustments made. The framework will need to be relevant to MOH's needs, but at the same time in order to answer questions of the comparability of Sri Lanka's health spending with other economies, retain substantial comparability to OECD 1998 and international practice.

Institutionalisation of NHA in Sri Lanka

NHA are primarily a policy tool. For this reason, in order for them to be sustained, the first requirement is that they be estimated by agencies/departments closely linked to the ultimate users, i.e., MOH.

Generally applicable elements in institutionalisation are:

1. Identification of the policy-making agency ultimately responsible for commissioning NHA on a regular basis. This agency does not have to be same agency responsible for the actual estimations. In this case, MOH/Planning would be the appropriate agency to take eventual responsibility.
2. Identification of agency or collaborating agencies responsible for execution and modalities for collaboration. This would include the members of HESC – Central Bank, Department of Census and Statistics and IPS.
3. Identification of regularly available and accessible data sources, and determination of appropriate estimation procedures.
4. Acquisition of experience in process of making estimations through direct participation.
5. Allocation of necessary resources – human and financial.

There are four stages in the compilation process:

1. Agreement on the framework, definitions and boundaries.
2. Identification and collection of data for estimation of individual financing flows, e.g., household out-of-pocket expenditures at private doctors, NGO financing of health services, etc.
3. Reconciling of individual estimates in order to arrive at final estimates.
4. Disaggregation of final expenditure estimates by desired beneficiary and functional groupings.

Although, IPS will provide a detailed documentation of data sources and estimation steps at end of study, the best method of ensuring institutionalisation of capacity is for MOH Health Expenditure Survey Committee members to actively participate in process of estimation. This will allow members to understand better why data was selected, why and how they were modified, and the practical difficulties encountered with each estimation. Members will also then be able to develop and improve the estimation procedures and information sources in future years.

Immediate steps

A draft framework for the health expenditure accounts is presented here, and in the attached paper.

It is proposed that the second stage of the compilation process be broken up into discrete elements, appropriate members of the MOH Health Expenditure Survey Committee assigned (groups of one or more agencies), and for IPS to work closely with these subgroups on these elements. This recognises that MOH Health Expenditure Survey Committee members have other responsibilities, and that time is limited. Given that specialist expertise may be available in other agencies or outside the government in certain areas (e.g., pharmaceuticals, medical insurance), it is also proposed that other agencies or individuals be invited to participate in these subgroups, as necessary.

Potential discrete elements, which will involve the exercise of significant subjective judgement or where data sources will not be self-evident include:

1. Government health expenditures other than those by MOH.
2. Health expenditures and revenues of charitable/non-profit organisations
3. Household expenditures at private practitioners
4. Pharmaceutical expenditures in the private sector
5. Expenditures and activities at private hospitals
6. Medical insurance expenditures
7. Health service statistics for public and private sectors

Draft Conceptual Framework for Sri Lanka's NHA

Health expenditure definition

Health expenditures are defined as all expenditures or outlays for prevention, promotion, rehabilitation, and care; population activities, and emergency programs for the specific and predominant objective of improving health. Health includes both the health of individuals as well as of groups of individuals or populations. Expenditures are defined on the basis of their primary purpose, regardless of the primary function or activity of the entity providing or paying for the associated health services. Expenditures for the purpose of training or educating health sector personnel, which impart health sector specific knowledge and skills, as well as health-related research are defined as being for the purpose of health improvement when applying this definition.

There is no internationally accepted definition of what constitutes health expenditures, but this definition is comparable to that conventionally used in other national health accounts and national health expenditure studies.

Implications

- There are many activities which have multiple objectives, including those of improving health, such as treatment of drug addicts, medical care for prisoners, nutrition programmes, water supply and sanitation. These are only included, if the primary and main objective is the improvement of health itself. Therefore most water and sanitation activities are not included.
- Expenditures on health services by entities, the primary purpose of whose activities is non-health related, are defined as health expenditures. This definition differs from that used in the SNA, which focuses on the purpose of the primary activity of the entity. For example, provision of medical services to prisoners by correctional facilities is treated as a form of health expenditure in the NHA, unlike in the SNA.
- Training expenditures are included if they are specifically related to health. So expenditures for the primary and secondary education of those who enter medical or nursing school are not included, but training given within medical schools to future doctors are.
- The purpose of expenditure is that intended by the user. For example, expenditures on homeopathic services or at "quacks" would be counted as health expenditures if the purpose of consuming was primarily health-related, regardless of whether the product or service actually contributed to better health or not.

National Health Expenditures

These are defined as all health expenditures for the benefit of individuals resident in Sri Lanka. Expenditures for the benefit of Sri Lankan citizens living abroad are excluded, although expenditures in other territories or countries for the benefit of residents of Sri Lanka are included, as well as expenditures for the benefit of foreign citizens resident in Sri Lanka.

Implications

- This definition is comparable to that used by US HCFA in estimating US National Health Expenditures, and in the Hong Kong SAR and Bangladesh health accounts.
- Treatment sought at foreign providers by resident Sri Lankan residents is included.

Base year for NHA

Sri Lanka's NHA will be estimated initially for a base year of 1996/97, which would correspond to the latest Central Bank Consumer Finance and Socio-economic Survey.

It is proposed that the main NHA estimates for this phase will be estimated for 1997-98 fiscal year, since that will be the latest that final provisional budgetary accounts are available.

Accounting basis

Sri Lanka's NHA will be estimated on a calendar year basis, as much of the data are available on that basis.

Expenditures will be counted using an accrual definition, that is, the fiscal year defined for the provision of health care goods and services is the year in which the health care goods and services are actually received or contracted out. Annual Government expenditures do not need to be adjusted using this definition, even though the accrual (obligation incurred) year may or may not exactly coincide with the fiscal year in which the cash transaction actually occurs. This definition also implies that the incurrence of liabilities by an entity is equivalent to an actual expenditure.

Proposed classifications for Sri Lanka NHA

In Sri Lanka's NHA, expenditures will be measured and organised on the basis of the entities making the expenditures, and those entities passing or using the expenditures. The classification of entities within Sri Lanka's health care system is thus critical for estimating and structuring Sri Lanka's NHA. Three sets of entities must be defined:

1. Financing sources
2. Financing intermediaries
3. Providers.

The following gives a provisional list for discussion of entities to be used in Sri Lanka's NHA.

Entities are defined as economic agents, which are capable of owning assets, incurring liabilities, and engaging in economic activities or transactions with other entities. They can consist of individuals, groups of individuals, institutions, enterprises, government agencies or NGOs/non-profit institutions.

Financing sources

Financing sources are defined as entities, which ultimately bear the expenses of financing the health care system. In operationalising this definition, a similar convention to that used in the UN SNA (System of National Accounts) is followed (United Nations, 1993). In general, non-government organisations are treated as ultimate financing sources, not the households or other entities that pay contributions to them. Similarly, the Government is considered an ultimate financing source, not the entities which pay taxes to it. One difference to SNA practice is observed; where firms or employers provide or pay for health services as part of the regular compensation of employees, these expenditures are treated as being by the employer, and not expenditures out of the income of households, which is SNA practice.

Financing sources will be grouped into five mutually exclusive institutional sectors:

- Government

Non-profit institutions

- For-profit enterprises
- Households
- Foreign sources

This broad grouping of sectors corresponds both to general national income accounting practice, as well as NHA practice in most countries.

The classification of entities within each sector is as follows:

I. **Government**
   1. Central government
   2. Provincial councils
   3. Local/municipal government

II. Non-profit institutions/NGOs

III. For-profit enterprises/firms

1. Employers
2. Other private sources

IV. Households

V. Foreign sources

1. Official donor agencies
2. Non-profit/NGO sources
3. Other foreign sources

Providers

The following classification of providers is proposed, in accordance with the ICHA-Classification of medical care industries (OECD, 1998). For each category, providers would also be cross classified according to their ownership status (central government, provincial government, local government, non-profit sector, and for-profit-sector:

I. **Government**

1. Hospitals
2. Nursing home and residential care facilities
3. Non-hospital medical facilities
4. Public health programme facilities
5. Health administration institutions

II. Academic and training institutions

III. Non-profit institutions/NGOs

6. Hospitals
7. Nursing home and residential care facilities
8. Non-hospital medical facilities
9. Other non-profit providers

IV. Enterprise own services

V. For-profit providers

A. Private modern medical providers
   1. Hospitals
   2. Nursing and residential care facilities
   3. Medical practitioners

B. Private dental providers

C. Diagnostic / imaging service providers

D. Private Ayurvedic and other traditional systems practitioners

E. Private Homeopathic and other alternative practitioners

E. Retail sale and other providers of medical goods
   1. Pharmacies
   2. Retail sale and other suppliers of optical and other medical goods and products
   3. Shops
   4. Traditional medicine shops

VI. Foreign providers

Non-profit institutions include both those funded through subventions by government agencies, as well as those funded through other means.

Beneficiaries

Depending on data availability, the NHA survey will disaggregate expenditures as estimated in the final NHA matrices according to the following break-down of beneficiaries:

Demographic

Age groups

The exact categorisation of age groups will need to be determined, but should be according to the ability of CSD to provide disaggregated tabulations from the HES (or Central Bank from CFS).

Gender

Male and female

Socio-economic

From the perspective of equity, the distribution of health expenditures across socio-economic groups is important. Expenditures will be disaggregated across income/expenditure quintiles, where individuals are ranked according to their per capita household income/expenditure, as reported in HES or CFS surveys.

Geographical

Some NHAs disaggregate expenditures according to geographical region. In the case of Sri Lanka's NHA disaggregation should be attempted by province. Tabulations of some, but not all, items of expenditures, e.g., household expenditures, by urban, rural and estate sectors may be appropriate.

Functions

The Sri Lanka NHA will show total national health expenditures, and how they are distributed by financing and provider entities. In addition, the study should estimate supplementary matrices, which show the use of expenditures by particular functions and use of services.

The classification system will be developed following close consultation with relevant government agencies. For reasons of international comparability it is based closely on the Draft International Classification for Health Expenditure (ICHE) proposed by OECD in 1998 (OECD 1998). Consistent with the OECD approach, all health expenditures are categorised into two types of function:

1. Core functions of medical care

2. Health-related functions

Each of these are further disaggregated as shown:

Functions of medical care

F1. Services of curative care
F2. Services of rehabilitative care
F3. Services of long-term nursing care
F4. Ancillary services to medical care
Distribution of medical goods
F5. Prevention and public health services
F6. Health programme administration and health insurance

Health-related functions

F.R.1. Investment into medical facilities
F.R.2. Education and training of health personnel
F.R.3. Research and development in health
F.R.4. Food, hygiene and drinking water control
F.R.5. Environmental health
F.R.6. Administration and provision of social services in kind to assist living disease and impairment
F.R.7. Administration and provision of cash benefits

Note: For personal medical services (HA.1- 3), each type of care is disaggregated into in-patient, outpatient, day cases, and home care. Some categories, such as day cases, long-term nursing care may not be relevant to Sri Lanka currently, but should be retained in anticipation of future developments.

More detailed definitions and a review of current international practice is provided in the attached paper.

Table 1: Functional classification of health expenditures in Sri Lanka

Functions of medical care		
Services of curative care	**F1**	**HC.1**
Inpatient curative care	F1.1	HC.1.1
Hospital in-patient care	F1.1.1	
Hospital out-patient care	F1.1.2	
Ayurvedic hospital in-patient care	F1.1.3	
Ayurvedic hospital out-patient care	F1.1.4	
Other in-patient curative care n.e.c	F1.1.9	
Day cases of curative care	F1.2	HC.1.2
Ambulatory care	F1.3	HC.1.3
Registered medical practitioners	F1.3.1	
General practitioners	F1.3.1.1	
Medical specialists	F1.3.1.2	
Other registered medical care professionals	F1.3.2	
Unregistered medical care professionals	F1.3.3	
Traditional medicine providers	F1.3.4	
Registered traditional medicine providers	F1.3.4.1	
Unregistered traditional medicine providers	F1.3.4.2	
Outpatient dental care	F1.3.5	HC.1.3.2
Other specialised healthcare	F1.3.6	HC.1.3.3
Other outpatient curative care n.e.c	F1.3.9	HC.1.3.9
Curative home care	F1.4	HC.1.4
Other services of curative care n.e.c	F1.9	
Services of rehabilitative care	**F2**	**HC.2**
Inpatient rehabilitative care	F2.1	HC.2.1
Day cases of rehabilitative care	F2.2	HC.2.2
Out-patient rehabilitative care	F2.3	HC.2.3
Services of rehabilitative home care	F2.4	HC.2.4
Other services of rehabilitative care n.e.c	F2.9	
Services of long-term nursing care	**F3**	**HC.3**
In-patient long term nursing care	F3.1	HC.3.1
Day cases of long-term nursing care	F3.2	HC.3.2
Long term nursing care:home	F3.3	HC.3.3
Other services of long-term nursing care n.e.c	F3.9	
Ancillary services to medical care	**F4**	**HC.4**
Clinical laboratory	F4.1	HC.4.1
Diagnostic imaging	F4.2	HC.4.2
Patient transport and emergency rescue	F4.3	HC.4.3
Other ancillary services n.e.c	F4.9	HC.4.9
Medical goods dispensed to out-patients	**F5**	**HC.5**
Pharmaceuticals and other medical non-durables	F5.1	HC.5.1
Prescribed medicines	F5.1.1	HC.5.1.1
Over-the-counter medicines	F5.1.2	HC.5.1.2
Other pharmaceuticals and medical non-durables n.e.c	F5.1.9	HC.5.1.3
Therapeutic appliances and other medical durables	F5.2	HC.5.2
Glasses and other vision products	F5.2.1	HC.5.2.1
Orthopaedic appliances and other prosthetics	F5.2.2	HC.5.2.2
Hearing aids	F5.2.3	HC.5.2.3
Medico-technical devices	F5.2.4	HC.5.2.4
Other therapeutic appliances and medical durables n.e.c	F5.2.9	HC.5.2.5
Other medical goods dispensed to out-patients n.e.c	F5.9	
Preventive and public health services	**F6**	**HC.6**
Family planning and reproductive health services	F6.1	HC.6.1
Maternal health	F6.1.1	
Infant and child care	F6.1.2	

Family planning services	F6.1.3	
Other reproductive health services	F6.1.9	
School health services	F6.2	HC.6.2
Prevention and management of communicable diseases	F6.3	HC.6.3
Immunisation	F6.3.1	
STD's	F6.3.2	
Prevention and management of other communicable diseases n.e.c	F6.3.9	
Prevention and management of non-communicable diseases	F6.4	HC.6.4
Occupational health care	F6.5	HC.6.5
Other public health services n.e.c	F6.9	HC.6.9
Health programme administration and health insurance	**F7**	**HC.7**
General government administration of health	F7.1	HC.7.1
Health administration and health insurance - private	F7.2	HC.7.2
Other health programme administration and health insurance n.e.c	F7.9	
Health related functions		
Capital formation of health care provider institutions	FR.1	HC.R.1
Education and training of health personnel	FR.2	HC.R.2
Research and development in health	FR.3	HC.R.3
Food, hygiene and drinking water control	FR.4	HC.R.4
Environmental health	FR.5	HC.R.5
Administration and provision of social services in kind to assist living with disease and impairment	FR.6	HC.R.6
Administration and provision of health related cash benefits	FR.7	HC.R.7
Other health related functions n.e.c	FR.9	

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