

Input Document
Unit 2Global Boundaries
of the
Accounting Framework
of SHA**Summary**

Activities in the health system can be broadly distinguished between activities consumed by individuals to produce health (including public health) and supporting activities for the provision of health care. Therefore, this proposal distinguishes between

- the consumption framework defined by HC,HP,HF, and
- the extended framework.

The intention of this split is to make clear what is the core system of health accounts and also to give countries some flexibility to include additional dimensions in a consistent way with the core consumption framework as regarding health-related activities and supporting activities including outlays of health care providers for education, investments, research as well as for resource costs or different layers of health financing.

The proposal puts the individuals in the centre of health accounts which means that unpaid activities of households for health should in addition be part of the extended framework plus non-monetary data about inputs, outputs, and outcomes.

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UNIT 2. GLOBAL BOUNDARIES OF THE ACCOUNTING FRAMEWORK OF SHA

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Preamble

SHA2.0 should provide a framework which answers basic questions about the size and structure of flows of health care services and goods and of the corresponding financial flows between individuals, providers, and financing agents. The implementation of SHA1.0 has shown that there are different demands for health accounts by countries. Therefore, the following proposal distinguishes between the consumption framework, which is focusing on the consumption of health care, and the expanded system which adds additional aspects by including capital formation, exports, resources, financing sources, human resources, intermediate consumption, research, cost-of-illness accounts and non-monetary health data. The interfaces to the expanded framework are only partly described in this paper.

Dimensions of boundaries

2.1 The boundaries of SHA are determined by the incorporated activities grouped into transactions by types and purposes. Transactions usually take place between actors as individuals, providers, corporations, and financing agents which are the economic units of health systems. There are different types of transactions of goods and services and of financial transactions which serve different purposes. Either they serve up the promotion, protection, and development of health of the individuals or health related purposes or they are supporting activities to develop health care. The definition of actors, transactions, and of the rules of compilation of transactions structure the accounting framework.

2.2 From an international perspective, it is necessary to have a commonly defined structure of actors and transactions which allow the description of the transactions of health care systems in a comparable way. Classifications are needed for the description and measurement of transactions and actors. SHA1.0 has defined the core structure of the accounting framework by three basic classifications of the functions of health care, health care provision, and health financing (HC, HP, HF). In the centre of SHA is the consumption of personal and collective health services and goods including their administration. This comprises the provision of these services and the financing of these services which are described in the following under the consumption framework. There are further activities of interest for analytical use which are described under the extended framework (see figure 1).

2.3 Crucial for health accounts is the specific connection to health. Although health is a multidimensional concept which is measured by outcome and process-data the users of health accounts are interested to see the links between the health expenditures covered in the consumption framework, the input, processes, and the outcomes, e.g. as hospital admissions, prevalence, and healthy life expectancy. It is proposed that these relations will be described in the special unit 'non-monetary data'.

2.4 The boundaries of health accounts are different from the boundaries of the system of the national accounts because of three reasons:

- health is a special characteristic of individuals as economic units, and not of other economic units such as enterprises;

- health accounts are focusing on all activities contributing to the health of the population of an economy during a given period of time;
- national accounts are focusing on a much wider set of activities of this economy.

2.5 National accounts have developed special conventions, methods, and accounts to group the economic units of an economy and to compile the transactions between these groups. These methodologies can help to structure and link economic activities in the health system in a consistent way in a set of accounts. National accounts split the final use of goods and services into final demand and intermediate consumption. Final demand consists of consumption, capital formation, and exports. Health accounts are also distinguishing between intermediate consumption, final consumption, capital formation, and exports. But, in the centre of SHA is the final consumption of health goods and services for the production of health. A further layer are the health related services and goods which are part of the extended framework. It is proposed to give the countries with the extended framework an adaptable tool to include additional aspects for analytical use in a flexible way. The relation outlined between the consumption framework and the extended framework of SHA is familiarized with the input-output structure used by the SNA (see figure 1).

The consumption framework

The universe of the consumption framework

2.6 The boundaries of the consumption framework of SHA are established by the purposes of the activities of consumption of the health care services included. The classifications of functions and providers are derived from these activities. Five types of actors are distinguished, which perform economic activities for the consumption of personal and collective health services and goods including administration. Actors are grouped into

- Individuals (HB)
- Financing actors (HF)
- Providers of health care services and goods (HP.1-6)
- Other corporations (HP.7) and
- Rest of the world (HP.9).

All paid economic activities are transactions. These are grouped into

- Personal and collective consumptive transactions (HC)
- Financing transactions (HF).

2.7 All health care services and goods consumed personally or collectively by individuals (HB) are used for the purpose to maintain, promote, and restore health or reduce ill-health. Individuals as consumers of health care are living in households which might both provide services and also finance health care. The identification of the activities for the financing, consumption, and production of health of individuals and the society as a whole is the basic idea of health accounts. The support of individuals, their empowerment, the active patients, and health education of individuals are in the centre of the promotion of health. Many activities are related to the production of health which are either health care, health-related

services or supporting services as e.g. research or education of health professionals or capital formation which guarantee access to care, cure, and preventive programs.

2.8 Individuals, financing units, providers, corporations, and the rest of the world determine the economic units of the universe of the health system measured in the consumption framework of health accounts. But, the health system is not fully described by the consumption framework of health accounts. It does neither aim to describe all activities and relations of the health system nor all actors of the health system which also includes governing structures and setting norms. Furthermore, it is important to note that the five groups of actors of the consumption framework of health accounts are different from the institutional sectors of SNA. For example, households do not include self-employed persons providing services or individuals who are only consumers of health care but do not produce care, even in the case of self-care (see also household production in the extended health accounts).

2.9 The consumption boundary and provision boundary of the consumption framework is partly different from SNA as e.g. occupational health care activities are directly consumed and not handled as intermediate consumption in the meaning of SNA. Depending on the definition of occupational health services all corporations might become providers of occupational health care although corporations produce non-health care goods as principal activity. Only health care providers deliver health services and goods as principal activity.

2.10 Provision of health care services by health care providers uses intermediate products from health care industries and other industries. Input-output tables exhibit that health providers use inputs from almost all industries. In the consumption framework of SHA2.0 supporting transactions are not considered. Supporting activities comprise

- intermediate consumption
- other transactions related to the allocation of inputs in the provision of health care such as the payment of employees and consumption of fixed capital, and
- fixed capital formation.

These supporting activities are handled in the extended framework. Only when individuals are directly involved and these activities are particularly directed to the development of certain production factors of the system these supporting activities are considered, e.g. clinical research which is patient care. It is proposed to handle intermediate products from health industries not in the consumption framework of SHA2.0 but to include these products and services in the expanded framework for national purposes.

2.11 Household provision of home care is another difference between SHA and SNA. According to SHA1.0 5.11 substitutability between household provision and provision on the market exists in actual fact when social programmes give households the choice between receiving social transfers in cash for health care provided by them and benefits in kind in the form of the services of a trained health professional, partly or totally, by the social programme. In the case where substitutability is not quite as obvious and households receive transfer payments for the health care they provide within the household instead of having recourse to outside help, the economic value of their care activities is nonetheless recognised

in the SHA since non-market household provision of health care services is assigned a value equal to the transfer payments received.

2.12 This valuation is based on the assumption that the value of the unpaid care work performed in the household is worth what social programmes are willing to grant. This is of course not a totally satisfactory treatment since the actual amount of time spent on health care work is not taken into consideration. Nevertheless it is preferable to no valuation at all, and therefore no consideration of hours spent on care, which is the case when no choice or monetary support is granted to households.

2.13 Supporting activities within health care provision (management and administration in provider institutions, technical service units, transport, gardening, and the like) have not been included as separate items in the functional classification nor does the functional classification provide a breakdown of health care activities into line items of resource costs (RC, such as expenses on personnel, various intermediate products, consumption of fixed capital). These items are already included under the various categories of the functional classification if properly accounted. There are no methodological difficulties to report on supporting activities and/or line items of providers in health accounting, but the only way to do so while avoiding double counting is to include a corresponding additional dimension in the ICHA. For international comparisons, this was not considered a high priority task in SHA1.0 but is proposed for the SHA revision (see SHA1.0: 3.24).

2.14 The proposed consumption framework of SHA will record only transactions of health care delivery which are paid. Unpaid services are not included. This is compatible with the central framework of SNA. However, unpaid services might be included in national extensions. Unpaid care for sick and disabled individuals is an important part of each health system. It is therefore proposed to provide recommendations in SHA2.0 on the compilation of household production in the extended framework.

2.15 Payments for services are transactions between health financing agents and health care providers. Often, the delivery of services requires co-payments by individuals, too. By definition of SHA, any delivery of services entails two transactions, at least a financial transaction and the respective consumption transaction. As a consequence, there is always a pair of consumption and payment transactions. SHA supposes that any service that is delivered is also paid. In the case, that there are co-payments, the payment of the consumption transaction is split between financing agents, e.g. government and households. There might be also splits of payments for services between central and regional levels. In practice, the organisation of the payment system reflects the incentive structures to steer health care provision. However, the consumption framework does not distinguish the type of payments as DRGs or fee-for-Service.

2.16 In the simplest case financing agents receive their revenues from households and enterprises. SHA1.0 does not record revenues but supposes that all revenues equal expenditures for health care services. This means that HF is a classification of financing flows and financing agents simultaneously. It is proposed that SHA2.0 modifies this assumption in the expanded framework by introducing balancing items which means that actual revenues of

financing agents could be lower, equal, or higher than health care expenditures (see also the paragraph ‘The extended financing account’). The same holds for providers. Incomes for health care purchases could be higher, equal, or lower than expenditures for resources to deliver the purchased health care services. In general, receivables and payables in the accounts of both financing agents and providers differ.

2.17 In practice, there might be differences between receivables and payables in the accounts of both financing agents and providers because of various reasons as incompleteness in the aggregates, differences in accounting rules, differences between purchases and payments. If the same type of transaction is differently measured at the provider side or financing side this means a statistical difference. On the other side, the balancing item between payables and actual payments of health financing agents for health care purchases must be equal to the balancing item between receivables and actual revenues of health care providers for these health care purchasers. It is important to note that the difference between receivables and revenues in the accounts of providers due to unpaid or overpaid purchases is a balancing item which differs from the balancing item between revenues and expenditures for use of resources. Receivables and payables are transactions of financial accounts which show changes in financial assets and liabilities. Financial accounts are part of the extended framework which are not described in this paper.

Consumption boundary of health care services and goods

Domestic consumption of health care services and goods

2.18 The consumption framework focuses on the compilation of domestic consumption and consumption abroad less exports of services. All resident individuals of a territory are the total domestic consumers of health. This means that the identification of health care services consumed by the population as a whole is the starting point of health accounts. Although SHA1.0 does not explicitly mention consumers as an economic unit, it refers to the population as a whole and discusses also the breakdown of consumption by classification of beneficiaries by age, gender, diseases, or income.

Personal and collective health care services and goods

2.19 In public health many activities are directed to the population as a whole or to defined subgroups and to individuals. In the end the protection and / or development of health of individuals is the final target of all preventive services and public health activities. Therefore, both personal and collective health services are consumed by individuals. What is considered as personal and what as collective health services depend very much on tradition and the level of economic development of countries.¹ The ideas what types of health services are within the

¹ One might add, it depends also on the statistical system. For example, all government final consumption expenditure under the headings COFOG 7.4 ‘Public health services’ should be treated as expenditures on individual consumption according to Eurostat’s COFOG Manual.

core consumption boundary and what is rather health related are discussed in more detail in unit 7 'Functional classification of health accounts'.

2.20 If the distinction between personal and collective health care transactions are kept as in SHA1.0 it is recommend also explicitly to distinguish personal preventive activities in SHA2.0. Personal health care services directly provided to individual persons cannot be consumed by others at the same time. They are by definition exclusive for individual persons. In contrast, collective services are not exclusive. A collective consumption service is a service provided simultaneously to all members of the community or to all members of a particular section of the community, such as all households living in a particular region. Collective services are automatically acquired and consumed by all members of the community, or group of households, without any action on their part. By their nature, collective services cannot be sold to individuals on the market, and they are financed by government units out of taxation or other incomes (SNA 93, 9.43).

2.21 All collective and individual health services delivered to individuals establish simultaneously the consumption and provision boundary of SHA. It is in the nature of health services that the individuals are directly and indirectly involved. They are directly involved in the case of personal health services. They are indirectly involved in collective health activities related to settings as activities to reduce nosocomial infections in hospitals or safety and hygiene measures at the work place. In general, public health activities have a broader scope than collective health services, because they are also directed to certain diseases of individuals.

2.22 The boundary of consumption activities is defined by the functional classification ICHA-HC. Health encompasses a very wide area. Even if generally agreed, common global boundaries of health care sectors to be the subject of international comparison are of little value unless there is a realistic possibility of collecting the data that fits for such boundaries. Therefore, the functional boundary will be set based on criteria and in agreement with the majority of the countries in the SHA2.0 revision process considering the possibility of its practical implementation. For national purposes countries might deviate from this boundary, however, the international functional classification should be used as a minimum for international comparability.

2.23 Following SHA1.0 Health (care) consumption in a country comprises the sum of services and goods consumed by individuals in order to secure or develop health through the application of medical, paramedical and nursing knowledge and technology such as:

- public health
- protection and promotion of health
- prevention
- diagnosis
- curing illness
- caring for persons affected by chronic illness
- caring for persons with health-related impairment, disability, and handicaps
- palliative care
- administering public health, health programmes, health insurance and other

health system activities.

Administration

2.24 Both personal and collective health services include transaction costs of health care provision (management, control, contracting, etc.). But the question is whether the consumption boundary should also take in administrative costs of collecting resources to finance this consumption.

2.25 Transaction costs of providers linked to health care delivery are recorded under the value of personal and collective consumption. In contrast, the general administrative cost related to health care delivery and health care financing by health insurance or government are recorded in SHA1.0 (3.14) as a separate function (HC.7) isolating the goods and services it finances from the management and funding of these goods and services. This corresponds to the separation of social insurance funds and the health insurance industry from health care service industries of provider organisations in the ICHA-HP provider classification. The separate recording of administration is straightforward whenever different establishments are involved in health care services on the one hand, and insurance and programme administration on the other. This function does not include the administration and operation of social protection programmes providing social protection in the form of cash benefits, although this separation may be difficult in practice and can only be done by approximation.

2.26 However, the rule of SHA 1.0 to show the full administration cost of social and private insurance schemes does not fit with the practices of tax-funded systems where the collecting and pooling of money is the responsibility of the treasury whose administrative costs are usually excluded. Therefore, one might also exclude the administrative costs of revenue collecting in social-security systems in the consumption boundary where the collecting and pooling of money is in the responsibility of the financing agent.

Consumption abroad (Imports)

2.27 Health services consumed by the population include all health services consumed abroad, hence all imports of health goods and services (directly linked to consumers or users) need to be tracked. The consumption framework SHA1.0 does not include exports only imports. Current health expenditures should, by definition, not include exports of health care services, i.e. services provided by domestic providers to foreigners, but includes imports of health care, such as health spending abroad by tourists and other persons travelling abroad [SHA1.0 (5.3)]. As a consequence the contribution of domestic provision of health care for final use does not coincide with current use by the population expressed in the term current health expenditures.

Current health expenditures (SHA1.0: HC.1-HC.7)

= Domestic provision of health care services and goods

+ Imports of health care services

∕ Exports of health care services

= Domestic production by health care providers

- ∕ Production of non-health care products of these providers
- + Domestic provision of health care expenditures by other domestic corporations
- + Imports of health care services
- ∕ Exports of health care services

2.28 Imports must be classified by health care functions in a manner consistent with that used for domestic consumption.

Borderline cases of health care services and goods

2.29 Many factors determine the consumption of health care services and goods. Diagnostic services might be used by both healthy and sick people for different purposes. The financing and provision might also vary among countries. The SHA consumption boundary is independent of where and how the activities are provided and how they are financed. The functional classification of health accounts draws the borderline of the consumption framework by purposes. It refers to the goals and purposes of activities (care, cure, rehabilitation, prevention, administration). In contrast to a general-purpose classification as CPC/CPA or ISIC/NACE the functional classification is a specific purpose classification. The borderline of health care used in health accounts is wider than the health care borderline used in CPC/CPA because some of the products and services are classified in the general-purpose classifications under different purposes such as education or social care.

2.30 The criteria used to guide the inclusion and exclusion process between the consumption framework, the extended health accounts framework, and the general economy are

- the type of activities
- the purpose of the activities
- the technology necessary to make the activities

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- the professions involved in the provision of the services
- the scientific evidence for the impacts of the activities
- the measurability of the transactions
- the agreement among countries about what should be in the consumption framework.

2.31 The medical-technical properties and the intrinsic nature of the services and products, the scientific and traditional acceptance as health products as well as the principle of origin of providers and their technical specification are important principles for classification of services and goods in SHA. The physical properties and intrinsic nature of products are distinguishing characteristics that are proper to the products themselves. These include, for example, the raw materials of which goods are made, the stage of production or the way in which goods are provided and the purpose or user category for which products are intended.

2.32 Borderlines cases are products that are situated on the boundaries of the health care goods and services. Borderline cases can also be new products that are not yet commonly considered as belonging to health care. All these are cases for which there may be a doubt about whether they belong to health or not. These may or may not be considered in the health

accounts depending on the point of view that is privileged to make the assessment. Borderline cases have been discussed among experts on Health Accounts on the basis of the existing elements of definitions in SHA 1.0 and in different international meetings. The criteria developed in these discussions to classify transactions represents a mean to achieve practically a better and more precise content of the health accounts. Although the importance of the items may be very unequal in terms of expenditure, it brings additional information to national statisticians in charge of health accounting to help them make their own clear distinction between health products, and sometimes health-related products according to the functional approach of SHA, and those to be excluded from the health accounts. The ultimate goal of these efforts is the improvement of international comparability of health accounts data (see Annex 1).

2.33 SHA is focusing on the actual final consumption, as the value of all the individual goods and services acquired by resident households plus the value of the collective services provided by general government to the community or large sections of the community plus the value of administration of these services.

Social care

2.34 Social care involves activities which improve living conditions for members of society. Fields of social care include among others:

- anti-poverty services
- anti-racism programs
- child welfare
- community development
- counselling
- day care provision
- family therapy
- forensic social work
- housing and homeless services
- neighbourhood development
- nursing homes
- old-age and retirement homes
- school social services
- services for disabled and handicapped
- social work
- violence prevention.

This list is not comprehensive but is indicative of the wide range of activities which may be included within social care, and of course there is significant variation between countries. In statistical systems, we need practical intersections that constitute social care rather than health care. Health returns by social activities could be a precondition in order to be included in the consumption framework. One could argue if an activity has a greater impact on living conditions than health then it constitutes a social service and it should be counted outside SHA. One example would be employment services for substance misusers. The purpose of this activity aims primarily to strengthen social relations, and secondarily health. The

purposes of social services are often multiple and one might wish to sketch different borderlines dependent on the analytical question. The COFOG Manual recommends to split an item of government expenditure whenever possible by volume indicators if expenditures relate to more than one function (multipurpose functions). Professions/occupations involved in provision of these services might also help to draw the borderline between health and social care.

2.35 Long term care services in nursing home or at home have been intensively discussed in recent years to determine whether they belong to health or social care. The subject has been addressed in a comprehensive way in many OECD documents targeted at national statisticians in charge of health accounts. Until now, the boundary is settled between activities of daily living (ADL) and instrumental activities of daily living (IADL). ADL belong to health and IADL of dependant persons have to be reported as social care to dependant persons (old age, sickness or handicap) under HC.R.6 Provision of social services in kind to assist living with disease and impairments. If one follows the OCED guidelines for SHA1.0, for which the majority of countries opted (Option A), this would mean that long-term nursing care has to be reported within the consumption framework and IADL activities will fall in the extended framework which countries could handle in a flexible way.

Non-observed health care activities

2.36 Non-observed health care activities are not captured in regular statistical enquiries. The reason may be that the activity is informal and thus escapes the attention of surveys geared to formal activities; it may be that the producer is anxious to conceal a legal activity, or it may be that the activity is illegal. Because the non-observed health activities might account for a significant part of the health system of some countries, it is particularly important to try to make estimates of total consumption that include it, even if it cannot always be separately identified as such.

2.37 The concealed provision of health services (to avoid the payment of income or other taxes or to achieve hidden additional income besides that under contracts with social insurance and/or government programmes) may amount to a sizeable share of the real medical consumption by private households. An estimate of this amount should be part of total expenditure on health as defined by the SHA, as differences in the treatment of the informal health care sector can distort international comparisons.

2.38 The national health expenditure estimates of some countries have, in the past, under-reported so-called “under-the-counter” or “envelope” payments by patients paid directly to providers. These payments do not show up in tax declarations of providers. This includes payments by patients that want to jump the waiting list or to obtain greater quality in the delivery of health care services. They might constitute an essential though informal part of the payment of providers. In the SHA these expenditures should be included in the estimates of overall spending.

2.39 In SHA2.0 it is recommended to follow the rules of SNA 2008. Transactions on unofficial markets that exist in parallel with official markets (for example, for foreign exchange or goods subject to official price controls) must also be included in the accounts, whether or not such markets are actually legal or illegal. In SHA 1.0 (5.15), illegal provision of health care services by unlicensed medical practitioners and the provision of drugs for illegal purposes (e.g. drug addiction), although within the provision boundaries of SNA, is not considered an expenditure on health of the SHA.

Valuation of consumption of health care services and goods

2.40 Health care goods and services consumed at health care markets at economically significant prices are valued at current prices including VAT. Invoiced VAT is the VAT payable on the sales of a producer; it is shown separately on the invoice that the producer presents to the purchaser. In general, health care services do not include VAT, but pharmaceuticals and medical devices.

2.41 The valuation of transactions of SHA at current prices is different from the purchasers prices used in SNA which excludes VAT from purchaser's price. In SNA, the purchaser's price is the amount paid by the purchaser, excluding any deductible VAT or similar deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. Deductible VAT is the VAT payable on purchases of goods or services intended for intermediate consumption, gross fixed capital formation or for resale that a producer is permitted to deduct from his own VAT liability to the government in respect of VAT invoiced to his customers.

2.42 When reliable market prices cannot be obtained, a second best procedure must be used in which the value of the output of the goods or services produced for own use is deemed to be equal to the sum of their costs of provision: that is, as the sum of:

- a. Intermediate consumption
- b. Compensation of employees
- c. Consumption of fixed capital
- d. A net return to fixed capital
- e. Rent on land used in the provision, if any
- f. Other taxes (less subsidies) on provision.

2.43 Financial transactions and their non-financial counterpart transactions are recorded at the same transaction value. Financial transactions are recorded at the transaction value that is the value in national currency at which the financial assets and / or liabilities are created, liquidated, exchanged or assumed on the basis of commercial considerations only.

Related dimensions of the consumption framework

Territorial boundary and imports of health care services and goods

2.44 Current expenditure on health measures the final use of health care goods and services by resident individuals of a country or of the territorial region of health accounts. In its broadest sense, an economic territory can be any geographic area or jurisdiction for which statistics are required. The connection of entities to a particular economic territory is determined from aspects such as physical presence and being subject to the jurisdiction of the government of the territory. The most commonly used concept of economic territory is the area under the effective economic control of a single government. However economic territory may be larger or smaller than this, as in a currency or economic union or a part of a country.

2.45 The concepts of economic territory and residence are designed to ensure that each institutional unit is a resident of a single economic territory. In general, an actor is resident in one and only one economic territory. The residence of individual persons is determined by that of the household of which they form part and not by their place of work. All members of the same household have the same residence as the household itself, even though they may cross borders to work or otherwise spend periods of time abroad. If they work and reside abroad so long that they acquire a centre of economic interest abroad, they cease to be members of their original households.

2.46 In the case of utilization of services abroad it is convenient to refer to non-resident providers as units that are resident in the rest of the world. Whenever accounts are drawn up for actors, as well as an account for the total economy, a further account shows the relationship with the rest of the world. In effect, therefore transactions with the rest of the world are recorded as if the rest of the world is de facto an additional group of actors (HP.9).

2.47 The consumption framework includes imports of health care services and goods acquired by residents in a particular period but which have been produced by nonresidents. Imports are coded in the consumption framework by functions HC but not by type of providers. They are summarized under HP.9 providers of the rest of the world.

Current resident health expenditures

+ Imports of health care services and goods (HP.9)

= Current health expenditures

Provision boundary and consumption of health care services and goods

2.48 Health (care) provision for final use in country differs from the consumption by the resident population by the external trade in final health services and goods. It comprises the sum of services and goods consumed by individuals in order to secure or develop health through the application of medical, paramedical and nursing knowledge and technology plus the exported health provision minus the imported health services and goods for final use. Health services are often provided for non-resident individuals. As a consequence domestic provision of health care services differs from domestic consumption.

2.49 Two further aspects might be considered while compiling the provision boundary: consumption of intermediate goods for health services (see extended framework) and non-health production.

2.50 Non-health care services might be produced by health care providers as secondary activity. For example, establishments of medical retail sales may also sell a significant share of non-medical goods. By definition, corporations other than providers produce as principal activity non-health goods and services. But they might also produce some types of occupational health hazards and are enforced to avoid or reduce these services. Non-health production is the difference between the total production of the economy and the provisions of health specific goods.

Non-Health Production

= Total production

- health specific provision for final use
- health specific intermediate production
- health specific investments, education, and research.

2.51 The complexity of health services delivery involves a considerable amount of subcontracting of intermediate health services, such as imaging and laboratory services, or direct provision of health care by specialized personnel, such as renal dialysis and part of cancer therapy. Ancillary services defined by SHA are intended to be used outside of health practices or hospitals which produce the services. The results of diagnostic imaging or laboratory tests are an essential part of medical information and last but not least used in medical statistics. Patient transport services are in general provided by specialised actors as a principal activity. In contrast, SNA defines an ancillary activity as an supporting activity undertaken within an enterprise in order to create the conditions within which the principal or secondary activities can be carried out; ancillary activities generally produce services that are commonly found as inputs into almost any kind of productive activity and the value of an individual ancillary activity's output is likely to be small compared with the other activities of the enterprise (e.g. cleaning and maintenance of buildings). The output of an ancillary service in the meaning of SNA is not intended for use outside the enterprise.

Time of recording

2.52 The time boundary of the consumption framework of SHA has three elements. First, a particular period must be chosen within which the activities took place. Most often this is a fiscal year or a calendar year. This choice may seem trivial, but in practice it can pose problems. For example, government entities may report spending on the basis of a fiscal year while private entities report on the basis of a calendar year. In such a case, the health accountant must adjust the figures reported so that only one time period is used.

2.53 The second element of the time boundary is the distinction between when the activity took place and when the transaction that paid for the activity took place. In practice, this involves a choice between accrual accounting and cash accounting. Health accounts should

use the accrual method, in which expenditures are attributed to the time period during which the economic value was created, rather than the cash method, in which expenditures are registered when the actual cash disbursements took place. For example, if a hospital stay occurs during the last month of the old fiscal year, but is paid for during the second month of the new fiscal year, it should be recorded as an expenditure in the old fiscal year.

2.54 Thirdly, when the episodes of care are very long, it becomes necessary to recognize that output is being produced continuously and to record it as “work-in-progress”. For example, the provision of certain orthodontic services may take years to complete. In such cases, it would distort economic reality to treat the output as if it were all produced at the moment of time when the process of consumption / provision happens to terminate. Whenever a process of consumption / provision extends over two or more accounting periods, it is necessary to calculate the work-in-progress completed within each of the periods in order to be able to measure how much output is produced in each period.

2.55 In the case medical goods are completed in an accounting period but not delivered (sold) to a user output is not recorded. Only if there is thus a significant difference between the value of output in a period and the value of sales, the difference being accounted for by changes in inventories of finished goods and work-in-progress.

Financing boundary of health care services and goods

2.56 All services and goods, which are delivered by providers in the consumption framework and which are consumed by individuals during the accounting period are assigned to financing agents in the same period. The total value of financing equals the total value of consumption and provision plus the balancing items of the financing agents and the balancing item of providers.

2.57 Financing by government or social security is coded in SHA1.0 by the financing agents HF.1.1 or HF.1.2, which means these transactions are not directly paid by household at the moment of care delivery. One could call them ‘prepaid’ financing flows. The coding of financing flows requires a clear idea about the universe of financing agents. Financing agents include all the different types of actors that purchase health care services and goods defined in the functional classification. In order to close the circle of financing flows it is assumed that these financing agents have collected and pooled the sources to purchase providers. This assumption is modified in the extended framework (see Financing Sources). SHA distinguishes as SNA three levels of territorial governments:

- central/federal government
- regional/state/provincial authorities
- local/municipal authorities

It supposed that the flows between these three levels are already consolidated.

The statistical unit of health care services and goods

2.58 The statistical unit is the entity for which statistics on the functional breakdown of transactions are compiled. It may be an observation unit on which information is received and statistics are compiled or an analytical unit which statisticians create by splitting or combining observation units with the help of estimations or imputations in order to supply more detailed and/or homogenous data than would otherwise be possible.

2.59 The statistical unit in the functional distribution within the SHA is a specific functionally defined output of health care industries for final use. In the case of personal care, the smallest item for reporting could be a patient contact with the health care system that would be allocated to a unique function of the ICHA-HC according to the main procedure performed. In practice, the definition of output items has to be taken from existing national health information systems and depends in each country on the prevailing payment modalities and survey procedures of providers of these health care services.

The extended framework

Dimensions of extension

2.60 The intention of the extended boundaries is to give countries some flexibility to include additional dimensions in a consistent way with the consumption framework as regarding health-related activities and supporting activities including investment outlays of health care providers. The following extensions distinguish between - layers of the consumption boundary - non-monetary health data

- cost-of illness accounts
- financing sources
- resource costs
- exports health care services and products
- supporting transactions as e.g. investments and intermediate consumption
- unpaid household provision
- expanded human resources accounts, and
- research & development and innovations.

Layers of the consumption boundary

2.61 Some countries have expanded the consumption boundary or have modified the functional classification for national analytical use. For example, countries might be interested to include social care in their health accounts as an additional layer. In this case the consumption boundary is expanded by types of social care transactions for final consumption and to the universe of health care providers social care providers are added.

2.62 It is important to note that the layers of the consumption boundary are different from the distinction between health care activities and health-related activities used in SHA1.0 which also comprises capital formation. SHA1.0 states that health-related functions should be

distinguished from the core of health care functions. They can be very closely linked to health care in terms of operations, institutions and personnel, but should, as far as possible, be excluded when measuring activities belonging to core health care functions. However, the term total health expenditures in SHA1.0 took in the current health expenditure HC.1 until HC.7 plus HC.R.1. This is misleading from a consumption point of view because expenditures for capital formation are not consumed.

2.63 The same holds for the education and. R&D. Both types of expenditures are closer to capital formation than to consumption. In general, individuals are not involved.

Non-monetary health data

2.64 The relation between health and health care is of particular interest for analytical use although health is only partly determined by the consumption of health care. Annual health expenditures are by definition the product of the annual prevalence of patients receiving health care services and the average value of these services.

2.65 The framework of non-monetary data offers not only the interface to cost-of illness-accounts but also to the compilation of healthy life expectancy based in a comprehensive framework which is summarizing the various activities of health care delivery recorded in the consumption framework.

Cost of illness accounts

2.66 The estimates of the consumption framework do not provide information about the related diseases. In practice, the organisation of care for the treatment of diseases is important for analytical use. Although there are many studies of expenditures for specific diseases, these frequently employ diverse data and methods so that alternative estimates for the same disease are not consistent, and the relative amounts spent for different diseases are distorted. Only by employing consistent methodology and data across all diseases can it be ensured that expenditures for various diseases can be compared and the sum of expenditures for all diseases totals to the current health expenditures estimates.

2.67 SHA offers the possibility to make consistent cost-of-illness accounts across diseases. COI estimates the direct and indirect economic burden incurred in a period of time as a result of the prevalence of the disease during this same base period, most often a year. Here, prevalence costs measure the value of resources used or lost during a specified period of time, regardless of the disease onset. For the SHA, only a breakdown according to a direct cost-of-illness estimate is suggested, given the number of assumptions and hypotheses going into so-called indirect cost-of-illness estimates (hypothetical amount of lost production due to morbidity or premature mortality).

2.68 Indirect costs are associated with lost productivity due to morbidity or premature mortality. Often these costs are higher than the direct costs. The estimation of indirect costs requires information about losses due to premature death and about disability rates. A

precondition for the estimation of indirect costs in the health accounts framework is therefore the development of the non-monetary data module.

Resource costs

2.69 The accounting of resource costs are linked to actors. The current use of resources in the provision of health care goods and services include intermediate consumption, compensation of human resources, and consumption of fixed capital. RC are the costs of the factor inputs used by providers or financing agents to produce the goods and services consumed or the activities conducted in the system. Resources are not only used in provision of services in the consumption framework, but also in the production of intermediate services, in the production of fixed capital formation and in exports. The boundary of the measurement of resource costs can therefore be much broader than that of the consumption framework. The most narrow boundary are defined by the actors of providers and financing agents in the consumption framework.

2.70 The Producers Guide includes a resource cost classification. Care must be taken to avoid double counting expenditures when using the resource cost approach to measure national health expenditure. Costs of one entity may be income of another one, and these intra-sector flows must be handled so as to capture the resources only when they are finally engaged.

2.71 In the case of non-market provision SHA1.0 requires that the “market” value be estimated from the value of the resources used to produce goods or services. In health care of quasi-market exists and care must be taken to measure the value of transactions and activities in the same way as they are measured in other economic reporting systems.

Intermediate production of health care services and goods

2.72 The extension of the accounting framework of SHA to intermediate consumption might be of interest because of various reasons e.g. a country has a strong medical device and pharmaceutical industry and want to know the contribution of these industries to the economic development, or in order to analyse the dependency of the health sector from energy. Another aspect is the relation between health care providers. A hospital may produce diagnostic services for another hospital. Often self-employed doctors work part-time in hospitals. They might be double-counting if these activities are recorded twice.

2.73 The inclusion of intermediate production in the extended framework, which is called in SNA intermediate consumption, enlarges the measurement of production output for health care. SHA 1.0 does not consider producers of intermediate products to health care as providers of medical care in the ICHA-HP. Examples are the following items in the International Standard Industrial Classification (ISIC, Rev. 3):

- 2423 Manufacture of pharmaceuticals, medicinal chemicals and botanical products;
- 3311 Manufacture of medical and surgical equipment and orthopaedic appliances.

Other specialised activities in the area of intermediate production are wholesale activities. For the extension it is necessary to make clear the boundaries between these specialised activities of intermediate production and the more general activities.

2.74 Intermediate consumption as handled in the extended framework follows the rules of SNA. If there is no use of resources, there is no transaction, and the activity is not measured in the health accounts. For example, the decision to stop smoking is clearly health-related. However, while medical goods and services consumed to help cessation are entered into the health accounts, the value of the act of stopping itself is not. As another example, goods and services consumed by one family member to care for another family member are appropriately included with health spending, but the unpaid labour of that caregiver, in a treatment parallel to that used to measure the aggregate output of the economy, is not counted among health expenditures. Intermediate services for medical infrastructure are also required, such as maintenance of buildings and of equipment.

Compensation of human resources

2.75 The largest item of resource costs of providers is the compensation of human resources that represents the income accruing to individuals in return for their labour input into production processes. The total compensation might include payments in cash or in kind. Following the Producer Guide compensation of human resources includes both salaries of employees and income of self-employed persons in health care. For analytical use it might be useful to distinguish between employees and self-employed.

2.76 Compensations also include social contributions. It is important to note that in SNA social contributions and income taxes are treated differently. In SNA, compensations of employees do include social contributions but not any taxes payable by the employer on the wage and salary bill, for example, the income tax. Such taxes are treated as taxes on production in the same way as taxes on buildings, land or other assets used in production.

2.77 In national accounts compensations of human resources are primary incomes which are payable out of the value added created by production. SHA includes in contrast to SNA in primary incomes the payments of social contributions to social insurance schemes and the receipt of benefits from them, current taxes on income, wealth, etc. and other current transfers, such current transfers being recorded in the secondary distribution of income account.

Consumption of fixed capital

2.78 Consumption of fixed capital (CFC) refers to the value loss of the capital assets used up for production during the current period, resulting from physical deterioration, normal obsolescence or damage. It measures the decline in the usefulness of a fixed asset for purposes of production. Measurement is frequently an assumed regular rate of decline of their efficiency in production over time, based on an average service life of the asset. Measurement of CFC is a complex undertaking which requires a comprehensive collection of statistics and

an inventory of investments made by different types of providers. SHA refers to SNA/ESA95 which recommends to estimate the gross capital stock either by surveys of enterprises or by the “perpetual inventory method” (PIM).

The extended financing account

2.79 The compilation of health care financing within the SHA serves mainly two questions at the national level: where does the money come from, and where does the money go to? The classification of financing flows by the classification of financing agents shows the public / private mix of financing flows allocated to provision of health care services and goods, but does not really answer the question where does the money come from? Furthermore, the consumption framework does not show the imbalances between expenditures and revenues at the level of actors. Balancing items of the accounts of actors, which are differences from one side of the account from the other side of the account, are not only technical terms but encapsulate important economic information.

Financing agents and paying providers

2.80 Financing agents may not pay providers (arrears) or may pay services from savings generated in previous periods. Not all countries might be able to identify these balancing items, however, it is proposed that SHA2.0 provides guidelines to show the balancing items for the mentioned two cases. As mentioned in 2.17 financial transactions show changes in financial assets and liabilities. Both financing agents and providers are usually obliged to provide annually income statements and balance sheets. Depending on the range of benefits and services covered or provided by these actors it is necessary to identify from these sources the health care specific surpluses or deficits of financing agents and providers.

2.81 In the case of arrears providers deliver health care services without payment which means that the values of resources used in the provision of health care are higher than the incomes received from financing agents. In the consumption framework the value of financing of health services is recorded by the consumption value and no balancing item is showing the outstanding payments. The extended framework should exhibit the balancing item.

Financing sources and collecting revenues

2.82 The compilation of the flows to the financing agents requires the definition of the actors that provide means for health care financing. The incomes in an economy which are used to raise revenues for health care are of different types. Health accounting defined by SHA1.0 does not distinguish the type of incomes. It distinguishes only actors that are contributing to the financing of health care. Therefore, a first step of extension might be to classify financing sources (FS) as actors of initial funding sources (households, corporations, NPISH, foreign sources) which through contribution mechanisms (taxes, contributions, direct payment to providers at time of use, grants, loans) dispense funds to the financing agents (HF).

Capital formation

2.83 Capital is a crucial factor in the provision of health care services and goods by health care providers. Accumulation of capital allows to expand the production and productivity. SHA 1.0 has defined the recording of Gross Fixed Capital Formation (GFCF) as health care related activity HC.R.1. It is proposed that SHA2.0 handles capital formation as a supporting transaction like education of health personnel, and research because these transactions do not directly provide benefits to consumers.

2.84 When SHA was published in 2000, there were not many studies dealing with the issue of capital formation in health care. However, both SHA and the Producers Guide recognize capital formation as an important expenditure item and propose to include it in the total health expenditure of a country. Furthermore, both manuals recommend to include consumption of fixed capital in the estimation of non-market output. As capital formation and capital consumption are closely related it is wise to check the consistency of the compilation of both variables concurrently.

2.85 In accounting, capital is recorded in the balance sheet. As such, fixed capital stock is an indicator of how the assets of a country have changed as a result of the production process. It is an indicator of the wealth of a country. But, at the same time, fixed capital is also an indicator of the future potential to produce goods and services.

2.86 GFCF includes products of capital formation as hospital buildings, medical equipment, and software. Most of these investments goods are produced by industries which are not specialised in health care provision. From an economic point of view this demand for capital formation creates not only income in those industries providing these capital goods but also contributes to the development of the production potential in health care delivery. In a closed economy the consumption of HC plus capital formation GFCF measures the output of total domestic production of health care plus related investments demanded by health care providers. The investments are induced or planned by governments for capacities to provide consumptive health care goods and services.

2.87 Capital formation is often, at least partly, financed by loans. Loans increase the funds available to a provider or financing agent, but they should not be included directly in the health accounts. A simple example may help to show the proper treatment of the amounts. Because loans affect the assets of the entity, two sets of accounts are needed – “current-account”, which track revenues and expenses, and “capital-account”, which track assets and liabilities. The loan itself affects the capital account (or balance sheet).

Exports of health care services and goods

2.88 The domestic provision of health care services and goods by non-residents are classified as exports of goods and services. Similarly, health care goods and services acquired by residents in a particular period that have been produced by non-residents, are classified as

imports of goods and services. The boundaries of the exports and imports included are set firstly by the health care services and goods included in the consumption framework. Secondly, additional products might be included as a result of the extension of the production boundary to intermediate consumption.

2.89 Exports and imports are recorded at the time when a service is delivered or, in the case of goods, the change in ownership of real assets occurs. The values of exports and imports denominated in foreign currencies are converted into national currency using market rates of exchange.

Human capital development and innovations

Education and training of health personnel

2.90 SHA1.0 is referring to the UNESCO/OECD/Eurostat (1995) guidelines for estimation strategies for expenditure on education and training of health personnel.

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

Research and development

2.92 Research and development by a provider is an activity undertaken for the purpose of discovering or developing new products, including improved versions or qualities of existing products, or discovering or developing new or more efficient processes of provision. The estimation of research and development requires a classification of research activities and the identification of research units. The OECD Frascati Manual provides guidance for international reporting of R&D.

2.93 A critical borderline issue here is the inclusion of research activities by industries. In SNA, research activities by industries are intermediate consumption. The Frascati Manual recommends “The best way of identifying the health R&D component is via cross-tabulation of industries and product fields. This should reveal in particular how much pharmaceutical R&D is being done outside the industry itself and also whether firms classified in the pharmaceutical industry are engaged in R&D on other products. Estimates must be made of the sources of funds of the additional health-related R&D in the services and of the R&D personnel concerned. Where product field data are not available, other series might be examined for additional information on health-related R&D, including R&D by field of science (medical sciences), R&D by socio-economic objective (health as SEO) or extramural expenditure by the pharmaceutical and medical instrument industries. Care should be taken to ensure that relevant R&D by biotechnology companies is included.”

2.94 Borderlines between R&D and education are illustrated in the Frascati Manual.

Household provision

2.95 The term household provision is used to refer to services delivered within the household by its members by combining their unpaid labour with purchases of durable and non-durable consumption goods. This output is used by the household without undergoing a market transaction. Hence it is called household non-market provision. The household non-market provision in the extended framework of SHA includes unpaid, informal help to other households excluding own-account capital formation (e.g. own-account construction of houses).

2.96 In national accounts, the provision of services by members of the household for their own final consumption has traditionally been excluded from measured production in national accounts. One main reason is that labour force would include inactive household members if household production would be considered. The following entries are not recorded in SNA when they are produced by household members and consumed within the same household:

- a. The cleaning, decoration and maintenance of the dwelling occupied by the household, including small repairs of a kind usually carried out by tenants as well as owners;
- b. The cleaning, servicing and repairing of household durables or other goods, including vehicles used for household purposes;
- c. The preparation and serving of meals;
- d. The care, training and instruction of children;
- e. The care of sick, infirm or old people;
- f. The transportation of members of the household or their goods.

They are only recorded if provided by other economic units when paid. Many households employ paid domestic staff to carry out these activities for them. Activities not included are activities that are not productive in an economic sense of SNA which include basic human activities such as eating, drinking, sleeping, taking exercise, etc., that it is impossible for one person to employ another person to perform instead. Paying someone else to take exercise is no way to keep fit.

2.97 Time use surveys carried out by several countries since the 1960's have shown the considerable amount of unpaid labour not recorded in labour force statistics. In order to achieve comparable results on time use between countries, researchers within the International Association of Time Use Research (IATUR) started to co-ordinate and harmonise time use methodology. The major step was taken by Eurostat when the Harmonised European Time Use Survey (HETUS) was developed (Guidelines ...2000).

2.98 There are two approaches to value household production (Eurostat Manual on Household Production and Consumption). The input approach values household production as the sum of the values of all its inputs: labour input, intermediate consumption, and capital costs. The output approach values household production at its imputed output value, in the same way that household own account production is valued in the core national accounts. The gross output is valued by multiplying the volume of household output for different activities by

market-equivalent prices for each type of service. Under the output method, the gross value added in household production is equal to the value of gross output less intermediate inputs. The output and input approaches use some of the same elements – intermediate consumption, capital consumption, taxes and subsidies. The calculation for each approach is presented below:

Output-based method:

Value of outputs (quantity x price) at market equivalent prices

– intermediate consumption

= gross value added

– consumption of capital

– other taxes on production

+ other subsidies on production

= mixed income (residual, includes compensation of labour and capital).

Input-based method:

Value of labour (units of time valued at suitable wages/time)

+ other taxes on production

– other subsidies on production

+ consumption of capital

= gross value added

+ intermediate consumption

= value of total output (sum of costs).

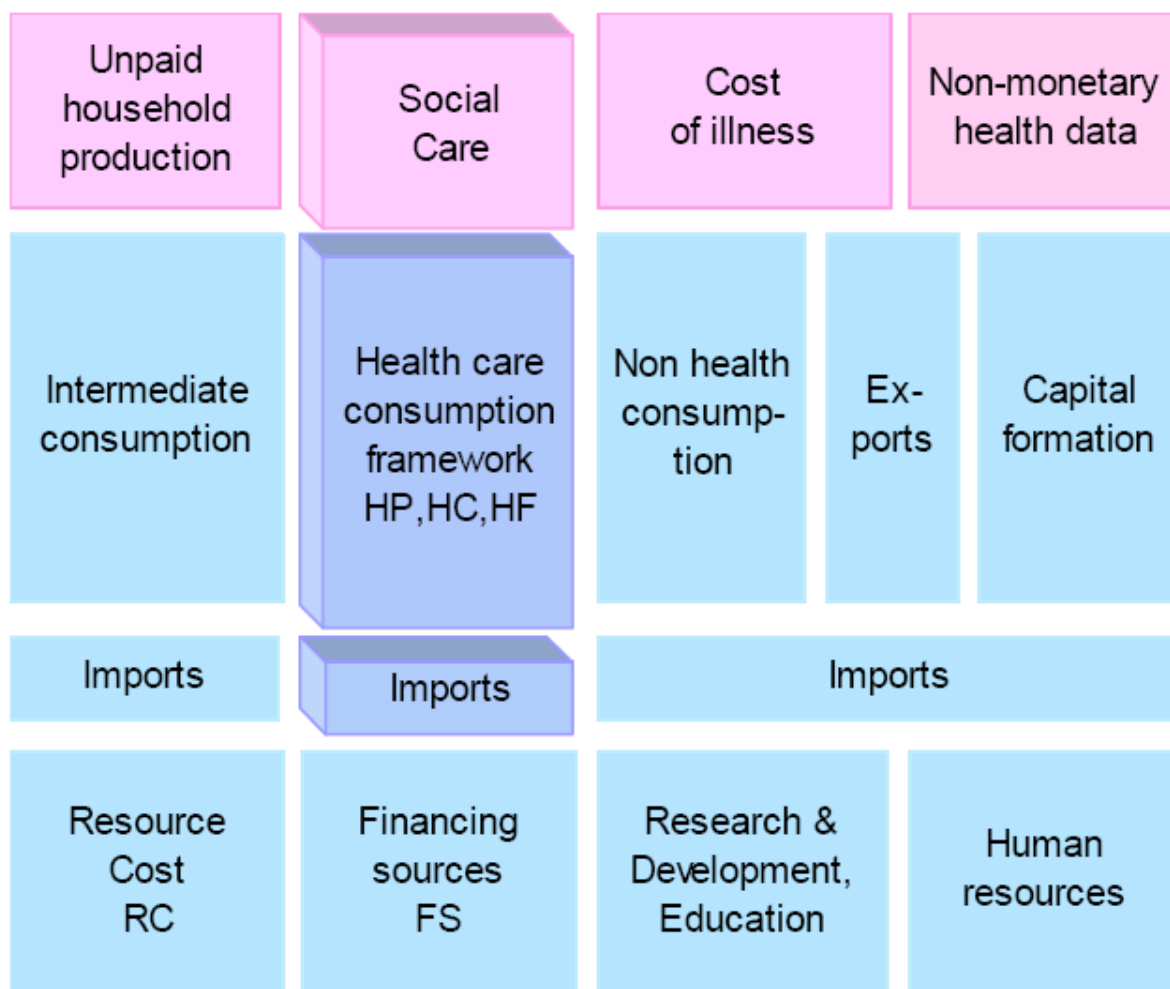
2.99 In the case of consumption of medical goods, the distinction between acquisition and use is analytically important. It underlies the distinction between durable and nondurable goods that is used extensively in economic analysis. In fact, the distinction between durable and non-durable goods is not based on physical durability as such. Instead, the distinction is based on whether the goods can be used once only for purposes of consumption or whether they can be used repeatedly, or continuously. For example, a pharmaceutical pill is a highly durable good in a physical sense, but it can be used only once. A durable good is one that may be used repeatedly or continuously over a period of more than a year, assuming a normal or average rate of physical usage. A consumer durable is a good that may be used for purposes of consumption repeatedly or continuously over a period of a year or more. Typical durable goods are glasses, wheelchairs, or orthopaedic prostheses. These are compiled in the central framework under medical goods HC.5.

2.100 According to the Eurostat manual on household production household durables are to be treated as fixed assets and consumption of fixed capital on household durables used for production of health has to be taken into account as input costs. In ageing societies with growing chronic diseases durable medical goods are quite important for the health of individuals. Durable goods can change the capabilities of individuals completely. It should be discussed whether the recommendations of the Eurostat manual is feasible in the extended framework because it would mean a reclassification of HC.5.

Links to other statistical systems

2.101 Many boundaries of SHA are interfaces to other statistical systems. The mapping of the classifications used in SHA and the classifications in the other statistical systems show these interfaces. In the SHA revision the link to SNA / ESA, ESSPROS and to the system of health non-expenditure data need special attention.

Figure 1: Consumption framework and extended framework of SHA



Annex 1: List of borderline cases of consumption of health care and services

The following table shows some results of the consultation of selected European health accounting experts about the degree of agreement on inclusion or exclusion of borderline cases of consumption of health care and services. Each item summarises the most important pro and con arguments. The list hasn't the intention of being exhaustive but it proposes at least examples for practical decisions on whether a service or a good should be included in the consumption frame work of health expenditure or not.

Table 1: Borderline cases of SHA

Purpose/Type of service	Criteria, explanation see	Framework	Main arguments	Recommendation
Curative				
Cosmetic, plastic or reconstructive surgery	M, H, P	CF	Performed by medical (surgeons) and paramedical professionals using medical technology, Contributes to improvement of mental health;	Include all services under these wordings, without trying to distinguish between cosmetic and reconstructive surgery; impossibility to separate plastic surgery without medical reasons
Artificial fertilisation	M, H, P	CF	Provided by health care institutions Services of health professionals	Include all services under this term
Abuse therapy	M, H, P	CF	Performed by health professionals	Include, although small therapy units may not be registered as health institutions and not taken into consideration as such
Services of balneology, massages, fitness activities, recreation services	M, H, P	CF	These services are often provided by non health professionals. They are seldom, prescribed as part of a medical treatment. The very large spectrum of such service do not allow reasonable definition refinements	Exclude, except if the service has clearly a curative, rehabilitative or prevention function and is provided by health professionals, i.e. massages by physiotherapists, fitness as part of rehabilitation
Autopsies and forensics	M, H, P	CF	Pros: Mostly performed under medical authority (legal medicine), by pathologists; forensics make large use of health knowledge and technology (incl. psychology); autopsies and forensics are services linked together. Cons:	Include because provided by medical specialists

			included in health related functions	
Chiropractors' services	M, H, P	CF	Provided by physicians or physiotherapists	Include
Alternative medicine, acupuncture	M, H, P	CF	Cons: Alternative medicine is too vague and cannot be understood unanimously, but acupuncture could generally be included as a health service	Include because traditional medicine
Activities of organ banks, telemedicine	M, H, P	EF	Performed using medical and paramedical knowledge and technologies	Do not include if these products are intermediate consumption of other health providers
Nutrition products, vitamins and minerals	M	CF	Pros: contribute to improvement of health, products sold in pharmacies and/or prescribed by doctors Cons: these products are also sold in supermarkets; a more precise borderline on what is medically indicated by health professionals is nearly impossible	Include but on a restrictive basis (i.e. advised by health professionals). Exclude generally nutrition for young children
Care				
Summer camp for disabled or family with disabled children		EF; Social Care	Pros: the main purpose of such services may be the support to activities of daily living (ADL); has a rehabilitative component Cons: included in health-related functions; are beyond daily living	Exclude as long as provided by non health institutions and provision by health specialists is a minor part
Orphanage, home for children, crèches for young children (0 to 3)		Exclusion	Has nothing to do with health; generally considered as social or human investments by institutions of social care / education.	Exclude, except if for disabled children or if prevention is the main component
Ancillary services				
Transportation for patient and disabled people: into/from health providers, taxis or other conventional vehicles	M	CF	Pros: the transportation service is needed because of the health status or a disability or to get a health provision. Cons: the service is generally not provided by health professionals; when provided in a health institution, this expenditure is already included in	Include if possible in HC.4.3, if the services (expenditure) can be captured out of financial data of the providers or of special compensation (government or social insurance)

			the main product (intermediate consumption, not final use)	
Special transports of human organs for transplantation	M, H	EF		Intermediate consumption
Diabetics association (teaching/support on how to deal with illness (medicine, lifestyle, nutrition))	M, H, P	CF	Use of health knowledge and skills, generally considered as prevention services	Include like other health association (Cancer league, etc.), research should, however, be captured separately (HC.R 3 research and development in health))
Housing adaptation, automatic staircase lift, needed in case of impairment	(M)	EF	There is a large spectrum of such technical devices, which are generally not bound to health services or provided by health professionals. Moreover, it is not care but investment. It doesn't improve health but standard of living	Exclude
Prevention				
Maternal and child health function	M, H, P	CF	Essential for reproduction	Include
Biochemical engineering	M, H	EF	Pros: performed for public health institutions or the pharmaceutical industry Cons: these products are integrated as intermediate consumption in health goods and services	Exclude from CF because intermediate consumption
Sunglasses, sun cream	M	CF	Pros: health prevention function of these goods; produced and sold by pharmacists/opticians who are health professionals (ISCO 88); may be prescribed by doctors Contra: sunglasses, except medical glasses, are mode articles with high esthetical added value. Sun cream belongs to general cosmetic articles	Include but on a restrictive basis, only medically prescribed or advised. Exclude from any estimation of expenditure of the articles sold by non-health professionals
Medical goods				
Condoms and other mechanical contraceptive devices	H	CF	SHA considers these articles under HC 5.1.3 Other medical non durable	Include

Orthopaedic shoes	M, H	CF	This device is generally medically prescribed and provided by orthopaedic technicians considered as a health professionals (ISCO 88)	Include HC.5.2.4 Orthopaedic appliances
Blood pressure instruments	M, H	CF	Explicitly mentioned in SHA as example of miscellaneous medical devices	Include under HC.5.2.9 Other miscellaneous medical durables
Administration				
Policy formulation outside central government <i>Consultant in public health, health policy or in health care services</i>	(M, H, P)	Not CF	Partly joint products; In health programmes and donor programmes consultancy can be offered as part of the package	Exclude since it is generally intermediate consumption by private or public health providers (final use)
Others				
Medical association, nurses union	(M, H, P)	Not CF	Not health activity toward patient	Exclude any health professional association or trade union
Refreshing training	(M, H, P)	EF	<i>To be worked on</i>	Included in health products or by the health providers as intermediate consumption or estimated separately in HC. R 2 Education and training
Health environment	(H), (P)		To be reconsidered if relevant in this list of borderline cases	Currently under HC.R.5, needs more precise definitions

Criteria: M =medical reason, H = health knowledge, P = health personnel.
Framework: CF = Consumption framework, EF = Extended framework.