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# ACRONYMS

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<tr>
<td>COFOG</td>
<td>Classification of the Functions of Government</td>
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<tr>
<td>COICOP</td>
<td>Classification of Individual Consumption by Purpose</td>
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<td>COPNI</td>
<td>Classification of the Purposes of Nonprofit Institutions</td>
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<td>COPP</td>
<td>Classification of Outlays of Producers by Purpose</td>
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<td>CPC</td>
<td>Central Product Classification</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>ISIC</td>
<td>International Standard Industrial Classification of All Economic Activities</td>
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<td>NAICS</td>
<td>North American Industry Classification System</td>
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<td>SHA</td>
<td>Satellite Health Account</td>
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<td>SNA</td>
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The growing need for data sources that can be used in developing public policies and making decisions on programs and projects related to social protection of the population has led experts to propose the creation of satellite accounts in specific sectors. Toward this end, as a contribution of the Pan American Health Organization, this Satellite Health Account Manual has been prepared as a proposal on formulation of health sector accounts, following the SNA93 guidelines.

This document consists of three core chapters that cover the general background of the System of National Accounts and the need to prepare satellite accounts for specific sectors or subjects. The first chapter presents important background and the SNA93 recommendations on preparation of satellite accounts. The second chapter outlines a proposal for development of the Satellite Health Account, and the third chapter discusses sources of information for the Satellite Health Account.

The document also presents recommendations, and the annexes include additional information on several specific topics as well as on the different classifications proposed.
This document is the proposed first version of a manual on the Satellite Health Account (SHA). The manual is intended for national accountants and others involved in the conceptual, methodological, and quantitative development of macro frameworks, for persons interested in highly detailed information on the supply of health services, and for those engaged in research and studies in the field of health economics. The objective of the manual is to identify clearly the linkages and relationships of the Satellite Health Account with the 1993 System of National Accounts (SNA93). It provides a description of the Satellite Health Account, its linkages with the central framework, the information to be included, and the level of freedom permitted in constructing the satellite account. It also sets forth the need to formulate a tentative definition of the coverage of the health sector that allows for basic comparability, recognition of the characteristic and related services to be included, and the possibility of extension beyond the limits of the central analytical framework while maintaining the connection to the SNA.

The manual presents basic criteria for construction of the Satellite Health Account through a review of essential concepts, classifications, and definitions of the central framework and of the SNA93 satellite account. It then proposes extensions of existing classifications to allow linkage with the SNA central framework and/or the opportunity for a more detailed analysis in the area of health. Finally, it presents sources of information and recommendations for development of the Satellite Health Account.

The advantages of preparation and use of the Satellite Health Account include the flexibility allowed by description of the sector; the potential to contribute to the process of administrative decision making, maintaining coherence with the SNA central framework; and methodological consistency between estimates of health expenditure and the different macroeconomic aggregates obtained from the central framework of national accounts, allowing the comparative analysis of both estimates.

The Satellite Health Account Manual provides a theoretical framework that should be complemented by a “Practical Guide for Compiling the SHA” and a “User’s Guide to the SHA.” The practical guide should establish the procedures to follow in preparing the Satellite Health Account and present the tables derived from it in order to adapt information to the needs of users and policy-makers, ensure identification of inconsistencies between different sources of information, and establish processes for correcting the discrepancies found.
1. BACKGROUND

95. Since the United Nations Economic and Social Council recommended its adoption, the 1993 System of National Accounts (SNA93)\(^1\) has become not only a standard for the preparation of national accounts but also a framework for other statistical systems. The SNA93 offers extensive information for analyzing economic development as well as guidance for improving basic statistics using different classificatory frameworks such as institutional sectors, economic activities, products, and others. As such, the SNA93 gives countries the opportunity to improve their national statistical systems.

96. One very important aspect of the SNA93 is the construction of satellite accounts. These accounts can be prepared in all sectors and allow expansion of analytical capacity in different areas, especially those of social concern. Some countries have already developed projects based on their requirements, generally in sectors such as tourism, housing, health, education, and the environment, among others.

1.1 THE SNA93

97. The SNA93 was prepared under supervision of the United Nations, the International Monetary Fund, the European Commission, the Organisation for Economic Co-operation and Development, and the World Bank. These five international organizations, working through an intersecretarial group of experts, developed the document’s methodological recommendations, which are intended to meet the needs of analysts and personnel responsible for economic policy and decision making. The SNA93 contains a set of macroeconomic accounts designed to be complete, coherent, and flexible enough to be used by all the countries of the world.

1.1.1 Definition

98. The System of National Accounts provides a comprehensive and detailed report of activities carried out in an economy, as well as the interaction among different agents and groups of economic agents. In other words, the national accounts provide a continuous flow of information indispensable for monitoring, analysis, and evaluation of the operation of an economy over time. In addition, the SNA provides concepts, definitions, accounting standards, accounts, and tables that make up the central and integrated framework for production, consumption, capital investment, income, deposits, the flow of financial and non-financial wealth, and related economic variables. These help in understanding the nature and trends of an economy and their comparability across countries and over time.

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1.1.2 Central framework

99. The SNA framework is an integrated and consistent system of accounts and tables in which the same concepts, definitions, and classifications are applied. Its purpose is to help countries develop their own systems of national accounts, based on a general methodological model that allows comparability of results and facilitates economic and social analysis in the global context. This framework consists of:

a) Integrated economic accounts, which include the accounts of all institutional sectors and the rest of the world, together with the accounts of transactions (and other flows) and the accounts of assets and liabilities. These accounts are the center of the accounting framework and offer a general view of an economy. They include the accounts of institutional units and sectors and their accounting balances, the transaction accounts, the accounts of assets and liabilities, the rest of the world accounts, and the aggregates.

b) A supply and use table, which includes the accounts of industries by type of economic activity and the accounts of transactions of goods and services by type of product. Also included are symmetrical input-output tables or matrixes. These tables provide a detailed analysis of the production process and of the supply and use of goods and services, as well as the income generated from such production.

c) A three-dimensional analysis of financial transactions and stocks of financial assets and liabilities (the flow of funds table), in which the relationships between sectors are represented directly. This table expands the financial portion of the integrated economic accounts, where the most complete classification of transactions and institutional sectors is used.

d) The flow of funds table, which integrates the assets and liabilities that are consolidated in the financial accounts, using a cross-classification of financial instruments by debtor and creditor sectors. Its objective is to show, for a given debtor sector and for each type of financial instrument, which sectors change their creditor position with respect to that sector in the period, and vice versa.

e) The functional analysis, in which certain transactions of institutional sectors are presented according to the purposes they serve. A functional analysis can be developed in the satellite accounts, through which several important macroeconomic aggregates can be calculated.

f) Population and employment tables, which include information on the population and its characteristics, allowing the calculation of per capita data, very useful aggregates for analysis. These tables also include the number of households and their characteristics, giving rise to the most detailed analysis of each aggregate and sector.
1.1.3 The classifications

100. The SNA classifications allow disaggregation of accounts in order to meet the needs of analysts. The principal categories that the SNA classifies are:

a) **Institutional units and sectors**: Institutional units are economic units capable of being owners of assets and of contracting liabilities in their own name. The **institutional sectors** group institutional units on the basis of their principal functions, behavior, and objectives. There are **five sectors**: Non-financial corporations, financial corporations, general government, households, and non-profit institutions serving households.

b) **Transactions and other flows**: The institutional units produce, consume, save, invest, and carry out all kinds of functions that give rise to the flows that are registered in the system. The types of transactions and other flows are grouped into four categories: transactions of goods and services (products), distributive transactions, financial transactions, and other accumulation entries.

c) **Assets and liabilities**: These are the components of the balances of the total economy and of the institutional sectors. They are presented as stocks (balances) of assets and liabilities and are linked to flows, since they are modified by transactions and other flows.

d) **Activities**: Institutional units can produce several types of goods and services (products), which come from different business activities. In this regard, units that devote themselves to a single activity are called establishments, which are classified according to the International Standard Industrial Classification of All Economic Activities (ISIC).\(^1\)

e) On the other hand, there are production units that carry out a principal activity and one or more secondary activities, a situation that occurs when the establishments and the industries are not uniform, according to the ISIC. In this case, the production of the secondary activities is identified according to its nature, based on a classification of products, although the inputs for the secondary activities cannot be separated from the principal activity. Auxiliary activities are analyzed and classified as part of the activities of the establishment or establishments that they serve.

f) **Products**: The different types of goods and services produced by the different economic activities, also called products, are classified according to the Central Product Classification (CPC).\(^2\)

g) **Purposes**: The SNA central framework applies an analysis by purpose to the majority of transactions of the general government sector and of nonprofit institutions serving households, to final consumption, and to some other transactions of households, as well as to certain transactions of producers.

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1. International Standard Industrial Classification of All Economic Activities (ISIC), United Nations, Series M, No 4, Rev. 2.
2. The Central Product Classification (CPC), V 1.0 United Nations, is a full classification of products that includes all goods and services.
These classifications are: classification of individual consumption by purpose; classification of the functions of government; classification of the purposes of nonprofit institutions serving households; and classification of outlays of producers by purpose.

1.1.4 Accounting rules

101. The SNA is constructed using a set of accounting rules that are summarized below.

102. **Terminology for the two sides of the accounts:** In the current accounts, the SNA uses the term “resources” (income) for transactions that add to the economic value of a unit or a sector; these by convention are recorded on the right side. The term “uses” (expenditures) is used to register transactions that reduce the economic value of a unit or sector; these are recorded on the left side of the accounts. As the example provided in the SNA explains, salaries and wages are a resource for the unit or sector that receives them (households) and a use for the unit or sector that pays them. In the accumulation accounts, the variations of liabilities and of net worth are recorded on the right side and the variations of assets on the left side. In the balances, the liabilities and net worth are registered on the right and the assets on the left.

103. **Double entry / quadruple entry:** Just as in business accounting, for a unit or sector, national accounting is based on the principle of double entry. Each transaction should be recorded twice, once as a resource (or a change in liabilities) and once as a use (or a change in assets), in such a way that, to confirm the consistency of the accounts, the total of transactions registered as resources or changes in liabilities and the total of transactions registered as uses or changes in assets should be the same. For example, a sale on credit by a company is recorded as a resource in production and as a gain of an asset in accounts receivable.

a) In the national accounts, considering units and sectors, two institutional units are involved in the majority of transactions, hence the registries are based on the principle of quadruple entry: each agent involved in each transaction should record it twice. Taking the example of the previous paragraph, a sale on credit by a company is registered as a resource in production and as a gain of assets in accounts receivable; in the account of the buyer, such a purchase is recorded as a use in intermediate consumption (if it is a company) or final consumption expenditure (if it is a household), and as incurring a liability in accounts payable.

104. **Time of recording:** The transactions or other flows are registered at the same time in the different accounts of the two units involved. As a general principle, the transactions are recorded when claims and obligations arise, when they are modified, or when they are canceled, independently of whether they have been paid or are still to pay (accrual basis).

105. **Valuation:** Transactions are recorded at the same value in all the accounts of the sectors involved and are valued at the real price agreed by the agents of such transactions, market prices being the basic reference for the valuation. When there
are no market transactions, the valuation is based on the costs incurred (non-market services produced by the government), or by taking as reference the market prices of similar goods or services (services for owner-occupied dwellings).

106. **Methods of valuation:** There are several methods for the treatment of taxes on products, subsidies, and trade and transport margins, in the valuation of transactions related to goods and services. Production, for example, can be valued at basic prices, producer prices, or buyer prices. Details on these valuations can be found in SNA paragraphs 2.71 to 2.76.

107. **Consolidation and netting:** Consolidation refers to the elimination, both from uses and resources, of transactions that occur between units when the latter are grouped, and to the elimination of reciprocal financial assets and liabilities, which can encompass several accounting procedures.

   a) If one wants to analyze a group of units, with regard to the remainder of agents of the economy in the process of consolidation, the net registry described in the previous paragraph should be used. When the goal is to analyze the relationships between the institutional units of a single sector, consolidation should be by addition, without eliminating transactions among the institutional units that make up the sector. For example, it is important to analyze the transfers between the central government, state governments, and/or local governments; this means that consolidation is carried out in gross terms, that is, without eliminating the transactions that take place between levels or entities of government.

### 1.1.5 The accounts

108. An account is an instrument that records, for a given aspect of economic life, uses (expenditures), and resources (income), or changes in assets and liabilities, and/or the stocks of assets and liabilities at a given time. In this regard, the SNA presents the following major classes of accounts:

- **Current accounts:** These record the production of goods and services, the generation of income in the productive process, the subsequent distribution and redistribution of income among institutional units, and the use of income for purposes of consumption and saving. They are divided into production accounts and accounts of distribution and use of income.

- **Accumulation accounts:** These record the acquisition and disposition of financial and non-financial assets and liabilities by institutional units, through transactions or as a consequence of other events. They include the capital account, the financial account, and the accounts of other changes in assets.

- **Balance sheets:** These show the value of stocks of assets and liabilities in the hands of institutional units or sectors, at the beginning and at the end of an accounting period. They include the opening balance sheet, balance changes,
and closing balance sheet. The balance or net worth represents the “wealth” of economic agents and the nation as a whole.

1.1.6 The production boundary

109. Because of the importance of determining the production boundary, both for the preparation of national accounts and for their probable extension in the construction of satellite accounts, SNA paragraphs 6.14 to 6.36 are reproduced in Annex 1.

1.2 THE EXTENSION TO SATELLITE ACCOUNTS

110. Satellite accounts use the System of National Accounts as the central reference framework and are designed to meet the needs for analysis of specific economic and social sectors. For this purpose, the use of complementary or alternative concepts and classifications is permitted, as are extensions of the central framework to introduce additional dimensions. These accounts provide a flexible way to develop an expanded system of national accounts for a given aspect of economic life; they can be progressively adapted to take account of changes related to institutional reforms. The conceptual framework, concepts, definitions, and classifications proposed in this document are based mainly on the recommendations of chapter XXI of the SNA93 Manual.

1.2.1 Definition

111. The SHA is a coherent, systematic, and integrated set of accounts and tables based on concepts, definitions, classifications, and accounting rules contained in the SNA93. Satellite accounts in general arise from the need to expand the analytical capacity of national accounts in specific areas of social concern, in a flexible manner and without overloading or disrupting the integrated structure of the SNA. This means that activities classified in the system of accounts are separated out with a view to studying a given area. Satellite accounts also constitute tools for statistical coordination that help to harmonize production and collection of data from a specific sector, such as tourism, the environment, or the health sector, among others.

1.2.2 Characteristics

112. The most important characteristics of the satellite accounts are:

- To provide additional information, of a functional or cross-sectoral character, on particular social aspects

- To use complementary or alternative concepts, including classifications and accounting frameworks, when there is a need to introduce additional dimensions to the conceptual framework of national accounts
1. BACKGROUND

- To expand the coverage of costs and benefits of human activities, as well as the analysis of data, through relevant aggregate indicators
- To link physical data sources and analysis to the monetary accounting system
- To facilitate the analysis of the sector being studied, in the context of the global economy

113. These characteristics summarize the role of satellite accounts. On the one hand, they are related to the central framework of national accounts and to the statistical information system for physical data, and on the other hand, they allow the coordination of sectoral and national statistics.

1.2.3 Satellite analysis

114. In relation to the SNA central framework, two types of satellite analysis can be distinguished. One has to do with rearrangement of the central classifications and the introduction of complementary elements that differ from the central conceptual framework; the other proposes alternative concepts to those used in the SNA. The first type of analysis refers to the specific accounts of given fields, such as spending on teaching, tourism, and environmental protection. The preparation of a satellite account within a specific accounting framework incorporates margins for flexibility that prevent overloading the central framework of the system.

115. In the second type of satellite analysis a different production boundary can be introduced, or the concepts of consumption and asset formation can be expanded. The scope of assets can be changed, or the boundary between economic and natural phenomena can be shifted, or the linkages between income and wealth can be placed within the context of a broader concept of wealth that includes natural assets and so forth. Several alternative concepts can be used at the same time, which can give rise to additional partial aggregates that complement the central system. In this regard, there have been some attempts to include these aggregates, in part or in their entirety, in an alternative system of national accounts.

116. This second type of research makes it possible to expand the work of national accounts beyond the SNA central system. It also gives results useful for economic analysis, as it experiments with new concepts and methodologies with a broader margin of freedom than those used in national accounts. This in turn can have a positive influence on the development of the central national accounts themselves.

117. The system does not make standardized recommendations on this type of work, which by definition should be kept open. On the other hand, the work of satellite accounts with a functional orientation, when there are no changes in the production boundary, pertains to a family of satellite accounts for which it is possible to propose an accounting framework that can be used as a reference in the construction of that type of account.
118. The preparation of satellite accounts of both types can imply changes in definitions or classifications according to the analytical needs. These changes are permitted in the satellite accounts, due to the flexibility of the SNA.

1.2.4 Typical cases of satellite account extension

119. In the preparation of satellite accounts with a functional orientation, the definitions and classifications of the SNA central framework can usually be changed. This implies, on the one hand, that these changes are identified and separated so that it is possible to make comparisons with the SNA, and, on the other, that the change in definitions generates a set of explicit transactions that can simultaneously modify the primary income, transfers, and the use of goods and services (intermediate consumption, final consumption expenditure, gross asset formation, and assets and liabilities, among others).

1.2.4.1 Production and products

120. In satellite accounts, accounts of production and income generation are prepared to serve as tools for analysis of productive activity. For some activities and products, it is necessary to separate the principal activity from secondary activities in order to differentiate the intermediate inputs and factors related to the principal activity. Furthermore, within production units, it may be important to identify particular ancillary activities and their associated production. Usually, the inputs of production units include direct costs of carrying out the principal and secondary activities, as well as some internal functions that are indirect components of total cost. In particular, it is very useful to separate the costs of secondary activities from costs of the principal activity and in some cases from costs of ancillary activities, in order to arrive at estimates of the production and income generation accounts.

121. In this regard, in order to achieve complete coverage of some activities and products within the production boundary of the central framework, as indicated in SNA paragraph 21.13, it is important to consider the following elements:

122. The establishments, or the units of homogenous production, whose principal or single activity is the activity of interest;

123. If dealing with establishments, the relevant secondary output of other establishments and the intra-establishment deliveries;

124. The relevant ancillary activities and their output, presumably measured by their costs in general.

125. The production boundary can be modified for certain objectives. This can be done globally, for example, by including services provided by people for other members of their household and/or volunteer work. This can also be done when the aim is to obtain a very broad description of a given activity. In general, the area of non-market activities can be expanded considerably. In the scope of production it is of interest to know: Who produces? How do they produce? What do they produce? To
ascertain this it is necessary to have specific classifications of activities, producers, and products.

1.2.4.2 Income

126. Income is made up of transactions that are classified on the basis of their different characteristics and their nature.

Primary incomes

127. According to SNA paragraph 21.19, the magnitude of primary incomes increases when the production boundary is expanded, with income being imputed for the additional activities. Mixed income or business income of the household sector can also be separated into compensation of labor and surplus or return from capital.

128. Nominal interest is not always an appropriate measure for the return to funds lent, since under inflation conditions that interest includes an implicit or explicit component or indicator of compensation for the change caused by inflation in the real value of monetary assets and liabilities. The nominal interest that is recorded in the accounts should exclude that component, which should be registered as a holding gain/loss.

Transfers and disposable income

129. In addition to transfers included in the system, other classes that have meaning can be defined. In this regard, when outputs from ancillary activities are assigned to final consumption, transfers can appear. Furthermore, transfers internal to units may also cover compensation for the cost of production of non-market services produced by the government, when it is useful to distinguish the productive and financial functions of government.

130. Furthermore, implicit transfers may be made explicit, since implicit transfers are not treated as imputed transfers within the central framework, although they change the situation between units. For example, non-market services provided free of charge by governmental units to market producers represent, in the central framework, collective consumption of government. If a further analysis treats them as an addition to intermediate consumption of market producers, a counterpart should be introduced in subsidies to production. This method can be used to measure all types of transfers between the government and specific sectors.

131. SNA paragraphs 21.25 to 21.28 state the following:

132. “Externalities may give rise to a wide range of implicit transfers, when trying to depict and value advantages/disadvantages that are not accounted for in the value of monetary transactions between economic units or that result from actions of these units in the absence of any monetary transaction. The environment, of course, gives rise to many external effects (see section D). For example, pollution and nuisances created by producers may have negative effects on final consumers. These negative effects might be estimated, not very easily of course, and recorded as negative transfers from producers to households. In order to balance these
negative transfers, one possibility might be to introduce a concept of production of externalities which would result in an output of negative or positive services and the corresponding final consumption.

133. “Thirdly, flows in the other changes in volume of assets account and the revaluation account of the central framework are candidates for enlarged concepts of transfers and disposable income. One could treat all of them as within an enlarged class of current transfers. The balancing item of the other changes in volume of assets account, i.e., “changes in net worth due to other changes in volume of assets”, and the balancing item "changes in net worth due to real holding gains/losses" in the revaluation account, would then appear as extraordinary (disposable) income, subsequently as extraordinary saving. In this hypothesis the resulting enlarged disposable income would approximate more closely the ex-post Hicksean income concept. Enlarged saving in effect would then become equal to changes in real net worth less net capital transfers received.

134. “However, one may think of making only limited steps in this direction. For instance, a country engaged in a war might find it useful to estimate an additional concept of disposable income by taking into account the destruction due to war. In countries where holding gains or losses on financial assets/liabilities are significant, real holding gains and losses on financial assets and liabilities could be added to disposable income in order to derive a broader measure of income.

135. “Naturally, changes in primary incomes of the type described above would also result in adjusted figures for disposable income. One possibility in that context would be to adjust the latter only for the component of nominal interest which compensates for inflation, or for the difference between nominal and real interest.”

1.2.4.3 Uses of goods and services

136. When the concept of production is expanded, the coverage of uses of goods and services changes. Goods and services may be for intermediate or final consumption or for capital formation. For example, if services rendered to each other by members of the same household are included in production, this constitutes final consumption of these services. Furthermore, the boundary between intermediate consumption, final consumption, and capital formation can be modified in several ways.

137. In this case it is important to cite SNA paragraphs 21.30, 21.31, and 21.32: “Two typical cases refer to human capital and consumer durables. When final consumption in education and health is, at least in part, treated as fixed capital formation, the corresponding central framework transactions are reclassified from consumption (mainly final, partly intermediate) to fixed capital formation which results in human capital assets. A less radical treatment is to capitalize only actual expenditures on education (and possibly part of expenditures on health) as intangible assets, so extending the scope of the latter. As an immediate consequence, the concept of consumption of fixed capital would be extended. An alternative to the inclusion of expenditures on consumer durables such as cars and furniture in household final consumption is to treat them as fixed capital formation.
Only that part of the resulting fixed asset that is estimated as consumption of fixed capital then enters final consumption. Strictly speaking, this procedure implies enlarging the concept of production to include household services. As a consequence of the changes just considered, the concept of saving is extended.

1.2.4.4 Assets and liabilities

138. As indicated in the previous paragraphs, the scope of assets, tangible or intangible, is modified when the concept of production is expanded or when the boundary between consumption and capital formation is changed. Furthermore, the scope of financial assets and liabilities may also be broadened by including contingent assets and liabilities in the classification of financial instruments. SNA paragraph 21.34 states: “In fact, this modification would be simply a formal one as presumably, following current corporate practice, equivalent amounts would be included in both the assets and liabilities of each sector involved, unless the present value of the net risk taken is estimated and recorded under other changes in volume of assets, for example.”

1.2.4.5 Purposes

139. In the central framework, an analysis by purpose is applied to most transactions of general government and nonprofit institutions serving households, to final consumption and some other transactions of households, and to certain transactions of producers. Nevertheless, the satellite account makes it possible to include a broader range of transactions because the functional approach is more flexible than the central framework. Annex 4 presents four classifications by purpose and their correspondence with the Satellite Health Account.

140. In the classifications by purpose used within the central framework, the categories at a given level are mutually exclusive. For example, a transaction classified under teaching cannot also be classified under health, since when a given purpose is taken into account the part of the expenditure that is omitted can be significant, and this can create a problem. With respect to this, SNA paragraph 21.37 states: “In particular cases, purposes of current interest hardly feature in the existing general classifications because, for historical or other reasons, priority is given to the analysis of other purposes. For example, besides the fact that tourism does not appear as such a main category in the classification of household goods and services by object, it is not even possible to reassemble the necessary pieces because not all of them are shown in the classification.”

141. Accordingly, SNA paragraph 21.38 recommends that “when emphasis is given to a particular purpose, a reclassification of a number of transactions is often necessary. All programs or transactions related to environmental protection, for example, may thus be identified and grouped into a specific purpose classification. Such specific classifications have to be designed to cover the various units concerned in a consistent way. Of course, once reorganized that way, transactions classified by purpose are no longer additive since some of them may appear simultaneously
under education and health, defense and health, environment and agricultural or
energy affairs, transport and tourism, etc.”

1.2.4.6 Aggregates

Changes in the principal aggregates shown in the central framework

142. The principal aggregates shown in the central framework can be modified when the
complementary or alternative analyses mentioned above are applied either directly
or indirectly. Examples of direct modifications are the increase in output, value
added, and final consumption when household internal services are included within
the production boundary, or the increase in fixed capital formation if human capital
is considered an economic asset. In the first case, disposable income is modified
indirectly, just as savings is, when human capital is considered an economic asset.

Introduction of aggregates by purpose

143. When the intent is to focus attention on a specific subject, changes to some
concepts and aggregates of the central framework can be made; however, that is
not the purpose of this type of analysis. According to SNA paragraph 21.42, the
purpose is “to define and measure one or more aggregates to capture at a glance
the magnitude of the resources an economy is devoting to the field of concern. In
some cases the functional analysis of the central framework directly provides
figures that are very close to those sought.”

144. In most cases, several sectors are involved and the classifications do not directly
contain the subjects of interest; moreover, the required aggregate is not integrated
only in final consumption and capital formation. In such case it is necessary to
define, as indicated in SNA paragraph 21.43, “a broader concept to cover all
aspects of the national expenditure in the field of concern.” In a specific satellite
account the functional classifications that are detailed should be exclusive.

1.2.5 The functionally oriented satellite account

145. The principal purpose of satellite accounts is to provide elements that make it
possible to quantify resources allocated to a specific area or sector. These
accounts allow calculation of aggregates such as national expenditure, in which the
uses of the specific goods and services in the field under study can be measured,
as well as capital formation by activity, and specific transfers of the sector. The
SNA recommends that, depending on the sector, the satellite account should
include the following aspects:

- For R&D or transport, a detailed analysis of the production and uses of the
  specific goods and services

- For social protection, a detailed analysis of transfers
• For teaching and health, both a detailed analysis of the production and uses of goods and services and an analysis of transfers, since the units that provide resources do not correspond to the users

• In the cases of tourism and environment, the uses as such, given that usually the units that are users as consumers or investors are the same ones that make the expenditures

146. In other words, a satellite account for a given sector includes analysis of uses or benefits derived from national expenditure, of production and its factors, and of transfers and other ways of financing uses.

147. It can therefore be concluded, as SNA paragraph 21.49 states, that “satellite analysis may apply to various aspects of national accounts and pursue different objectives. One approach is to concentrate on one field to give a full picture of it, in a systematic way, by establishing a specific accounting framework, articulated with the central framework.”

148. As regards its relations with the central framework, such a “specific satellite framework does not aim at covering all economic life; it is a self-consistent framework in a partial domain” (SNA paragraph 21.50). Escaping certain constraints of the central framework, which is mainly institutional in nature, a satellite framework or account is by hypothesis more functional.

149. Satellite accounts combine “an extension of the kind of activity and product analysis and a generalization of the purpose approach” (SNA paragraph 21.51). It is then possible to “try to design an accounting framework to cover a wide variety of cases, all of them belonging to a family of functionally oriented satellite accounts. Such accounts are relevant for many fields, such as: culture, education, health, social protection, tourism, environmental protection, research and development (R&D), development aid, transportation, data processing, housing and communications.”

150. The fields mentioned in the preceding paragraph are of social concern and refer to services that, in general, relate to different activities. “It should be noted at the outset that because the fields of functionally oriented satellite accounts sometimes overlap, the shares of national expenditure in those fields in relation with gross domestic product (GDP), for example, may not be strictly additive. Some activities/products/purposes may be classified in several places. Thus, if shares of overlapping fields have to be calculated, the denominator will normally have to be modified” (SNA paragraph 21.52).

1.2.5.1 **Scope of a functionally oriented satellite account**

151. To analyze a specific field in depth while preserving the possibility of calculating certain aggregates such as national expenditure, the starting point is an analysis of uses. This corresponds to the questions set forth in SNA paragraph 21.53: “How many resources are devoted to (education, transportation, tourism, environmental protection, data processing, etc.)?” Or, identically, “How much is spent on
(education, transportation, etc.)? In order to answer these questions, we have to decide upon:

a) The goods and services that we will consider specific to this field, where national expenditure includes the uses (current or capital) of these specific products;

b) The activities for which we will record capital formation;

c) The transfers that we will consider specific to this field, recognizing that they will be a separate component of national expenditure only to the extent that they are not already included in the value of the uses of the specific products (otherwise, they will be analyzed only in relation to financing).

152. Depending on the field, the design of a given satellite account will emphasize (SNA paragraph 21.54):

153. The detailed analysis of the production and uses of the specific goods and services (e.g., R&D or transportation);

154. The detailed analysis of transfers (e.g., social protection);

155. Both production/uses and transfers equally (e.g., education and health);

156. Uses as such (e.g., tourism, environmental protection).

157. SNA paragraph 21.55 points out that “When units which are the users, as actual consumers or investors, and units which ultimately bear the expenses coincide, figures for users tell us who finally bears the expenditure.” This is usually the case for data processing and in some cases for transportation and tourism. Nevertheless, “ultimate users and ultimate bearers of the expenses may often differ, as is the case for education and health. In these cases, analyzing the way the uses are financed is very important.” In addition, when transfers represent all or the main part of national expenditure in a sector, this analysis is even more important.

158. Furthermore, SNA paragraph 21.56 says that: “Analyzing in detail who are the users, consumers, investors, or transfer recipients is thus an important part of what can be done in a satellite account. Even if the aggregate under study is called national expenditure, the users in this context are the units which actually acquire the goods or services (for actual final consumption, intermediate consumption or capital formation) or receive specific transfers which are not intended to finance these acquisitions of goods and services.”

159. That is to say that, when the focus is on a specific field, it is useful to associate non-monetary figures to the monetary ones. Non-monetary figures relate to units and factors of production (labor, various kinds of assets) and to users/beneficiaries. In other words, a satellite account of a given sector includes analysis of the uses or benefits derived from national expenditure, of production and its factors, and of transfers and other ways of financing uses, both in value and in physical quantities.
1.2.5.2 Production and products

160. With regard to the productive process, satellite accounts focus attention on the production of characteristic goods and services, that is, those goods and services that have been identified as typical in the functional field of the satellite account. In this regard, it is necessary to identify and estimate the production account for the producers of characteristic products.

161. As noted above, it is necessary to create a list of activities that produce the characteristic products; then the characteristic producers should be classified. They may be units of homogeneous production belonging either to establishments whose principal activity is a characteristic activity, or to establishments that carry out a characteristic activity only as a secondary or ancillary activity.

162. In the case of establishments whose principal activity is a characteristic activity, all activities are included in the estimates of the production accounts, for practical reasons. Characteristic producers are classified into market and non-market producers.

1.2.5.3 Full accounts for characteristic producers

163. For a satellite account in a given field, it is important to set up complete accounts for characteristic producers, although complete accounts can only be established for institutional units. Nevertheless, if one considers that a great many units of homogenous production (establishments) are part of institutions with productive activity that is characteristic of the same field, it is possible to have complete accounts. In this regard, the analysis can be extended, if all those institutional units are regrouped in a sector of characteristic producers and their accounts are presented using a simplified presentation (balance sheets may or may not be included).

164. The production and income generation accounts, other current accounts, and accumulation accounts are shown below in schematic form.
### Production and generation of income account

<table>
<thead>
<tr>
<th>Uses</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intermediate consumption</strong></td>
<td><strong>Output</strong></td>
</tr>
<tr>
<td>- of characteristic activities</td>
<td>- of characteristic output</td>
</tr>
<tr>
<td>- of other activities</td>
<td>- of other output</td>
</tr>
<tr>
<td><strong>Compensation of employees</strong></td>
<td></td>
</tr>
<tr>
<td>- for characteristic activities</td>
<td></td>
</tr>
<tr>
<td>- for other activities</td>
<td></td>
</tr>
<tr>
<td><strong>Taxes on production and imports</strong></td>
<td></td>
</tr>
<tr>
<td>Subsidies (-)</td>
<td></td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td></td>
</tr>
<tr>
<td>Operating surplus, net</td>
<td></td>
</tr>
<tr>
<td>- of characteristic activities</td>
<td></td>
</tr>
<tr>
<td>- of other activities</td>
<td></td>
</tr>
<tr>
<td><strong>Mixed income, net</strong></td>
<td></td>
</tr>
<tr>
<td>- of characteristic activities</td>
<td></td>
</tr>
<tr>
<td>- of other activities</td>
<td></td>
</tr>
</tbody>
</table>

### Other current accounts

<table>
<thead>
<tr>
<th>Other current accounts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Property income</td>
<td>Operating surplus</td>
</tr>
<tr>
<td>Current taxes on income, wealth, etc.</td>
<td>Mixed income</td>
</tr>
<tr>
<td>Social contributions and benefits</td>
<td>Property income</td>
</tr>
<tr>
<td>Other current transfers</td>
<td>Social contributions and benefits</td>
</tr>
<tr>
<td>Adjustment for the change in net equity of</td>
<td>Other current transfers</td>
</tr>
<tr>
<td>households in pension funds</td>
<td></td>
</tr>
<tr>
<td>Collective consumption</td>
<td></td>
</tr>
<tr>
<td>Saving, net</td>
<td></td>
</tr>
</tbody>
</table>

### Accumulation accounts

<table>
<thead>
<tr>
<th>Accumulation accounts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross fixed capital formation</td>
<td>Saving, net</td>
</tr>
<tr>
<td>- of characteristic activities</td>
<td>Capital transfer receivable</td>
</tr>
<tr>
<td>- of other activities</td>
<td>Capital transfer payable (–)</td>
</tr>
<tr>
<td>Consumption of fixed capital (–)</td>
<td></td>
</tr>
<tr>
<td>Changes in inventories</td>
<td></td>
</tr>
<tr>
<td>Acquisition less disposals of valuables</td>
<td></td>
</tr>
<tr>
<td>Acquisition less disposals of non-produced</td>
<td></td>
</tr>
<tr>
<td>non-financial assets</td>
<td></td>
</tr>
<tr>
<td>Net acquisitions of financial assets</td>
<td></td>
</tr>
<tr>
<td>Other accumulation entries</td>
<td></td>
</tr>
</tbody>
</table>

|                                      | Net incurrence of liabilities |
|                                      | - for financing characteristic activities |
|                                      | - others |
|                                      | Other changes in net worth |

165. As satellite accounts are functionally oriented, the sector of characteristic producers may also cover units that are characteristic producers in the field under study, but that belong to institutional units whose principal activity is in another field. In this case, SNA paragraph 21.107 indicates that “To balance the accounts, the operating surplus or mixed income, if any, of these producing units is transferred as property income to their parent institutional units. In the accumulation accounts, the capital formation of these producing units is balanced by an equivalent capital transfer coming from their parent institutional units.”
166. The analysis of transfers and their financing is important when satellite accounts are prepared in fields such as social protection, where distributing transfers is the principal economic function involved and the production of services plays only a marginal role, since the analysis of units that manage the distribution and redistribution processes predominates. In this case, if administrative costs are presented directly as uses and sales as resources, it is easier to group all the current accounts. On the other hand, “if social protection institutions act as producers of health or welfare services and if a satellite account covers both production and redistribution functions, the above presentation of accounts remains relevant” (SNA paragraph 21.108). Furthermore, “Transfers are analyzed according to their nature (in cash, in kind, subdivided in various ways) and the type of risks (sickness, unemployment, etc.). A detailed classification of social protection schemes is also used (basic, complementary or supplementary schemes, subdivided between national, general, special or voluntary schemes for instance)”(SNA paragraph 21.109).

1.2.5.4 Supply and use of goods and services

167. The table of supply and use of goods and services of a satellite analysis can give rise to an input-output table, provided that detailed classifications of characteristic producers and products, as well as of related goods and services, are available. In this case, the classifications of other producers and products can also be added.

168. Table 1.1, the satellite input-output table or supply and use table, is a rearrangement of the supply and use table of the central framework, where characteristic producers are emphasized and detailed, adding in other producers. This table explains in detail the supply and use of characteristic and related goods and services.

169. In the columns for producers, characteristic producers are separated from other producers and are classified into market and nonmarket producers. Market producers are subdivided into principal producers, secondary producers, and ancillary activities. In the case of non-market producers, in addition to principal producers, secondary producers, and ancillary activities, the category “others” is included, so that this column can include information on production when the production boundary has been extended for analysis of the satellite account.

170. Although the table presents other producers aggregated in a column, it may be of interest to detail and present separately the activities that produce the principal intermediate inputs or capital goods for the characteristic producers or for certain related goods and services.

171. The first part of Table 1.1 presents information on supply. The rows show the details of characteristic and related products, as well as other products. The columns show, in addition to production, trade and transport margins, taxes on products, subsidies for products, and imports. All these elements as detailed in each row constitute the supply.
172. The second part of Table 1.1 shows the uses of the products in purchasers' values, with the rows listing the same categories of products. The final part of the Table contains in the columns for producers the components of added value for the respective production accounts and additional information such as personnel used, inventory of fixed assets, etc. Columns have also been added to complete the variables referring to use, such as final consumption of households, nonprofit institutions serving households, and general government. Columns for gross capital formation and exports have also been added.
**Table 1.1: Satellite input-output table (supply and use table)**

<table>
<thead>
<tr>
<th>Resources</th>
<th>Total supply at purchaser's prices</th>
<th>Trade and transport margins</th>
<th>Taxes on products</th>
<th>Subsidies to products</th>
<th>Characteristic producers</th>
<th>Non-market producers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Market producers</td>
<td>Other producers</td>
</tr>
<tr>
<td>Goods and services: Supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Principal producers</td>
<td></td>
</tr>
<tr>
<td>Characteristic products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Secondary producers</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auxiliary activities</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
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<td>...</td>
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<tr>
<td>m.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>2.</td>
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<td>...</td>
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</tr>
<tr>
<td>n.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other products</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table structure is designed to show the flow of goods and services from producers to the total economy, including imports of goods and services.
Table 1.1 Satellite input-output table (supply and use table) (continuation)

<table>
<thead>
<tr>
<th>Uses</th>
<th>Total uses at purchaser’s prices</th>
<th>Characteristic producers</th>
<th>Final consumption expenditure</th>
<th>Gross capital formation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>NPISH</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Market producers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary producers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Auxiliary activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Principal producers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-market producers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other producers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exports of goods and services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households</td>
<td>Individual</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individual</td>
<td>Collective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gross fixed capital formation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supply changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acquisitions less disposals of valuables</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Goods and services
Uses:
Intermediate consumption

Characteristic products
1.
2.
... 
m.

Related products
1.
2.
... 
n.

Other products

Total
<table>
<thead>
<tr>
<th>Uses</th>
<th>Characteristic producers</th>
<th>Final consumption expenditure</th>
<th>Gross capital formation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total uses at purchaser's prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>NPISH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Principal producers</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary producers</td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Auxiliary activities</td>
<td>Collective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Principal producers of the government</td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary producers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Auxiliary activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other producers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total economy</td>
<td></td>
</tr>
<tr>
<td>Gross domestic product (GDP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee compensation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes on products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other taxes on production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidies to products (–)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other subsidies to production (–)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating surplus, net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed income, net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-specific products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating surplus, gross</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed income, gross</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor inputs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-specific products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net stock of fixed assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.2.5.5 *Uses / national expenditure*

173. Depending on the functional field of a given satellite account, it is necessary to define different types of uses that should be included in each of the generic variables or aggregates shown in Table 1.2, Components of national uses/expenditure (SNA Table 21.1), which can be shown by types of products, transfers, or purposes.

174. This table shows in the first items the total uses of resident units (items 1 to 5). The last two items show current and capital uses of resident units that are financed by the rest of the world, in order to obtain by subtraction the national expenditure. This national expenditure represents the effort that the country makes in the functional field that is the object of the satellite analysis.

**Table 1.2  Components of uses / national expenditure**

<table>
<thead>
<tr>
<th>Components of uses/ national expenditure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consumption of goods and specific services</td>
<td></td>
</tr>
<tr>
<td>1.1 Actual final consumption</td>
<td></td>
</tr>
<tr>
<td>1.1.1 Market products</td>
<td></td>
</tr>
<tr>
<td>1.1.2 Non-market products</td>
<td></td>
</tr>
<tr>
<td>1.1.2.1 Individual</td>
<td></td>
</tr>
<tr>
<td>1.1.2.2 Collective</td>
<td></td>
</tr>
<tr>
<td>1.2 Intermediate consumption</td>
<td></td>
</tr>
<tr>
<td>1.2.1 Actual intermediate consumption</td>
<td></td>
</tr>
<tr>
<td>1.2.2 Internal intermediate consumption</td>
<td></td>
</tr>
<tr>
<td>2. Capital formation in specific goods and services</td>
<td></td>
</tr>
<tr>
<td>3. Fixed capital formation of characteristic activities in non-specific products *</td>
<td></td>
</tr>
<tr>
<td>4. Specific current transfers (not counterpart of item 1)</td>
<td></td>
</tr>
<tr>
<td>5. Specific capital transfers (not counterpart of item 2 or 3)</td>
<td></td>
</tr>
<tr>
<td>Total uses of resident units</td>
<td></td>
</tr>
<tr>
<td>6. Current uses of resident units financed by the rest of the world (minus)</td>
<td></td>
</tr>
<tr>
<td>7. Capital uses of resident units financed by the rest of the world (minus)</td>
<td></td>
</tr>
<tr>
<td>National Expenditure</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td></td>
</tr>
</tbody>
</table>

* And their acquisition less disposals of non-produced non-financial assets.

1.2.5.6 *Components of uses / national expenditure*

175. A satellite account with a functional orientation requires identification of specific goods and services, classified into “characteristic” and “related” as appropriate in each item of the table above (Table 1.2). Characteristic goods and services are those typical of the field of study; it is of particular interest to understand how these are produced. In the case of related goods and services, only the uses are of
interest, because they are part of the field of study. The borderline between these two types depends on the economic organization of a given country and the purpose of the satellite account.

176. Items 1 and 2, showing consumption and gross capital formation of specific goods, should detail the characteristic and related products for each of the functional satellite accounts. Item 1 includes actual final consumption and intermediate consumption of specific goods. Actual final consumption is defined as in the SNA93 central framework: market and non-market products are separated, and there are rows for individual and collective consumption expenditures, for both characteristic and related products. The values in this table are the same as those in the central framework, as long as the production boundary is not changed. When the production boundary is changed for analytical purposes, for example to include voluntary work in education or health, or when a different type of valuation is adopted (value returned versus cash flow), these inclusions should explain the differences with the central framework.

177. Intermediate consumption includes actual intermediate consumption, defined as in the SNA central framework, and internal intermediate consumption within an establishment. In the latter, consumption is considered intermediate for production of the ancillary activities that are explicitly indicated, depending on the functional field (education, health, research and development) of the satellite account, as well as intermediate consumption by extension of the scope of production, as previously mentioned.

178. Item 2, gross capital formation in specific goods and services, will have information on characteristic and related goods and services that are regarded as gross capital formation.

179. Item 3 is fixed capital formation of characteristic activities in non-specific products and their acquisition less disposals of non-produced non-financial assets. This includes gross capital formation of characteristic activities, except for goods and services considered in category 2. This item includes acquisition of non-produced non-financial assets, such as the acquisition of land.

180. Item 4, specific current transfers that are not counterparts of item 1, and item 5, capital transfers that are not counterparts of items 2 or 3, are very important categories in some satellite accounts such as those dealing with social protection or development assistance. In these cases, items 1 and 2 refer only to administrative costs of the entities that administer the funds of social protection or international assistance; the spending of most importance in these functional accounts consists of transfers.

181. In the case of the fields of health and education, most transfers are means of financing the acquisition of goods and services that are included in items 1 to 3, which means that these transfers are not registered in item 4. Also, it is very important to define a classification of specific transfers for the functional field of the satellite account to develop independently of whether or not they are counterparts of items 1 to 3. This classification will permit a better analysis of uses and financing.
182. The “total uses of resident units” are obtained by adding items 1 to 5, as described above.

183. To obtain national expenditure it is necessary to deduct from the total the current uses and capital uses by the rest of the world through transfers or loans in items 6 and 7, respectively.

184. In Table 1.3, Coverage of national expenditure in various fields (SNA Table 21.2), the rows show the different categories of uses, and the columns show various functional fields. For each combination, the cells for which uses should be evaluated are marked. In this table, there exist categories that are specific to given functional fields. Thus item 5, specific capital transfers that are not counterparts of items 2 or 3, corresponds to the satellite accounts of the functional fields for social protection, development aid, and transportation, while item 2, capital formation in specific goods and services, is important in the satellite accounts for environmental protection, research and development, and data processing.
Table 1.3 Coverage of national expenditure in several fields

<table>
<thead>
<tr>
<th>Components of national uses/expenditure</th>
<th>Culture</th>
<th>Education</th>
<th>Health</th>
<th>Social protection</th>
<th>Tourism</th>
<th>Environmental protection</th>
<th>Research and development</th>
<th>Development Aid</th>
<th>Transportation</th>
<th>Data processing</th>
<th>Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consumption of specific goods and services</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.1 Actual final consumption</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>1.1.1 Market products</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<td></td>
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<tr>
<td>1.1.2 Non-market products</td>
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<td></td>
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</tr>
<tr>
<td>1.1.2.1 Individual</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
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<tr>
<td>1.1.2.2 Collective</td>
<td>X</td>
<td>X</td>
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<tr>
<td>1.2 Intermediate consumption</td>
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<tr>
<td>1.2.1 Actual intermediate consumption</td>
<td>X</td>
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<tr>
<td>1.2.2 Internal intermediate consumption</td>
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<tr>
<td>2. Capital formation in specific goods and services</td>
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</tr>
<tr>
<td>3. Fixed capital formation of characteristic activities in non-specific products *</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>4. Specific current transfers (not counterpart of item 1)</td>
<td></td>
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<td></td>
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<tr>
<td>5. Specific capital transfers (not counterpart of item 2 or 3)</td>
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<td></td>
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<tr>
<td>Total uses of resident units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Current uses of resident units financed by the rest of the world (minus)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. Capital uses of resident units financed by the rest of the world (minus)</td>
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<tr>
<td>National expenditure</td>
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<td></td>
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<tr>
<td>Current national expenditure (1+4–6)</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>National capital expenditure</td>
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<td></td>
</tr>
</tbody>
</table>
1. BACKGROUND

Components of national uses/expenditure

<table>
<thead>
<tr>
<th>(2+3+5–7)</th>
<th>Culture</th>
<th>Education</th>
<th>Health</th>
<th>Social protection</th>
<th>Tourism</th>
<th>Environmental protection</th>
<th>Research and development</th>
<th>Development Aid</th>
<th>Transportation</th>
<th>Data processing</th>
<th>Housing</th>
</tr>
</thead>
</table>

* And their acquisition less disposals of non-produced non-financial assets.

1.2.5.7 Users / beneficiaries

185. The terms “users” and “beneficiaries” refer to those who use the goods and services or benefit from transfers. In Table 1.5, National expenditure by components and users/beneficiaries (SNA 21.3), the columns show users/beneficiaries, and each cell where information should appear, in principle and according to the functional field, is marked.

a) For better identification, Table 1.4, Type of producers by institutional sectors, shows the types of producers, with their respective institutional sectors.

Table 1.4 Type of producers by institutional sectors

<table>
<thead>
<tr>
<th>Types of producers and consumers</th>
<th>Institutional sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-financial corporations</td>
</tr>
<tr>
<td>Market producers</td>
<td>X</td>
</tr>
<tr>
<td>Producers for own final use</td>
<td>X</td>
</tr>
<tr>
<td>Other non-market producers</td>
<td></td>
</tr>
<tr>
<td>Government as a collective consumer</td>
<td>X</td>
</tr>
<tr>
<td>Households as consumers</td>
<td></td>
</tr>
<tr>
<td>Rest of the world</td>
<td></td>
</tr>
</tbody>
</table>

b) In the Table 1.5, users/beneficiaries can be detailed by producers, industries, and/or institutional sectors, depending on the analytical purposes of a particular satellite account and to show the relation to the values of the central framework accounts.
Table 1.5 National expenditure by components and users/beneficiaries

<table>
<thead>
<tr>
<th>Components of national uses/expenditure</th>
<th>Users/beneficiaries</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Consumption of specific goods and services</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Actual final consumption</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.1 Market products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2 Non-market products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.1.2.1 Individual</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2.2 Collective</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1.2 Intermediate consumption</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.1 Actual intermediate consumption</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.2 Internal intermediate consumption</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Capital formation in specific goods and services</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Capital asset formation of characteristic activities in non-specific products *</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Specific current transfers (not counterpart of item 1)</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5. Specific capital transfers (not counterpart of item 2 or 3)</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Total uses of resident units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Current uses of resident units financed by the rest of the world (minus)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Capital uses of resident units financed by the rest of the world (minus)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National expenditure</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current national expenditure (1+4–6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital national expenditure (2+3+5–7)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* And their acquisition less disposals of non-produced non-financial assets.

1.2.5.8 Financing

186. Users/beneficiaries do not necessarily finance the goods and services that they use; for this reason it is important to analyze the financing units and the classification of these units in relation to each institutional sector. Table 1.6 shows the financing units by institutional sector.

187.
Table 1.6 Financing units by institutional sectors

<table>
<thead>
<tr>
<th>Financing units</th>
<th>Institutional sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-financial corporations</td>
</tr>
<tr>
<td>Market producers</td>
<td>X</td>
</tr>
<tr>
<td>NPISH</td>
<td></td>
</tr>
<tr>
<td>General government</td>
<td></td>
</tr>
<tr>
<td>Households as consumers</td>
<td></td>
</tr>
<tr>
<td>Financial enterprises</td>
<td></td>
</tr>
<tr>
<td>Rest of the world</td>
<td></td>
</tr>
</tbody>
</table>

188. Table 1.8, National expenditure by components and financing units (SNA Table 21.4), presents the components of expenditure in the rows and the financing units in the columns. Cells that should contain data are marked with an X, according to the functional field of the satellite account to be developed. In this table non-market producers do not appear explicitly, since they are not considered financing units. Market producers correspond to market producers of all institutional sectors, as in the classification of users/beneficiaries. The inclusion of financial corporations is due to their role in providing funds that are captured through financial intermediation.

189. Table 1.8 uses the following treatments:

a) Market producers finance their intermediate consumption through their sales, while gross capital formation of the same producers is financed by their saving, sale of assets, or loans.

b) Nonprofit institutions serving households are treated as financing units.

c) The government is treated as a financing unit and not the units that pay taxes to it, except in the case of fees or taxes collected with a specific purpose. Social contributions represent means of financing by households.

d) Households are considered to be the financing units for all expenditures they make and pay for themselves, except for transfers in kind received from the rest of the world, government, and NPISH.

e) Incurrence of liabilities is treated as a source of financing of expenditure. When the counterpart of this incurrence of liabilities is a direct acquisition of assets by institutional units other than financial enterprises, the corresponding financing is recorded in columns 1 to 4 or 6. Acquisition of financial assets by financial enterprises through their intermediation function is considered financing by these enterprises, not the units that own the deposits.
f) Finally, in the case of remittances in kind received from the rest of the world by resident units other than the government or NPISH, the financing unit is the rest of the world.

190. In Table 1.8, actual final consumption of market products, which is always a use of households, is financed mainly by households themselves, by general government and NPISH, possibly by the rest of the world and market producers through transfers in kind, and by financial enterprises through loans. Individual consumption of non-market products is financed by the institutional sectors themselves: general government and NPISH, or by households. Collective consumption is financed by the government and, exceptionally, by households through contributions to social security, because of their redistributive effect.

191. Identifying the financing units for capital formation is not easy. It can be financed through saving of the investors themselves, through loans provided by financial enterprises, or through capital transfers from the government. On the other hand, gross capital formation depends on decisions made by institutional units. When a company has multiple activities, both characteristic and non-characteristic, it is necessary to hypothesize the proportions of the different sources of financing.

192. In gross capital formation by government, the analysis of financing can be more complex, as the government deficit is financed by issuing bonds and loans from the rest of the world.

193. In item 4, specific current transfers, households act as financing units through the social contributions that they pay to the government or to other funds, as the contributions of employers are included in compensation. This item is very important in the case of the satellite account for social protection, through the detailed analysis of social services that households receive.

194. Table 1.7 Current and Capital Transfers Matrix
195. The financing from the rest of the world, carried out through loans and transfers, is recorded in the corresponding column and in each row, as appropriate.

196. Finally, to calculate the financing of national expenditure, the amounts in items 6 and 7, corresponding to current and capital uses of resident units financed by the rest of the world, are deducted.
## Table 1.8 National expenditure by components and financing units

<table>
<thead>
<tr>
<th>Components of national uses/expenditure</th>
<th>Financing units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>1. Consumption of specific goods and services</td>
<td></td>
</tr>
<tr>
<td>1.1 Actual final consumption</td>
<td></td>
</tr>
<tr>
<td>1.1.1 Market products</td>
<td></td>
</tr>
<tr>
<td>1.1.2 Non-market products</td>
<td></td>
</tr>
<tr>
<td>1.1.2.1 Individual</td>
<td></td>
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<tr>
<td>1.1.2.2 Collective</td>
<td></td>
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<tr>
<td>1.2 Intermediate consumption</td>
<td></td>
</tr>
<tr>
<td>1.2.1 Actual intermediate consumption</td>
<td></td>
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<tr>
<td>1.2.2 Internal intermediate consumption</td>
<td></td>
</tr>
<tr>
<td>2. Capital formation in specific goods and services</td>
<td></td>
</tr>
<tr>
<td>3. Fixed capital formation of characteristic activities in non-specific products *</td>
<td></td>
</tr>
<tr>
<td>4. Specific current transfers (not counterpart of item 1)</td>
<td></td>
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<tr>
<td>5. Specific capital transfers (not counterpart of item 2 or 3)</td>
<td></td>
</tr>
<tr>
<td>Total uses of resident units</td>
<td></td>
</tr>
<tr>
<td>6. Current uses of resident units financed by the rest of the world (minus)</td>
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<tr>
<td>7. Capital uses of resident units financed by the rest of the world (minus)</td>
<td></td>
</tr>
<tr>
<td>National expenditure</td>
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<tr>
<td>Current national expenditure (1+4–6)</td>
<td></td>
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<tr>
<td>Capital national expenditure (2+3+5–7)</td>
<td></td>
</tr>
</tbody>
</table>

* And their acquisition less disposals of non-produced non-financial assets.

### 1.2.5.9 Non-monetary data

197. Within the central framework, the relationship between physical data and the monetary accounting system is implicit, as it is only explicit in data on population and labor inputs that are required for per capita calculations and productivity indicators. In a satellite account, however, one can make an explicit linkage. In this case, “as output is studied in much more detail than in the central framework, even when it includes a detailed supply and use/input-output table, it is generally possible to show meaningful data on the number of units produced or used: physician consultations by kind of physician, hotel-nights of various types, student years in various levels of education, etc. The labor force may be presented in detail: number of people employed in various categories, according to skill and sex, number of hours worked or equivalent person years, number of people in training,
etc. *Data on existing assets in physical terms are especially interesting in such fields as education, culture, health or housing. In conjunction with labor force data, they constitute well-known social indicators such as number of teachers, of hospital beds or of physicians per ten thousand inhabitants.*

198. In areas of social concern such as education, health and others, non-monetary data are very significant when referring to users/beneficiaries of goods and services and to recipients of transfers, since they require information that is generally less developed than that on labor force and assets mentioned above. However, non-monetary data are indispensable to assess the standard of living of various segments of the population and to look in depth at redistribution policy. As a result, physical data should be an important part of a satellite account, not only for the information they present, but also because they help give meaning to the monetary data.

### 1.2.5.10 Relation to the central framework

199. As was shown at the beginning of this chapter, satellite accounts can expand the production boundary, creating detailed classifications that are suitable for analysis of a specific functional field. Accordingly, the values of the different variables are not always the same as their counterparts in the central framework. In some cases, the central framework may show grouped data that are not as detailed. For this reason it is very important that the first task of a functionally oriented satellite account be to make explicit the differences in classifications of economic activities, products, and purposes.

200. When the production and inputs of ancillary activities are outsourced or explicitly indicated, this can lead to a difference with the central framework. Intermediate consumption of these activities appears in item 1.2.2. in the tables of components of expenditure.

201. When changes to the production boundary are made, these values are located in the column for other non-market characteristic producers. The same applies if there are changes in the conceptual framework of the destination of goods and services, for example to consider expenditures in education and health as capital expenditure.

### 1.2.5.11 Perspective on the central framework

202. The framework for satellite accounts that has been discussed covers a broad and important set of functional fields, and in some cases it may not be totally adapted to the central framework. The development of satellite systems in different areas can help to enrich the central framework itself, such as the supply and use table, with adjustments in terminology for characteristic activities and products.
1.2.6 Households in the satellite accounts

203. In functionally oriented satellite accounts in the social sectors, the users or beneficiaries are households. Households are also recipients of transfers, as in the case of the health, education, and social protection accounts. For this reason the institutional sector of households should be considered by subsectors.

204. The criterion for classifying households into subsectors depends on the need for analyzing the functional area and on the availability of information. Classification can be by socioeconomic category, by age group, by the sex of the head of household, by income category or level, by geographic area, and by many other social, demographic, and economic characteristics. This allows for better presentation for purposes of analysis and for policy making and decision making by the authorities.

205. For the purposes of analysis and policy, it is essential to know the number of people included in each category, in order to calculate, for example, average consumption or transfers, the number of people who benefit very little or not at all from national expenditure in the field being studied, etc.
2. THE SATELLITE HEALTH ACCOUNT

206. The Satellite Health Account (SHA), like all satellite accounts, uses the System of National Accounts as its central reference. It is prepared in order to meet the needs for analysis and/or decision making in the health field, making explicit the implicit data in this area. The SHA provides a way to show detailed information on the health sector, while maintaining a relationship to the central framework of the national account system.

2.1 DELIMITATION OF THE HEALTH AREA

207. The delimitation of health for purposes of preparing the satellite account depends on the organization of health systems in the countries and on the respective institutional and administrative units, as well as on the policy objectives of the countries. At a minimum, the health sector includes all institutional units of the economy whose activities and products are related to the delivery of services of health prevention, treatment, and rehabilitation. It also includes the institutional units of government that have responsibility for regulation and standardization of activities to preserve the health and lives of the population. That is, it includes both the delivery of human health services and the regulation of these services. These constitute the characteristic activities and products covered by the Satellite Health Account.

208. The institutional units include agencies, institutions, companies, and other agents of the public and private sectors devoted to the activities cited in the previous paragraph.

209. In addition to characteristic products, the SHA also covers related products, those that in one way or another contribute to health prevention, treatment, and rehabilitation and/or to improving the provision of services. Examples include drugs, medical equipment, hospital infrastructure, equipment in hospitals and local health centers, vocational training of human resources, research and development, and environmental sanitation, among others. The minimum definition of related products covers drugs.

2.2 CHARACTERISTICS

210. The principal characteristics of the Satellite Health Account are as follows:

a) It provides additional information on the health sector, for example, tables showing expenditure by financing units and users/beneficiaries.

b) It uses more detailed concepts, classifications, and tables related to health, that are complementary or alternative to those in the SNA, for example by including...
ancillary units, changing the coverage of the sector, or disaggregating products, among others.

c) It extends and details the coverage of production, costs, and benefits of human health activities, for example by including volunteer work and domestic work related to the care of patients within a household.

d) It extends data analysis through the use of specific aggregates and indicators and facilitates analysis of the health sector in the context of the global economy, considering, for example, the valued added by the health sector, the share of the health sector in the economy (percentage of GDP), and health expenditure per capita, among others.

e) It enhances the analysis of monetary data by including physical data, such as the number of beds, number of outpatient consultations, and number of surgical interventions, among others.

2.3 CLASSIFICATIONS

211. The classifications provide the basis for design of the accounting framework and compilation of the Satellite Health Account. In this regard, with a view to designing the different tables of the SHA, basic classifications must be established that reflect the characteristics of the health sector in the countries. The classifications that are part of the SHA will, in general, also be applied for non-monetary and physical indicators.

212. Section 1.1.3 a) describes the institutional units as economic units capable of being owners of assets and of contracting liabilities in their own name. These units are grouped into five institutional sectors, taking into account their principal function, behavior, and objectives: non-financial corporations, financial corporations, general government, households, and nonprofit institutions serving households.

213. Within the scope of the Satellite Health Account, from the standpoint of the producers, non-financial corporations include public and private corporations that mainly provide health services, such as hospitals, clinics, medical centers, multipurpose clinics, laboratories, and centers for medical diagnoses1, among others. General government includes the health ministry or secretariat, social security agencies, autonomous entities in the health sector, and institutional units of local, regional, or provincial governments with a particular relation to health. Households that provide health services, for example, physicians, midwives, and nurses, among others, offer private services to clients. Nonprofit institutions serving households are private entities that mainly provide health services.

214. From the standpoint of users/beneficiaries, the general government consumes the collective services produced by the health ministry or secretariat, the autonomous entities of the health sector, and the institutional units of local, regional, or provincial

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1 Centers for sonograms and X-rays.
governments that are mainly concerned with health. Households consume\textsuperscript{2} the health services produced by non-financial corporations, households, individual services of the general government, and nonprofit institutions serving households.

2.3.1 Classification of activities

215. The classification of activities in the Satellite Health Account is used to identify and detail the productive activities directly or indirectly related to this sector. Two major groups of activities are considered: characteristic activities, whose production is of interest in the analysis, and related activities that produce related goods. See Annex 2.

a) Characteristic activities: These activities should be classified according to the International Standard Industrial Classification of All Economic Activities (ISIC), or regional or national classifications of activities, in order to maintain the relationship to the national account system. For the health sector, the proposed classification of characteristic activities is listed below. For descriptions, see Annex 2.

75122 Regulation of the activities of agencies that provide health care, except for social security services

7530* Compulsory social security activities

8511 Hospital activities

85111 General hospitals

85112 Psychiatric hospitals and hospitals for treatment for substance abuse

85113 Hospitals for other medical specialties

8512 Medical and dental practice activities

85121 Medical physician’s offices

851211 General medical physician’s offices

851212 Specialized medical physician’s offices

85122 Dental physician’s offices

85123 Centers for patient care that do not require hospitalization

851231 Family planning centers

851232 External medical care centers for the mentally ill and addicted

851233 Other centers for patient care that do not require hospitalization

8519 Other human health activities

85191 Medical and diagnostic laboratories

85192 Residential nursing services

85193 Ambulance services, organ banks, and other services ancillary to medical treatment

851931 Ambulance services

851932 Organ bank services and other services ancillary to medical treatment

\textsuperscript{2}Actual consumption - SNA93.
b) **Related activities:** These are activities that produce related products (see paragraph 99). Unlike characteristic activities, related activities do not necessarily require an analysis of their production; it is the supply and use of related goods and services that are of interest, rather than the process of producing them. In this case, the following related activities are proposed. For descriptions see Annex 2.

- **2423** * Manufacture of pharmaceutical and medicinal products
- **3311** Manufacture of medical and surgical equipment and orthopedic appliances
- **3312** * Manufacture of instruments and equipment for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
- **3320** * Manufacture of optical instruments and photographic equipment
- **4520** * Construction of hospital infrastructure
- **4530** * Building installation
- **4540** * Building completion
- **5139** * Wholesale sale of other household goods: pharmaceutical and medicinal products, surgical and orthopedic instruments and optical devices
- **5150** * Wholesale sale of machinery, equipment, and supplies
- **5231** * Retail sale of pharmaceutical and medicinal goods, cosmetic and toilet articles
- **5239** * Other retail sale in specialized stores: optical and precision equipment
- **5520** * Preparation of food diets for hospitals
- **6603** * General insurance plans
  - Insurance for family medical care (disease and maternity)
  - Personal accident insurance
  - School insurance
- **7310** * Research and experimental development in the field of the natural sciences and engineering
- **7422** * Technical tests and analysis
- **8030** * Higher education for health
- **8090** Adult and other education for health

- **9301** * Delivery of specialized laundry services

216. There are activities that are not recorded in the SNA as production and for which the inputs are part of the costs of principal and/or secondary production. Such activities are carried out in order to produce goods and services for the establishment itself or for other establishments of the institutional unit itself, rather
than for sale. These are called **ancillary activities**. For example, in the Satellite Health Account, intermediate services such as clinical and radiological laboratories, etc., constitute ancillary activity when they are provided within the establishments providing the health services and do not sell their services. When part of the production of these intermediate services is sold, it is registered as secondary production. On the other hand, if intermediate services are provided by independent units or companies, the production is measured and classified as characteristic activity (ISIC 8519). When it is important for the analysis of the sector to determine the total supply of these kinds of services and its cost structure, ancillary activities should be separated or estimated in the SHA. Examples include hospitals, medical centers, and medical physician’s offices of banana, mining, or oil companies, of the armed forces and police (when it has not been identified), and others. These activities should be classified according to the economic activities described, both characteristic and related (see Annex 2).

### 2.3.2 Classification of producers

217. The classification of producers in the Satellite Health Account makes it possible to identify the type of productive units for analysis. Producers are classified into characteristic producers and other producers; characteristic producers are the ones that carry out activities aimed at producing services typical of the health area.

218. Characteristic producers are subdivided into two categories: market producers and non-market producers. In turn, market producers are classified into principal, secondary, and ancillary, while non-market producers are classified into principal, secondary, ancillary, and others.

219. Principal producers are the establishments whose principal activity is characteristic. Secondary producers are those establishments that have a characteristic activity, but the principal activity of the institutional unit to which they belong is not a characteristic activity. Ancillary producers are those establishments whose ancillary production is characteristic. Other non-market producers are those that are outside the production boundary (non-remunerated work in health, volunteer work), and other producers include the remaining establishments not elsewhere classified.

220. In addition, non-market producers can be classified into central government, state, and municipal government, social security agencies, and NPISH.

![Classification of producers diagram]

1. Characteristic producers
   - Market
     - Principal
     - Secondary
     - Ancillary
   - Non-market
     - Principal
     - Secondary
     - Ancillary
     - Other
2. Other Producers

221. The minimum delimitation of producers for purposes of preparing a basic satellite account includes characteristic producers, market and non-market, principal and secondary. The inclusion of ancillary producers requires special research, depending on the needs of the countries. Other non-market producers are those for which the production boundary is expanded, such as by including volunteer work and patient care within households. The decision to incorporate them depends on the interest of the countries, and the recording of these activities in a special category does not affect international comparability.

2.3.3 Classification of products

222. Goods and services or products for the Satellite Health Account are divided into characteristic products, related products, and other products. Their classification should be based on the Central Product Classification (CPC). The level of disaggregation of products will depend on the desired level of analysis and on the availability of information.

a) **Characteristic products** are those typical for health. They can be classified as follows, according to the CPC and specialized classifications in the functional field (see descriptions in Annex 3).

   9112  Administrative services of agencies that provide educational, health care, cultural and other social services, excluding social security services
   91122 Administrative health care services
   911221 Steering role and health services administration services
   9112211 Steering role services
   91122111 Direction and management services
   91122112 Health monitoring services
   91122113 Regulation and quality control services
   91122114 Administrative services
   9112212 Public health services
   91122121 Prevention services
   91122122 Communication, information, and education services
   9131  Administrative services for illness, maternity, or temporary disablement benefit schemes
   931   Human health services
   9311 93110 Hospital services
   9312  Medical and dental services
   93121 General medical services
   93122 Specialized medical services
   93123 Dental services
2. THE SATELLITE HEALTH ACCOUNT

9319 Other human health services
  93191 Services provided by midwives, nurses, physiotherapists, and paramedical personnel
  93192 Ambulance services
  93193 Residential health facilities services other than hospital services
  93199 Other human health services n.e.c.

b) The classification of related products depends on the availability of information, the needs of the level of analysis, and country priorities. Below is a proposed list of related products (for details see Annex 3).

342 Basic inorganic chemicals n.e.c.
352 Pharmaceutical products
481 Medical and surgical equipment and orthopedic appliances
  4831 Optical instruments
53129 * Health services infrastructure
71320 Accident and health insurance services

c) Other products are those that are neither characteristic nor related. These can form a single group or can be shown in more detail, considering the product classifications in each country.

2.3.4 Classification by purpose

223. Functional classifications identify "functions," in the sense of "purposes" or "objectives," carried out by households, the general government, and nonprofit institutions serving households, as well as producers who participate in certain transactions. Annex 4 contains the following classifications:

- Classification of Individual Consumption by Purpose (COICOP)
- Classification of the Functions of Government (COFOG)
- Classification of the Purposes of Nonprofit Institutions (COPNI)
- Classification of Outlays of Producers by Purpose (COPP)

224. Functional classifications serve three objectives. They distinguish between collective services and goods and services for individual consumption, provided by the government; they provide statistics of general interest for analytical purposes, consonant with experience; and they give the user ways to restructure key aggregates in the system, which are useful for particular analyses such as those related to the satellite account. In the case of the third objective, for example, it can be argued that, for various analytical purposes (SNA paragraph 18.4), "the SNA definition of gross capital formation is too narrow. In studies of labor productivity, researchers often need a measure of 'human capital' which is normally derived from information on past expenditures on education. The four functional classifications therefore identify expenditures on education incurred by households, general
government, nonprofit institutions serving households and producers; (b) In studying the process of economic growth, researchers sometimes prefer to treat some or all research and development (R&D) expenditures as capital formation rather than as consumption expenditure."

2.4 DESCRIPTION OF THE ACCOUNTS

225. This section presents a description of the accounts that should be included in a satellite scheme, in a form similar to SNA accounts. The production accounts and income generation accounts by economic activity and services provided are set out in greater detail, that is, the unit of information used is the type of establishment. In contrast, the other current accounts and accumulation accounts are prepared at the level of institutional units.

2.4.1 Production account

226. The production account shows production as a resource, and the goods and services used in production (intermediate consumption) as uses. In the institutional sectors production is disaggregated into characteristic and other production, while intermediate consumption is disaggregated into characteristic and other activities. In the establishments, for the purpose of compiling the supply and use account, disaggregation is into characteristic, related, and other; the first two categories should incorporate details at the level of products and product groups.

227. In preparing these accounts, it is important to distinguish between market production, production for own final use, and other non-market production.

228. Market output: “output that is sold at prices that are economically significant or otherwise disposed of on the market, or intended for sale or disposal on the market” (SNA paragraph 6.45). The value of market production is obtained in the following way:

a) The total value of goods and services sold (at economically significant prices);

b) The total value of goods or services bartered;

c) The total value of goods or services used to make payments in kind, including compensation in kind;

d) The total value of goods or services supplied by one establishment to another belonging to the same market enterprise to be used as intermediate inputs;

e) The total value of changes in inventories of finished goods and work-in-progress intended for one or another of the above uses.

229. Output produced for own final use: “This type of production consists of goods or services that are retained for their own final use by the owners of the enterprises in
which they are produced" (SNA paragraph 6.46). The value of the output is the sum of the values of the following items:

a) The total value of goods and services produced by household enterprises and consumed by the same households, that is, production for final personal consumption. An example would be if the production boundary is expanded to include the patient care services produced and consumed by members of a given household.

b) The total value of own-account gross fixed capital formation, that is, the value of fixed assets produced by an establishment that are held within the same enterprise for use in future production.

c) The total value of changes in inventories of finished goods and work-in-progress intended for final personal consumption or own-account gross fixed capital formation.

230. “The goods or services produced for own final use are valued at the basic prices of similar products sold on the market, or by their costs of production if no suitable basic prices are available” (SNA paragraph 6.48).

231. Other non-market output: “This production consists of goods and individual or collective services produced by nonprofit institutions serving households (NPISHs) or government that are supplied free, or at prices that are not economically significant, to other institutional units or the community as a whole” (SNA paragraph 6.49). The value of the output is the sum of the values of the following items (SNA paragraph 6.51):

a) The total value of goods and services supplied free, or at prices that are not economically significant, to other institutional units, either individually or collectively;

b) The total value of goods or services supplied by one establishment to another belonging to the same non-market producer to be used as intermediate inputs;

c) The total value of changes in inventories of finished goods and work-in-progress intended for one or another of the above uses.

232. The production of non-market goods or services is valued according to their production costs, that is, the sum of the spending on goods and services incurred in generating the production, compensation paid to employees, taxes on production paid to government units, and consumption of fixed capital. Part of that production is acquired by households, and the difference between that amount and the total constitutes final consumption expenditure by governmental units or NPISH.

233. The accounting balance of the production account is determined by the added value. Added value for market producers is defined as the difference between the value of gross production and intermediate consumption. In the case of the government and nonprofit institutions, production is valued at cost and added value
consists of the sum of compensation, taxes on production less subsidies to production, and consumption of fixed capital.

234. In the case of the Satellite Health Account, part of the flexibility of the system is that the production boundary can change. This occurs when the outputs of ancillary activities are explicitly indicated, which leads to changes in production, added value, intermediate consumption, and final consumption. If volunteer work is valued, this changes employee compensation, production, and final consumption; depending on where the volunteer work is done, it changes final consumption of households, the government, and/or NPISH. If patient care in households is valued, this increases production for final use on the part of households (patient care within a household) and final consumption.

### Production account

<table>
<thead>
<tr>
<th>Uses</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate consumption</td>
<td>Production</td>
</tr>
<tr>
<td>- of characteristic activities</td>
<td>- characteristic</td>
</tr>
<tr>
<td>- of other activities</td>
<td>- other</td>
</tr>
<tr>
<td>Added value</td>
<td></td>
</tr>
</tbody>
</table>

235. Gross production is valued at basic prices (these do not include taxes net of subsidies for products). Intermediate consumption is valued at purchaser’s prices (includes the basic value plus the taxes net of subsidies on products and trade and transport margins). Accordingly, added value is valued at basic prices.

### 2.4.2 Income generation account

236. From the standpoint of producers, the income generation account records distribution transactions, linked directly to the production process. The resources are determined by the value added. Uses include employee compensation, disaggregated into characteristic activities and other activities, and the taxes on production and imports, less subsidies, when these are included in the valuation of production (see SNA paragraph 2.71). The account balance is the operating surplus or mixed income: the operating surplus is the balance of the market producers that are corporations, while mixed income is the balance of households as producers, that is, of household enterprises.
2. THE SATELLITE HEALTH ACCOUNT

Income generation account

<table>
<thead>
<tr>
<th>Uses</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee compensation</td>
<td>Added value</td>
</tr>
<tr>
<td>- for characteristic activities</td>
<td></td>
</tr>
<tr>
<td>- for other activities</td>
<td></td>
</tr>
<tr>
<td>Taxes on production and imports</td>
<td></td>
</tr>
<tr>
<td>Subsidies (-)</td>
<td></td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td></td>
</tr>
<tr>
<td>Operating surplus</td>
<td></td>
</tr>
<tr>
<td>- from characteristic activities</td>
<td></td>
</tr>
<tr>
<td>- from other activities</td>
<td></td>
</tr>
<tr>
<td>Net mixed income</td>
<td></td>
</tr>
<tr>
<td>- from characteristic activities</td>
<td></td>
</tr>
</tbody>
</table>

2.4.3 Other current accounts

237. These include the accounts for allocation of primary income, secondary distribution of income, redistribution of income in kind, and use of income. The account balance is saving.

Other current accounts

<table>
<thead>
<tr>
<th>Uses</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Income</td>
<td>Operating surplus</td>
</tr>
<tr>
<td>Current taxes on income, wealth, etc.</td>
<td>Mixed income</td>
</tr>
<tr>
<td>Social contributions</td>
<td>Property Income</td>
</tr>
<tr>
<td>Social services</td>
<td>Social contributions</td>
</tr>
<tr>
<td>Other current transfers</td>
<td>Social services</td>
</tr>
<tr>
<td>Adjustment for the change in net equity of households in pension funds</td>
<td>Other current transfers</td>
</tr>
<tr>
<td>Collective consumption</td>
<td></td>
</tr>
<tr>
<td>Saving</td>
<td></td>
</tr>
</tbody>
</table>

2.3.4 Accumulation accounts

238. These accounts record the acquisition and disposal of financial and non-financial assets and liabilities of institutional units, through transactions or as a consequence of other events. They include capital accounts, financial accounts, and other changes in assets.
Accumulation account

<table>
<thead>
<tr>
<th>Resources</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross fixed capital formation</td>
<td>Saving</td>
</tr>
<tr>
<td>- of characteristic activities</td>
<td>Capital transfers received</td>
</tr>
<tr>
<td>- of other activities</td>
<td>Capital transfers paid (–)</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td></td>
</tr>
<tr>
<td>Changes in inventories</td>
<td></td>
</tr>
<tr>
<td>Acquisitions less disposals of valuables</td>
<td></td>
</tr>
<tr>
<td>Acquisitions less disposals of non-produced</td>
<td>Net liabilities incurred</td>
</tr>
<tr>
<td>non-financial assets</td>
<td></td>
</tr>
<tr>
<td>Net acquisition of financial assets</td>
<td>- for financing of characteristic activities</td>
</tr>
<tr>
<td>Other accumulation entries</td>
<td>- others</td>
</tr>
<tr>
<td>Other accumulation entries</td>
<td>Other accumulation entries</td>
</tr>
<tr>
<td>Other changes in net worth</td>
<td>Other changes in net worth</td>
</tr>
</tbody>
</table>

239. **Gross capital formation:** The SNA defines gross capital formation as the total value of fixed capital formation, changes in inventories, and acquisitions less disposals of valuables. Fixed capital formation includes the total value of acquisitions less disposals of fixed assets, carried out by a producer in an accounting period. Fixed assets are tangible or intangible assets that are obtained as a result of the production process.

240. The different types of gross fixed capital formation include:

a) Acquisitions less disposals of new or existing tangible fixed assets, by type:
   
i) dwellings;
   
ii) other buildings and structures;
   
iii) machinery and equipment;
   
iv) cultivated assets (trees and livestock), that are used repeatedly or continuously to produce products such as fruit, milk, etc.;

b) Acquisitions less disposals of new or existing intangible fixed assets, by type (data processing programs and other intangible assets)

c) Major improvements to tangible non-produced assets, including land;

d) Costs associated with transfers of ownership of non-produced assets.

2.4.5 **Goods and services accounts**

241. The goods and services accounts are balances of products and show, for groups of characteristic health products, in values and/or quantities, the equality of supply and demand. This account is intended to ensure the equality, at purchaser's prices, of supply or resources and demand or uses.
242. Supply, or resources, includes production at basic values, imports (CIF), trade and transport margins, taxes on products, subsidies for products, VAT taxes, and import duties. Demand, or uses, includes the values, at purchaser’s prices, of intermediate consumption, final consumption, gross capital formation, and exports.

243. When independent estimates are obtained for each of these variables, these accounts constitute a valuable tool for evaluating consistency of the different sources of information.

### Goods and services account

<table>
<thead>
<tr>
<th>Supply</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (basic values)</td>
<td>Intermediate consumption</td>
</tr>
<tr>
<td>Imports</td>
<td>Final consumption expenditure of households</td>
</tr>
<tr>
<td>Taxes on products, including import duties</td>
<td>Final consumption expenditure of the general government</td>
</tr>
<tr>
<td>Subsidies for products</td>
<td>Final consumption expenditure of nonprofit Institutions serving Households</td>
</tr>
<tr>
<td>VAT taxes</td>
<td>Gross capital formation</td>
</tr>
<tr>
<td>Trade margins</td>
<td>Exports</td>
</tr>
<tr>
<td>Transport margins</td>
<td></td>
</tr>
<tr>
<td><strong>Total Supply</strong></td>
<td><strong>Total Demand</strong></td>
</tr>
</tbody>
</table>

2.5 **Supply and use table for goods and services**

244. The supply and use table for goods and services shows industry accounts by economic activity and goods and services accounts by type of product. The analysis of supply and use of goods and services is focused on characteristic and related products. Table 2.1, Supply and use of goods and services of the Satellite Health Account, has a structure similar to the comparable SNA93 table. This table consists of five blocs: supply, intermediate use or intermediate consumption, final use, added value, and complementary information. To understand the structure of the table, a diagram of the five blocs is shown below.
2.5.1 Supply

245. In the rows of the first three blocks, products are presented classified into characteristic, related, and other; these three blocks provide the accounts of supply and use of goods and services (product balances). The supply block columns include the distribution margins (trade and transport margins), taxes less subsidies for products, production classified by type of producer, and imports.

246. When the production boundary is expanded, supply is also changed for the same reasons mentioned earlier. This increase in the production of ancillary units, which are explicitly indicated, is recorded in the column for either market or non-market characteristic producers. When the production boundary is expanded to include volunteer work or that of households, these values are recorded in the column for "other" characteristic non-market producers.

247. Recording these outputs separately makes it easier to explain the differences between results from the satellite account and results from the central framework. In such cases it is necessary to be careful with indicators related to GDP in the central framework.

2.5.2 Demand or use

248. The columns in the blocks for intermediate use or consumption, added value, and complementary information correspond to the classification of producers. The production and information generation accounts are obtained from the first three blocks, and the last block of complementary information contains data on employed personnel, gross fixed capital formation, number of establishments, number of beds, inventory of fixed assets, and other indicators that enhance the analysis of production.

249. If some secondary or ancillary producers are not considered in the column of characteristic producers, characteristic production should be included in supply under other producers.

250. The columns for final use show exports, actual consumption (households, NPISH, and government), and gross capital formation.
2.5.3 Primary income

251. The income generation account is obtained from Table II.1. It is important to point out that when the characteristic production of the ancillary units has been extended in the satellite account, the primary income amount increases in the system, as the production and income of this characteristic production are not measured explicitly in the SNA.

252. Changes also occur in the level of primary income when volunteer work in health facilities is valued in order to have a better understanding of the productivity of services and of personnel employed in the sector and a better picture of consumption by households. These considerations also apply to patient care work performed by members of a household.

253. Conceptual extensions of the SNA93 should be done carefully in order to maintain the coherence of the satellite system, as well as when comparisons are made with variables in the national accounts.

2.5.4 Transfers

254. Transfers play an important role in the Satellite Health Account. A more detailed classification of these transactions identifying the extensions (beyond the SNA) is key for analysis of disposable income, national expenditure on health, and its sources of financing. In some cases it is necessary to extend the concept of transfers. Some examples are presented below:

- When ancillary activities produce characteristic goods and services and are made explicit in the satellite account, production is intended for final consumption and is financed with transfers from the units to which these belong.

- To distinguish the productive and financial functions of government, it is necessary to identify internal transfers of units with the compensation of production costs of non-market services produced by government.

- When volunteer work is valued as a part of production costs in compensation, these are financed by transfers from households to the government or to the institutional sector where the work is carried out.

255. Transfers are first analyzed according to whether they are in cash or in kind. In the classification of transfers recommended in the SNA, listed below, the ones that correspond to health need to be distinguished. Institutional units that pay and receive such transfers and their destinations should also be identified.

256. The detailed classification of transfers follows. Transfers incorporated in the Satellite Health Account are shown in italic:

D.6 Social contributions and benefits

D.61 Social contributions
D.611 Actual social contributions
   D.6111 Employers’ actual social contributions
      D.61111 Compulsory contributions
      D.61112 Voluntary contributions
         D.611121 Health-related voluntary contributions
         D.611122 Other voluntary contributions
   D.6112 Employees’ social contributions
      D.61121 Compulsory contributions
      D.61122 Voluntary contributions
   D.6113 Social contributions by self-employed and non-employed persons
      D.61131 Compulsory social contributions
      D.61132 Voluntary social contributions

D.612 Imputed social contributions
   D.6121 Health-related imputed social contributions
   D.6122 Other imputed social contributions

D.62 Social benefits other than social transfers in kind
D.621 Social security benefits in cash
   D.6211 Benefits for disease and disability
   D.6212 Allowances for maternity
   D.6213 Other health-related social security benefits in cash
   D.6214 Other non-health-related social security benefits in cash
      D.62141 Family allowances for children or other dependents
      D.62142 Unemployment benefits
      D.62143 Retirement and survivors pension
      D.62144 Death benefits
      D.62145 Other allowances or benefits

D.622 Private funded social benefits
   D.6221 Benefits for disease and disability
   D.6222 Allowances for maternity
   D.6223 Other health-related social security benefits in cash
   D.6224 Other non-health-related social security benefits in cash
      D.62241 Family allowances for children or other dependents
      D.62242 Unemployment benefits
      D.62243 Retirement and survivors pensions
2. The Satellite Health Account

D.62244 Death benefits
D.62245 Other allowances or benefits

D.623 Unfunded employee social benefits
D.6231 Maintenance of wages, normal or reduced, during periods of absence from work due to disease, accident, maternity, etc.
D.6232 General medical services not related to the work of the employee
D.6233 Unfunded health-related special social services for employees
D.6234 Unfunded non-health-related special social services for employees
D.62341 Payment of family allowances, educational allowances, or other allowances for dependents
D.62342 Payment of retirement or survivors pensions to former employees or their survivors, and payment of indemnities to the workers or their survivors in cases of dismissal, disability, accidental death, etc.
D.62343 Convalescence homes and retiree residences.

D.624 Social assistance benefits in cash
D.63 Social transfers in kind
D.631 Social benefits in kind
D.6311 Social security benefits, reimbursements
D.6312 Other social security benefits in kind
D.6313 Social assistance benefits in kind
D.63131 Health-related social assistance benefits in kind
D.63132 Non-health-related social assistance benefits in kind
D.632 Transfers of individual non-market goods and services
D.6321 Transfers of health-related individual non-market goods and services (health services, medicines, etc.)
D.6322 Transfers of non-health related individual non-market goods and services

D.7 Other current transfers
D.71 Net non-life insurance premiums
D.711 Net non-life health insurance premiums
D.712 Other net non-life insurance premiums
D.72 Non-life insurance claims
D.721 Non-life insurance health insurance claims
D.722 Other non-life insurance claims
D.73 Current transfers within general government
   D.731 Current health-related transfers within general government
   D.732 Current non-health-related transfers within general government
D.74 Current international cooperation
   D.741 Current health-related international cooperation
   D.742 Current non-health-related international cooperation
D.75 Miscellaneous current transfers
   D.751 Other health-related current transfers
   D.752 Other non-health-related current transfers
D.76 Current transfers outside the SNA framework
   D.761 Current transfers of ancillary units that produce characteristic goods and services
   D.762 Current transfers resulting from valuation of volunteer work
D.8 Adjustment for the change in net equity of households in pension funds
D.9 Capital transfers
   D.91 Capital taxes
   D.92 Investment transfers
      D.921 Transfers for health-related investment
      D.922 Transfers for non-health-related investment
   D.93 Other capital transfers
      D.931 Other health-related capital transfers
      D.932 Other non-health-related capital transfers

2.5.5 Employment

257. The population is divided into three groups: the employed, the unemployed, and those who are not economically active. The first group are those classified in the aggregate “Employment,” and according to the conventional definition they include people with one or more jobs. For purposes of the analysis of productivity, information is required related to labor inputs. In this regard, the SNA suggests that three indicators be used:

- **Jobs**: These are contracts between a person and an institutional unit for performance of work in return for compensation, for a defined period or until further notice.

- **Total hours worked**: These are the hours actually worked during the period in remunerated jobs and self-employment.
• **Full-time equivalent jobs**: These are total hours worked divided by average annual hours worked in full-time jobs.

258. It should be noted that the measurement of employment does not include the members of a household who produce only unremunerated domestic and personal services within their own home, such as patient care, given that these people are considered part of the non-economically-active population.
### Table 2.1 Satellite supply and use table

#### RESOURCES

<table>
<thead>
<tr>
<th>Supply of goods and services</th>
<th>Characteristic products (see Annex 2)</th>
<th>Related products (see Annex 2)</th>
<th>Other products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>National production</td>
<td>Characteristic producers</td>
<td>Total</td>
<td>Total</td>
<td></td>
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<tr>
<td></td>
<td>Market</td>
<td>Non-market</td>
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<tr>
<td>Intermediate use</td>
<td>Characteristic producers</td>
<td>Total</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Market</td>
<td>Non-market</td>
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<tr>
<td>Final consumption expenditure</td>
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<tr>
<td>Capital formation</td>
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</tr>
</tbody>
</table>

#### ADDED VALUE

- Employee compensation
- Taxes on production net of subsidies
- Operating surplus
- Mixed income

- Employed personnel, by category of employment
- Gross fixed capital formation
- Number of establishments
- Number of beds
- Inventory of fixed assets
- Other indicators
2.6 COMPONENTS OF HEALTH EXPENDITURE

259. The principal results of a Satellite Health Account should correspond to a set of detailed items, which are called components. As noted above, these components include a first level of classification of demand variables: consumption of specific goods and services, fixed capital formation in specific goods and services, fixed capital formation of characteristic activities in non-specific products, specific current transfers, specific capital transfers, etc.

260. A second level of classification refers to the type of products, both distinguishing between market and non-market products and providing details of specific characteristic and related products.

2.6.1 Components of health uses/expenditure at the national level

261. Table 2.2, Components of health uses/expenditure at the national level, shown below, reflects total health expenditure at the national level according to components of the uses. This table constitutes the basis for detailing these expenditures by beneficiary agents and financing units.

<table>
<thead>
<tr>
<th>Components of health uses/expenditure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consumption of specific goods and services</td>
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<tr>
<td>1.1. Actual final consumption</td>
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<tr>
<td>1.1.1. Market products</td>
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<tr>
<td>1.1.1.1. Characteristic products (see Annex 3)</td>
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<td>1.1.1.2. Related products (see Annex 3)</td>
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<td>1.1.2. Non-market products</td>
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<td>1.1.2.1. Individual</td>
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<td>1.1.2.1.1. Characteristic products (see Annex 3)</td>
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<td>1.1.2.1.2. Related products (see Annex 3)</td>
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<td>1.1.2.2. Collective</td>
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<td>1.1.2.2.1. Characteristic products (see Annex 3)</td>
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<td>1.2. Intermediate consumption</td>
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<td>1.2.1. Actual intermediate consumption</td>
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<td>1.2.1.1. Characteristic (see Annex 3)</td>
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<td>1.2.1.2. Related (see Annex 3)</td>
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<td>1.2.1.3. Others</td>
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<td>1.2.2. Internal intermediate consumption</td>
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<td>1.2.1.1. Characteristic (see Annex 3)</td>
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<td>1.2.1.2. Related (see Annex 3)</td>
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<td>1.2.1.3. Others</td>
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<tr>
<td>2. Capital formation in specific goods and services</td>
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<tr>
<td>2.1. Characteristic (see Annex 3)</td>
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</tbody>
</table>
2.2. Related (see Annex 3)

3. Fixed capital formation of characteristic activities in non-specific products

4. Specific current transfers (not counterparts of item 1)

5. Specific capital transfers (not counterparts of items 2 or 3)

Total uses of resident units

6. Current uses of resident units financed by the rest of the world (minus)

7. Capital uses of resident units financed by the rest of the world (minus)

National expenditure

Current

Capital

* And their acquisition less disposals of non-produced non-financial assets.

262. **Consumption of health goods and services:** The expenditure of final consumption of health goods and services is recorded in the supply and use table as a part of final use and is made up of all the characteristic and related goods and services. These expenditures are recorded in three institutional sectors: general government, households, and nonprofit institutions serving households.

263. Table 2.3 presents the structure of consumption expenditure in a Satellite Health Account.

<table>
<thead>
<tr>
<th>Table 2.3 Consumption of specific goods and services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Actual final consumption</td>
</tr>
<tr>
<td>1.1.1. Market products</td>
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<tr>
<td>1.1.1.1. Characteristic products (see Annex 3)</td>
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<td>1.1.1.2. Related products (see Annex 3)</td>
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<td>1.1.2. Non-market products</td>
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<td>1.1.2.1. Individual</td>
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<td>1.1.2.1.1. Characteristic products (see Annex 3)</td>
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<td>1.1.2.1.2. Related products (see Annex 3)</td>
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<td>1.1.2.2. Collective</td>
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<td>1.1.2.2.1. Characteristic products (see Annex 3)</td>
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<td>1.1.2.2.2. Related products (see Annex 3)</td>
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<td>Other products</td>
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<td>Other products</td>
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<tr>
<td>Total</td>
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</tbody>
</table>

264. **Gross fixed capital formation in the health sector (public and private):** Gross fixed capital formation by characteristic producers is measured by the value of their acquisitions less disposals of new or existing fixed assets such as construction of hospital infrastructure, medical surgical equipment and instruments, furniture, and transportation equipment. Insofar as possible it is important to record gross fixed capital formation in physical units, for example, the number of hospital beds,
operating tables, ultrasound scanners, dental units, or cardiac monitors, among others.

265. It is possible that some countries may choose to consider certain health services as capital spending, changing the SNA definitions, in the case of expenditures on prevention, health education, and research, among other services.

2.6.2 Users/beneficiaries

266. Table 2.4, National health expenditure by components and users/beneficiaries, provides information on national expenditure by components, according to users/beneficiaries. Although users/beneficiaries are grouped into five broad categories, these can be broken down into a more detailed sub-classification depending upon the needs for analysis. For example, the government as consumer can be subclassified into central government, regional governments, municipal governments, and social security agencies. The need for a more detailed classification will depend on the organization of the national health systems of the countries and on analytical requirements.

Table 2.4 National health expenditure by components and users/beneficiaries

<table>
<thead>
<tr>
<th>Components of national uses/ expenditure</th>
<th>Total</th>
<th>Market producers</th>
<th>Non-market producers</th>
<th>Government as collective consumer</th>
<th>Households as consumers</th>
<th>Rest of the world</th>
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</thead>
<tbody>
<tr>
<td>1. Consumption of specific goods and services</td>
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<td>1.2. Intermediate consumption</td>
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<td>2. Capital formation in specific goods and services</td>
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</tbody>
</table>
2.6.3 Financing

267. Table 2.5, National health expenditure by components and financing units, provides information on national expenditure by components, according to financing units. For example, households as consumers can be subclassified by geographic region or area of residence, whether urban or rural. The need for a more detailed classification will depend on the requirements for analysis of health expenditure financing.

<table>
<thead>
<tr>
<th>Components of national uses/expenditure</th>
<th>Total</th>
<th>Market producers</th>
<th>NPISH</th>
<th>General government</th>
<th>Households as consumers</th>
<th>Financial corporations</th>
<th>Rest of the world</th>
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<tbody>
<tr>
<td>1. Consumption of specific goods and services</td>
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<tr>
<td>1.2.2.3 Others</td>
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</tbody>
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2. Capital formation in specific goods and services
2.6.4 Relationships among components of national health uses/expenditure and SNA transactions

268. The components of national health uses/expenditure, which are very disaggregated in the SHA, are closely related to transactions recorded in the SNA central framework. Table 2.6 shows the SNA accounts and tables where they are found.

Table 2.6 Relationships among components of national health uses/expenditure and SNA transactions

<table>
<thead>
<tr>
<th>Components of national uses/expenditure</th>
<th>Accounts and tables of the SNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consumption of specific goods and services</td>
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</tr>
<tr>
<td>1.1. Actual final consumption</td>
<td>Individual consumption expenditure account:</td>
</tr>
<tr>
<td></td>
<td>P.31/P.41 *</td>
</tr>
<tr>
<td>1.1.1. Market products</td>
<td>Supply and use table (SUT)</td>
</tr>
<tr>
<td>1.1.1.1. Characteristic products (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
</tr>
<tr>
<td>1.1.1.2. Related products (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
</tr>
<tr>
<td>1.1.2. Non-market products</td>
<td>Supply and use table (SUT)</td>
</tr>
<tr>
<td>1.1.2.1. Individual</td>
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<td>1.1.2.1.1. Characteristic products (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
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<td>1.1.2.1.2. Related products (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
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<td>1.1.2.2. Collective</td>
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<td>1.1.2.2.1. Characteristic products (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
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<tr>
<td>1.2. Intermediate consumption</td>
<td>Production account: P.2</td>
</tr>
<tr>
<td></td>
<td>Supply and use table (SUT)</td>
</tr>
<tr>
<td>1.2.1. Actual intermediate consumption</td>
<td></td>
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<tr>
<td>1.2.1.1. Characteristic (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
</tr>
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<td>1.2.1.2. Related (see Annex 3)</td>
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<tr>
<td>1.2.1.3. Others</td>
<td></td>
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<tr>
<td>1.2.2. Internal intermediate consumption</td>
<td></td>
</tr>
<tr>
<td>1.2.2.1. Characteristic (see Annex 3)</td>
<td>Supply and use table (SUT)</td>
</tr>
<tr>
<td>1.2.2.2. Related (see Annex 3)</td>
<td></td>
</tr>
</tbody>
</table>
2.1. Characteristic (see Annex 3)

2.2. Related (see Annex 3)

3. Fixed capital formation of characteristic activities in non-specific products *
   Capital account: P.51
   SUT

4. Specific current transfers (not counterparts of item 1)
   Account for secondary income distribution: D.621/D.622/D.624/D.73/D.75

5. Specific capital transfers (not counterparts of items 2 or 3)
   Capital account: D.9 *

Total uses of resident units

6. Current transfers of resident units financed by the rest of the world (minus)
   Account for secondary income distribution: D.74

7. Capital transfers of resident units financed by the rest of the world (minus)
   Capital account: D.9 *

* The component of expenditure is part of this total.

269. It should be emphasized that the different components of national health expenditure must be measured using the same procedures adopted in the national accounts, so as to ensure comparability of results and consistency of the indicators derived from them.

2.6.5 Non-monetary data and health indicators

270. In the process of compiling the Satellite Health Account, non-monetary data should be integrated, allowing construction of indicators that enrich the analysis of monetary information. When the production accounts are prepared, it is important to link every producer or provider of health-related services to information on establishment type, economic activity, and establishment size. Furthermore, if possible, information on production in physical units and type of fixed assets used should be included in order to give an idea of both installed and used capacity.

271. In addition to these physical indicators, certain other kinds of non-monetary data should also be introduced into the SHA: number of consultations by specialty, sex, and age; number of deaths in hospitals, by cause of death; average days of hospital stay, by type of disease; number of public and private health facilities; number of health facilities by geographic area; level of qualification of medical staff; ratio of specialized physicians to ancillary personnel; and number of medical equipment units by specialized use, among others.

272. When working with households on a sectoral basis, household surveys offer a set of non-monetary data and indicators for the sector, as noted in section 2.7 below.

2.7 HOUSEHOLDS IN THE SATELLITE HEALTH ACCOUNT

273. In the SHA, households are the principal beneficiaries of health services provided by the public health system, by social security institutions, by nonprofit institutions, and by the private sector.
274. Although it is very important to know the breakdown of national expenditure by components and financing units, it is much more useful for analysis to be able to divide households into subgroups. This sectoral subdivision will depend on the availability of information and the type of analysis. One criterion for sectoral division of households can be geographic: households may be divided according to urban and rural areas, or regionally into north, center, and south, or into capital city, large cities, other cities, and rural population centers. Yet another criterion that can be used is the level of poverty, or a combination of criteria can be used.

275. The sectoral subdivision of households can be done on the basis of information from household surveys. Moreover, these surveys provide additional data of interest that can be used to advantage. For each subsector of households, it is possible to obtain information on economic characteristics (employment, income); demographic characteristics (population by age and sex); educational characteristics (school-age population in school by type of school, literate and illiterate population, population by level of education, etc.); state of health, perception of disease, and needs for health care; access to public services (educational services, health services, public transportation, telephone, radio, television, cable, newspapers, and social programs like school breakfast, food assistance, school supplies), etc.

2.8 THE REST OF THE WORLD

276. The Satellite Health Account should cover transactions between residents and nonresidents, which are recorded in the rest of the world account and in the balance of payments. These are transactions relating to health services that the residents of a country carry out outside their country, as well as the health expenditures of nonresidents within the country.
3. SOURCES OF INFORMATION FOR THE SATELLITE HEALTH ACCOUNT

277. The construction of satellite accounts requires systematization of health sector statistics. For this, information must be organized in such a way as to provide the data necessary for the calculations. It is particularly important to consider information from both the public sector and the private sector. This will make it possible to prepare a Satellite Health Account (SHA) that helps authorities review their health policies and make necessary decisions.

278. Toward this end, agreements should be reached regarding access to data that can help to improve health sector statistics, without neglecting the traditional types of information normally produced by national statistical agencies and ministries of health.

279. Ministries of health, as part of their administrative activities, have mechanisms for compiling physical data on management, which in turn can yield indicators for coverage, disease control, morbidity, mortality, hospital care, basic sanitation and other topics. The ministries also have data on infrastructure, budgets, budget implementation, and resources allocated by the state to health services. Information drawn from administrative records and turned into statistics usually has to do with services provided by the central government and, in some cases, an expanded public sector, including services of other state institutions and social security agencies.

280. With regard to the private sector, very few countries have systematic information on coverage, disease control, general health services, budget, infrastructure, or expenditures on health.

281. This brief chapter outlines and discusses possible sources of information for preparation of the Satellite Health Account. These sources can include administrative records, surveys, censuses, and current sectoral statistics related to health.

3.1 MARKET PRODUCERS

282. The health services, through their administrative mechanisms, compile statistics on all aspects of the production of services, including the use of human resources, the different services provided, morbidity and mortality rates, and situation of the population served. These statistics provide a basis for making indirect calculations for the different categories and aggregates in the tables and accounts that make up the satellite system. For the private sector, surveys of health facilities (hospitals, polyclinics, and clinics) and the information they provide on private services are the definitive data sources; nevertheless, statistical systems need to make greater efforts to obtain information and have complete coverage of access to different health services by the population.
3.1.1 Organized market producers

283. In the case of market producers organized as formal agents (that is, incorporated, for example as clinics), sources of information are economic surveys or detailed financial statements provided by such enterprises.

284. Economic surveys of the health sector provide information on production of the principal characteristic producers in the private sector. These surveys usually do not cover the production of medical physician's and dental physician's offices, for which indirect indicators must be used. Other sources of information that can be tapped when there are no direct and complete sources include associations of producers and professionals, as these associations know their own markets very well. In addition, directories of health companies and facilities are valuable for improving the sampling design of current and future surveys, which also makes it possible to prepare estimates for the private sector.

285. Administrative records and financial statements give statistics on infrastructure that are important for calculation of gross fixed capital formation of the private sector. Necessary information includes an inventory of buildings, machinery, and equipment, as well as other assets related to the production of health services and scientific research and development. In particular, it is important to have details of available assets, including their acquisition costs and current values. In this case, economic surveys also represent principal sources of information, although special surveys are often required to carry out the calculations.

286. The private sector as producer or provider of goods and services does not have final consumption expenditures. The classification by type of current expenses and capital expenses makes it possible to prepare production accounts, income generation accounts, other current accounts, and, partially, the accumulation accounts described in section 2.3.4. In the Satellite Health Account, the private sector is a producer of goods and services; in addition to health services, these include marketing of goods, as in the case of pharmacies and health insurance companies. In terms of supply, data are required on the production of specific goods and services, both characteristic and related, as that production is sold mainly to households and is financed both by traditional sources (such as compensation, mixed income, and rents) and by benefits from insurance companies.

3.1.2 Non-organized market producers

287. In the case of the non-organized private sector, one needs to know the number of professionals who provide services in their offices, as well as the number of non-professionals (nontraditional physicians). The information required includes the estimated number and the average value of income. The latter data can be obtained from special employment, workforce, or multipurpose surveys.

288. A satellite account may consider production by secondary characteristic producers and ancillary producers, or expand the scope of production to include volunteer
work. In the former case, it is necessary to conduct special surveys of companies to obtain information from these producers on production, cost structure, capital formation, human resources, etc. Preparing production accounts for these producers can require much effort for a level of production that is not very significant; in such cases it may be advisable to identify production only for the supply and use of goods and services accounts. In the case of volunteer work, information from administrative records on person-days or person-months worked is needed in order to estimate the value of this work, using average income paid in the market.

3.2 Non-market producers

289. Non-market producers include the different entities of the general government, including social security agencies, as well as NPISH. For these producers, basic information can be obtained from administrative records of actual income and spending and financial statements of the institutions, as appropriate.

3.2.1 Central, state, and local government

290. The principal source of information on governmental units, in terms of production, consumption, investment, and transfers, consists of administrative records showing budget implementation and actual amounts of both expenses and income. Usually these records provide enough information to prepare all the accounts for these units, as well as to detail transfers paid and received.

291. Furthermore, for the general government, there are statistics related to spending on health services and budget implementation that make it possible to calculate production from the perspective of costs and consumption expenditure. Infrastructure statistics are important for calculation of gross fixed capital formation, for the public sector as for the private sector. This requires an inventory of buildings, machinery, equipment, and other assets related to health services production and scientific research and development. In this regard, it is important to have details of available assets, including acquisition costs and current values. In the case of the public sector, the sources of information are administrative records, from which data are obtained on available fixed assets, new acquisitions, and construction of new buildings.

292. In the case of central, state, and local government, information on actual current expenditures and capital expenditures is usually available, based on a given budget. This information, as noted above, makes it possible to calculate values for the health services production account; in this case, final consumption expenditure is derived from the difference between the value of production and the income by sale at nominal prices of these services, adding those purchases that are distributed to the population in the same state as when they were purchased. Government consumption expenditure is classified into individual services, which go to actual consumption by households through social transfers in kind, and
collective services, which are considered actual final consumption expenditures by government.

293. The administrative records of the health services contain statistics on all aspects of the production of these services, as they usually monitor human resources, the different services provided, morbidity and mortality, as well as the situation of the population served. Health services statistics provided by the public sector are usually well recorded and managed, and are already part of national statistical systems. These statistics are basic sources for making indirect calculations for the different categories and aggregates of the tables and accounts that make up the satellite system.

294. In addition, the general government also includes the central or decentralized agencies for social security, which in many cases provide health services and free medicines. These health and medical services, when they recorded in accounts, are considered to be final consumption of households. The households finance these services with the social contributions that they make to social security, and social security agencies repay them with social services.

3.2.2 Social security

295. Social security is generally under the responsibility of an institution created specifically for this purpose, with administrative and financing autonomy. Social security generates monetary information on budgeted income and expenses and financial statements, as well as physical indicators on social services provided.

296. The administrative records of health services provided by social security agencies track human resources, the different services provided, morbidity and mortality, as well as the situation of the population served, yielding data on all aspects of the production of these services. Just as in general government, these administrative records make it possible to carry out indirect calculations for the different categories and aggregates of the tables and accounts that make up the satellite system.

3.2.3 Nonprofit institutions serving households

297. In general, there is very little information available on activities and financing for preparing production accounts, income generation accounts, asset formation accounts, etc., of NPISH. To obtain full accounts special surveys are needed, although one alternative partial source can be found in government’s administrative records on donations received from the rest of the world, in cases where this information is available.

298. It is particularly useful to gather information, at least from a sample of these institutions, on current expenditures, capital expenditures, and transfers received. It is advisable that information be obtained from a set of surveys, which together can give a picture of the value of resources used to provide health services to the population. The first step is to obtain a directory of nonprofit entities that have
activities in the health sector; then, surveys can be carried out with a sample of them.

299. In principle, in these institutions, final consumption expenditure is obtained by deducting from the value of their production income from sales of these services if they are sold at nominal prices. These institutions by convention only produce individual services; as a consequence, their actual final consumption is zero. The consumption value is transferred to households as social transfers in kind, making up actual consumption of households.

3.2.4 Households

300. Household surveys, surveys of income and expenditures, surveys for multiple purposes and/or of living conditions, and data on housing are the principal sources of information for household accounts, not only for monetary information but also for demographic and social indicators on households, by subsector or social class.

3.3 HOUSEHOLDS AS BENEFICIARIES OF THE HEALTH SERVICES

301. Actual final consumption of households is made up of out-of-pocket expenditures, social transfers in kind from government and NPISH, individual goods and services and health services provided by social security agencies, and health services financed with benefits from insurance companies. Sources of information on out-of-pocket expenditures include surveys of household income and expenditures. Other transactions are obtained as counterparts from the units involved, such as the accounts of government, NPISH, insurance companies, and social security agencies.

302. As noted in section 3.2, data on household final consumption expenditure of goods and services are based mainly on results of household surveys, which make it possible to subdivide households into sectors for better analysis. In addition to these out-of-pocket expenditures, it is important to have information on insurance companies related to premiums and benefits of school insurance, accident insurance, and disease insurance, since, as mentioned, households finance part of their health expenditures with these resources.

3.4 OTHER SOURCES OF INFORMATION

303. In addition to the sources already covered, several others can help to provide the additional data needed for preparation of a supply and use table of health-related activities.
3.4.1 Central framework of national accounts

304. The national accounts constitute a valuable source of information for preparation of the Satellite Health Account; as in the case of related products such as drugs, when they are identified by a category in the classification of products.

3.4.2 Balance of payments

305. Expenditures overseas on health services by resident units are recorded in the balance of payments, which can also be a source of important data on financing (donations and official development assistance).

3.4.3 Foreign trade

306. The administrative records of customhouses and foreign trade statistics, particularly for imports, provide information for preparation of the supply and use table.

3.4.4 Insurance company statistics

307. Insurance companies and insurance agents providing insurance that covers health-related risks are a source of information on premiums received from households and companies, as well as on benefits paid. The latter are divided into refunds and payments made directly to health providers. This separation is important for calculating adjustments in the final consumption expenditures by households that are obtained from household surveys, as well as for transfers.

3.5 Traditional sources of information

308. These provide different statistical methods for finding out the situation in a sector. Data are available on demographic status, labor, and the economy, making it possible to link the sector with national data on activities. Traditional sources include national censuses; special, regular, and ongoing surveys; and ongoing statistics and projections, including population estimates and national accounts. Also included are statistics on the health sector, which are usually produced by the ministries of health.

3.5.1 National censuses

309. A census is the most complete tabulation. Censuses usually report characteristics of the population, dwellings, agricultural and livestock enterprises, establishments, and other units on which information is required. National census programs include population and housing censuses, agricultural and livestock censuses, and economic censuses.

- **Population and housing censuses**: These provide information on the population by sex, age group, educational status, occupation, and geographic area. The data
also make it possible to learn characteristics of households and conditions of dwellings, information that provides an opportunity for analysis of socioeconomic conditions at all levels of geographical disaggregation. From these one can get information to expand the analysis in a health account, since it is possible to obtain cross-tabulations of data required by analysts.

- **Economic censuses:** This is research to obtain data on the economic and financial characteristics of companies and other establishments engaged in economic activities. This includes units devoted to activities classified as specific to the health sector, where the principal activity is usually defined.

### 3.5.2 Surveys

310. There are several kinds of surveys, but those of interest for the SHA are special surveys and the so-called regular surveys, which have national coverage or are aimed at calculation of variables or indicators that reflect the situation of the country.

- **Special surveys:** Among these, those most useful for the purpose at hand are surveys on the living standards of the population, surveys on household income and expenditures, and health surveys. These instruments for capturing data are of utmost importance because they are carried out in between national censuses, providing the opportunity to do more detailed research on specific aspects of interest. Although their coverage is national, the methodology does not make it possible to gather data at levels of geographic disaggregation smaller than urban and rural areas, indigenous groups, or other levels selected in advance. The results provide information that can be used for analyses with a gender perspective, and the surveys are also flexible enough to accommodate variables needed for the estimates of the satellite accounts.

- **Regular surveys:** The most common are household surveys, normally devoted to estimates of employment and unemployment. Their results can be analyzed to show highly detailed characteristics of the economically active and non-economically-active populations. Other regular surveys include economic surveys, which provide information on establishments. If the availability of these surveys is considered carefully, they can provide valid and reliable instruments for expanding analysis of the health sector through inclusion of specific modules aimed at collecting additional data.

### 3.5.3 Continuous statistics

311. National statistical systems include sectoral statistics aimed at providing indicators that contribute to better analysis, public policy making, and decision making. The classification and level of detail of continuous statistics series are usually not related to the specific needs of analysts. That is, they may provide important data, but still not meet the expectations of those who are concerned with constructing satellite accounts. Nevertheless, it is important that information from the health sector be incorporated within the framework of the statistical system, meaning that
its preparation should follow established standards and procedures, including data from public and private institutions.

3.5.4 Health sector statistics

312. Ministries of health, as part of their administrative activities, have mechanisms for compiling physical data on management, which in turn can yield indicators for coverage, disease control, morbidity, mortality, hospital care, basic sanitation and other topics. Information drawn from administrative records and turned into statistics usually refers to services provided by the central government and, in some cases, an expanded public sector, including services of other state institutions and social security agencies. In this regard, it is important to take into account budgetary and accounting information on resources that the state provides for health care services. Nevertheless, the authorities should take greater interest in providing opportunities for analysts to specify additional information required for the satellite accounts, so that collection of the necessary data can be arranged.
CONCLUSIONS AND RECOMMENDATIONS

1. The use of this manual allows each country to decide on the extensions and the level of detail to incorporate in its satellite account, taking into account its analytical needs and the availability of basic information.

2. The manual also allows for the best comparison between countries at specific levels of aggregation (groups of products and activities).

3. The manual ensures the numerical and methodological consistency of indicators used in the Satellite Health Account and the SNA central framework.

4. For the design and preparation of the satellite account, the creation of a multidisciplinary and inter-institutional committee is recommended. This committee should include representatives of all institutions of the health sector (both public and private), statistical offices, and agencies that make and implement health-related policies.

5. To facilitate implementation of the Satellite Health Account, it is recommended that a “Practical Guide for Compiling the SHA” be prepared. This guide can help adapt information to the needs of users and policy-makers, establish the procedure to follow in preparing the SHA, ensure identification of inconsistencies between different sources, establish processes for correcting the discrepancies found, and, finally, present the accounts and tables.

6. In addition, a “User’s Guide to the SHA" should be prepared to assist users with analysis and use of the results obtained.

7. As each country prepares its SHA, it will be possible to develop expanded, harmonized, and improved versions of this manual.
ANNEX 1. THE PRODUCTION BOUNDARY

Paragraphs 6.14 to 6.36 of the 1993 System of National Accounts are excerpted below.

313. (SNA 6.14) Given the general characteristics of the goods and services produced as outputs, it becomes possible to define production. A general definition of production is given first, followed by the rather more restricted definition that is used in the System.

The general production boundary

314. (SNA 6.15) Economic production may be defined as an activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital, and goods and services to produce outputs of goods or services. There must be an institutional unit that assumes responsibility for the process and owns any goods produced as outputs or is entitled to be paid, or otherwise compensated, for the services provided. A purely natural process without any human involvement or direction is not production in an economic sense. For example, the unmanaged growth of fish stocks in international waters is not production, whereas the activity of fish farming is production.

315. (SNA 6.16) While production processes that produce goods can be identified without difficulty, it is not always so easy to distinguish the production of services from other activities that may be both important and beneficial. Activities that are not productive in an economic sense include basic human activities such as eating, drinking, sleeping, taking exercise, etc., that it is impossible for one person to obtain another person to perform instead. Paying someone else to take exercise is no way to keep fit. On the other hand, activities such as washing, preparing meals, caring for children, the sick or aged are all activities that can be provided by other units and, therefore, fall within the general production boundary. Many households employ paid domestic staff to carry out these activities for them.

The production boundary in the System

316. (SNA 6.17) The production boundary in the System is more restricted than the general production boundary. For reasons explained below, production accounts are not compiled for household activities that produce domestic or personal services for own final consumption within the same household, except for services produced by employing paid domestic staff. Otherwise, the production boundary in the System is the same as the more general one given in the previous section.

317. (SNA 6.18) Activities that fall within the production boundary of the System may, therefore, be summarized as follows:

a) The production of all individual or collective goods or services that are supplied to units other than their producers, or intended to be so supplied, including the
production of goods or services used up in the process of producing such goods or services;

b) The own-account production of all goods that are retained by their producers for their own final consumption or gross capital formation;

c) The own-account production of housing services by owner-occupiers and of domestic and personal services produced by employing paid domestic staff.

**Domestic and personal services produced for own final consumption within households**

318. (SNA 6.19) The own-account production of domestic and personal services by members of the household for their own final consumption has traditionally been excluded from measured production in national accounts and it is worth explaining briefly why this is so.

319. (SNA 6.20) First, it is useful to list those domestic and personal services for which no entries are recorded in the accounts when they are produced 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 repair 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.

320. (SNA 6.21) In most countries a considerable amount of labour is devoted to the production of these domestic and personal services, while their consumption makes an important contribution to economic welfare. However, national accounts serve a variety of analytical and policy purposes and are not compiled simply to produce indicators of welfare. The reasons for not imputing values for unpaid domestic or personal services produced and consumed within households may be summarized as follows:

a) The own-account production of services within households is a self-contained activity with limited repercussions on the rest of the economy. The decision to produce a household service entails a simultaneous decision to consume that service. This is not true for goods. For example, if a household engages in the production of agricultural goods, it does not follow that it intends to consume
them all. Once the crop has been harvested, the producer has a choice about how much to consume, how much to store for future consumption or production, and how much to offer for sale or barter on the market. Indeed, although it is customary to refer to the own-account production of goods, it is not possible to determine at the time the production takes place how much of it will eventually be consumed. For example, if an agricultural crop turns out to be better than expected, the household may dispose of some of it on the market even though it may have been originally intended all for own consumption. This kind of possibility is non-existent for services;

b) As the vast majority of household domestic and personal services are not produced for the market, there are typically no suitable market prices that can be used to value such services. It is therefore extremely difficult to estimate values not only for the outputs of the services but also for the associated incomes and expenditures which can be meaningfully added to the values of the monetary transactions on which most of the entries in the accounts are based;

c) Imputed values have a different economic significance from monetary values. The imputed incomes generated by the imputed production would be difficult to tax in practice. They would have to be shown as being all spent on the same services. However, if the incomes were to be available in cash, the resulting expenditures might be quite different. For example, if a household member were offered the choice between producing services for own consumption and producing the same services for another household in return for compensation in cash, the paid employment would likely be preferred because of the greater range of consumption possibilities it affords. Thus, imputing values for the own-account production of services would not only be very difficult, but would yield values which would not be equivalent to monetary values for analytic or policy purposes.

321. (SNA 6.22) Thus, the reluctance of national accountants to impute values for the outputs, incomes and expenditures associated with the production and consumption of domestic and personal services within households is explained by a combination of factors, namely the relative isolation and independence of these activities from markets, the extreme difficulty of making economically meaningful estimates of their values, and the adverse effects it would have on the usefulness of the accounts for policy purposes and the analysis of markets and market disequilibria - the analysis of inflation, unemployment, etc. It could also have unacceptable consequences for labour force and employment statistics. According to International Labour Organisation (ILO) guidelines, economically active persons are persons engaged in production included within the boundary of production of the System. If that boundary were to be extended to include the production of own-account household services, virtually the whole adult population would be economically active and unemployment eliminated. In practice, it would be necessary to revert to the existing boundary of production in the System, if only to obtain meaningful employment statistics.
The production boundary within households

322. (SNA 6.23) Although personal and domestic services produced for own consumption within households fall outside the boundary of production used in the System, it is nevertheless useful to give further guidance with respect to the treatment of certain kinds of household activities which may be particularly important in some developing countries.

Own-account production of goods

323. (SNA 6.24) The System includes the production of all goods within the production boundary. At the time the production takes place it may not even be known whether, or in what proportions, the goods produced are destined for the market or for own use. The following types of production by households are, therefore, included whether intended for own final consumption or not:

a) The production of agricultural products and their subsequent storage; the gathering of berries or other uncultivated crops; forestry; wood-cutting and the collection of firewood; hunting and fishing;

b) The production of other primary products such as mining salt, cutting peat, the supply of water, etc.;

c) The processing of agricultural products; the production of grain by threshing; the production of flour by milling; the curing of skins and the production of leather; the production and preservation of meat and fish products; the preservation of fruit by drying, bottling, etc.; the production of dairy products such as butter or cheese; the production of beer, wine, or spirits; the production of baskets or mats; etc.;

d) Other kinds of processing such as weaving cloth; dress making and tailoring; the production of footwear; the production of pottery, utensils or durables; making furniture or furnishings; etc.

324. The storage of agricultural goods produced by households is included within the production boundary as an extension of the goods-producing process. The supply of water is also considered a goods-producing activity in this context. In principle, supplying water is a similar kind of activity to extracting and piping crude oil.

325. (SNA 6.25) It is not feasible to draw up a complete, exhaustive list of all possible productive activities but the above list covers the most common types. When the amount of a good produced within households is believed to be quantitatively important in relation to the total supply of that good in a country, its production should be recorded. Otherwise, it is not worthwhile trying to estimate it in practice.
"Do-it-yourself" decoration, maintenance and small repairs

326. (SNA 6.26) "Do-it-yourself" repairs and maintenance to consumer durables and dwellings carried out by members of the household constitute the own-account production of services and are, therefore, excluded from the production boundary of the System. The materials purchased are treated as final consumption expenditure.

327. (SNA 6.27) In the case of dwellings, "do-it-yourself" activities cover decoration, maintenance and small repairs, including repairs to fittings, of types which are commonly carried out by tenants as well as by owners. On the other hand, more substantial repairs, such as replastering walls or repairing roofs, carried out by owners, are essentially intermediate inputs into the production of housing services. However, the production of such repairs by an owner-occupier is only a secondary activity of the owner in his capacity as a producer of housing services. The production accounts for the two activities may be consolidated so that, in practice, the purchases of materials for repairs become intermediate expenditures incurred in the production of housing services. Major renovations or extensions to dwellings are fixed capital formation and recorded separately.

The use of consumption goods

328. (SNA 6.28) In general, the use of goods within the household for the direct satisfaction of human needs or wants cannot be treated as production. This applies not only to materials or equipment purchased for use in leisure or recreational activities but also to foodstuffs purchased for the preparation of meals. The preparation of a meal for immediate consumption is a service type activity and is treated as such in the System and in International Standard Industrial Classification (ISIC). It therefore falls outside the production boundary when the meal is prepared for own consumption within the household. The use of a durable good, such as a vehicle, by persons or households for their own personal benefit or satisfaction is intrinsically a consumption activity and should not be treated as if it were an extension, or continuation, of production.

Services of owner-occupied dwellings

329. (SNA 6.29) The production of housing services for their own final consumption by owner-occupiers has always been included within the production boundary in national accounts, although it constitutes an exception to the general exclusion of own-account service production. The ratio of owner-occupied to rented dwellings can vary significantly between countries and even over short periods of time within a single country, so that both international and intertemporal comparisons of the production and consumption of housing services could be distorted if no imputation were made for the value of own-account housing services. The imputed value of the income generated by such production is taxed in some countries.
Illegal production

330. (SNA 6.30) Despite the obvious practical difficulties in obtaining data on illegal production, it is included within the production boundary of the System. There are two kinds of illegal production:

a) The production of goods or services whose sale, distribution or possession is forbidden by law;

b) Production activities which are usually legal but which become illegal when carried out by unauthorized producers; e.g., unlicensed medical practitioners.

331. (SNA 6.31) Both kinds of production are included within the production boundary of the System provided they are genuine production processes whose outputs consist of goods or services for which there is an effective market demand. The units who purchase such outputs may not be involved in any kind of illegal activities other than the illegal transactions themselves. Transactions in which illegal goods or services are bought and sold need to be recorded not simply to obtain comprehensive measures of production and consumption but also to prevent errors appearing elsewhere in the accounts if the funds exchanged in illegal transactions are presumed to be used for other purposes. The incomes generated by illegal production may be disposed of quite legally, while conversely, expenditures on illegal goods and services may be made out of funds obtained quite legally. The failure to record illegal transactions may lead to significant errors in the financial account and also the external account of some countries.

332. (SNA 6.32) Examples of activities which may be illegal but productive in an economic sense include the manufacture and distribution of narcotics, illegal transportation in the form of smuggling (often a form of own-account illegal production) and services such as prostitution.

333. (SNA 6.33) Illegal production does not refer to the generation of externalities such as the discharge of pollutants. Externalities may result from production processes which are themselves quite legal. Externalities are created without the consent of the units affected, and no values are imputed for them in the System. Illegal production also does not refer to stolen output. The theft of legally produced output by employees or others needs to be clearly distinguished from illegally produced output which is sold to willing buyers on the market.

Concealed production and the underground economy

334. (SNA 6.34) Certain activities may be both productive in an economic sense and also quite legal (provided certain standards or regulations are complied with) but deliberately concealed from public authorities for the following kinds of reasons:

a) To avoid the payment of income, value added or other taxes;

b) To avoid the payment of social security contributions;
c) To avoid having to meet certain legal standards such as minimum wages, maximum hours, safety or health standards, etc.;

d) To avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms.

335. All such activities clearly fall within the production boundary of the System provided that they are genuine processes of production. Producers engaged in this type of production may be described as belonging to the "underground economy". The underground economy may account for a substantial proportion of the total output of certain industries - for example, construction or certain service industries where small enterprises predominate.

336. (SNA 6.35) There may be no clear borderline between the underground economy and illegal production. For example, production which does not comply with certain safety, health or other standards could be described as illegal. Similarly, the evasion of taxes is itself usually a criminal offence. However, it is not necessary for the purposes of the System to try to fix the precise borderline between underground and illegal production as both are included within the production boundary in any case. It follows that transactions on unofficial markets which exist in parallel with official markets (e.g., 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.

337. (SNA 6.36) Because certain kinds of producers try to conceal their activities from public authorities, it does not follow that they are not included in national accounts in practice. Many countries have had considerable success in compiling estimates of production which cover the underground economy as well as the ordinary economy. In some industries, such as agriculture or construction, it may be possible by using various kinds of surveys and the commodity flow method to make satisfactory estimates of the total output of industry without being able to identify or measure that part of it which is underground (or indeed illegal). Because the underground economy may account for a significant part of the total economy of some countries, it is particularly important to try to make estimates of total production which include it, even if it cannot always be separately identified as such.
ANNEX 2. CLASSIFICATION OF ECONOMIC ACTIVITIES OF THE SATELLITE HEALTH ACCOUNT

Presented below are descriptions of each of the economic activities included in the SHA, based on the International Standard Industrial Classification of All Economic Activities (ISIC), with some details from the North American Industry Classification System (NAICS).

338. 2423 * Manufacture of pharmaceuticals and medicinal chemicals

339. This class includes:

Manufacture of pharmaceutical preparations for human or veterinary use: generic or proprietary preparations; preparations available to the general public or controlled by the health system; ampules, tablets, capsules, vials, ointments, powders or solutions; botanical products ground, graded, milled or otherwise prepared.

Manufacture of surgical dressings, medicated wadding, fracture bandages, catgut, and other prepared sutures.

Manufacture of cements used in dentistry.

Manufacture of chemical substances used in the manufacture of pharmaceuticals: antibiotics, endocrine products, basic vitamins; opium derivatives; sulfa drugs; serums and plasmas; salicylic acid, its salts and esters; glycosides and vegetable alkaloids; chemically pure sugar; etc.

Exclusions:

Packaging of pharmaceuticals for own account is classified in class 5139 (Wholesale of other household goods) or class 5231 (Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles) and packaging on a fee or contract basis in class 7495 (Packaging activities).

340. 3311 Manufacture of medical and surgical equipment and orthopedic appliances

341. This class includes manufacture of:

Instruments and appliances used in medical, surgical, dental or veterinary practice or science including electro-diagnostic apparatus such as electro-cardiographs, dental drill engines, ophthalmic instruments including sight testing sets, syringes, with or without needles, needles used in medicine and other instruments and appliances including optical instruments such as mirrors and reflectors, endoscopes, etc.

Apparatus based on the use of X-rays or alpha, beta or gamma radiations, whether or not for use in human or animal medicine. Included is manufacture of X-ray tubes, high tension generators, control panels, desks, screens and the like.

Sterilizers.

Mechano-therapy appliances; massage apparatus; psychological testing apparatus; ozone therapy, oxygen therapy, artificial respiration or other therapeutic respiratory apparatus; other breathing appliances and gas masks other than simple protective masks.

Orthopedic appliances including crutches, surgical belts and trusses, orthopedic corsets and shoes; splints and other fracture appliances; appliances worn, carried or implanted (e.g. hearing aids or pace-makers).
Artificial teeth, artificial limbs and other artificial parts of the body.

Medical, surgical, dental, or veterinary furniture, such as operating tables, hospital beds with mechanical fittings, dentists’ chairs and barbers’ chairs with the same or similar movement capability.

342. Exclusions:

Manufacture of surgical dressings, medicated wadding, fracture bandages, catgut, and other prepared sutures is classified in class 2423 (Manufacture of pharmaceuticals, medicinal chemicals and botanical products).

Manufacture of cements used in dentistry is also classified in class 2423.

Manufacture of thermometers is classified in class 3312 (Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment).

Manufacture of corrective spectacle lenses and of their frames or of compound optical microscopes is classified in class 3320 (Manufacture of instruments of optical instruments and photographic equipment).

The activity of denture fitting by dentists or spectacles fitting by optometrists is classified in the appropriate class of group 851 (Human health activities).

3312 * Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment

This class includes the manufacture of:

Sensitive balances.

Drawing marking-out or mathematical calculating instruments including instruments for measuring length for use in the hand (e.g. measuring rods and tapes, micrometers, callipers and gauges).

Microscopes other than optical microscopes and diffraction apparatus.

Apparatus for measuring and checking electrical quantities (e.g. oscilloscopes, spectrum analyzers; and instruments for checking current, voltage, resistance) with or without a recording device.

Apparatus for measuring or checking non-electrical quantities (e.g. radiation detectors and counters, instruments and apparatus specially designed for telecommunications such as cross-talk meters and apparatus for testing and regulating vehicle motors).

Automatic regulating or controlling instruments and apparatus (e.g. thermostats, pressure controllers, level regulators, humidity regulators, oven-draught regulators; and automatic regulators of electrical quantities), except industrial process control equipment.

Navigational, meteorological, geophysical and related instruments and apparatus (e.g. surveying instruments such as theodolites) oceanographic or hydrological instruments, seismometers, rangefinders, automatic pilots, sextants, ultrasonic sounding instruments, and special instruments for air navigation.

Radar apparatus and radio remote control apparatus.

Electricity supply meters and supply meters for water or gas.

Machines and appliances for testing the physical properties of materials: machines and apparatus for testing hardness and other properties of metals; for testing wear and tear and other properties of textiles; aid for testing the physical properties of paper, linoleum, plastics, rubber, wood, concrete and other materials.

Instruments and apparatus for carrying out physical or chemical analyses (e.g. polarimeters, refractometers, colorimeters, Orsob’s apparatus, pH-meters, viscometers, surface tension instruments).
Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (e.g. flow meters, level gauges, manometers, heat meters), except industrial process control equipment.

Other measuring, checking or testing instruments, apparatus or machines (e.g. hydrometers, thermometers, barometers, revolution counters, taximeters, pedometers, tachometers, balancing machines, test benches, comparators (including optical comparators and other optical-type measuring and checking appliances and instruments)), instruments for checking watches or watch parts, etc., except industrial process control equipment.

Exclusions:

Manufacture of pumps incorporating measuring devices is classified in class 2912 (Manufacture of pumps, compressors, taps and valves).

Manufacture of medical and surgical instruments is classified in class 3311 (Manufacture of medical and surgical equipment and orthopedic appliances).

Manufacture of industrial process control equipment is classified in class 3313.

Manufacture of binoculars, monoculars and similar optical devices is classified in class 3320 (Manufacture of optical instruments and photographic equipment).

**3320 * Manufacture of optical instruments and photographic equipment**

This class includes the manufacture of:

- Optical elements of glass or of any other material (e.g. quartz, fluor spar, plastics or metal).
- Prisms and lenses, mirrors constituting optical elements, colour filters, polarising elements, etc.
- Ophthalmic lenses including contact lenses.
- Optical fibres and cables of optical fibres not individually sheathed.
- Mounted optical elements.
- Spectacle frames and frames fitted with lenses whether or not the lenses are optically worked: sunglasses, protective glasses and corrective glasses.
- Optical instruments such as binoculars, monoculars, other optical telescopes and their mountings; optical astronomical instruments.
- Compound optical microscopes including those for photomicrography and micro-projection.
- Other optical appliances and instruments (e.g. telescopic sights for fitting to arms, machines or appliances; lasers other than laser diodes; hand magnifying glasses and magnifiers; mounted, optically worked, glass mirrors, door eyes).
- Still or cinematographic cameras; cameras of all types for all purposes including those used to prepare printing plates, for underwater or aerial photography, or for producing microfilm or microfiche; cinematographic sound cameras.
- Image projectors, enlargers and reducers including microfilm, microfiche or other microfilm readers.
- Cinematographic projectors including those incorporating sound reproducing apparatus.
- Discharge lamp (“electronic”) and other flashlight apparatus, but not flashbulbs.
- Apparatus and equipment for photographic (including cinematographic) laboratories.
- Apparatus for the projection of circuit patterns on sensitized semi-conductor materials; projection screens.

Exclusions:
Manufacture of photochemical products is classified in class 2429 (Manufacture of other chemical products n.e.c.)

Manufacture of unworked glass optical elements is classified in class 2610 (Manufacture of glass and glass products), but unworked optical elements of other materials remain included in this class.

Manufacture of photo-copying apparatus incorporating an optical system or of the contact type and thermo-copying apparatus are classified in class 3000 (Manufacture of office, accounting and computing machinery).

Manufacture of optical fibre cables made up of individually sheathed fibres is classified in class 3130 (Manufacture of insulated wire and cable).

Manufacture of photographic flashbulbs is classified in class 3150 (Manufacture of electric lamps and lighting equipment).

Manufacture of television cameras is classified in class 3220 (Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy).

Manufacture of video cameras is classified in class 3230 (Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods).

Manufacture of medical and surgical instruments containing optical elements (e.g. endoscopes) is classified in class 3311 (Manufacture of medical and surgical equipment and orthopedic appliances) and manufacture of measuring or checking appliances containing optical elements in class 3312 (Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment), if for other uses (e.g. theodolites).

343. 4520 * Construction of hospital infrastructure

This class includes:

General construction and some special trade construction for buildings and general and special trade construction for civil engineering, regardless of the kind of materials used. It includes new work, additions and alterations, the erection of pre-fabricated buildings or structures on the site and also construction of temporary nature.

Also included is repair of civil engineering projects, but most repairs of buildings that are not complete alterations or additions are classified in classes 4530 (Building installation) and 4540 (Building completion).

General construction mostly involved in the construction of entire dwellings, office buildings, stores and other public and utility buildings, farm buildings, etc., or the construction of heavy constructions such as highways, streets, bridges, tunnels, railways, airfields, harbours and other water projects, irrigation systems, sewerage systems, industrial facilities, pipelines and electric lines, sports facilities, etc. This work can be carried out on own account or on a fee or contract basis. Portions of the work and sometimes even the whole practical work can be subcontracted out to trade contractors.

Special trade construction includes the construction of parts of the above mentioned works or preparation therefor. It is usually specialized in one aspect common to different structures, requiring specialized skills or equipment. Activities such as pile-driving, foundation work, water well drilling, carcass work, concrete work, brick laying, stone setting, scaffolding, roof covering, etc., are covered. The erection of steel structures is included provided that the parts are not produced by the same unit. Special trade construction will mostly be carried out under subcontract, but especially in repair construction it is done directly for the owner of the property.
344. Exclusions:

Landscape planning and design, lawn and garden installation and maintenance and tree surgeons activities are classified in class 0140 (Agricultural and animal husbandry service activities, except veterinary activities).

Construction activities directly related to extraction of oil and natural gas are classified in class 1120 (Service activities incidental to oil and gas extraction excluding surveying). However, the construction of buildings, roads, etc., on the mining site remains in this class.

The erection of complete prefabricated buildings or structures from self-manufactured parts is classified in the relevant category in manufacturing, depending on the material chiefly used, except if the chief material is concrete, in which case it remains classified here. The erection of metal structures from self-manufactured parts is classified in class 2811 (Manufacture of structural metal products).

Special trade construction involving building installation and completion (finishing) are classified in class 4530 and 4540, respectively.

Architectural and engineering activities are classified in class 7421 (Architectural and engineering activities and related technical consultancy).

Project management for constructions is also classified in class 7421.

4530 * Building installation

This class includes the installation of all kind of utilities that do the construction function as such. These activities are usually performed at the site of the construction, although parts of the job may be carried out in a special shop.

Included are activities such as plumbing, installation of heating and air-conditioning systems, antennas, alarm systems and other electrical work, sprinkler systems, elevators and escalators, etc. Also included are insulation work (water, heat, sound), sheet metal work, industrial process piping work, commercial refrigerating work, the installation of illumination and signaling systems for roads, railways, airports, harbours, etc., and the installation of certain plants such as electric power and transformer plants, telecommunication and radar plants, etc. Also repair of the same type as the above mentioned activities is included.

4540 * Building completion

This class includes many different activities that contribute to the completion or finishing of a construction such as glazing, plastering, painting and decorating, floor and wall tiling or covering with other materials like parquet, carpets, wallpaper, etc., floor sanding, finish carpentry, acoustical work, cleaning of the exterior, etc. Also repair of the same type as the above mentioned activities is included.

Exclusions: The installation of self-manufactured carpentry or joinery is classified in the relevant category in manufacturing, depending on the material used, e.g. of wood in 2022 (Manufacture of builders’ carpentry and joinery).

Cleaning of windows, inside as well as outside, chimneys, boilers, interiors, etc., is classified in class 7493 (Building-cleaning activities).

345. 5139 * Wholesale of other household goods: pharmaceutical and medicinal products, surgical and orthopedic instruments and optical devices

346. This class includes the wholesale of household appliances, articles and equipment, e.g. household furniture, household appliances, cutlery, lighting articles, radio and television equipment, glassware, wooden ware, wallpaper, and floor coverings, etc.; pharmaceutical and medical goods, surgical and orthopedic instruments and devices, perfumery, cosmetics and soaps; and wholesale of miscellaneous consumer goods, e.g. paper and paperboard, books, magazines, newspapers and
stationery, photographic and optical goods, games and toys, watches, clocks and jewelry, sports goods (incl. bicycles), leather goods and travel accessories, cleaning materials, etc.

347. **5150** * Wholesale of machinery, equipment, and supplies

348. This class includes the wholesale of goods such as agricultural machinery and equipment, transport equipment (except motor vehicles, motorcycles, snowmobiles and bicycles), construction and civil engineering machinery and equipment, office machinery and equipment, machinery and equipment for the textile, wood and metal industries, etc., as well as wholesale of related supplies.

349. **5231** * Retail sale of pharmaceutical and medicinal goods, cosmetic and toilet articles

350. This class includes the specialized retail trade of pharmaceutical, medical and orthopedic goods; perfumery articles, cosmetic articles and toilet soaps.

351. **5239** * Other retail sale in specialized stores: optical and precision equipment

352. This class includes the specialized retail sale of office supplies and equipment; computers and non-customized software; books, newspapers, magazines and stationery; photographic, optical and precision equipment; cleaning materials, wallpaper and floor coverings; watches, clocks and jewelry; sports goods; games and toys; flowers, plants, seeds, fertilizers and pet animals; souvenirs; fuel oil, bottled gas, coal and fuel wood; non-food products not elsewhere classified.

353. **5520** * Preparation of food diets for hospitals

354. **6603** * General insurance plans

   - Insurance for family medical care (disease and maternity)
   - Personal accident insurance
   - School insurance

   This class includes insurance plans (including reinsurance) other than life insurance (for example, accident and fire insurance plans, health insurance, property and car insurance, motor, maritime, aviation and transport insurance, pecuniary loss and liability insurance).

355. **7310** * Research and experimental development in the field of the natural sciences and engineering

   This class includes systematic studies and creative work in the three types of research and development defined above, in natural sciences (mathematics, physics, astronomy, chemistry, life sciences, medical sciences, earth sciences, agriculture, engineering and technology etc.). They are intended to increase the stock of knowledge and to devise new applications.

356. **7422** * Technical testing and analysis

   This class includes testing and inspection of all types of materials and products. Testing of their composition and purity, e.g. of minerals, food, etc. Qualification and reliability testing, certification of products, failure analysis, materials evaluation, etc. Testing the physical characteristics and performance of products or materials, e.g. for their strength, thickness, durability, electrical conductivity, radioactivity, etc. Also included is the testing of textiles, radiographic testing of welds.
and joints and performance testing of complete machinery, motors, automobiles, appliances or electronic equipment, whether or not with the use of models or mock-ups of ships, aircraft, dams, etc.

Exclusion: Testing and analysis of medical and dental specimens are classified in class 8519 (Other human health activities).

355. **75122** * Regulation of the activities of agencies that provide health care, education, cultural services and other social services excluding social security

356. This class includes:

Public administration of programs and administration of R&D policies and associated funds intended to increase personal well-being.

Administration of health care, promotion and protection programs. Administration of primary, secondary, post-secondary and special retraining programs. Administration of programs to provide recreational and cultural services, such as performing arts or fitness and amateur sport programs. Sponsoring of recreational and cultural activities. Distribution of grants to artists. Administration of potable water supply programs. Administration of refuse collection and disposal operations. Administration of environment protection programs, such as water purification and pollution control. Administration of housing programs.

Exclusions:

Postal activities are classified in class 6411 and telecommunications are classified in class 6420.

Research and experimental development activities are classified in division 73.

Compulsory social security activities are classified in class 7530.

Education activities are classified in division 80.

Human health related activities are classified in group 851.

Sewage and refuse disposal and sanitation are classified in class 9000.

Activities of libraries, public archives, museums and other cultural institutions are classified in the appropriate class of group 923.

Exclusion: Direct provision of welfare services and other social work with accommodation is classified in class 8531, and without accommodation in class 8532, respectively.

357. **7530** Compulsory social security activities

358. This class includes the funding and administration of government-provided social security programs.

359. Social security services may be defined as chiefly transfer payments to compensate for reduction or loss of income or inadequate earning capacity. Compulsory social security normally covers sickness, accident and unemployment insurance and retirement pensions. Also more specific risks leading to loss of income may be covered: maternity, temporary disablement, widowhood, family increase.

360. Exclusion: Direct provision of welfare services and other social work with accommodation is classified in class 8531, and without accommodation in class 8532, respectively.

361. **8030** Higher education for health
362. This class includes post-secondary sub-degree level education and education that leads to university degree or equivalent. A great variety of subject-matter programs is offered at this level, some more emphasizing theoretical instruction and some more practical instruction.

363. **8090** Adult and other education for health

364. This class includes adult education, i.e. education for people who are not in the regular school and university system. Instruction may be given in day or evening classes in schools or in special institutions providing for adults.

365. Also included is all instruction through radio and television broadcasts, or by correspondence. Instruction may cover both general and vocational subjects. Typically, most of these educational activities presuppose that the student volunteered to attend as he/she has a particular motivation in taking the program. Provision of literacy programs for adults is included. Also included are education at first and second levels in specific subject matters, not elsewhere classified, and all education which is not definable by level.

366. Exclusion: Higher education is classified in class 8030.

367. **DIVISION 85 SOCIAL AND HEALTH SERVICES**

368. **851** Human health activities

369. **8511** Hospital activities

370. This class includes the activities of general and specialized hospitals, sanatoria, preventoria, asylums, rehabilitation centers, leprosaria, dental centers and other health institutions which have accommodation facilities, including military base and prison hospitals. The activities are chiefly directed to in-patients and carried out under the direct supervision of medical doctors. They comprise the services of medical and paramedical staff, laboratory and technical facilities, including radiological and anesthaesiological services, food and other hospital facilities and resources such as emergency room services.

371. Exclusions: Health activities for military personnel in the field are classified in class 7522 (Defense activities).

372. Dental activities without accommodation are classified in class 8512 (Medical and dental practice activities).

373. Activities carried out predominantly for out-patients are classified in class 8519 (Other human health activities), as are activities of ambulances.

374. Veterinary activities are included in class 8520.

375. These are subdivided into the following categories:

376. **85111** General hospitals
377. Economic units devoted mainly to provide non-specialized medical services for care of specific diseases and that have facilities for hospitalization of patients, such as general, pediatric, geriatric, and women's hospitals (NAICS-Mex 62211).

378. This excludes: Psychiatric hospitals, medical specialty hospitals, centers for patient care that do not require hospitalization, residences with nurses' care for patients who are convalescent, in rehabilitation, incurable, or terminal, residences for the care of people with problems of mental retardation, and residences for the care of people with mental health problems or substance abuse.

379. 85112 Psychiatric hospitals and hospitals for treatment for substance abuse

380. Economic units devoted mainly to providing medical services for patients who require hospitalization due to psychological disorders (such as neurosis, schizophrenia, paranoia) and for substance abuse.

381. This excludes: residences for the care of people with problems of mental retardation, mental health, or substance abuse, providing advice to substance-abuse addicts, psychiatrists' offices, psychology services, and external medical care centers for the rehabilitation of mentally infirm and the addicted.

382. 85113 Hospitals for other medical specialties

383. Economic units devoted mainly to providing specialized medical services and that have facilities for hospitalization of patients. This also includes maternity hospitals.

384. This excludes: psychiatric hospitals, residences with nurses' care for patients who are convalescent, in rehabilitation, incurable, or terminal, hospitals not specialized in the care of particular diseases, and centers for patient care that do not require hospitalization.

385. 8512 Medical and dental practice activities

386. This class includes consultation and treatment activities of general physicians and medical specialists including dentists. It involves activities of doctors of general medicine or medical specialists or surgeons in health institutions (including hospital out-patient clinics and departments of pre-paid groups of physicians) or private practice. Included are activities carried-out in clinics such as those attached to firms, schools, houses for the aged, labor organizations and fraternal organizations as well as in patients' homes. Patients are usually ambulatory and can be referred to specialists by general practitioners. Dental activities may be of general or specialized nature and can be carried out in a private practice or in out-patient clinics including clinics attached to firms, schools, etc., as well as in operating rooms.

387. Exclusions: In-patient care in hospitals is included in class 8511 (Activities of hospitals). In-patient hospital activities are classified in class 8511 (Hospital activities).
388. Para-medical activities such as those of midwives, nurses and physiotherapists are classified in class 8519 (Other human health activities).

389. These are subdivided into the following categories (contained in the NAICS):

390. 85121 Medical physician’s offices

391. Economic units devoted mainly to services of general and specialized external medical consultation provided by professionals with at least a medical doctor's degree.

392. Excludes: hospitals, technical offices of other paramedical personnel or professionals that do not have a medical doctor's degree, such as psychologists, chiropractors, therapists, optometrists, nutritionists, midwives, and personnel providing dental and X-ray services, veterinary medical services, opticians, medical dispensaries, family planning centers, and external medical care centers for the mentally ill and addicted.

393. 851211 General medical physician's offices

394. Economic units devoted mainly to services of general external medical consultation provided by professionals with at least a medical doctor's degree.

395. It excludes: Hospitals, other establishments providing dental services, technical offices of other paramedical personnel and professionals that do not have a medical doctor's degree, such as psychologists, chiropractors, therapists, optometrists, nutritionists, midwives, and personnel providing dental and X-ray services, veterinary medical services, opticians, medical dispensaries, family planning centers, and external medical care centers for the mentally ill and addicted.

396. 851212 Specialized medical physician’s offices

397. Economic units of the private sector devoted mainly to specialized outpatient services provided by professionals with at least a medical doctor's degree and with some medical specialty.

398. It excludes: outpatient medical care centers belonging to the private sector for the mentally ill and addicted, private sector hospitals devoted to medical specialties, economic units of the private sector devoted mainly to dental services, offices for private sector technical personnel, other paramedical personnel, and professionals that do not have a medical doctor's degree, such as psychologists, chiropractors, therapists, optometrists, nutritionists, midwives, and private sector economic units devoted mainly to providing X-ray services, veterinary services veterinarians, or private sector opticians.

399. 85122 Dental physician’s offices

400. Economic units devoted mainly to providing dental services, such as orthodontic services, endodontic services, maxillofacial surgery, dental cosmetology, and pediatric dental services.
401. It excludes: n.e.s. preparation of dental prostheses

402. **85123** Outpatient care centers

403. Economic units devoted mainly to providing outpatient surgery services for kidney dialysis and other medical services that do not require hospitalization not classified elsewhere. Includes medical dispensaries.

404. Excludes: n.e.s. provision of external general medical practice.

405. **851231** Family planning centers

406. Economic units devoted mainly to providing medical care for birth control and the treatment of fertility problems. It includes also n.e.s. provision of prenatal medical care.

407. **851232** External medical care centers for the mentally ill and addicted

408. Economic units devoted mainly to providing outpatient medical practice services for the rehabilitation of the mentally ill and addicted.

409. **851233** Other centers for outpatient care

410. Economic units devoted mainly to providing outpatient surgery services for kidney dialysis and other medical services that do not require hospitalization not classified elsewhere. Includes medical dispensaries.

411. Excludes: n.e.s. provision of external general medical practice.

412. **8519** Other human health activities

413. This class, which includes all activities related to human health which are not carried out in hospitals nor involve the participation of physicians and dentists, includes activities carried out or directed by nurses, midwives, physical therapists and other paramedical personnel specialized in optometry, hydrotherapy, massage, occupational therapy, speech therapy, podiatry, homeopathy, chiropractic medicine, acupuncture, etc. These activities can be carried out in health care clinics as well as in companies, schools, nursing homes, union organizations, and professional associations; in residential health care institutions distinct from hospitals; and in private physician’s offices, patients' homes, and other places. Also included are actions carried out by dentistry auxiliaries, such as dental therapists, school nurses with knowledge of dentistry, and dental hygienists, who can serve patients without the presence of a dentist but are supervised periodically by a dentist. Also included are all kinds of clinical activities of pathology and diagnosis carried out by independent laboratories, as well as activities of blood banks, ground and aerial ambulances, residential health care services, except for hospitals, etc.

414. Exclusions: The manufacture of artificial teeth, dentures, and prosthetic equipment by dental laboratories is classified in class 3311 (Manufacture of medical and surgical equipment and orthopedic appliances).
415. Bromatological tests are classified in class 7422 (Technical testing and analysis).

416. Other human health activities are subdivided into the following categories:

417. **85191** Medical and diagnostic laboratories

418. Economic units devoted mainly to providing services of medical analysis and diagnosis (such as biopsies, analyses of blood and discharges, X-rays, ultrasound) includes n.e.s. provision of X-ray services.

419. Excludes: organ banks and blood banks, n.e.s. manufacture of dental, and orthopedic prostheses, and research in medical and biological sciences.

420. **85192** Residential nursing services

421. Economic units devoted mainly to providing skilled nursing services in the residence of the patient. This includes nurses who work on their own.

422. **85193** Services of ambulances, organ banks, and other services ancillary to medical treatment

423. Economic units devoted mainly to providing ancillary services to medical treatment, such as transfer of patients in all kinds of ambulances, the reception, conservation, and management of organs and blood donated for transplantation and transfusions; to the application of vaccines, to measurement of blood pressure and hearing, also includes human sperm banks and osteoporosis centers.

424. Excludes medical and diagnostic laboratories and transportation services without medical services, for transporting disabled, elderly, weak, or ill persons without medical services.

425. **851931** Ambulance services

426. Economic units devoted mainly to providing the service of transporting patients in all kinds of ambulances.

427. Excludes transportation services without medical services, for transporting disabled, elderly, weak, or ill persons.

428. **851932** Organ bank services and other services ancillary to medical treatment

429. Economic units devoted mainly to the reception, conservation, and management of organs and blood donated for transplantations and transfusions, and to other services ancillary to medical treatment not classified elsewhere, such as the application of vaccines, measurement of blood pressure and hearing. Also includes human sperm banks and osteoporosis centers.

430. Excludes medical and diagnostic laboratories.

431. **85194** Other health care offices
432. Economic units devoted mainly to providing health care services by technical personnel, by other paramedical personnel, and by professionals who do not have a doctor's degree, such as, as psychologists, chiropractors, therapists, optometrists, nutritionists, podiatrists, acupuncturists, naturopaths, hypnotherapists, midwives.

433. It excludes: n.e.s. provision of general or specialized external medical services consultation provided by professionals with at least a doctor's degree, dental services, hospitals, n.e.s. provision of X-ray services, optical services, n.e.s. provision of physical conditioning services, therapeutic massage services, and traditional healers.

434. **851941** Chiropractor’s offices

435. Economic units devoted mainly to providing physical rehabilitation services through the manipulation of the vertebrae, provided by technical personnel, by other paramedical personnel and by professionals that do not have a doctor's degree.

436. Excludes: n.e.s. provision of physical therapy and massage services.

437. **851942** Physician’s offices for Audiology and occupational therapy, physical therapy, and language therapy

438. Economic units devoted mainly to providing services of occupational therapy and for rehabilitation of people with physical problems, of language, and of the ear, provided by technical personnel, by other paramedical personnel and by professionals that do not have a doctor's degree. Also includes n.e.s. provision of sports therapy services.

439. Excludes n.e.s. provision of diagnostic and physical rehabilitation services through manipulation of the vertebrae, traumatology services and orthopedics, and psychological services.

440. **851943** Nutritionist's and dietitian's offices

441. Economic units of the private sector devoted mainly to providing consultation services for rationally determining diets advisable for personal health, provided by technical personnel, other paramedical personnel, and professionals that do not have a doctor's degree. These also include economic units of the private sector devoted mainly to providing weight control services through diets without medical prescription.

442. Excludes economic units of the private sector devoted mainly to providing weight control services with medical prescriptions, therapeutic massage services, and physical conditioning services.

443. **851944** Other health care offices

444. Economic units of the private sector devoted mainly to providing services for health care not elsewhere classified, provided by technical personnel, other paramedical
personnel, and professionals that do not have a doctor's degree, such as naturopaths, acupuncturists, podiatrists, hypnotherapists, midwives.

445. Excludes private sector offices of nutritionists and dietitians, economic units of the private sector devoted mainly to providing X-ray services, traditional healers, and economic units of the private sector devoted mainly to providing dental services.

446. 9301 * Delivery of specialized laundry services

447. Included in this class are activities of washing, cleaning, including dry cleaning, ironing, etc., of all sorts of clothing (even leather garments) and other articles of cloth that are carried out with mechanical equipment, by hand and in coin-operated machines for the general public and for industrial and commercial clients, as well as the rental of linens, work uniforms, and related garments by laundries. The collection and distribution of clothes by laundries are also included. This class also encompasses the repair and minor alterations in clothing and other cloth articles, if these activities are carried out in combination with cleaning activities.

448. The washing of carpets and tapestries with shampoo and the cleaning of curtains and hangings at the site or residence of the client are included in this class.

449. Exclusions: Repair and alteration of clothing, etc., that are carried out as independent activity are included in class 5260 (Repair of personal belongings and household appliances).

450. Rental of clothing and other articles of domestic use made of cloth is included in class 7130 (Rental of personal belongings and household appliances n.e.c.), although their cleaning is part of the activities of this class.
ANNEX 3. CLASSIFICATION OF PRODUCTS

Below is the description of the SHA classification of products, based on the Central Product Classification (CPC) and complemented by classifications of products contained in Medicare and Medicaid reports:

342 Basic inorganic chemicals
This includes products used in the health field such as ethylene, hydrogen, nitrogen, oxygen, carbon dioxide, and others used as bases for staining in clinical laboratories.

352 Pharmaceutical products
This includes bases for preparation of products used in health (salicylic acid and its salts and esters, lysine and its esters and salts of these compounds; glutamic acid and its salts; pro-vitamins, vitamins, and hormones; glucosides and plant alkaloids and their salts, ethers, esters, and other derivatives; antibiotics) and (35560) Drugs for therapeutic or prophylactic uses.

481 Medical and surgical equipment and orthopedic appliances
This includes equipment based on the use of X-rays or alpha, beta, or gamma radiation;
Electrical diagnostic equipment and ultraviolet or infrared equipment used in medicine, surgery, dentistry, or veterinary medicine;
Other dentistry instruments and equipment (except for syringes, needles, and analogous articles);
Medical, surgical, or laboratory sterilizers;
Other instruments and equipment used in medicine, surgery, or veterinary medicine (including syringes, needles, catheters, cannulas, ophthalmology instruments and equipment n.e.c., and electromedical equipment n.e.c.);
Equipment for mechanotherapy; massage equipment; psychotechnical equipment; equipment for ozone therapy, oxygen therapy, aerosol therapy, artificial respiration, or other therapeutic respiratory appliances; other respiratory appliances and gas masks (except for protective masks that do not have either mechanical parts or replaceable filters);
Orthopedic appliances; boards and other equipment and articles for fractures; artificial body parts; audiphones and other devices that are placed or implanted in the body to compensate for a defect or a disability; furniture for medicine, dentistry, surgery, or veterinary medicine; barbers' chairs and similar seats with movements of rotation, inclination, and elevation.

4831 Optical instruments
Optical fibers, bundles of optical fibers, and cables of optical fibers (except for fiber compounds in separated insulating sheaths); sheets and plates of polarizing material; glasses, prisms, mirrors, and other optical articles (except for glass not worked optically), installed or not installed, excluding cameras, projectors, and photographic enlargers and reducers; spectacles, eyeglasses, and analogous articles for correction, protection, or of another type; frames for spectacles, eyeglasses, and analogous articles; binoculars, monoculars, and other optical telescopes; other astronomy instruments, except for instruments for radio astronomy; compound optical microscopes; liquid crystal devices n.e.c.; laser equipment, except for diodes lasers; other optical instruments and equipment.

53129 * Health services infrastructure
Includes construction of other non-residential buildings.

71320 Accident and health insurance services
This subclass includes:
Underwriting services of insurance policies that provide protection for hospital and medical expenses not covered by government programs and, usually, other health care expenses such as prescribed drugs, medical
appliances, ambulance, private duty nursing, etc.; underwriting services of insurance policies that provide protection for dental expenses; underwriting services of insurance policies that provide protection for medical expenses incurred when traveling outside a certain geographic area; underwriting services of insurance policies that provide periodic payments when the insured is unable to work as a result of a disability due to illness or injury; underwriting services of insurance policies that provide accidental death and dismemberment insurance, that is, payment in the event than an accident results in death or loss of one or more bodily members (such as hands or feet) or the sight of one or both eyes.

91119 Other state administrative services n.e.s.

All other general public services. Included here are all the administrative and support services for government public affairs that cannot be assigned to any of the four previous categories. The services of departments related to the administration of non-self-governing and trust territory affairs are also included here, well as the organization of elections.

91122 Administrative health care services

Public administration services for all kinds of health and social services. Management, operation, inspection, and support services for general and specialized medical or dental hospitals and clinics, plus nursing and convalescent home services.

Also included are administration, management, operation, and support services in public health matters, such as blood bank operation services, disease detection services, prevention services, birth control services, etc. These services are frequently provided by special teams not connected with a particular hospital, clinic, or practitioner.

Exclusion: Disease benefits are classified in the subclass 91310 (Administration services for sickness, maternity, or temporary disablement benefit schemes).

911221 Steering role and health services administration services

The steering role is a characteristic competence of government, carried out by the Ministry of Health. It is understood as management of public health policy in the context of the new pattern of relationships between government and civil society in the modern state. It includes the functions of formulating, directing, regulating, harmonizing, and evaluating decisions and public actions to satisfy the legitimate health needs and aspirations of the social sectors, within the framework of the national development model adopted.

The steering role in health rests with the Ministry of Health and cannot be transferred to other entities of society; however, it can be shared with different state actors, under certain conditions and pre-established standards.

9112211 Steering role services

The steering role is defined with reference to the capacity for management and leadership of the sector and its institutions for the effective resolution of health problems and the struggle against threats to the health of individuals and their environments, with a view to maintaining a state of well-being and contributing to improvement in the quality of life. It is the implementation of the general health policy and the actions of the health system, intended to preserve and improve the health levels of the population, laid out in national development plans and coordinated with other sectors.

91122111 Direction and management services

Management is based on an interpretation of the health situation and an analysis of trends that make it possible to formulate health policies and strategies that are economically sustainable and promote equity in the access, use, and financing of health services, favoring a collective approach to solving health problems.

Management is the exercise of leadership, understood as the capacity to exert influence to "get things done." It facilitates consensus and mobilizes everyone for action, transforming the action of leaders into institutional action and thus into action by the entire sector. It implies the harmonization of action
plans and management models of the different decentralized or deconcentrated public agencies delivering health services in the country.

It includes:

Planning (organizing knowledge and preparing proposals to facilitate the decision-making process and guide implementation), a function that implies leadership.

Direction and operationalization of health policies with the social actors involved.

Modularization of financing, organizing health financing and expenditure to ensure universal access to necessary health care, solidarity between sectors with different needs and capacities, and equity. This includes defining redistributive mechanisms for current and capital expenditures, in order to compensate for inequities that may be generated by decentralizing processes.

Definition of criteria for allocation of resources to decentralized or deconcentrated public agencies and/or establishments that deliver personal and non-personal services.

Guarantee of security and full access with dignity, through a set of public strategies and interventions that are socially accepted and that seek to promote "social protection" and, in particular, to eliminate exclusion in health.

Excludes:

Administration

91122112 Health surveillance services

Health surveillance involves ongoing surveillance of events that affect the health status of the population, to serve as a basis for decision making and definition of effective actions to respond to the needs detected.

It also involves the record keeping and the processing and dissemination of information to document the incidence and prevalence of health events in the general population and in specific populations. It includes sentinel studies, mandatory reporting, and the analysis and dissemination of data.

This system guarantees that all public and private entities that insure or provide health services routinely report the causes of morbidity that determine the use and supply of their services.

This includes:

Comprehensive analysis of the health situation

Epidemiological surveillance systems

Drug surveillance

Food and nutrition surveillance (regarding staples fortified with micronutrients)

Disaster situations

91122113 Services for regulation and quality (7422)

This class includes tests of all kinds of materials and products, for example, food, drugs, water, etc., to determine their composition and purity; tests of quality and reliability, certification of products, analyses of defects, evaluation of materials, etc.; tests to determine physical properties and performance of products and materials with respect to, for example, radioactivity, etc.

Excludes:

Activities of testing and analysis of medical and dental specimens that are included in class 8519 (Other human health activities).

Activities of testing and analysis of textile products; radiographic tests of welding and joints; tests of machines, motors, cars, and electronic instruments and equipment, whether or not based on the use of mock-ups or models of ships, aircraft, dams, etc.
Activities of testing and technical analysis of materials and mineral products
Activities of testing for resistance, thickness, durability, electric conductivity

91122114 Administrative services (91122)
Administrative health services is a subclass that includes:

Public administrative services for all kinds of health services and social services, services for management, operation, and support for general clinics and general hospitals, specialized clinics and hospitals, dental clinics and hospitals, as well as nursing and convalescent services provided in residences.

Services of administration, management, operation, and support for public health, such as blood banks, disease detection services, prevention services, drug quality control programs, birth control services, etc. These services are frequently provided by specialized teams of medical professionals not connected with private physicians, clinics, or hospitals.

Excludes:
Health insurance services, see 91310
Social welfare services, see 933

9112212 Public health services
These are services designed to improve the health of the population. They are distinguished from curative services, which repair health damages and dysfunctions. Typical services include mass vaccination campaigns and programs.

91122121 Preventive services
These are individual actions that help to control, reduce, or eliminate dangers and risks\(^3\) to which the population is exposed.

This category includes services aimed at improving the health status of the population or specific population groups by means other than personal medical care. Often these services are offered in an integrated form (curative-preventive) by general health care establishments or as a normal part of their routine activities.

Includes:
Vaccination services
Sexual and reproductive health services
Services for early detection of cervical cancer
Communicable disease prevention services
Noncommunicable disease prevention services
Services to prevent social violence
Occupational health services
School health services
Adolescent health care services
Other miscellaneous public health services

Excludes:
Public education campaigns to raise awareness about prevention and collective healthy lifestyles.

\(^3\) Danger and risk are closely linked concepts: danger refers to any change in a factor determining health or disease, capable of provoking a harmful effect for health, while risk is a function of the probability of a harmful health effect and the severity of such an effect, as a consequence of a danger or dangers.
9122122 Services of communication, information, and education

Institutions and organizations carry out collective or mass actions for public health and prevention when they disseminate information that enables individuals to avoid being exposed to dangers and risks. This includes public awareness and education campaigns that promote individual and collective healthy lifestyles. It excludes preventive actions of an individual nature.

Food fortification

Mass campaigns to promote individual and collective healthy lifestyles

Mass campaigns to reduce social violence

Campaigns against environmental pollution

Campaigns against smoking

Campaigns to promote condom use

Campaigns for the fight against dengue

9131 Administrative services for obligatory social security plans

Administration of obligatory health and social insurance plans (social security) is carried out by national, regional, and local authorities. These activities include planning, management, and collection of funds and management of benefits of the service delivery system. This is a function distinct from the financing and administration of the use of those goods and services. This reflects the separation of the funds of the health insurance industry from those of the health care industry.

Includes:

Administrative services related to benefits for sickness, maternity, or temporary disablement.

Administrative and operational services related to social security, involving provision of benefits for loss of income due to sickness, maternity, or temporary disablement.

Excludes:

Public administrative services for pension plans for government employees and benefits for the elderly, disabled, or for survivors other than those granted to government employees (9132).

• Administrative services and operation of plans for retirement, pension, and disability for government employees and their survivors, including social protection plans

• Administration and operation of social protection programs

DIVISION 93 SOCIAL AND HEALTH SERVICES

931 Human health services

9311 93110 Hospital services

Services that are provided mainly to in-patients and under the direct supervision of physicians, aimed at curing, restoring, or maintaining the health of patients. Hospital services include the services of medical and paramedical staff, nurses, laboratories and technical installations, including radiology services and anesthesiology, etc.

Exclusions: Services provided mainly to outpatients are classified in subclass 93121 (Consultations and treatment: physicians of general medicine) or 93122 (Consultations and treatment: specialized physicians and surgeons). Dentistry services are classified in subclass 93123. Ambulance services are classified in subclass 93192.

These services can be classified into:

• Surgical services

• Medical services
9312 Medical and dental services

Services aimed at prevention, diagnosis, and treatment of diseases through consultations for individual patients outside of health institutions, except for those provided by outpatient clinics (during part of the day).

93121 General medical services

Services that consist of prevention, diagnosis, and treatment by physicians of general medicine, physical and mental, such as consultations, administration of injections, checkups, etc. These services are not limited to specific conditions, diseases, or parts of the human anatomy. They can be provided by general practice physicians and by outpatient clinics, and they can be provided in companies, schools, etc.

These services can be classified into:

Preventive care services

These include preventive care services provided in outpatient physician’s offices by general practice physicians and by outpatient clinics, and can be provided in companies, schools, etc.

Curative health care services

These include curative health care services provided by general practice physicians in outpatient physician’s offices or clinics and by outpatient clinics, and can be provided in companies, schools, etc.

93122 Specialized medical services

Services of diagnosis and treatment provided by specialized physicians in specialized centers or health institutions (including clinics for inpatients and outpatients).

These services refer to specific conditions, diseases, or parts of the human anatomy (except for dental services), such as the following: nervous system; eyes; ears, nose, and throat; respiratory system; circulatory system; digestive system; hepatobiliary system and pancreas; musculoskeletal system and related tissues; skin, subcutaneous, and mammary tissue; endocrine diseases and disorders, metabolism and nutrition; kidney and urinary system; male reproductive system; female reproductive system; pregnancy, childbirth, and postpartum; neonatology; blood-forming organs; myeloproliferative disorders; infectious and parasitic diseases; mental disorders and illness; drug consumption and mental disorders due to drug addiction; injuries, poisoning, and toxic effects due to drugs; burns; determinants of health and other contacts with health services (for example, rehabilitation, monitoring, etc.).

Exclusion: Services of medical laboratories are classified in subclass 93199 (Other human health services n.e.s.).

These services are the responsibility of specialized departments in health facilities. Every specialization includes both services provided to hospitalized inpatients and those to outpatients. The specializations are:

Specialized consultation for allergies

Specialized care in cardiology

Specialized consultation in dermatology

Specialized consultation in diabetology
Dental services

Services of diagnosis and treatment of dental disorders or deformations of the oral cavity, as well as dental disease prevention services. Dental surgery is included even when it is provided to inpatients in hospitals.

These dental services can be provided in clinics or in centers in schools, companies, homes for the elderly, etc., as well as in private offices and operating rooms. They include general dental services such as periodic examinations, preventive dental treatment, treatment of caries, etc. Also included are orthodontic services, such as the treatment of protruding teeth, etc., as well as maxillofacial surgery services and other specialized dental services, such as in the areas of periodontal disease, children's dentistry, endodontics, and reconstruction.

These services can be classified into:

... ... General dentistry services
Orthodontic services
Maxillofacial surgery services
Preventive treatment services
Other services of specialized dentistry

9319 Other human health services

93191 Services provided by midwives, nurses, physiotherapists, and paramedical personnel

Services of supervision during pregnancy and childbirth, as well as supervision of the mother after childbirth. Outpatient nursing services, advisory services, and disease prevention provided to patients in their homes, and care provided in the field of maternity, infant hygiene, etc. Paramedical and physiotherapy services include those provided in the areas of physiotherapy, ergonomic therapy, occupational therapy, speech therapy, homeopathy, acupuncture and dietetics, etc.

These services can be classified into:

Supervision during pregnancy
Supervision of the mother after pregnancy
Counseling on breastfeeding and care of the newborn
Services of physical therapists and other paramedical personnel
Language therapy services
Occupational therapy services
Services of homeopathy, acupuncture, and nutrition
Other services of nurses, medical technicians, and paramedics

93192 Ambulance services

General and specialized medical services provided in ambulances.

These services can be classified into:

Transportation with resuscitation services
Transportation without resuscitation services

93193 Services of residential health facilities other than hospital services

Combined medical and residential services that are not provided under the supervision of a physician of the institution.

93199 Other human health services n.e.c.

Services of morphological or chemical pathology; bacteriological, virological, immunological services, etc.; as well as services not classified elsewhere, such as those for acquisition of blood.

These services can be classified into:

Services of medical laboratories
Services provided by blood banks
Services provided by sperm banks
Services provided by organ transplantation banks
... Services of diagnostic imaging without interpretation (X-ray, EKG, ultrasound, magnetic resonance)
ANNEX 4. CLASSIFICATION OF INDIVIDUAL CONSUMPTION BY PURPOSE IN THE SATELLITE HEALTH ACCOUNT

This classification has been excerpted from the Classification of Individual Consumption by Purpose (COICOP).

A) Individual consumption expenditure of households

06. Health

This division also includes health services purchased from school and university health centers.

06.1 Medical products, appliances and equipment

This group covers medicaments, prostheses, medical appliances and equipment and other health-related products purchased by individuals or households, either with or without a prescription, usually from dispensing chemists, pharmacists or medical equipment suppliers. They are intended for consumption or use outside a health facility or institution. Such products supplied directly to outpatients by medical, dental and paramedical practitioners or to in-patients by hospitals and the like are included in outpatient services (06.2) or hospital services (06.3).

06.1.1 Pharmaceutical products (ND)

Medicinal preparations, medicinal drugs, patent medicines, serums and vaccines, vitamins and minerals, cod liver oil and halibut liver oil, oral contraceptives.

Excludes: veterinary products (09.3.4); articles for personal hygiene such as medicinal soaps (12.1.3).

06.1.2 Other medical products (ND)

Clinical thermometers, adhesive and non-adhesive bandages, hypodermic syringes, first-aid kits, hot-water bottles and ice bags, medical hosiery items such as elastic stockings and knee supports, pregnancy tests, condoms and other mechanical contraceptive devices.

06.1.3 Therapeutic appliances and equipment (D)

Corrective eyeglasses and contact lenses, hearing aids, glass eyes, artificial limbs and other prosthetic devices, orthopedic braces and supports, orthopedic footwear, surgical belts, trusses and supports, neck braces, medical massage equipment and health lamps, powered and unpowered wheelchairs and invalid carriages, "special" beds, crutches, electronic and other devices for monitoring blood pressure, etc.;

Repair of such articles.

Includes: dentures, but not fitting costs.

Excludes: hire of therapeutic equipment (06.2.3); protective goggles, belts and supports for sport (09.3.2); sunglasses not fitted with corrective lenses (12.3.2).

06.2 Outpatient services

This group covers medical, dental and paramedical services delivered to outpatients by medical, dental and paramedical practitioners and auxiliaries. The services may be delivered at home, in individual or group consulting facilities, dispensaries or the outpatient clinics of hospitals and the like.

Outpatient services include the medicaments, prostheses, medical appliances and equipment and other health-related products supplied directly to outpatients by medical, dental and paramedical practitioners and auxiliaries.
Medical, dental and paramedical services provided to in-patients by hospitals and the like are included in hospital services (06.3).

**06.2.1 Medical services (S)**
Consultations of physicians in general or specialist practice.
*Includes:* services of orthodontic specialists.
*Excludes:* services of medical analysis laboratories and X-ray centers (06.2.3); services of practitioners of traditional medicine (06.2.3).

**06.2.2 Dental services (S)**
Services of dentists, oral hygienists and other dental auxiliaries.
*Includes:* fitting costs of dentures.
*Excludes:* dentures (06.1.3); services of orthodontic specialists (06.2.1); services of medical analysis laboratories and X-ray centers (06.2.3).

**06.2.3 Paramedical services (S)**
Services of medical analysis laboratories and X-ray centers;
Services of freelance nurses and midwives;
Services of freelance acupuncturists, chiropractors, optometrists, physiotherapists, speech therapists, etc.;
Medically prescribed corrective-gymnastic therapy;
Outpatient thermal bath or sea-water treatments;
Ambulance services;
Hire of therapeutic equipment.
*Includes:* services of practitioners of traditional medicine.

**06.3 Hospital services**
Hospitalization is defined as occurring when a patient is accommodated in a hospital for the duration of the treatment. Hospital day-care and home-based hospital treatment are included as are hospices for terminally ill persons.

This group covers the services of general and specialist hospitals, the services of medical centers, maternity centers, nursing homes and convalescent homes which chiefly provide in-patient health care, the services of institutions serving old people in which medical monitoring is an essential component and the services of rehabilitation centers providing in-patient health care and rehabilitative therapy where the objective is to treat the patient rather than to provide long-term support.

Hospitals are defined as institutions which offer in-patient care under direct supervision of qualified medical doctors. Medical centers, maternity centers, nursing homes and convalescent homes also provide in-patient care but their services are supervised and frequently delivered by staff of lower qualification than medical doctors.

This group does not cover the services of facilities, such as surgeries, clinics and dispensaries, devoted exclusively to outpatient care (06.2). Nor does it include the services of retirement homes for elderly persons, institutions for disabled persons and rehabilitation centers providing primarily long-term support (12.4).

**06.3.0 Hospital services (S)**
Hospital services comprise the provision of the following services to hospital in-patients:
Basic services: administration; accommodation; food and drink; supervision and care by non-specialist staff (nursing auxiliaries); first aid and resuscitation; ambulance transport; provision of medicines and other pharmaceutical products; provision of therapeutic appliances and equipment;

Medical services: services of physicians in general or specialist practice, of surgeons and of dentists; medical analyses and X-rays; paramedical services such as those of nurses, midwives, chiropractors, optometrists, physiotherapists, speech therapists, etc.

B) Individual consumption expenditures of nonprofit institutions serving households (NPISHs)

13.2 Health

This division also includes health services purchased from school and university health centers.

13.2.1 Pharmaceutical products (ND)

Medicinal preparations, medicinal drugs, patent medicines, serums and vaccines, vitamins and minerals, cod liver oil and halibut liver oil, oral contraceptives.

Excludes: veterinary products; articles for personal hygiene such as medicinal soaps.

13.2.2 Other medical products (ND)

Clinical thermometers, adhesive and non-adhesive bandages, hypodermic syringes, first-aid kits, hot-water bottles and ice bags, medical hosiery items such as elastic stockings and knee supports, pregnancy tests, condoms and other mechanical contraceptive devices.

13.2.3 Therapeutic appliances and equipment (D)

Corrective eyeglasses and contact lenses, hearing aids, glass eyes, artificial limbs and other prosthetic devices, orthopedic braces and supports, orthopedic footwear, surgical belts, trusses and supports, neck braces, medical massage equipment and health lamps, powered and unpowered wheelchairs and invalid carriages, "special" beds, crutches, electronic and other devices for monitoring blood pressure, etc.;

Repair of such articles.

Includes: dentures, but not fitting costs.

Excludes: hire of therapeutic equipment; protective goggles, belts and supports for sport, sunglasses not fitted with corrective lenses.

13.2.4 Outpatient medical services (S)

Consultations of physicians in general or specialist practice.

Includes: services of orthodontic specialists.

Excludes: services of medical analysis laboratories and X-ray centers; services of practitioners of traditional medicine.

13.2.5 Outpatient dental services (S)

Services of dentists, oral hygienists and other dental auxiliaries.

Includes: fitting costs of dentures.

Excludes: dentures; services of orthodontic specialists; services of medical analysis laboratories and X-ray centers.

13.2.6 Outpatient paramedical services (S)

Services of medical analysis laboratories and X-ray centers;
Services of freelance nurses and midwives;
Services of freelance acupuncturists, chiropractors, optometrists, physiotherapists, speech therapists, etc.;
Medically prescribed corrective-gymnastic therapy;
Outpatient thermal bath or sea-water treatments;
Ambulance services;
Hire of therapeutic equipment.

*Includes*: services of practitioners of traditional medicine.

### 13.2.7 Hospital services

Hospital services comprise the provision of the following services to hospital in-patients:

**Basic services**: administration; accommodation; food and drink; supervision and care by non-specialist staff (nursing auxiliaries); first aid and resuscitation; ambulance transport; provision of medicines and other pharmaceutical products; provision of therapeutic appliances and equipment;

**Medical services**: services of physicians in general or specialist practice, of surgeons and of dentists; medical analyses and X-rays; paramedical services such as those of nurses, midwives, chiropractors, optometrists, physiotherapists, speech therapists, etc.

### 13.2.8 Other health services (S)

*Includes* public health services, research and development in health and other health services.

### C) Individual consumption expenditure by the general government

#### 14.2 Health

This division also includes health services purchased from school and university health centers.

**14.2.1 Pharmaceutical products (ND)**

Medicinal preparations, medicinal drugs, patent medicines, serums and vaccines, vitamins and minerals, cod liver oil and halibut liver oil, oral contraceptives.

*Excludes*: veterinary products; articles for personal hygiene such as medicinal soaps.

**14.2.2 Other medical products (ND)**

Clinical thermometers, adhesive and non-adhesive bandages, hypodermic syringes, first-aid kits, hot-water bottles and ice bags, medical hosiery items such as elastic stockings and knee supports, pregnancy tests, condoms and other mechanical contraceptive devices.

**14.2.3 Therapeutic appliances and equipment (D)**

Corrective eyeglasses and contact lenses, hearing aids, glass eyes, artificial limbs and other prosthetic devices, orthopedic braces and supports, orthopedic footwear, surgical belts, trusses and supports, neck braces, medical massage equipment and health lamps, powered and unpowered wheelchairs and invalid carriages, "special" beds, crutches, electronic and other devices for monitoring blood pressure, etc.;

Repair of such articles.

*Includes*: dentures, but not fitting costs.

*Excludes*: hire of therapeutic equipment; protective goggles, belts and supports for sport, sunglasses not fitted with corrective lenses.

**14.2.4 Outpatient medical services (S)**
Consultations of physicians in general or specialist practice.

*Includes:* services of orthodontic specialists.

*Excludes:* services of medical analysis laboratories and X-ray centers; services of practitioners of traditional medicine.

**14.2.5** Outpatient dental services (S)

Services of dentists, oral hygienists and other dental auxiliaries.

*Includes:* fitting costs of dentures.

*Excludes:* dentures; services of orthodontic specialists; services of medical analysis laboratories and X-ray centers.

**14.2.6** Outpatient paramedical services (S)

Services of medical analysis laboratories and X-ray centers;

Services of freelance nurses and midwives;

Services of freelance acupuncturists, chiropractors, optometrists, physiotherapists, speech therapists, etc.;

Medically prescribed corrective-gymnastic therapy;

Outpatient thermal bath or sea-water treatments;

Ambulance services;

Hire of therapeutic equipment.

*Includes:* services of practitioners of traditional medicine.

**14.2.7** Hospital services (S)

Hospitalization is defined as occurring when a patient is accommodated in a hospital for the duration of the treatment. Hospital day-care and home-based hospital treatment are included as are hospices for terminally ill persons.

This group covers the services of general and specialist hospitals, the services of medical centers, maternity centers, nursing homes and convalescent homes which chiefly provide in-patient health care, the services of institutions serving old people in which medical monitoring is an essential component and the services of rehabilitation centers providing in-patient health care and rehabilitative therapy where the objective is to treat the patient rather than to provide long-term support.

Hospitals are defined as institutions which offer in-patient care under direct supervision of qualified medical doctors. Medical centers, maternity centers, nursing homes and convalescent homes also provide in-patient care but their services are supervised and frequently delivered by staff of lower qualification than medical doctors.

This group does not cover the services of facilities, such as surgeries, clinics and dispensaries, devoted exclusively to outpatient care (06.2). Nor does it include the services of retirement homes for elderly persons, institutions for disabled persons and rehabilitation centers providing primarily long-term support (12.4).

**14.2.8** Public health services (S)

Includes the public health services.


CEPAL - Ingresos y gastos de consumo de los hogares en el marco del SNA y en encuestas de hogares. CEPAL. Santiago de Chile. Enero; 2001.


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Accumulation account
Two accounts that record changes in total assets derived from transactions in a period, with one recording physical assets (capital account) and the other financial claims (financial account).

Actual final consumption
Expenditure on final consumption adjusted for social transfers in kind.

Added value
The value of production minus intermediate consumption. It is a measure of the contribution to GDP made by an output unit, industry, or sector.

Branch of economic activity
Group of establishments that produce mainly goods and services of a relatively uniform nature. However, an establishment can produce secondary goods and services that are principally or typically produced by other branches.

Capital account
Records the physical accumulation of capital derived from the productive process, financed with savings and capital transfers. The accumulation of physical capital includes the classification of fixed assets, inventories, and valuables, in full correspondence with the balance sheets.

Central Product Classification (CPC)
A complete classification of products that encompasses goods and services. It provides a general framework for international comparison of data from various kinds of statistics related to goods, services, and assets. Basically, the CPC is for use in different kinds of statistics that show data by type of product, for example, industrial statistics and national accounts, price statistics, foreign trade statistics (including trade in services), and balance of payments statistics. The CPC was prepared by the United Nations Statistics Division (1991) and published in Series M, No. 77.

Collective services
Services that are provided at the same time to all members of a community or to all members of a particular section of the community, without need for any action on their part.

Consumption of fixed capital
Value of replacement at current cost of replicable fixed assets consumed during an accounting period as a result of their use in the productive process, of foreseeable obsolescence, and of the normal rate of unforeseen damages.

Enterprise
Institutional unit that participates in production of goods and services for the market. Enterprises can be corporations, quasi-corporations, nonprofit institutions, and unincorporated enterprises (output units of the "household sector").
Equities other than shares
Financial instruments that include equities that grant the unconditional right to receive a quantity of money on a given date, which are negotiated in markets organized with a discount rate. This also includes equities that give the right to receive a fixed amount of money or a variable money income that is contractually determined (interest payments that do not depend on the profits of the borrower).

Establishment
Statistical unit that produces a good or a group of goods that are relatively uniform in nature, cost structure, and production technology. Its transactions are recorded in the production accounts.

Expenditure of gross domestic product at market prices
The value of the flow of final goods and services measured through their destination or use:
- Expenditure on final household consumption
- Expenditure on final consumption of nonprofit private institutions
- Expenditure on final government consumption
- Change in inventories
- Gross fixed capital formation
- Exports of goods and non-factorial services (fob)
- Minus: Imports of goods and non-factorial services (cif)

Expenditure on final consumption of nonprofit private institutions serving households (NPISH)
Value of the goods and services produced by these institutions and distributed free of charge to households. This is equivalent to the value of gross production (intermediate consumption, employee compensation, consumption of fixed capital, and taxes on production) minus the value of sales of goods and services.

Expenditure on final government consumption
Value of goods and services produced by the government and distributed to the community free of charge, either individually or collectively. This is determined by the value of gross production (intermediate consumption of goods and services, employee compensation, consumption of fixed capital, and indirect taxes) minus the value of sales of market and non-market products produced by the government.

Expenditure on final household consumption
Expenditures made by resident households on new durable and nondurable goods and services, minus net sales of used goods.

Final or total consumption
The expenditure on final consumption of households, nonprofit private institutions, and the general government.

Final use
The allocation of goods and services to expenditure on final consumption, gross fixed capital formation, changes in inventories, and exports.

Financial account
Records changes in financial assets and liabilities. This account refers to a unique set of financial instruments: monetary gold and special drawing rights (SDR), currency and
deposits, shares and other equity, loans, technical reserves of insurance and other accounts receivable or payable, that may be assets or liabilities depending on their position in the asset portfolio of the agents.

**Financial assets**
Financial rights can be defined as assets that give rights to their owner (the creditor) to receive a payment or a series of payments from another agent (the borrower), in circumstances that are specified in a signed contract between them. The right ceases when the borrower fulfills the liability according to the contract. These assets can generate income from property.

**Financial institutions**
Institutional units devoted mainly to financial intermediation or to ancillary financial activities. They are made up of the following subsectors: central bank, commercial banks and other deposit-taking institutions, other financial intermediaries (except for insurance companies and pension funds), pension funds, insurance companies, and financial auxiliaries.

**General government**
Institutional sector that in addition to meeting political responsibilities and carrying out its role in economic regulation, produces principally non-market services (and possibly goods) for collective consumption and redistributes income and wealth.

**Government agencies as producers of other goods and services**
Includes departments, units, and other agencies of central, regional, provincial, and local administration, that devote themselves to activities such as the delivery of administrative services, defense, health, education, and other social services (including health), and to the promotion of economic development, and are financed by regular and extraordinary budgets, or by extra-budgetary funds.

**Gross capital formation**
Equivalent to gross fixed capital formation plus changes in inventories.

**Gross domestic expenditure**
Equivalent to expenditure on final consumption plus gross capital formation.

**Gross domestic product, at market prices (GDP)**
One of the measures of production of goods and services, net of double-counting, generated in a country in a given period. It is assessed at market prices and its measurement is usually done through the added values of different branches of economic activity, or producers, also including value-added tax (collected VAT) and import duties.

- Sectoral added values
  - Imputed cost of banking services
  + Net collected VAT
  + Import duties

= Gross domestic product at market prices

This is equal to the expenditure of gross domestic product at market prices or to the total of employee compensation, consumption of fixed capital, net indirect taxes, and the operating surplus.
**Gross fixed capital formation**
Expenditures—purchases and production on own account—that add new durable goods to the inventory of fixed assets, less the net sales of similar used goods and wastage by industries, public services, and nonprofit private institutions serving households.

**Gross national saving**
The sum of balances of current income and expenses of the different resident institutional sectors.

**Gross total saving**
Gross national saving plus external saving (surplus of the nation on current account). By definition it is equivalent to the total gross domestic investment.

**Gross value of production (GVP)**
Market value of goods and services produced during an accounting period, including work-in-progress and products for use on own account.

**Households as producers of domestic services**
Domestic services that a household provides to another household, such as assistance with general services, cooking, care of children, gardening, etc. These services do not constitute market production and their costs consist only of employee compensation.

**Implicit price deflator (IPD) for GDP**
Index that shows the evolution of prices of components of gross domestic product. The implicit deflator is expressed as follow: GDP at current prices x IPD of GDP = GDP at constant prices.

**Income and expenditure accounts**
Record analytically the process of redistribution of income: income generation, primary distribution of income, secondary distribution of income, redistribution of income in kind, and use of income.

**Individual service**
A service acquired by a household and used to meet the needs and desires of its members. Individual services can be purchased and sold in the market; they also can be provided free of charge or at economically insignificant prices, as transfers in kind.

**Institutional unit**
Economic entity with the capacity to own assets, contract liabilities, and carry out economic activities and transactions with other entities. They are grouped into sectors according to their legal form of organization and their institutional objectives.

**Integrated economic accounts**
Provide a synthetic vision of the accounts of the economy, including current accounts, accumulation accounts, and balances. They feature a single table containing the accounts of institutional sectors, the total economy, and the rest of the world. Flows or assets and liabilities are balanced.

**Intermediate consumption**
Nondurable goods and services consumed in production during a period. Also includes maintenance and current repairs of capital goods, indirect spending on financing of capital
formation, and transfer costs from purchases and sales of nonphysical assets and financial credits. From the perspective of supply it is called intermediate utilization or use.

**International Standard Industrial Classification (ISIC)**
Classification that allows international comparison of national statistics, distributing economic data according to categories of activity with similar production technology and inputs.

**Market production**
Production intended for sale in the market at an economically significant price. It is production mainly generated by enterprises constituted as corporations, and represents the principal part of the gross production of the economy.

**National income**
Income received by the factors of production owned by residents in the country. It includes compensation for work and the operating surplus of exploitation plus net income by factors of production received from abroad.

**Net current transfers from abroad**
Uncompensated current disbursements between resident economic agents and the rest of the world.

**Net lending**
Financial balance that results from applying to the gross accumulation of an agent their internal sources of financing. If the balance is positive, the agent is putting financial resources at the disposal of other economic agents; if it is negative, the agent is showing its need of financing.

**Net VAT collected**
Value-added tax collected by the government and ultimately paid by those buyers who do not have the legal right to recover this tax.

**Nonmarket production**
Goods and services mainly generated by the government or nonprofit private institutions, intended for distribution free of charge or at insignificant prices to other institutional units or to the community as a whole. Typical examples are services of education and public health that are provided free of charge or at values much lower than their production costs.

**Nonprofit private institutions serving households (NPISH)**
Institutions that obtain income mainly from transfers and operate in some cases without covering the costs of their activity. They produce other goods and services, and they can occasionally be sold. Their gross production is equal to their costs and the fraction not sold represents the expenditure on final consumption of the NPISH themselves.

**North American Industry Classification System (NAICS). Mexico 2002**
“The classification NAICS-Mexico extends the basic classification structure shared by Canada, the United States, and Mexico with details of the peculiarities of economic activity in Mexico. Having a common base with the classification systems of Canada and the United States, it allows for comparison of the economic statistics of the three countries of North America. The objective of NAICS-Mexico is to provide a unique, consistent, and up-to-date framework for collection, analysis, and presentation of economic statistics, that reflects the structure of the Mexican economy. NAICS-Mexico is the basis for the generation,
presentation, and dissemination of all the economic statistics of INEGI. Its adoption by other institutions that also provide statistics will make it possible to standardize economic information produced in the country, and thereby contribute to similar standardization for the region of North America.”

Operating surplus
A residual variable made up of gross production at producer's prices less intermediate consumption, employee compensation, consumption of fixed capital, and indirect taxes net of subsidies. By definition this surplus can only be generated by market industries or producers, because for nonmarket producers gross production is equivalent to the total of their explicit costs.

Pension funds
As a financial instrument, corresponds to the shares of contributors to pension funds and retirement bonds issued by the state (principal and capitalization of interests).

Primary distribution of income account
Reproduces the distribution of the income from production (credit) recorded in the income generation account, and adds the income (credit) and expenditures (debit) associated with income from property: interest, dividends, and other business income, and other income from foreign investment, land, insurance policies, and royalties, among the principal components. The final balance of this account is net primary income, which becomes national revenue when the national accounts are consolidated.

Production account
Shows operations related to the process of production as such. It is prepared both for branches of activity and for institutional sectors. Its balance is the added value. For the total economy the production account includes, among resources, in addition to the production of goods and services, taxes on products, which makes it possible to obtain the GDP at market prices as the accounting balance.

Production for own final use
Production not involved in the market, intended for the producer's own use. The most relevant cases of production for own final use are agricultural production for personal consumption, construction works carried out by the same persons who will use them, services that dwellings provide for their owners, and compensated domestic services for personal consumption by households.

Resources
Transactions that increase the economic value of a unit or sector. They are recorded on the right side of the accounts.

Rest of the world
The rest of the world account records transactions of nonresident units with resident agents.

Shares and other equities
Financial instrument that includes shares and equities in corporations and the net participation of owners in quasi-corporations. Shares and other equities recognize a right both to the value and to the income of corporations remaining after obligations to all creditors are covered.
The net contributions of owners to quasi-corporations correspond to the net contributions made by owners to the reserves of corporations, with a view to increasing or reducing capital investments.

**Social transfers in kind**
The value of individual services produced by the government and nonprofit institutions serving households that are transferred to households.

**Subsidies**
Current uncompensated payments made by governmental units to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services that they produce, sell, or import. In the case of resident producers, subsidies can be aimed at influencing their levels of production or the sale prices of products.

** Tradable and nontradable goods**
Tradable goods are those that can be exported and/or imported. Nontradable goods are those that can not be traded internationally.

**Transfers**
Transactions through which an institutional unit provides a good, a service, or assets to another unit without receiving any compensation. Transfers can be current transfers or capital transfers.

**Use of income account**
Records the use of disposable income in final consumption by households, government, and nonprofit private institutions. There are two recording options that come from disposable income: consumption expenditure when it concerns disposable income, and actual consumption when it refers to adjusted disposable income. The final balance is savings.