IPS HPP Occasional Paper No.08

National Health Accounts

Review of International NHA Approaches and Proposed Classification System for Sri Lanka National Health Accounts

Original dated December 1, 1998
Revised March 16, 2001

Institute of Policy Studies of Sri Lanka
Health Policy Programme

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Recommended Citation

Institute of Policy Studies, 2001. Review of International NHA Approaches and Proposed Clasification System for Sri Lanka National Health Accounts. Health Policy Programme Occasional Paper 8. Colombo: Institute of Policy Studies

Document information

This was originally prepared as Working Paper WP/98/02

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Acronyms

A&E	Accidents & Emergencies
ALOS	Average Length of Stay
APHEN	Asia-Pacific Health Economics Network
COFOG	Classification of the Functions of Government
DHA	Domestic Health Accounts (Hong Kong)
ESA	European System of Integrated Economic Accounts
GDFCF	Gross Domestic Fixed Capital Formation
GNP	Gross National Product
GOSL	Government of Sri Lanka
GST	Goods and Services Tax
HCFA	Health Care Financing Administration (USA)
HCHS	Hospital and Community Health Services
HA	Health Accounts
HES	Household Expenditure Survey
HESC	Health Expenditure Survey Committee
HMO	Health Maintenance Organisations
HQ	Head Quarters
ICHE	International Classification for Health Expenditure
ICHE-HA	International Classification for Health Expenditure – function component
IPS	Institute of Policy Studies
JCAHO	US Joint Commission on Accreditation of Healthcare Organisations
MCH	Maternal and Child Health
MOH	Ministry of Health
NHA	National Health Accounts
PCE	Private Consumption Expenditures
PDE	Producers' Durable Equipment
R&D	Research & Development
SAS	Services Annual Survey (Department of Census & Statistics)
SHA	System of Health Accounts
SIC	Standard Industrial Classification
SL-HA	Sri Lanka – Health Accounts
SNA	System of National Accounts
TCM	Traditional Chinese Medicine
TM	Traditional Medicine
OECD	Organisation for Economic Cooperation and Development
OTC	Over-The-Counter
UN	United Nations
UNICEF	United Nations Children's' Fund
UNFPA	United Nations Population Fund
VAT	Value Added Tax
WHO	World Health Organisation

Note on preparation

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Overview

This document provides a review of current definitions and classifications used in national health accounts (NHA) work by the Organisation of Economic Co-operation and Development (OECD) and four OECD member countries, USA, UK, Canada and Japan. Additionally, the conceptual framework developed for the Hong Kong SAR Government's Domestic Health Accounts by the Institute of Policy Studies is reviewed, and differences noted. Given the similarities between the two systems, the definitions adopted for Hong Kong are recommended for Sri Lanka in many instances. On the basis of these approaches, recommendations are made as to options for the framework to be used in Sri Lanka's NHA.

Preparation of this document involved a systematic review of the current definitions used by the four countries concerned, the definitions used by the OECD secretariat in preparing its 1998 estimates of health spending in OECD member countries (referred to herein as OECD I), and a draft proposal for collecting international health statistics under preparation by the OECD secretariat (unpublished document made available to the Institute of Policy Studies by OECD, referred to herein as OECD II). OECD II was revised in September 1998 (OECD, 1998), and presented at the 30 September 1998 Ad-hoc meeting of Experts on Health Accounting in Dublin (herein referred to as OECD III). This meeting, at which IPS and the Asia-Pacific Health Economics Network (APHEN) NHA Group was represented,[1] agreed to pilot test the new accounting framework in OECD member states during 1998-2000, with the intention of full adoption of the system in national health statistics data collection by 2000/1. The OECD Health Policy Unit agreed that it would cooperate on an informal basis with APHEN and interested Asian countries in enabling them to also pilot test the draft of the OECD system parallel with OECD members, and to dialogue with them in order to incorporate Asian experiences into future revisions. The final pilot version of the revised manual was released in May 2000 as OECD SHA (version 1), referred to herein as OECD IV

OECD I is the most recent version of the set of definitions used by OECD in preparing its annual estimates of health spending in the OECD. It was developed over several years in an ongoing attempt to standardise the available health statistics data reported by member countries, and therefore reflects substantially the structure of the health expenditure reporting systems in individual countries, in particular those of USA.

OECD II and its revisions, OECD III and IV, are a new set of classifications and frameworks prepared by the OECD secretariat for measuring health expenditures in a manner consistent with other UN statistical reporting systems and the existing OECD database. It differs from OECD I in that it proposes a different breakdown or classification of health expenditures, and in that it provides much more detailed sets of definitions for the various types of expenditures. Its functional classification of health expenditures, it terms the ICHE (International Classification of Health Expenditures), and this is presented in four levels of disaggregation, each level of which is labelled according to a system of 1-4 digit codes. OECD will test this new approach during the next two years, and based on resulting modifications and feedback from non-OECD countries and experts, will forward a revised version of the Proposal to Eurostat and other UN agencies as a global standard for health expenditure estimation. We have included the OECD II - IV in our review, as it is likely that it will lead eventually to a new international system of health expenditures estimation. Since OECD III and IV are largely similar, only OECD 2000 definitions are included in this

[1] Other non-OECD representatives consisted of WHO/Geneva and the World Bank.

review. Where there are significant differences between the two, both sets of definitions are laid out. However, OECD 2000 is yet to be ratified by the OECD itself, and currently contains several major defects, which we believe will force major modifications. For this reason, we have focused on those elements in OECD II - IV that are most useful and likely to stand the test of time.

The preparation of the definitions for preventive and public health programmes has incorporated inputs from a special working group consisting of representatives of MOH Family Health Bureau, UNICEF and UNFPA.

Functional classification of health expenditures

OECD II's functional classification makes a basic distinction between core functions of medical care and health related functions. We propose that this same distinction be used in Sri Lanka NHA, as it separates those expenditures for which there is universal agreement about their classification as health, from those for which there is considerable national variation and dispute. OECD II then disaggregates core functions into seven types at the first level (or one digit level of the ICHE):

F1. Services of curative care
F2. Services of rehabilitative care
F3. Services of long-term nursing care
F4. Ancillary services to medical care
F5. Dispensing medical goods to outpatients
F6. Prevention and public health services
F7. Health programme administration and health insurance

Functions 1 – 4 constitute personal medical services.

Health related functions consist of the following:

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

The draft functional classification proposed for Sri Lanka NHA will use this same classification. At the next level of disaggregation, Sri Lanka NHA should deviate from that presented by the OECD II (2 digit level in ICHE), and instead follow the general practice used in national NHA work by USA and that used in OECD I, III and IV. OECD II presents a substantially different functional classification at its two-digit level, which does not differentiate between inpatient and outpatient expenditures, and instead focuses on the clinical purpose of patient treatment expenditures. In our judgement, this new classification is unlikely to survive subsequent revisions, as most policy makers are actually interested firstly in knowing the inpatient/outpatient breakdown, and since most countries do not have the data to allow estimation of the categories proposed in OECD II.

Table 1 gives the proposed functional classification for health expenditures in Sri Lanka's NHA. The remaining part of the document concentrates on presenting the definitions used by national agencies when reporting national statistics on health expenditures, or in their national health accounts, as well as those in use or proposed currently by OECD. In many cases the only relevant OECD definitions will be those from OECD I. The definitions given for individual countries are the ones used in reporting national health expenditures through the OECD secretariat, where they deviate from the OECD I definitions.

Table 1: Functional classification of health expenditures in Sri Lanka

FUNCTION	ITEM	
Functions of medical care	SL-HA code	OECD 2000 code
Services of curative care	**F1**	**HC.1**
Inpatient curative care	F1.1	HC.1.1
Hospital inpatient care	F1.1.1	
Hospital outpatient care	F1.1.2	
Ayurvedic hospital inpatient care	F1.1.3	
Ayurvedic hospital outpatient care	F1.1.4	
Other inpatient 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
Outpatient 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**
Inpatient 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 outpatients	**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 outpatients 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	

Functions of personal medical care

➢ RECOMMENDATIONS FOR SRI LANKA NHA

- Functions of personal medical care comprise of functions F1 to F5.
- Defined as those services that can be directly allocated to individuals, as distinct from services provided to society at large (F6 Prevention and public health services; and F7 Health programme administration and health insurance).
- Functions of personal medical care are both classified by type of episode of care (curative, rehabilitative and long-term nursing care) and by mode of production (inpatient, day-care, outpatient and home care).

The above is similar to that in OECD 2000. OECD II on the other hand, does not keep the inpatient/outpatient division customarily used in disaggregating personal health services, both by national agencies and by OECD itself. Instead, it proposes a breakdown, which focuses on the clinical nature of the service given. Our opinion is that this suggested alternative breakdown will not survive revisions by OECD member countries. OECD 2000 not only differentiates between inpatient and outpatient care quite specifically but also introduces a third category for day-care patients. We propose that Sri Lanka NHA use the categorization of OECD 2000 with the inpatient-outpatient distinction that is common to virtually all NHA systems.

Mode of production

The following definitions of mode of production are used throughout OECD classification systems to define categories of personal medical services at two-digit level.

Inpatient care

An **inpatient** is a patient who is formally admitted (or "hospitalised") to an institution for treatment and/or care and stays for a minimum of one night in the hospital or other institution providing in patient care. Inpatient care is delivered in hospitals, other nursing and residential care facilities or in establishments, which are classified according to their focus of care under the ambulatory care industry but perform inpatient care as a secondary activity. Included are services delivered to inpatients in prison and army hospitals, tuberculosis hospitals, and sanatoriums. Inpatient care includes accommodation provided in combination with medical treatment when the latter is the predominant activity provided during the stay as an inpatient.

Day care

Day care comprises medical and paramedical services delivered to patients that are formally admitted for diagnosis, treatment or other types of medical care with the intention of discharging the patient on the same day. An episode of care for a patient who is admitted as a day care patient and subsequently stays overnight is classified as an overnight stay or other inpatient case. Services for non-admitted patients that are extended to formal admission for day care are considered as day care. A day patient (or "same-day patient") is usually admitted and then discharged after staying between 3 and 8 hours on the same day.

This item comprises medical and paramedical services delivered to patients at home. It excludes the consumption of medical goods (pharmaceuticals, other medical goods) dispensed to outpatients as part of private household consumption.

Outpatient care

This item comprises of medical and paramedical services delivered to outpatients. An outpatient is not formally admitted to the facility (physician's private office, hospital outpatient centre or ambulatory care centre. Outpatient medical care comprises of services delivered to outpatients by physicians in establishments of the ambulatory health care industry and outpatient departments of establishments of the hospital industry. OECDI, OECD II and most NHA systems have now distinguished outpatient services on the basis of the institution at which they were provided, i.e., hospital or ambulatory care facility. OECD 2000 on the other hand, distinguishes between outpatient services provided under different types of episode of care i.e. curative and rehabilitative.

F1 Services of curative care

This corresponds largely to inpatient care as defined in OECD I, and in USA, Canada and Japan. The relevant definitions follow.

Total expenditure on hospital care

OECD I

Current expenditure, exclusive of investment outlays, on inpatient care, which includes:

a) Acute Hospital Care
b) Psychiatric Hospitals
c) Nursing Homes
d) Home care
e) Other Long-Term Care.

- Included: All types of public and private hospitals; general hospitals, special hospitals (paediatric, orthopaedic, cancer, rehabilitation, etc.), extended care, mental hospitals, tuberculosis hospitals (sanatoriums).
- Excluded: Outpatient care and care delivered in the armed forces, prisons, and schools. Outpatient care is defined as including day cases, such as day surgery.
- The boundaries differentiating residential care/social services from nursing home care are not homogeneous. (For international purposes, on-going work is attempting to approximate these boundaries).
- Although the OECD definition does not include outpatient expenditures of hospitals, most countries in fact report hospital outpatient expenditures as part of inpatient spending. The reason is essentially lack of suitable data to make the disaggregation.

Canada

Data reported for expenditures for care in hospitals and "other institutions". Hospitals include facilities for acute, chronic/extended, convalescent/rehabilitation, and psychiatric care. "Other institutions" include homes for the aged, institutions for the physically handicapped, the mentally retarded and the mentally handicapped, emotionally disturbed children, and treatment centres for substance abuse.

- Includes: expenditures on hospital outpatient services, with the exception of physicians' fees for hospital outpatient services paid directly to the physicians by the provincial medical insurance plans; home care provided by hospitals and expenditures by the Department of National Defence and by Solicitor General Canada (correctional services).

- Federal government expenditures for hospital services represent direct payments to providers of service excluding the tax-abatements and cash contributions to provinces, yet include services provided to special groups (e.g. veterans and members of the armed forces whose care is a federal responsibility).
- Provincial governments' expenditure represents total payments by provincial governments and includes the spending of federal cash contributions and tax-abatement proceeds. Only benefits are included in compensation boards figures. Private hospital expenditures include charges for preferred accommodation, charges for services to uninsured persons; charges for services that are not medically necessary and user charges.

Japan

The total of inpatient care expenditure (from National Medical Expenditure Estimates), nursing home care expenditure (from Annual Report of Medical Operation for the Elderly, the cost for inpatient care only) and home care expenditure (from National Medical Expenditure Estimates). Includes nursing and transportation expenses.

United Kingdom

Includes outpatient and day-patient services for England and Wales. Excludes ambulance services, blood transfusions and other central services.

United States

In the national health accounts, hospital care is defined as covering all services provided by hospitals to patients. Thus, expenditure covers room and board charges, ancillary charges such as operating room fees, the services of resident physicians, inpatient pharmacy charges, charges for hospital-based nursing home care, and any other services billed by the hospital.

- Includes armed forces, prison hospitals and expenditures made on behalf of military personnel.

Hong Kong

Hospital services consist of all expenditures by hospitals, for both inpatient and outpatient services.

Day inpatients (generally referred to as non A&E patients discharged within 24 hours) must be included as part of hospital inpatient services. Geriatric and psychiatric day hospital services will however be excluded, and will be counted as hospital outpatient services.

Outpatient services should be further subdivided into services delivered by general practitioners and those delivered by specialists.

➢ **Recommendations for Sri Lanka NHA**

- This item comprises medical and paramedical services delivered in an episode of curative care.
- An episode of curative care is one in which the principal medical intent is to relieve symptoms of illness or injury, to reduce the severity of an illness or injury or to protect against exacerbation and/or complication of an illness and/or injury, which could threaten life or normal functions.
- Includes not only inpatient (hospital) services but also day cases of curative care and outpatient curative care.
- Includes obstetric services, cure of illness or provision of definitive treatment of injury, surgery and diagnostic or therapeutic procedures.
- Excludes palliative care.

F1.1 Inpatient curative care

Total expenditure on acute hospital care

It is desirable to distinguish hospital expenditures in acute care hospitals from those in other long-stay facilities, as these are different types of services, and may require different funding mechanisms. In addition, it would be also desirable to separate hospital services from those provided in long stay nursing homes and private homes. The two non-acute care categories, which most need separate treatment, are psychiatric care and extended care. As for psychiatric care, while psychiatric care provided in hospitals will be classified under inpatient, that provided in other settings will be classified under a separate category: inpatient long term nursing care for mental health and substance abuse patients (F3.1.2).

The following are the definitions used for expenditure on acute hospital services.

OECD I

Acute care is defined either in terms of an institution (hospital) or a ward (hospital department). Expenditure on acute hospital care is defined as current expenditure on institutions (or wards) accommodating patients whose average length of stay is 30 days or less.

- Excludes hospital outpatient care expenditures.

Canada

In the Canadian health accounts, data are not compiled separately for acute hospital care, since the provincial public accounts, the main data sources used to compile hospital expenditures, do not generally permit a distinction between types of hospital care. An alternative data source, the "Annual Return of Hospitals" provided to Statistics Canada, allows for the identification of expenditures of public short-stay hospitals. However, more than 20% of the beds in the short-stay hospitals are for long-term care and psychiatric care.

- Reported data represent expenditures in all hospitals: short-stay hospitals (general, paediatric, orthopaedic, cardiology, neurology, maternity, cancer, etc.), chronic/extended care hospitals, convalescent/rehabilitation hospitals, and psychiatric care hospitals.

- Reported data include expenditures on hospital outpatient services (except fees paid directly to the physicians by the provincial medical insurance plans for hospital outpatient services) and expenditures on home care provided by hospitals.

United Kingdom

Categorises hospitals into: Acute Care Hospitals, Psychiatric Hospitals, Long-Stay Hospitals. Acute Care hospitals are defined as those hospitals with not more than 40 % of their beds allocated to the excluded departments (i.e. mental illness, child psychiatry, mental handicap, diseases of the chest, units for the younger disabled, geriatric and convalescence).

- Over 97 % of the hospitals defined as "Acute" had an ALOS of less than 30 days.

Total expenditure on psychiatric hospital care

OECD I

Expenditures in hospitals or hospital departments dealing with mental diseases, excluding facilities for the mentally handicapped (whose services are almost exclusively of a specialised education and specialised residential nature).

United Kingdom

UK only reports expenditures with respect to public sector (NHS) spending.

- Finance Division NHS Executive HCHS (Hospital and Community Health Services) Programme Budget - latest year. Gross Expenditure (£m) as sum of categories: Mental Illness Inpatient, Mental Illness Outpatient and Mental Illness Day-Patient.

United States

This total includes Private and State and Local non-community psychiatric hospitals, but excludes federal hospitals.

The OECD 2000 definitions are adopted for Sri Lanka as they were for Hong Kong.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

Hospital inpatient care

- Inpatient curative care comprises medical and paramedical services delivered to inpatients during an episode of curative care for an admitted patient.
- Includes overnight stays. During an overnight stay, inpatients leave the hospital or other institutions the day following the day of admission but usually not less than twelve hours after admission.

Hospital outpatient care

- In OECD 2000 outpatient curative care (HC.1.3) includes both hospital and ambulatory outpatient services with the two being distinguished by episode of care only. However data may not be sufficient to adequately disaggregate hospital outpatient care provided. It is therefore recommended that a separate sub-category for hospital outpatient care be introduced under inpatient curative care.
- Hospital outpatient services are F1.1.2.
- Hospital inpatient services are F1.1.1.

- Defined as any invasive therapies provided, under general or local anaesthesia, to outpatients whose post-surveillance and convalescence requires no overnight stay and no formal admission as an inpatient, would be classified as F1.1.2.
- However, when formal admission as an inpatient is required, it will be classified as a Day case of curative care (F1.2).

Ayurvedic hospital care

- Inpatient and outpatient care at Ayurvedic hospitals will be classified under F1.1.3 and F1.1.4. Equivalent definitions do not exist for this under OECD.

All other types of inpatient curative care, F1.1.9.

- Includes all other hospital inpatient or outpatient expenditures that cannot be classified as above.

F1.2 Day cases of curative care

This category does not exist in OECD I, OECD II and most other national NHA systems in 1998. OECD has proposed this new category in OECD III, and Hong Kong will likely adopt such a category. Recent trends in OECD countries are to encourage the development of day-care services, particularly day surgery, as a means of reducing costs and patient inconvenience. The increase in day services presents difficulties in analysing expenditures according to a strict inpatient/outpatient dichotomy, and also raises new demands for information to track developments in these expenditures. Participants at the Dublin meeting were unanimous on the need to make such a distinction in future, and it is expected that this new categorisation will eventually be adopted by most developed health systems.

The OECD 2000 definitions are adopted for Sri Lanka.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Day care is defined as medical and paramedical services delivered to patients that are formally admitted for diagnosis, treatment or other types of medical care with the intention of discharging the patient on the same day.
- Ambulatory surgery day care is defined as all invasive therapies provided, under general or local anaesthesia, to day care patients whose post-surveillance and convalescence stay requires no overnight stay as an inpatient. Surgical procedures are defined according to national lists of procedures.

F1.3 Ambulatory care

Total expenditure on outpatient care

OECD I

The sum of current outlays on:

a) Physicians' services, including osteopaths
b) Dental services
c) Other professional health services (optometrists, chiropractors, podiatrists, speech therapists, psychologists, dieticians, occupational therapists and nurses, natural therapists, acupuncturists, hypnotherapists, physiotherapists)
d) Services in hospital outpatient departments.

The services of professionals working under salary for hospitals, nursing homes, or some other type of health care establishments are reported with expenditures for the services offered by the establishment. For example, care rendered by hospital residents and interns is defined as hospital care ; services provided by nursing home staff nurses are included with nursing home care. Professional fees paid by hospitals to physicians are counted with hospital care rather than with physician services. Professional salaries of physicians and dentists serving full-time in the armed forces, prisons, etc. are not included.

Canada

The sum of current outlays on the services of physicians, dentists and other health professionals in private practice (chiropractors, optometrists, podiatrists, osteopaths, naturopaths, nurses, denturologists, and physiotherapists).

- Gross expenditures include overhead expenses of private practice where applicable, such as the wages of employees, rents, utilities, car expenses and premiums for malpractice insurance. They exclude wages of government public health workers and of employees of hospitals and other institutions whose earnings are included in the expenses of the entities employing them.
- Included: Salaries of physicians serving in the armed forces and prisons.
- Excluded: expenditures on services supplied by the outpatient department of hospitals, with the exception of fees paid directly to physicians by the provincial medical care insurance plans for hospital outpatient services.

Japan

Figures refer to the sum of expenditures on "outpatient care" and "dental care".

- Includes share of expenditure by hospitals and clinics on medicines dispensed in their outpatient wards.

United Kingdom

Sum of general medical, dental and ophthalmic services net of user charges. Fiscal-year figures are pro-rated to arrive at a calendar year basis. Excludes expenditure on hospital outpatient services.

United States

The closest equivalent categories in the USA NHA are expenditures for professional services. This is defined as including the services of physicians, dentists, and other professionals. Currently, the USA relies on annual surveys of the service sector in order to obtain data on these activities, and therefore the categories into which professional expenditure falls are determined by the 1987 Standard Industrial Classification (SIC).

- For the physicians, the SIC codes are 801 (Offices and clinics of Doctors of Medicine) and 803 (Offices and clinics of Doctors of Osteopathy). In addition, they include the independently billed medical laboratories procedures (part of SIC 8071).
- For the dentists, the SIC code is 802 (Offices and clinics of Dentists).
- For the other professional services, the SIC codes are 804 (Offices and clinics of chiropractors, optometrists, podiatrists, health practitioners not elsewhere qualified such as nurses, acupuncturists, occupational therapists, psychologists, etc.) and 809 (Miscellaneous health and allied services not elsewhere classified such as kidney dialysis centres and speciality outpatient facilities).
- From 1977 onward the professional services expenditures are all based on data from the Census's Services Annual Survey (SAS). Prior to 1977, the data was based on statistics compiled from the Internal Revenue Service. Employment and earnings information, price indices, data from other governmental sources, and trade association information are considered in making the private/public splits for the professional services.

OECD 2000

The latest set OECD proposals disaggregate outpatient services into the following categories with hospital and ambulatory care outpatient services combined.

HC.1.3.1 Basic medical and diagnostic services
HC.1.3.2 Outpatient dental care
HC.1.3.3 All other specialised health care
HC.1.3.4 All other outpatient curative care

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Ambulatory care comprises medical and paramedical services delivered to outpatients during an episode of curative care at settings designed solely for the provision of outpatient care.
- Outpatient health care comprises mainly of services delivered to outpatients by physicians in establishments of the ambulatory health care industry.
- Excludes outpatient departments of hospitals.
- Excludes home visits by general practitioners and primary care physicians.

F1.3.1 Registered medical practitioners

OECD I

Physician services

Expenditure on professional health services provided by general practitioners and specialists. Includes expenditures on services of osteopaths.

- The services of professionals working under salary for hospitals, nursing homes, or some other type of health care establishments are reported with the services offered by the establishment. For example, care rendered by hospital residents and interns is defined as hospital care. Professional fees paid by hospital to physicians are counted with hospital care rather than with physician services.
- Outpatient physician services should be aggregated with general practitioners.
- Excluded: professional salaries of physicians serving full-time in the armed forces, prisons, etc.

Canada

Expenditure on physicians' services

The largest component is professional fees paid by provincial medical care insurance plans. Among other components are salaries and other forms of contractual professional incomes received by physicians, fee payments made by workers' compensation boards, direct expenditures on physicians' services by federal agencies, private-sector payments for services not covered by provincial plans and amounts extra-billed by physicians in the years preceding the prohibition of extra-billing in the mid-eighties.

- Includes the professional remuneration of physicians serving in the armed forces and prisons.
- Excludes the remuneration of physicians who are on payrolls of hospitals, public health agencies, and the like, physicians' fees for hospital outpatient services, with the exception of fees paid directly by the provincial medical care insurance plans.
- Excludes expenditures on services of osteopaths (in 1992, there were only 16 active licensed osteopaths in Canada).

Japan

Expenditure on physicians' services

Figures refer to the expenditure on "outpatient care", which does not include the expenditure on dental care.

United Kingdom

Reports fiscal-year expenditures by NHS on general medical services pro-rated to arrive at a calendar year basis.

Hong Kong

Same as that adopted for Sri Lanka.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Expenditures for curative services and medical products delivered by or under the supervision of medical practitioners registered under the Medical Ordinance, working in both public and private sectors in ambulatory facilities devoted solely to provision of outpatient services.
- This would include salaries, pharmaceutical and other related expenses for services delivered in public outpatient clinics under the supervision of a registered medical practitioner.
- Expenditures to purchase pharmaceuticals at dispensing private doctors would be included in this category. However, as these expenditures are partly for the doctors' time and partly for the cost of drugs dispensed, it would be better to disaggregate the category into two sub-categories.
- Expenditures at private general practitioners are F1.3.1.1.
- Expenditures at private medical specialists are F1.3.1.2.

F1.3.2 Other registered medical care professionals

This category covers medical, nursing or other professional services delivered on an outpatient or ambulatory basis by qualified medical professionals other than registered medical or dental practitioners. No standard definition is available for OECD countries, as this demarcation between registered medical practitioners and other registered or unregistered providers depends on the particular licensing arrangements and traditions in force in a country. Below are the relevant ordinances for each type of other registered medical practitioner as would be relevant in Sri Lanka.

Profession	Related Ordinance
Medical practitioners	Medical Ordinance
Nurses (both enrolled and registered nurses)	Medical Ordinance
Midwives	Medical Ordinance
Dentists	Medical Ordinance
Pharmacists	Medical Ordinance
Physiotherapists	Medical Ordinance
Occupational therapists	Medical Ordinance
Medical laboratory technologists	Medical Ordinance
Ophthalmic auxiliaries	Medical Ordinance
Radiographers	Medical Ordinance

Of these, not all supply services directly to patients by themselves. Those registered under the Medical Professions Ordinance generally only deliver services together with other registered medical providers.

In Sri Lanka, statutory arrangements are provided or are about to be initiated for registration of the above health care professions.

RECOMMENDATIONS FOR SRI LANKA NHA

- Expenditures for services and medical products delivered on an outpatient basis by or under the supervision of health care professionals registered under the Medical Ordinance.
- This excludes services and medical products delivered by these health care professionals, but under the supervision of registered medical or dental practitioners, which are included under F1.3.1 and F.1.3.6.

F1.3.3 Unregistered medical care professionals

F1.3.4 Traditional medicine providers

The category of unregistered medical care professionals exists to cover care provided by all unregistered medical care providers or those not formally recognised. In the context of OECD countries, this category is all-inclusive, and would include practitioners of traditional medicine, and other alternative medical therapies. In Hong Kong's case, traditional Chinese medicine practitioners are an important group of providers in their own right, and one that the government seeks to regulate and register in future. For this reason, it was desirable that Hong Kong distinguished between such TCM providers and others, which are not registered currently. The same is true of Sri Lanka.

- **RECOMMENDATIONS FOR SRI LANKA NHA**

- Expenditures for Ayurvedic medicine and other indigenous or traditional forms of medicine (TM) practitioners (F1.3.4) are defined as all expenditures for services and medical products delivered by Ayurvedic and TM practitioners. In Sri Lanka some TM providers are registered. Hence the need for the following two sub-categories:
- Registered TM providers are F1.3.4.1.
- Unregistered TM providers are F1.3.4.2.
- This category (F1.3.4) excludes expenditures for the purchase of Ayurvedic or TM products from stores.
- Expenditures for unregistered medical care professionals (F1.3.3) include all expenditures for services and medical products delivered by medical providers not registered by government ordinance or statute, and not included in categories F1.3.1 and F1.3.2.

F1.3.5 Dental services

OECD I

Expenditure on dental services consists of expenditures on professional health services provided by dentists, but excluding professionals' salaries of dentists serving full-time in the armed forces, prisons, etc. Expenditures on dental prostheses, which are recorded separately, are excluded.

Canada

Expenditure for dental services includes expenditure on services of dentists, dental assistants, dental hygienists and denturists.

- It includes the cost of dental prostheses, including false teeth and laboratory charges for crowns and other dental appliances. Data submitted by private insurers do not allow for the exclusion of dental prostheses from dental services.

United Kingdom

Public dental expenditure is fiscal-year expenditure on general dental services (net of user charges) pro-rated to arrive at a calendar year basis.

OECD 2000

Outpatient dental care comprises of dental medical services (including dental prosthesis) provided to outpatients by physicians. It included the whole range of services performed usually by medical specialists of dental care in an outpatient setting such as tooth extraction, fitting of dental prosthesis and dental implants

- Dental prostheses are treated in SHA as intermediate products to the production of dental care and thus always included under expenditures on dental care.

Discussion

As Census's Household Expenditure Survey does record expenditures on dental prostheses and dentists' fees separately, it will be relatively easy to produce estimates for these expenditures, which are incurred by households. Since dental prostheses are better treated as a medical good, this category should be reserved for expenditures for the professional services of dentists.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Expenditures on dental services consisting of expenditures on professional health services provided by or under the supervision of dentists.
- Expenditures on dental prostheses, which are recorded separately under distribution of medical goods, are excluded.

F1.3.6 Other specialised health care

Specialised health care, in particular psychological and socio-psychological care is not reported separately by OECD in its annual health data series, and is therefore not currently defined. However it does occur as a new expenditure category in the OECD III, which recognises that this is an important type of health care, and one, which often needs to be financed and provided differently from other types of health care. As this distinctiveness in financing and provision was seen in Hong Kong, this new category was included in Hong Kong's functional classification of health expenditures to include these services provided outside of hospitals. In the case of hospitals, these types of expenditures are already covered separately in the proposed classification of expenditures on hospital services. However, in OECD 2000 psychological and socio-psychological is subsumed under a new category called 'Other specialised health care'.

OECD III

Psychological and socio-psychological care:
This comprises outpatient medical curative care provided by physicians to mental health and substance abuse patients.
It includes special mental treatment and training (performed by medical or paramedical personnel) psychotherapy, psychosocial treatment, pedagogic diagnostics, pedagogic training, orthodidactic diagnostics. To include services the following criteria should be taken into consideration:

a) Services are provided by a trained specialist (doctor, psychologist, nurse) predominantly performing psychological encounters and therapy;
b) Services are provided in a specialised institution (psychiatric hospital; institutions for mentally retarded/handicapped; clinics for drug addicts);
c) Services constitute some kind of "therapy" or crisis intervention where mental aspects predominate.

OECD 2000

All other specialised care:
This item comprises all specialised medical service provided to outpatients by physicians other than medical and diagnostic services and dental care. Included are mental health and substance abuse therapy and outpatient surgery.

OECD 2000 definitions are adopted for Sri Lanka.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Same definitions as OECD 2000.
- Other specialised care comprises all specialised medical service provided to outpatients by physicians other than medical and diagnostic services and dental care. Expenditures on psychological services and psychosocial therapy on all mental/psychiatric curative services provided outside of hospitals are to be included here.

F1.3.9 Other outpatient curative care

OECD 2000 definitions are adopted for Sri Lanka,

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Includes all other miscellaneous medical and paramedical services provided to outpatients by physicians or paramedical practitioners that have not been classified as any of the above.

F1.4 Curative home care

OECD I

Care provided in the home of a patient by a special unit of a conventional hospital or a community service, which substitutes for inpatient care or retards the institutionalisation of a patient.

- Home care should normally be treated as ambulatory care, but many countries' data do not yet allow to disaggregate it from inpatient expenditure.

United Kingdom

Home care is not included in their definition of inpatient care.

Hong Kong

Care provided in the home of a patient by a special unit of a conventional hospital or a community service, which substitutes for inpatient care or retards the institutionalisation of a patient.
Domiciliary services, which are not for the purpose of preventing inpatient admission of home-based patients, will be excluded, and these will be covered under ambulatory service (F1.2).

OECD 2000

OECD 2000 deviates from OECD I in that all care provided at home is included in this category. The same definition is adopted for Sri Lanka.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Defined as all medical and paramedical curative services provided to patients at home.
- Includes highly specialised services such as home dialysis. In many cases home care is provided in combination with social services such as homemaking or meals on wheels which should, however, be recorded separately as they are not part of expenditure on health.
- Includes home visits to provide curative care, including diagnostic procedures by general practitioners and specialised services such as home dialysis, obstetric services and telematic services.

F2 Services of rehabilitative care

F3 Services of long-term nursing care

Previous OECD approaches and NHA systems of individual countries combined rehabilitative care and long terms nursing care under 'Extended care'. These definitions are given below followed by the OECD 2000 classification, which makes the distinction between both types of care.

Total expenditures on extended care

OECD I

Nursing home care

Expenditure on establishments receiving elderly patients or patients requiring long term chronic care.

Other long term care

Rehabilitation, post-clinical care, and specialised chronic facilities in which medical and paramedical services constitute a substantial part of total outlays.

Canada

Expenditures for care in homes for the aged, institutions for physically handicapped, mentally retarded, mentally handicapped, emotionally disturbed children, and treatment centres for substance abuse.

Japan

Recuperation cost of nursing home care (cost for inpatient care only).

United Kingdom

Only NHS expenditures are reported, i.e., only care with a significant health element is included.

OECD 2000

Services of rehabilitative care

Services of rehabilitative care comprise services where the emphasis lies on improving the functional levels of the persons served and where the functional limitations are either due to a recent event of illness or injury or of a recurrent nature (regression or progression). Included are services delivered to persons where the onset of disease or impairment to be treated occurred further in the past or has not been subject to prior rehabilitation services.

An *episode of rehabilitative care* corresponds to *sub-acute care* as defined by the *US Joint Commission on Accreditation of Healthcare Organizations* (JCAHO):

Sub-acute care

Sub-acute care is treatment rendered immediately after, or instead of, acute hospitalisation to treat one or more specific active complex medical conditions or to administer one or more specific active complex medical treatments, in the context of a person's underlying long-term conditions and overall situation.

Services of long-term nursing care

Services of long-term care comprise of ongoing health and nursing care given to patients who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence and activities of daily living. Long-term care is typically a mix of medical (including nursing care) and social services.

F2.1 Inpatient rehabilitative care

This item comprises medical and paramedical services delivered to inpatients during an episode of
rehabilitative care for an admitted patient.

F2.2 Day-cases of rehabilitative care

This item comprises medical and paramedical services delivered to day-care patients during an
episode of rehabilitative care for a day-care patient.

F2.3 Outpatient rehabilitative care

This item comprises medical and paramedical services delivered during an episode of rehabilitative
care to outpatients.

F2.4 Services of rehabilitative home care

This item comprises medical and paramedical services delivered to patients at home during an
episode of rehabilitative care.

F2.9 Other services of rehabilitative care

Includes all services of rehabilitative care that are not categorised as above.

F3.1 Inpatient long-term nursing care

This item comprises of ongoing medical and paramedical nursing health care provided to inpatients that need long-term care. Care is provided in institutions or community facilities.
Includes long-term health care for dependent and elderly patients such as respite care or care provided in homes for the aged by specially trained persons.
Includes hospice or palliative care (medical, paramedical and nursing care services to the terminally ill, including counselling for their families). Hospice care is usually provided in nursing homes or similar specialised institutions.
Includes inpatient long term nursing care for mental health and substance abuse patients where the need for care is due to chronic or recurrent psychiatric conditions.

F3.2 Day cases of long-term nursing care

This item comprises nursing care delivered to day cases of patients who need assistance on a continuing basis.
Includes day cases of long-term nursing care for dependent elderly patients.

F3.3 Long-term nursing care: home care

Ongoing paramedical care provided at home to patients who need assistance on a continuing basis. This type of home care can include social services such as homemaking and meals on wheels that should, however, be recorded separately as they are part of health expenditures.
Includes long-term home care for dependent elderly patients.

F3.9 Other long-term nursing care

Includes all other forms of long-term care that have not been categorised as any of the above.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

OECD 2000 definitions should be adopted.

F4 Ancillary services to medical care

This level 1 category was introduced in OECD III and maintained in OECD 2000. Previously the components of this category were classified under ambulatory care in OECD and other NHA systems including HK. Sri Lanka adopts OECD 2000 and includes this category.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- This item comprises a variety of services, mainly performed by paramedical or medical technical personnel with or without the direct supervision of a medical doctor, such as laboratory, diagnosis imaging and patient transport.

F4.1 Laboratory services

OECD I

Expenditures on laboratory tests and services provided by commercial clinical laboratories, public laboratories, and hospital laboratories serving outpatients.

Canada

The data include payments by the provincial medical care plans to commercial laboratories and expenditures of provincial public health laboratories, as well as direct costs of hospital laboratories (for tests pertaining to both inpatients and outpatients). Direct costs are the costs charged directly to the laboratory department in the hospital accounting system (remuneration of physicians and of technical & support staff, the cost of laboratory supplies).

- Excludes: laboratory costs of the federal government, except for the estimated laboratory costs of federal hospitals.

OECD 2000

OECD II, III and OECD 2000 present a detailed sub-classification of expenditures on laboratory services, based on an international clinical classification of laboratory procedures. However, since it will be difficult for many countries to compile expenditures disaggregated in this fashion, and since the existence of multiple-channel analysers makes it difficult to allocate costs by specific type of test, it is not recommended that the OECD I be followed at this stage. Moreover, there seems little compelling policy reason why these expenditures need to be disaggregated.

- **RECOMMENDATIONS FOR SRI LANKA NHA**
- Expenditures on laboratory tests and services provided by commercial clinical laboratories and public laboratories, but excluding laboratories based in and owned by hospitals, typically for the purpose of serving outpatients being treated by the same hospitals and other clients.
- It covers the following services: urine, physical and chemical tests, blood chemistry, automated blood chemistry profiles, haematology, immunology, faeces, microbiological cultures, microscopic examination, specialised cytology and tissue pathology, all other miscellaneous laboratory tests.

F4.2 X-rays and imaging diagnostic procedures

OECD I

Expenditure on diagnostic radiology services/procedures provided by private physicians' office, commercial facilities, public facilities, and hospitals.

Canada

The data include payments by the provincial medical care plans for diagnostic radiology services provided in private physicians' offices and commercial radiology facilities, as well as direct costs of diagnostic radiology services in hospitals (for both inpatients and outpatients). Direct costs are the costs charged directly to the hospital diagnostic radiology unit in the hospital accounting system.

- Excludes payments for ultrasonography provided outside the hospital radiology units.

OECD 2000

OECD II, III and OECD 2000 present a detailed sub-classification of expenditures on diagnostic imaging services, based on an international clinical classification of imaging for diagnostic purposes. As with laboratory services, it will be difficult for many countries to compile expenditures disaggregated in this. It is not recommended that the OECD 2000 be followed at this stage. Moreover, there seems little compelling policy reason why these expenditures need to be disaggregated.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Expenditures on diagnostic radiology services/procedures provided by private physicians' offices, commercial facilities and private hospitals to outpatients.

F4.3 Patient transport and emergency rescue

OECD I

Expenditure for transportation in a specially equipped surface vehicle or by a designated air ambulance to and from facilities for the purposes of receiving medical and surgical care. It may also include transportation in conventional vehicles, such as taxi, when the latter is authorised and reimbursed to the patient (as it is often the case for patients undergoing renal dialysis or chemotherapy).

- OECD notes that patient transport is often recorded under inpatient care.

Canada

The data represent public expenditures for transportation in a specially equipped surface vehicle or by a designated air ambulance to or from facilities for the purposes of receiving health care. Ambulance expenditures reported in provincial public accounts as hospital expenditures are subtracted from the hospital category and added to the ambulance category. No data on private sector expenditures are available.

United States

Not available.

OECD 2000

This definition is recommended for Sri Lanka below.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Patient transport and emergency rescue is defined as transportation in a specially equipped surface vehicle or in a designated air ambulance to and from facilities for the purposes of receiving medical and surgical care. It also includes transportation in conventional vehicles, such as taxi, when the latter is authorised and the costs reimbursed to the patient (as it is often the case for patients undergoing renal dialysis or chemotherapy).
- Includes emergency transport services of public fire rescue departments or defence that operate on a regular basis for civilian emergency services (not only for catastrophe medicine).

F4.9 Other ancillary services

Includes all other miscellaneous ancillary services to health care.

F5 Distribution of medical goods

Sri Lanka NHA should adopt the definition given in OECD 2000.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Expenditures on medicaments, prostheses, medical appliances and equipment and other health related products provided to individuals, either with or without a prescription, usually from dispensing chemists, pharmacists or medical equipment suppliers intended for consumption or use by a single individual or household outside a health facility or institution.
- Includes services of public pharmacies, opticians, sanitary shops, and other specialised or non-specialised retail traders.
- Excluded are pharmaceuticals, prostheses and other medical and health related goods supplied to inpatients and day care patients or products delivered to outpatients as part of treatment provided in facilities of ambulatory care.
- Hiring of therapeutic equipment is included. Hiring and repair of therapeutic appliances and equipment is reported under the corresponding categories of goods. Also included is the service of dispensing medical goods, fitting of prosthesis and services like eye tests, in case these services are performed by specially trained retailed traders and not by medical professions.
- Excluded are the following items: protective goggles, belts and supports for sport; veterinary products; sunglasses not fitted with corrective lenses; medicinal soaps.

F5.1 Pharmaceuticals

OECD I

The consumption of pharmaceutical products includes prescriptions and self-medication, often referred to as over-the-counter (OTC) products. Vitamins are excluded as they are nutrients. The series includes the pharmacists' remuneration when the latter is separate from the price of medicines. Pharmaceuticals consumed in hospitals are excluded. The expenditure includes VAT and sales taxes where applicable.

- Excludes the amount of consumption in hospitals, which is included under inpatient care.
- Pharmaceutical expenditure is disaggregated into: (i) prescribed, and (ii) over the counter medicines.

Expenditure on prescription medicines

Total pharmaceutical expenditure with prescription: expenditure on medicines, exclusively sold to customers with a medical prescription, irrespective of whether it is covered by public or private funding. Includes the cost-sharing for these pharmaceuticals.

Expenditure on OTC products

Defined as private households' pharmaceutical expenditure without prescription: expenditure on medicines that do not need a prescription, often called Over-The-Counter (OTC).

Canada

The data represent retail expenditures on prescribed and non-prescribed drugs and personal health supplies. Some products classified as non-prescribed drugs or devices under the Canadian Food and Drugs Act are considered here to be personal health supplies. The list of personal health supplies is as follows:

a) Oral hygiene: dentifrice, dental floss, toothbrushes, oral antiseptics, denture cleansers, and denture antiseptics. Infant care: cotton swabs.
b) Home medical care/diagnostic: diabetic test strips, pregnancy test kits, selected insoles, hot/cold kits/compresses, athletic/medical support braces, elastic bandages, incontinence products, condoms, cover & tape products, fever thermometers, adhesive bandages, diabetic syringes.
c) Other products: contact lens preparations, eye drops & lotions, medicated shampoos, antiperspirants, feminine hygiene, sanitary pads, tampons, artificial sweeteners (sugar substitutes).

Expenditure on prescribed medicine

The data represent retail expenditures on non-prescribed drugs as compiled from information provided by A.C. Nielson (Canada). The figures include the federal Goods and Services Tax (GST) and provincial sales taxes. Non-prescribed drugs include the following categories of products:

a) CougIVCold/Flu: cough syrups, cold tablets/cap/powder, nasal preparations, throat remedies.
b) Infant Care: hypo-allergic feeding products.
c) Dietary Aids/Nutritional Supplements: traditional diet products, medical nutritional supplements.
d) External OTC: personal lubricants, tropical wound care, analgesic rubs, pediculicides, athletes' foot products.
e) Internal OTC: vitamins, headache remedies, diarrhoea remedies, laxatives, sleeping aids, stomach remedies, pre-menstrual products.

United Kingdom

Defined as public expenditure on pharmaceutical services net of user charges and pro-rated to arrive at calendar year basis.

- Excludes pharmaceutical services in hospitals.

United States

Drugs and other non-durable products - this class of expenditure is limited to spending for products purchased from retail outlets. The value of drugs and other products provided to patients by hospitals (on an inpatient or outpatient basis) and nursing homes, and by health care practitioners as part of a provider contact, are implicit in estimates of spending for those provider services.

Prescription drugs include retail sales of human-use dosage-form drugs, biological and diagnosis products. These transactions can occur in community or HMO pharmacies, grocery-store pharmacies, mail order establishments, etc. Using a methodology originally developed by the Actuarial Research Corporation (Trapnell and Genuardi, 1987), manufacturers' domestic drug sales were augmented by wholesale and retail mark-ups and by inventory changes to arrive at final consumption by various classes of end-users (hospitals, pharmacies, etc.). Those classes of users that are included in the NHA scope were aggregated to the NHA figure. (A more recent methodology for estimating pharmaceutical expenditures has been developed by HCFA, and details of this are given in a journal article circulated to DHA team members).

- Non-prescription drugs and medical sundries comprise a long list of products. The estimate is based on private consumption expenditures (PCE) for non-durable goods (a part of the GNP), and includes spending for such items as rubber medical sundries, heating pads, bandages, and non-prescribed drugs and analgesics.

OECD 2000

Total expenditure on pharmaceuticals is defined as all expenditures for medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals and oral contraceptives. Vitamins might be taken in many (or most) instances without a medical indication or prescription beyond the control of doctors and pharmacies. Vitamins are complex chemical substances, which can in some cases -- like other drugs -- be harmful if abused. The common practice to sell and consume vitamins like normal food products, thus not recording them as outlays, is debatable. Included is the pharmacist's remuneration when the latter is separate from the price of medicines. The expenditure includes VAT and sales taxes where applicable.

Total expenditure on prescribed medicine

Prescribed Medicines are medicines, exclusively sold to customers with a medical prescription, irrespective of whether it is covered by public or private funding and include branded and generic products. In health accounting, this includes the cost-sharing for these pharmaceuticals.

Total expenditure on OTC medicines

Over-the-counter medicines (OTC medicines) are private households pharmaceutical expenditures on non-prescription medicines. Non-prescription medicines are often called over-the-counter (OTC) perhaps abusively as they may be included on physician prescriptions.

Total expenditures on other pharmaceutical and medical durables

Includes a wide range of medical non-durables such as bandages, elastic stockings, incontinence articles, condoms and other mechanical contraceptive devices.

Discussion

Sri Lanka's pharmaceutical distribution system differs significantly from most OECD countries in three respects:

(i) Significant consumption of TM products, bought both on advice of TM practitioners, as well as directly by households for their reputed general health benefits.

(ii) Dispensing of medicines by private doctors, which accounts for a significant share of pharmaceutical sales.
(iii) The relaxed state of legal enforcement of the requirement to have a prescription to purchase prescription medicines, which means that most medicines (with the significant exception of narcotics) can in fact be bought without a prescription from pharmacies, despite the existence of regulations to prevent this.

OECD I definition of pharmaceutical expenditures does not include vitamins as these are considered food products. However, OECD II/III points out the dangers in classifying vitamins as nutrients and includes them in the pharmaceutical category. The reason given is that consumption of these products might be dangerous if inappropriately consumed. This has some bearing for the classification of the consumption of foods that have medicinal values (TM). However, the OECD definitions have largely been developed in the context of countries in which traditional medicine products are not widely consumed, and therefore cannot be regarded as definitive for all health care systems.

The primary objective of NHA is to estimate total expenditures for the purpose of improving or maintaining health in a country. From this perspective, any expenditures, which are primarily for this purpose must be included, irrespective of the nature of the product or service, purchased. In the case of TM products, which are consumed partly as foods, this is relevant. Moreover, in Sri Lanka's case, the primary data source for household expenditures for this type of product will be Census's Household Expenditure Survey. This survey does not contain information on the reasons why certain products were consumed, but only the expenditures on each product or service. For this reason it will be better to base the definition of pharmaceutical and medical goods for Sri Lanka's NHA on the classification of expenditures existing in the HES, which is based primarily on product type.

The distinction between prescription and OTC medicines is not practical in Sri Lanka's case as there is no strict enforcement of prescription regulations. For this reason, it would be better not to make such a distinction. However, if data are available from industry sources it may be possible to consider some alternative categorisation, which would distinguish between medicines normally sold only on the basis of medical advice and those, which are generally purchased without medical advice.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Total expenditures on pharmaceuticals is defined as all expenditures for medicinal preparations, branded and generic medicines, drugs, patent medicines, serums and vaccines, vitamins and minerals, oral contraceptives, and TM products and foods. SLNHA will have three subcategories.
- Prescribed medicines, F5.1.1.
- Over the counter medicines, F5.1.2.
- Other pharmaceutical and medical durables, F5.1.3.
- An exact classification corresponding to specific product groups listed in the Census Household Expenditure Survey should be defined for operational reasons.

F5.2 Therapeutic appliances and medical equipment

OECD I

This is defined as including a wide range of medical goods other than pharmaceuticals (e.g. optical equipment, hearing devices, wheelchairs, thermometers, etc.), excluding appliances supplied in hospitals. Excludes medical prostheses and dental prostheses. The expenditures should include VAT and sales taxes where applicable.

Expenditure on optical equipment, lenses

No definition provided.

Expenditure on dental prostheses

Expenditure of dental prostheses supplied outside hospitals. Those supplied in hospitals are included under inpatient care. Includes professional fees.

Expenditure on orthopaedic equipment

No definition provided.

Canada

Reports expenditures on eyeglasses (including glasses, parts, and contact lenses), hearing aids, and other appliances and prostheses such as wheelchairs, trusses, walkers and artificial limbs.

- Excludes expenditures for dental prostheses, which are included with DENTISTS, and expenditures by hospitals for appliances and prostheses, which are included with HOSPITALS.
- Includes private expenditures for the professional services of optometrists and dispensing opticians. Optometric examinations are not reported separately from eyeglasses and contact lenses in primary data sources for private expenditures on health care.

Expenditure on dental prostheses

Expenditure of dental prostheses supplied outside hospitals. Those supplied in hospitals are included under inpatient care. Includes professional fees.

United Kingdom

Reports expenditures only for spectacle frames and lenses.

United States

Reports expenditures for such items as eyeglasses, hearing aids, surgical appliances and supplies, bulk and cylinder oxygen and equipment rental. As for non-durables, estimates of durable goods expenditures are based upon personal consumption expenditures. To accommodate the National Health Accounts (NHA) definitions, adjustments are made to the Private Consumption Expenditure (PCE) categories for "ophthalmic and orthopaedic appliances" and "other professional services" for certain GNP benchmark years.

OECD 2000

Therapeutic appliances and medical equipment

Defines this category as covering a wide range of medical goods including the distribution for final use of all other medical goods besides pharmaceuticals.

Glasses and other vision aids

Corrective eyeglasses and contact lenses with corresponding cleansing fluid. Includes fitting by opticians.

Orthopaedic appliances and other prosthetics

Orthopaedic appliances and other prosthetics; orthopaedic shoes, artificial limbs and other prosthetic devices, orthopaedic braces and supports, surgical belts, trusses and supports, neck braces.

Hearing aids

All kinds of removable hearing aids (including cleaning, adjustment and batteries).

Medico-technical devices

Wheelchairs, powered and unpowered and invalid carriages.

Other medical products n.e.c.

This item comprises of a wide variety of miscellaneous durables and medical products not classified elsewhere, such as blood pressure instruments. Includes specialised telematic equipment for emergency calls from the patient's home and/or for the remote monitoring of medical parameters. Excludes automatic staircase lifts and other similar devices for adapting the housing situation of patients with transitory or chronic impairments.

Discussion

The detailed classification of expenditures in this category by OECD II largely corresponds to previously agreed UN classifications of the purposes of private consumption by households. This therefore also closely corresponds or can be mapped directly to the product groupings used by Census in its Household Expenditure Survey, or presumably will be relevant to any new coding categories developed for HES. For this reason, it is desirable to closely follow the OECD 2000 in which there are no changes.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Expenditures on dental prostheses, F5.2.1, are defined as including dentures, but not the fitting performed by dentists.
- Expenditure on glasses and other vision aids F5.2.2 are defined as including corrective eye-glasses and contact lenses with corresponding cleansing fluid, and fitting by opticians.
- Expenditures on orthopaedic appliances and other prostheses, F5.2.3 are defined as including orthopaedic appliances and other prosthetics, orthopaedic shoes, artificial limbs and other prosthetic devices, orthopaedic braces and supports, surgical belts, trusses and supports, neck braces.
- Expenditures on medico-technical devices, F5.2.4 are defined as including wheelchairs, powered and unpowered and invalid carriages.

- Expenditures on other medical products n.e.c. (not expressly classified), F5.2.9, are defined as a wide variety of miscellaneous durables and medical products not classified elsewhere, such as blood pressure instruments. Includes specialised telematic equipment for emergency calls from the patient's home and/or for the remote monitoring of medical parameters. Excludes automatic staircase lifts and other similar devices for adapting the housing situation of patients with transitory or chronic impairments.
- An exact classification corresponding to specific product groups listed in the Census Household Expenditure Survey should be defined for operational reasons for each of the above.

F5.9 Other medical goods dispensed to outpatients

All medical goods dispensed to outpatients that cannot be categorised as either pharmaceutical goods or therapeutic goods.

F6 Prevention and public health services

This category consists of a variety of different types of collective health services, many of which are not expressly grouped in this overall category in most NHAs. The following listing of definitions for each of the subcategories within collective health services is those in use by national agencies and by OECD currently. Following these, the definitions for the same sub-categories are given for OECD 2000.

Health promotion and disease prevention

OECD I

Expenditure on services designed to enhance the health status of the population as distinct from the curative services which repair health dysfunction, such as vaccination, campaigns when not included in maternity and child health care, programmes to eradicate unhealthy life styles.

United States

Not available.

Maternal and child health care

OECD I

Refers to outlays on programmes providing counselling and antenatal services to expectant mothers as well as counselling, vaccination and paediatric care to infants. Family planning, which is often a joint product with social and medical components, would be included when the medical components dominate.

Screening and community health

OECD I

Refers to outlays on programmes mainly collectively supplied and otherwise not listed (such as school health services or maternal and child health services), e.g. vaccination programmes, health education campaigns, etc., whose purposed intent is the avoidance of risks incurred such as contamination and infections and the improvement of the health status of nations, such as campaigns in favour of healthier life styles, safe sex etc.

Canada

Refers to outlays on programmes mainly collectively supplied and otherwise not listed (such as school health services or maternal and child health services), e.g. vaccination programmes, health education campaigns, etc., whose purposed intent is the avoidance of risks incurred such as contamination and infections and the improvement of the health status of nations, such as campaigns in favour of healthier life styles, safe sex etc

United States

Not available.

Military, school and prison health services

OECD I

The United Nations Standard Accounting System (SNA) treats medical services associated with schooling, periods spent in the armed forces, and prisons, as auxiliary services of education, defence, and law and order. The European System of integrated economic Accounts (ESA), applied by the European Community, has adopted in this respect similar rules. For consistency purposes, these "subsidiary" services should be consolidated with medical consumption in the OECD series.

- Expenditures on care to Veterans are typically not recorded under Armed Forces Health Services, but rather under Inpatient Care and Ambulatory Care.
- Professional salaries of physicians and dentists serving in the armed forces, prisons, etc. are included here (they are not included under Ambulatory Care).

Canada

Armed Forces: reports expenditures by the Department of National Defence on health services to its members and their families.

Japan

Expenditure on Prison Health Services as reported by Ministry of Finance.

United Kingdom

Does not report data after 1988, as they are not available.

Expenditure on food hygiene, standards monitoring

OECD I

Defined under "other health expenditure", as monitoring cost of veterinary and other inspectorates designed to implement environmental and hygiene standards.

United States

Not available.

Expenditure on occupational health care

OECD I

Defined under "other health expenditure", and includes expenditures incurred by employers on or off-business premises for the surveillance of employee health and therapeutic care.

Canada

Expenditures to promote and enhance health and safety at the workplace and to provide emergency care in the event of injury at work.

OECD 2000

Prevention and public health services

Prevention and public health services include services designed to enhance the health status of the population as distinct from the curative services, which repair health dysfunction. Typical services are vaccination campaigns and programmes. With the shift of emphasis from infectious disease to chronic conditions and the specific demand of ageing populations, the latter play an increasingly important role.

Note on health promotion and disease prevention

Health promotion and disease prevention presents a difficult boundary issue for which no international classification exists. The boundaries drawn in national health accounts are usually linked to the identification of specific programmes of screening and health check-ups with a legally or administratively defined, limited coverage reimbursed separately under public or private health schemes. Examples are screening of blood pressure, diabetes, certain forms of cancer, dental health, and "health check-ups".

Prevention is in many instances a reason for encounter and not a separate procedure. This means that the same procedure (for example many diagnostic procedures) can be either performed as preventive measures for screening purposes or as diagnostic procedure in the case of an acute health problem. The criterion for including services under this item, is whether prevention is provided as social programme (public or private, including occupational health) or is requested on the patient's own initiative. The range of these activities includes essentially the following items.

Maternal and child health; family planning and counselling

Maternal and child health covers a wide range of medical services: genetic counselling and prevention of specific congenital abnormalities, prenatal and postnatal medical attention, well-baby health care, pre-school and school child health.

Prevention of communicable diseases

This item *includes*: Compulsory reporting/notification of certain communicable diseases and epidemiological enquiry of communicable disease; efforts to trace possible contacts and origin of disease; prevention of tuberculosis and tuberculosis control (including systematic screening of high risk groups); immunisation/vaccination programmes (compulsory and voluntary); vaccination under maternity and child health care. *Excludes*: vaccination for occupational health; vaccination for travel and tourism on the patients' own initiative.

Prevention of other non-communicable diseases

This item comprises public health services of health education, disease prevention, and the promotion of healthy living conditions and lifestyles such as services provided by centres for disease surveillance and control; and programmes for the avoidance of risks incurred and the improvement of the health status of nations even when not specifically directed towards communicable diseases.

Includes: interventions against smoking, alcohol and substance abuse such as anti-smoking campaigns; activities of community workers; services provided by self-help groups; general health education and health information of the public; health education campaigns; campaigns in favour of healthier life-styles, safe sex etc.; information exchanges: e.g. alcoholism, drug addiction.

Excludes: public health environmental surveillance and public information on environmental conditions.

Occupational health care

Occupational health care comprises a wide variety of health services such as surveillance of employee health (routine medical check-ups) and therapeutic care (including emergency

medical services) on or off-business premises (including government and non-profit institutions serving households). This excludes, however, remuneration-in-kind of health services and goods, which constitute household actual final consumption rather than intermediate consumption of business.

All other miscellaneous public health services

This item comprises a variety of miscellaneous public health services such as operation and administration of blood and organ banks, and the preparation and dissemination of information on public health matters not classified elsewhere.

Includes: public health environmental surveillance and public information on environmental conditions.

Discussion

Distinction between personal and collective health services may often be blurred as in the case of MCH and family planning services. OECD 2000 presents a more comprehensive and clear categorisation of these collective health services than definitions used previously in OECD. While OECD 2000 was used as the basis for Sri Lanka NHA's public health classifications, the definitions were revised and further disaggregated in consultation with a working group formed specifically for this purpose.

One of the key differences between OECD II and III are the transfer of food hygiene and drinking water surveillance from public health services (Functions of medical care) into a separate category under Health related functions. Public health functions included in the ICHE-HA do not cover all fields of public health in the broadest sense of a cross-functional common concern for health matters in all political and public actions. Some of these broadly defined public health functions such as emergency plans, and environmental protection, are not part of expenditure on health. The most important of these public health functions are classified under various Health related functions in the ICHE-HA.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

F6: PREVENTIVE AND PUBLIC HEALTH SERVICES

This category includes expenditures on services specifically intended to enhance the health status of the population or specific population subgroups, as distinct from the personal medical services, which repair health dysfunction. Many of these expenditures on these services may be provided in an integrated fashion by general medical institutions as part of their normal activities. These expenditures are not accounted for here, although SLNHA does provide disaggregations of the relevant expenditures, where feasible. Typical examples are vaccination services, campaigns and special reproductive health programmes.

Note that many of these items may be grouped to form categories relevant to other classifications. In particular, these can be identified or defined:

1. Safe motherhood services, as defined by some authorities, consist of maternal health (F6.1.1).
2. Maternal and child health, also termed family health, consists of maternal health, well-baby, infant and child care, and family planning services (F6.1.1 – F6.1.4).

3. Reproductive health services consist of maternal health and family planning health services (F6.1.1, F6.1.3 - 4).
4. Childbirth services are accounted for separately under personal curative services (F1).

F6.1: Family Health and Reproductive Health Services

This covers a wide range of services, which comprise significant elements in what is also known as reproductive health care, maternal and child health services, and family health.

F6.1.1: Maternal health
Maternal health services include all special programmes designed to provide antenatal and postnatal care to mothers, including provision of dietary supplements for malnourished pregnant and lactating mothers, and micronutrients such as iron and vitamins (Thriposhaya).

F6.1.2: Infant and childcare
This covers special services intended to promote and improve the health and development of infants and pre-school children. It includes well-baby health care, growth monitoring and growth promotion of infants and pre-school children, and provision of dietary supplements such as Thriposhaya and micronutrients.

F6.1.3: Family planning services
This consists of programmes specifically intended to provide delivery of family planning methods and counselling, and health education in support of such services.

F6.1.5: Other reproductive health services
This consists of other categories of reproductive health services not classified above and intended to enable both women and men to safely exercise their reproductive health functions. They include services dealing with sub-fertility, sexual behaviour, adolescent health, treatment and prevention of reproductive tract infections and conditions, including cancers of the reproductive system, menopausal problems, and services genetic counselling and prevention of specific congenital abnormalities. Programmes dealing primarily with sexually transmitted diseases are excluded, and are classified elsewhere.

F6.2: School health services

This consists of special programmes and services intended to promote and maintain the health of children at school. These services are generally delivered within school premises.

F6.3: Prevention and management of communicable disease

This category includes: compulsory reporting/notification of certain communicable diseases and epidemiological enquiry of communicable disease; efforts to trace possible contacts and origin of disease; prevention and management of tuberculosis and leprosy, and tuberculosis and leprosy control (including systematic screening of high risk groups); immunisation/vaccination programmes (compulsory and voluntary); vaccination under maternity and child health care. Excludes: vaccination for occupational health; vaccination for travel and tourism on the patients' own initiative; and environmental health services intended to maintain food safety and hygiene.

F6.3.1: Immunisation

This includes special programmes to provide immunisation/vaccination services, including immunisations provided as part of routine maternal and child health care, and rubella immunisation of girls and women. Where immunisation services are delivered using existing infrastructure of other services, such as the MCH services, only the marginal costs represented are accounted here.

F6.3.2: STDs
This includes special programmes to control, treat and manage sexually transmitted diseases, including HIV/AIDS.

F6.3.9: Others n.e.c.
This includes services not explicitly classified above.

F6.4: Prevention and management of non-communicable disease

This category comprises public health services of health education, disease prevention, and the promotion of healthy living conditions and lifestyles, directed towards non-communicable diseases and conditions. It includes services, such as those provided by centres for disease surveillance and control, programmes for the avoidance of risks incurred through injurious behaviours, and programmes for the general improvement of the health status of the population.

Includes: interventions against smoking, alcohol and substance abuse such as anti-smoking campaigns; activities of community workers; services provided by self-help groups; general health education and health information of the public; health education campaigns; and campaigns in favour of healthier life-styles; and information exchanges, e.g., alcoholism, drug addiction.

Excludes: public health environmental surveillance and public information on environmental conditions.

F6.5: Occupational health care

Occupational health care consists of health services provided to individuals or population groups in their capacity as employees and workers. They comprise a wide variety of health services such as surveillance of employee health (routine medical check-ups) and therapeutic care (including emergency medical services), provided on or off-business premises. No distinction is made as to the sector of employment, including government and non-profit institutions serving households. This excludes, however, remuneration-in-kind of health services and goods, which constitute household actual final consumption rather than intermediate consumption of business.

F6.9: All other public health services n.e.c.

This item comprises a variety of miscellaneous public health services such as operation and administration of blood and organ banks, and the preparation and dissemination of information on public health matters not classified elsewhere.

Includes: public health environmental surveillance and public information on environmental conditions.

F7 Health programme administration and health insurance

OECD I

Expenditure by private insurers and by central and local authorities including social security in the planning, management, regulation, collection of funds and handling of claims of the delivery system. The expenditure by private health insurance companies is usually the difference between revenue from premiums and claims' benefit. Therefore, this estimate may include a "technical reserves and profits" element.

Canada

Only the administrative cost of providing insured health services by either governments or private health insurance firms is included. General administrative expenses of government health departments, other than for insured health services, are classified as PUBLIC HEALTH and are not included here. For private health insurance firms, prepayment administration is usually the difference between premiums received and claims paid. For insurance plans offering administrative services only, the amount reported is the payment for administrative services.

United Kingdom

Financial-year data from central administration (revenue expenditure), regional health authorities, district health authorities and Family Practitioner Committees. HQ administration (including Regional and District Health Authorities) accounts for approximately 4 % of the total expenditure on the hospital and community health services. Reported data do not include the cost of administration at unit level.

United States

This category of expenditure is broken into three parts. The largest part comprises the difference between earned premiums and incurred benefits of private health insurers. This difference, which accounts for administrative costs, net additions to reserves, rate credits and dividends, premium taxes, and profits or losses, is estimated separately for the various types of insurers. The next largest part comprises the administrative expenses of government programmes. The smallest part comprises the expenses associated with health activities of philanthropic organisations.

OECD 2000

Health programme administration and health insurance are activities of private insurers and central and local authorities, and social security. Included is the planning, management, regulation, collection of funds and handling of claims of the delivery system. The expenditure by private health insurance companies is usually the difference between revenue from premiums and claims' benefit. Therefore, this estimate may include a

"technical reserves and profits" element. This item excludes public security, law and order activities, fire service activities and defence activities.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

General government administration of health programme and policies F7.1

- This item comprises a variety of activities of overall government administration of health that cannot be assigned to HC.1 to HC.6; activities such as formulation, administration, co-ordination and monitoring of overall health policies, plans, programmes and budgets, preparation and enforcement of legislation and standards for the provision of health services.
- Includes the licensing of medical establishments and medical and Para-medical personnel.
- Includes the production and dissemination of general information, technical documentation and statistics on health (other than those classified under HC.6, Prevention and public health).

Health programme administration and health insurance (F7.2)

- This item comprises the administration and operation of all other private health and accident insurance including private for-profit insurance schemes.
- The expenditure by private health insurance companies is the difference between revenue from premiums and claims' benefit, which may include a "technical reserves and profits" element.

Other health programme administration and health insurance (F7.9)

All health programme and insurance administration expenditures classified as neither F7.2 nor as F7.3.

Health related functions

FR.1 Investment in medical facilities

OECD I

Total investment in medical facilities

The sum of capital outlays earmarked for:
a) Hospitals, clinics, health centres and related buildings
b) Medical equipment, including first-aid stations.

The exclusion of capital expenditure, as is done in many countries' presentation of health expenditures, underreports the level of total expenditures, but if the latter is calculated as the sum of subfunction expenditures along with depreciation allowances, there could be a double counting. A full-cost method of accounting for capital expenditure, i.e., capital expenditures are counted in full at the time the expenditures are incurred, is recommended.

Canada

Capital expenditures pertain to hospitals and nursing homes and are counted in full at the time the expenditures are made (full-cost accounting). They include the cost of procuring, constructing and installing new facilities and machinery and equipment, whether for replacement of worn or obsolete assets, or as additions to existing assets.

- Includes all capitalised costs such as feasibility studies, architectural, legal, installation and engineering fees, as well as capitalised interest charges on loans with which capital projects are financed.
- Construction expenditures exclude the purchase price of land but include outlays for land servicing and site preparation.

United Kingdom

Total Investment on Health reported as data for Gross Domestic Fixed Capital Formation (GDFCF) on all fixed assets for 'Health and Social Work', as given in the national income accounts.

United States

- The construction component of the national health accounts is limited to the value of new construction put in place for hospitals and nursing homes. Estimates are taken from the Bureau of Census's C-30 survey of new construction. The measure includes new buildings; additions, alterations, major replacements, and so on; mechanical and electrical installations; and site preparation.
- Maintenance and repairs are excluded, as are non-structural equipment such as X-ray machines and beds. Also excluded are producers' durable equipment (PDE): X-ray equipment, computers, etc.

OECD II

Total investment into medical facilities defined as sum of gross fixed capital investment into the institutional units listed under the ICHE-HP classification, regardless of public and private ownership.
OECD III has no separate category for investment expenditure.

OECD 2000
This item comprises of capital formation of domestic health care provider institutions.

Discussion

OECD definitions ignore depreciation in estimating investment expenditure, as do virtually all countries when estimating public sector expenditures. There have been recommendations in some countries that governments should adopt accrual based accounting for financial reporting, but this is yet to happen in the vast majority of OECD states. Since GOSL does not use depreciation as an accounting concept in its budgetary reporting, it is best not to include this concept at this stage.

- RECOMMENDATIONS FOR SRI LANKA NHA

1. Sri Lanka NHA should adopt full cost accounting and ignore depreciation - which is the same concept as Gross Domestic Fixed Capital Formation in national income accounting.
2. Include expenditures on plant and medical equipment, when the value of each item is over $100,000, which is the practice used in recording additions to fixed assets by HA.

FR.2 Expenditure on health education and training

OECD I

Includes expenditures reported by central and local governments for the training of health workers. Complete costs would include expenditures for universities and other training institutions. Salaries of medical interns and residents or nurse trainees are included as institutional expenditures for services rendered, not as training expenditures.

United States

Not available.

OECD 2000
This item comprises of government and private provision of education and training of health personnel, including administration, inspection or support of institutions providing education and training of health personnel.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

- Includes expenditures for education and training of health personnel by both public and private agencies and institutions.
- Includes education and training that involves (i) paramedical schools, (ii) undergraduate schools in medical/paramedical departments and (iii) graduate schools in medical/biomedical departments.
- Expenditures would include expenditures for universities and other training institutions. Salaries of medical interns and residents or trainee nurses are reported under expenditures on health for the services rendered. However, salaries of trainees or other health personnel undergoing training in a classroom setting outside a clinical setting should be included in this category.
- Expenditures of or for teaching hospitals should not be included here, except to the limited extent that they are directly and specifically related to the training of medical personnel. In particular, all costs of patient care other than general expenses of academic hospitals should be excluded from the education figures, even if the education authorities must pay such expenses.(UNESCO/OECD/Eurostat manual).

FR.3 Health Research & Development

OECD I

The basic definition of biomedical research comprises:

1. The study of specific diseases and conditions (mental or physical), including detection, cause, prophylaxis, treatment and rehabilitation of persons;
2. The design of methods, drugs and devices used to diagnose, support and maintain the individual during and after treatment for specific diseases or conditions;
3. The scientific investigation required to understand the underlying life processes, which affect disease and human well-being, including such areas as cellular and molecular bases of diseases, genetics, immunology.

Expenditures include research with the objective of:

1. The improvement in the health status of the population,
2. Cost effectiveness in the delivery of preventive and therapeutic goods and services towards that end.

Excludes outlays by pharmaceutical firms.

Canada

Total expenditure on health R&D

The data represent expenditures for research activities intended to improve the health status of the population, or to increase efficiency in the delivery of preventive and therapeutic services. The data exclude expenditures for research carried out and funded by hospitals and by drug or health care appliances companies in the course of product development. These expenditures are included respectively under the categories HOSPITALS, PHARMACEUTICAL GOODS, and THERAPEUTIC APPLIANCES.

Japan

Total expenditure on health R&D

- Total = Research institute (owned by central government, local government, and private institutes) + Universities and College (national + public + private).
- Does not include Pharmaceutical industry expenditure on R&D.

United States

Includes activity carried out by non-profit or government entities. Not included are R&D expenditures by drug manufacturers.

OECD 2000

This recommends use of the Frascati Manual, which is an internationally agreed methodology for measuring research expenditures in countries, and published by OECD.

Expenditures are defined as expenditure for R&D programmes directed towards the protection and improvement of human health. It includes R&D on food hygiene and nutrition and also R&D on radiation used for medical purposes, biochemical engineering, medical information, rationalisation of treatment and pharmacology (including testing medicines and breeding of laboratory animals for scientific purposes) as well as research relating to epidemiology, prevention of industrial diseases and drug addiction.

In university hospitals where, in addition to the primary activity of healthcare, the training of medical students is of major importance, the activities of teaching, R&D and advanced as well as routine medical care are frequently very closely linked. "Specialised medical care" is an activity, which normally is to be excluded from R&D. However, there may be an element of R&D in what is usually called "advanced medical care", carried out, for example, in university hospitals. It is difficult for university doctors and their assistants to define that part of their overall activities which is exclusively R&D. If, however, time and money spent on routine medical care are included in the R&D statistics, there will be an over-estimate of R&D resources in the medical sciences. Usually such advanced medical care is not considered R&D and all medical care not directly linked to a specific R&D project should be excluded from the R&D statistics.

R&D in health, when measured according to the rules of the Frascati Manual, exclude outlays by pharmaceutical firms, shown separately.

Activities of R&D in health care should exclude all education and training of health personnel in universities and special institutions of higher and post-secondary education. However, research by postgraduate students carried out at universities and university hospitals in medical sciences should be counted, wherever possible, as part of R&D in health care.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

Sri Lanka NHA should adopt the definitions and approach presented in OECD 2000 for measuring expenditures on health research and development.

FR.4 Food hygiene and drinking water control

OECD previously classified this under F1, core medical functions. OECD 2000 includes it under health related functions. Its definitions are recommended for use in Sri Lankan NHA.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

1. Expenditures on food hygiene control cover monitoring of veterinary and other inspectorates designed to implement food hygiene standards.
2. Expenditures for control of drinking water, environmental surveillance include such activities with a specific health purpose such as maintenance of standard health standards, but exclude fluoridation of drinking water.

FR.5 Expenditure on environmental health

OECD I

Although not included in total expenditure on health, this entry measures investments and operating outlays on air cleaning and water treatment programmes largely determined on grounds of better health.

OECD 2000

This notes that there is no agreed international standard definition of expenditures on environmental health, and instead proposes to sum up various items under COFOG functions 08 Housing and Community Development and 09 Environment Protection. It also notes that the control of environmental hazards, in particular water and sewage treatment, has been among the most important determinants of population health. Air pollution abatement, used water treatment, the disposal or recycling of solid waste have important spillover effects on health. However, from a theoretical point of view, environmental health does not constitute a medical care function as it is not distinct from other public functions such as general public safety, or law-and-order which contribute to the health status objective. In many countries, the responsibility for environmental health does not usually lie with Ministries of Health. Separate accounting systems, such as satellite systems for environmental accounting have been installed in many OECD countries for monitoring societies' resources devoted to environmental protection as well as for estimating and evaluating improvement or decline of the environment. Nevertheless, for international comparison, a set of consistent indicators showing expenditure functions of environmental protection (including water supply) relevant for population health would be a valuable complement of a system of Health Accounts.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

Exclude this item from SLNHA until a better international standard definition is developed.

FR.6 Administration and provision of social services in kind to assist living with disease and impairment

This category did not exist in previous OECD classifications and was introduced in OECD III and maintained in OECD 2000. The same definitions are recommended for Sri Lanka.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

1. This comprises (non-medical) social services in kind provided to persons with health problems and functional limitations or impairments where the primary goal is the social and vocational rehabilitation or integration.

2. It includes education of bed-bound children and special schooling for the handicapped, occupational therapy, vocational rehabilitation and sheltered employment.

3. The provision of medical care benefits in kind under social protection arrangements is in some cases closely intertwined with the provision of social benefits in kind to assist living with disease and medical impairment.

FR.7 Administration and provision of health related cash benefits

OECD I

Sickness benefits in cash include the upholding of earnings/income (benefits attributed in case of illness, absenteeism from work and equivalent to the full revenue), day indemnity (benefits, contract or proportional to the income, in order to partially replace the earnings/income lost with the suspension of the professional activity due to illness), and other benefits in cash linked to the receiver health status.

➢ **RECOMMENDATIONS FOR SRI LANKA NHA**

Use the same definition as used by OECD I.

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