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WS.5 Indicators of Health Care in the System of National Accounts

Indicators of Health Care in the *System of National Accounts*

Work as part of the update of the 2008 SNA
Task Team on Well-Being and Sustainability
Area Group on Health and Social Conditions[*]

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[*] Contributions to this Guidance Note were made by members of the area group on health and social conditions. Members include Ann Lisbet Brathaug (Statistics Norway – chair of the group from July 2021), Elisabeth Hopkins (Statistics Sweden), Ciara O'Shea (Central Statistics Office Ireland), Paolo Passerini (Eurostat), Maria Pettersson (Statistics Sweden), Dylan Rassier (U.S. Bureau of Economic Analysis – chair of the group until July 2021), Lisbeth Rivas (International Monetary Fund), and Rachel Soloveichik (U.S. Bureau of Economic Analysis).

Contents

Summary

The objective of this Guidance Note is to present proposals for indicators of health care in the new version of the *System of National Accounts* (*SNA*). The *System of Health Accounts 2011* (*SHA 2011*) provides the foundation for the proposals. The *SHA 2011* is a well-developed framework for classifying health expenditures by function, provider and financing schemes.

It is proposed to base the indicators on data already developed in the *SHA 2011*, a framework that is applied by almost 50 countries, reporting data to international organizations. The indicators are considered appropriate for extended or supplementary tables. Only one of the proposals in this Guidance Note is relevant for the central framework of the *SNA* (also referred to as core accounts in this note).

Options to be developed in extended or supplementary tables include:

- additional indicators that will help inform policy on health care, social care and well-being;
- extensions to the SNA production boundary to include unpaid household provision of health care and long-term social care;
- creation of supply and use tables for health care and long-term social care to help ensure consistency and completeness of the analysis of health care and social care (in extended accounts); and
- inclusion in the *SNA*, for use in extended accounts, the *SHA 2011* classifications for health care functions and providers.

Recommendation for improvements in the SNA central framework:

- improving estimates of health services in constant prices by compiling health expenditure in volume terms with improved methods to capture changes in quality of care.

It is also recommended to harmonize *SHA* and *SNA* to the extent possible. Even though the differences between *SHA 2011* and 2008 *SNA* in practice are marginal, it should be a goal that the *SNA* concepts and definitions are fully embedded in the *SHA* framework.

1. Introduction

1. A well-rounded picture of a country's economy should include data that enables policymakers and other users of official statistics to assess resources spent on health care and to estimate real output of health care. This is already addressed in the joint OECD, Eurostat and World Health Organization (WHO) framework *A System of Health Accounts 2011 (SHA 2011).* The *SHA* was established in 2000 and revised in 2011. By July 2022, 48 countries reported data to the OECD according to this system, including 10 non-OECD economies. For EU members, including European Economic Area (EEA) (i.e., Norway and Iceland), the joint reporting to the OECD, WHO and Eurostat is regulated by law (*Regulation (EC) No 1338/2008 of the European Parliament and of the Council also covering statistics on health care expenditure and financing*). It should be noted that even though SHA to a large extent is the responsibility of Central Statistical Offices (CSOs), it is to a lesser extent done as a part of the

National Accounts System. It is mainly health statisticians either in CSOs or in the Health Ministries that are compiling SHA results.

2. The *SNA* is the primary economic statistical framework that supports policymaking. As measures of well-being become more important to decision making, the relevance of macroeconomic statistics depends on the ability to adapt the *SNA* and develop a more comprehensive framework to meet the evolving needs of policymakers and other users.

3. The objective of this Guidance Note is to present proposals for indicators of health care in the national accounts. The proposal provides extensions of the central framework to expand official measures of well-being. We propose to use the *SHA 2011* as the foundation for achieving the objective including analyses of who benefit from the resources spent on health and social care (distributional analysis).

4. This Guidance Note looks at a number of questions and puts forward proposed options for the update of the current *SNA*:

- What is the *SHA 2011*, is it consistent with the *SNA* and could it be used to improve analyses of health, social care and well-being in the *SNA*? (Section 2).
- To what extent should national accounts include long-term social care services in a broader measure of well-being? (Section 3)
- Should national accounts boundaries be extended to include unpaid household production of health and long-term social care, or should unpaid household production at least be measured given its implications for government policy to promote well-being? (Section 3)
- Should own-account production of health care services (occupational health care) be imputed? (Section 3)
- How should volumes of health care services be measured in light of quality differences? (Section 3)
- What are the proposals for improving the current *SNA* and do these involve changes to the central framework of the *SNA* or extensions of the central framework? (Section 4)

2. The System of Health Accounts 2011 (Existing Material)

2.1. Background

5. *A System of Health Accounts 2011* (*SHA 2011*) is a result of a joint cooperation among the Organization for Economic Cooperation and Development (OECD), World Health Organization (WHO), and Eurostat, and it builds on the first edition of *A System of Health Accounts* (OECD 2000), the *Guide to Producing National Health Accounts* (WHO, World Bank, and USAID 2003), and the *SHA Guidelines* (Eurostat and UK Office for National Statistics 2003). The first edition of the *SHA* is described in paragraphs 29.128-29.142 of the *2008 SNA*. The *SHA* methodology was revised in 2011.

6. The background for setting up the health accounts is described in *SHA 2011* as follows:

> *"Health accounts provide a systematic description of the financial flows related to the consumption of health care goods and services. Their intent is to describe a health*

system from an expenditure perspective. But as more countries implement and institutionalize health accounts, there are increased expectations from analysts, policy makers, and the general public alike for the more sophisticated information that can be gained through the greater volume of health expenditure data now available. Health accounts are increasingly expected to provide inputs (along with other statistical information) into improved analytical tools to monitor and assess health system performance." (*SHA 2011*, p. 20)

7. The *SHA* is organized around a tri-axial system, defining consumption of health care goods and services by function, provision of health care services by industry, and financing of health care (i.e., sources of funding). The three dimensions have their own classifications. Consumption of goods and services classified according to health care functions is the starting point and defines the boundaries of the health accounts. What is consumed must be provided, meaning that setting up the system within a supply and use framework would be a useful tool for ensuring consistency and completeness. Finally, what is produced and consumed must be financed. Therefore, there is a clear link and consistency among the three axes.

8. The *SHA* is closely linked to compilations in the national accounts as well as to business accounting and public accounting standards.

9. *SHA 2011* provides a standard for classifying health expenditures and the underlying objectives include 1) providing a framework relevant for international comparisons of health expenditure and health system analysis, 2) providing a tool that can produce useful data to monitor and analyze the health system, and 3) defining internationally harmonized boundaries for tracking expenditures on health care consumption (*SHA 2011*, p. 25).

2.2. Scope and Framework

10. The three key classifications in the *SHA* are 1) classification of health care functions (HC), 2) classification of health care providers (HP), and 3) classification of health care financing schemes (HF). These three classifications answer the questions what types of health care services are provided, who provides the services, and how they are financed. Other classifications are also provided in the system, but the three outlined above are essential and closely related to reporting of data. They provide the tools to account comprehensively for health care financing, and they define the key concepts and the relationships among consumption (function), production (provider), and financing.

11. An example of other classifications provided in the *SHA* framework is the *classification of health care goods and services*, described in *Annex E* of *SHA 2011*. The primary use of the product classification is to facilitate the boundary-setting and recommend what products should be selected when estimating health care expenditures. The product classification in the *SHA* is linked to the *SNA* Central Product Classification (CPC) and the Classification of Products by Activity (CPA) of the European System of Accounts (ESA) (see Table 1 in the annex of this note), and thus the supply and use framework in the national accounts. Although this Guidance Note does not recommend changes to the product classifications in the *SNA* update, it does recommend a review of the *SHA* product classifications to move towards greater consistency with the *SNA* (see Section 4.3).

2.2.1. Classification of Health Care Functions

12. Health care functions relate to "what is the purpose" or "the type of need a transaction or group of transactions aims to satisfy" (*SHA 2011*, p. 72). This is the most fundamental classification within the *SHA* and defines what is in and out of scope for "health care".

13. The first-digit level of this classification aims to identify the type of need of the consumer—curative care, rehabilitative care, etc. Table 2 in the annex of this note presents the first-digit level from table 5.1 of *SHA 2011*. The classification is broken down into further detail, as the two-digit level of curative care can be distributed among inpatient curative care (HC.1.1), day curative care (HC.1.2), outpatient curative care (HC.1.3), and home-based curative care (HC.1.4). The three-digit level is further split in table 5.1 of the *SHA 2011*.

14. There will always be borderline cases between health care and social care. Long-term care (health) consists of a range of medical and personal care services that are consumed and for which the goal is to alleviate pain and suffering and reduce deterioration in the health status of patients depending on long-term care. The *SHA* describes what to include under this function, but the handbook also recommends to measure, as a memorandum item (not part of health expenditures), the expenditures related to long-term care (social). What is defined as long-term care (social) is listed in the handbook (*SHA 2011*, p. 114) and includes subsidies to residential services (as well as expenditure on accommodation) in assisted living arrangements and other kinds of protection housings for persons with functional limitations etc., housekeeping services, day-care social services for dependent persons, and transport to and from day-care facilities or similar social services for persons with functional limitations. The definition is important in order to maintain a consistent definition of 'health care' across countries and over time. See also discussion in section 3.1.

15. *SHA 2011 Annex A* gives a detailed correspondence between the functional classification (HC) and the CPC product classification and between the HC and classifications in the *SNA*: classification of individual consumption according to purpose (COICOP), classification of the functions of government (COFOG), and classification of the purposes of non-profit institutions serving households (COPNI). Details of the correspondence between the health care functions and COFOG, COICOP and COPNI can be found in table A.1.5 in the *SHA 2011*.

2.2.2. Classification of Health Care Providers

16. Health care providers include organizations and actors that deliver health care goods and services as their primary activity, as well as those for which provision of health care products is a secondary activity (*SHA 2011*, p. 122).[2] Table 3 in the annex of this note adapts the first-digit level from table 6.2 of *SHA 2011*. The provider's classification is broken down into two- and three-digit levels. For example, hospitals (HP.1) can be split into general hospitals (HP.1.1), mental health hospitals (HP.1.2), and specialized hospitals other than mental health hospitals (HP.1.3).

17. *SHA 2011 Annex A* gives a detailed correspondence between the provider classification (HP) and the International Standard Industrial Classification (ISIC) and between the provider classification (HP) and institutional sectors in the *SNA*. Table 6 in the annex shows the correspondence between HP

[2] All other industries as secondary providers of health care are classified under HP.8.2.

and ISIC, while table A.1.12 in *SHA 2011* gives the correspondence between the HP-classification and institutional sectors in *SNA*.

2.2.3. Classification of Health Care Financing Schemes

18. This classification reveals who is financing the expenditures. The financing schemes will include both direct payments by households and third-party financing arrangements. Table 4 in the annex of this note reports the first-digit level from table 7.3 of *SHA 2011*. The financing classification is broken down into two- and three-digit levels. For example, government schemes and compulsory health care financing schemes (HF.1) can be broken down into government schemes (HF.1.1), compulsory contributory health insurance schemes (HF.1.2), and compulsory medical savings accounts (HF.1.3).

19. *SHA 2011 Annex A* gives a detailed correspondence between financing schemes and institutional sectors in the *SNA*.

2.3. Comparing the *SHA* and the *SNA*

20. As already indicated, there is a link between the *SHA* and the *SNA*, and *SHA 2011* describes how health expenditures and financing data reported in the *SHA* cross-classified tables relate to the main macroeconomic variables in the *SNA*. Hence, data for the *SHA* can be retrieved from national accounts if the basic detail information is included. The *SHA* also gives guidelines for compilation of additional *SNA*-type accounts. The links between the *SHA* and the *SNA* are provided in *Annex B* of *SHA 2011*.

21. Current health expenditures reported in the *SHA* are equal to the sum of health care goods and services for final consumption of resident units. When broken down by providers (i.e. HC x HP), this represents the value of the part of output from health care providers that is consumed by households, NPISH, and government. The "final consumption expenditure" in the *SHA* also includes the service of "occupational health" (e.g. surveillance of employee health and therapeutic care on or off business premises) which are considered as an ancillary activity in the central framework of the *SNA* and treated as intermediate consumption.

22. Another difference between the *SHA* and the *SNA*, set out in *Annex B* of *SHA 2011*, is that the *SHA* extends the present *SNA* production boundary by including imputed production for the value of health services produced within the household that are covered partially or completely by dependency allowances. For example, if households receive cash payments to cover household labor services provided to persons with severe functional mobility or cognitive handicaps, these are treated as social benefits in the *SNA* (not part of production), whereas in the *SHA* they are treated as quasi-salaries with a corresponding production value that is included in current health expenditure.

23. A third difference is the *SHA* considers goods purchased and resold by retailers as their intermediate consumption, whereas the *SNA* excludes them from intermediate consumption, which yields two consequences: 1) manufacturers of health care goods are excluded from the *SHA* provider classification and 2) retailers' output is measured in the *SHA* by the sum of the total value of the goods they purchase for resale plus the trade margins realized, while in the *SNA* only the latter component is included. This different treatment should have no impact on either measured final output or measured consumption.

24. The final difference enumerated in *SHA 2011* is that research and development (R&D) is treated as a non-financial asset in the *SNA*, and hence, R&D produced on own-account is part of hospital output (and recorded as gross fixed capital formation in the same industry), while the *SHA* core measures exclude this creation of R&D. R&D is discussed in *SHA 2011* on page 267. The reason for treating R&D as an input in the production process (i.e. intermediate consumption) instead of capitalizing it is guided by practical considerations. At the time of the preparation of *SHA 2011*, information on R&D in the health system was available only for a few countries, so its inclusion would likely impair international comparability of the data.

3 Conceptual Issues and Coverage of the Accounts

3.1 Paid Long-Term Social Care Services

25. The *SHA* is related to information on health care services, access to it, and changes in health policy priorities. Recall the intent of health accounts is to describe a health system from an expenditure perspective. Only expenditures on health care are defined within the system. However, the handbook highlights that health care related classifications also identify policy relevant areas that go beyond the health care boundary as programs that come under the social part of long-term care (*SHA 2011*, p. 74).

26. Distinguishing health care expenditures from social care expenditures can be difficult, especially for long-term care (LTC). The *SHA* clearly establishes a borderline between LTC (health) and LTC (social) (*SHA 2011*, pp. 88-95). In general, the SHA distinguishes various underlying components of the two elements of LTC: **i) Health**: medical or nursing care including the management of symptoms involving medical, paramedical and nursing care services, such as relieving pains or other symptoms, administering medication, performing medical diagnosis and minor surgery, dressing wounds etc, as well as personal care services provided in response to limitations in self-care primarily due to disability and illness and **ii) Social**: assistance services related to care that enables a person to live independently in a house or apartment, i.e. lower-level social care services to assist with instrumental activities of daily living (SHA 2011, page 114).

27. Since social care services are also important for household well-being and for policymaking, social care services should be taken into consideration. The *SHA* does this by including LTC (social) as a memorandum item (HCR.1) in the classification of health care functions. The memorandum item for LTC (social) comprises expenditures on lower level social care services to assist with **instrumental activities of daily living** (IADL) such as shopping, laundry, and cooking as mentioned in para. 26. Also, other social care services such as child welfare could be considered included in the extended accounts. However, as a first step, inclusion of what is already discussed in the *SHA 2011*, i.e., LTC (social), will be recommended as a practical starting point.

3.2 Unpaid Household Care Services

28. Household production of health care is included in the *SHA* framework however, limited to those health services whose costs are partially or completely covered by dependency allowances. The transfers will be treated as a quasi-salary in the SHA and a corresponding “production value” is calculated. Justifications for measuring unpaid household production of health and social care are evident in a number of sources. Stiglitz et al. (2009) argue that focusing solely on market activity provides a biased picture of living standards, especially when economic activity appears to increase but is simply the result of a shift from household production to the market provision of similar services. Hanly and Sheerin (2017) focus on heightened demand for unpaid long-term care putting pressure on

the provision of informal care in the home, which at the same time is experiencing limited supply because of female labor force participation and loosening of community and family ties.

29. Gender differences also play a role in the importance of official statistics on unpaid household production of health care. Ferrant et al. (2014) conclude that the majority of informal care is undertaken by women, which negatively impacts their participation in the labor force and in education. Likewise, Hanly and Sheerin (2017) argue that neglecting unpaid care work leads to incorrect inferences about levels and changes in individuals' well-being, which in turn limits policy effectiveness for gender inequalities in employment and empowerment areas.

30. Overall, the literature supports the view that unpaid household care has a significant role in understanding health and social conditions and individuals' well-being. It is therefore, recommended that all unpaid household production of health and social care, and not limited to what is already recorded in the SHA, is included in the **extended accounts** in the *SNA*. Valuation of unpaid production of health and social care should be carried out in line with international guidelines for valuing unpaid household work. It would be beneficial if the guidelines in the SHA 2011 were updated accordingly and, thus, extend the imputations which is presently based on dependency allowances.

3.3 Occupational health care – ancillary activities

31. Occupational health care provided by organizations for their employees is treated as "final consumption expenditure" of health in the *SHA*, whereas in the *SNA* it is recorded as an ancillary activity and recorded as intermediate consumption. In the *SNA* supply and use tables, output includes the value of the enterprises' purchased health goods and services provided as intermediate consumption, but it does not impute own-account provision of such services within an organization unless that organization is a health provider. Theoretically, to record the total expenditure of occupational health care, this should cover output both from the health providers and own-account provision (see Table 11 and Table 12 in the annex of this note). The authors of this Guidance Note examined whether own-account production of occupational health services should be imputed as secondary output of the employer and allocated to intermediate consumption (GDP should be unaffected). It is considered that such an imputation can be difficult to implement and therefore it is not included in the recommendations. However, the conclusion is to follow the guidelines in the *SHA* and, if own-account occupational health care is recorded, the output should also be included in Tables 11 and 12 in the extended accounts.

3.4 Measuring Volumes of Health Services

32. To analyze health output developing over time, it is recommended to compile health expenditure in constant prices/volume terms. This should be carried out consistently with volume estimates of health services in the core accounts. Recommendations in the Eurostat *Handbook on Prices and Volume Measures in National Accounts* are based on the following definition of health output: "Health output is the quantity of health care received by patients, for each type of health care." The quantities/volumes should be weighted together using data on the costs or prices of the health care provided." There are many obstacles in doing so especially for health services from by non-market providers. Consistent with *SNA* recommendations and conclusions of country experiences, research should continue to better understand the quality of health care and to best reflect quality changes in

volume measures of health care services in the core national accounts. This will lead to improvements in indicators presented in extended or supplementary tables.

4 Recommendations

33. It is recommended to build health indicators based on the well-developed framework in *SHA 2011.* This means that SHA should be more closely linked to the national accounts in extensions of the central framework, thus expanding official measures providing insights in important elements affecting well-being. One recommendation is important for improving the core accounts.

34. To avoid any duplication in efforts to estimate the health indicators and to avoid inconsistency between the SNA and SHA, it is recommended that the National Accounts staff cooperate closely with health statisticians compiling the SHA.

4.1 Proposed Improvements to the Central Framework of the *SNA* 2008 (Core)

This Guidance Note recommends that:

35. Health expenditure is compiled both in current and constant prices/volume terms. However, to improve volume measures of health and social care services both in the core accounts and in the extended accounts, further research and experimentation is needed - in particular to better understand quality of health and social care so that changes in quality of care can be captured in the measures.

4.2 Proposals for Extended or Supplementary Tables (Non-Core)

This Guidance Note makes the following recommendations:

36. To present additional indicators of health based on the system of health accounts in the *SHA 2011* in extensions of the *SNA* core framework (see **Box 1**). The extensions should be based on analyzing health expenditures as equal to health output provided to individuals. Based on experiences learned from the coronavirus pandemic, in future there might be demand for other ways of splitting health care by policy-relevant characteristic, implying that the extended accounts should be built in a flexible way.

Box 1: Additional Indicators

Indicators for health and social care should be built from the expenditure flow data in the extended accounts. This covers individual final consumption expenditures of health and social care with various breakdowns defined mainly by health care function, provider, and financing scheme, see examples in Table 10 in the annex. These data can also be cross tabulated according to various combinations. It should be noted that "final" consumption expenditure in the extended tables includes also intermediate consumption related to occupational health care.

The following standardizations and additional breakdowns of final consumption expenditures for domestic uses over time are proposed: expenditures as a share of GDP, per capita expenditures, expenditure by health care function, expenditure by age and gender of beneficiaries, and expenditure by income group of beneficiaries. Indicators constructed from *health expenditure* data and combined in various ways with other indicators, will allow for a range of analyses of household well-being.

In addition, the financing scheme is important, allowing for example to analyze the shares between health care expenditures paid out of own pocket or by private insurance, government, or non-profits and health care received as transfers in kind.

Indicators in physical terms such as employment in health and social care should be considered as well as a breakdown by the International Standard Classification of Occupations (ISCO-08) characteristics of employed persons. The most relevant ISCO groups for health are sub-major group 22 (health professionals) and 32 (health associate professionals). Physical measures of assets could also be presented with a suitable breakdown (e.g. number of hospital beds available).

Experience developed in the course of *SHA* data collection could be used to define distinctions for health insurance along dimensions including voluntary/compulsory, private/public, and individual/social as a supplement to the *SNA* central system.

37. The broader framework on well-being and sustainability should include all expenditures on health and social care. Health expenditure are defined in *SHA 2011*. Social care is not part of health expenditure but is discussed in the *SHA* and reported as a memorandum item. The approach described in the *SHA 2011* for estimating expenditure on social care can be used as a starting point.

38. The production boundary in the extended accounts (non-core) should be expanded to include imputed values for unpaid household production of health care and long-term social care (see Table 8 in the annex). This should be carried out in line with the recommendations of valuation of unpaid household work in Guidance Note *WS.3: Unpaid Household Service Work.* It is recognized that this will not be in complete harmony with *SHA 2011*, which limits the imputations to the costs of non-market health and social care services that are covered by dependency allowances. We therefore recommend that the *SHA* revise their guidelines accordingly.

39. By including the expenditure data in extended accounts, allow the aggregation of individual consumption expenditure on health and social care in a different way than in the core accounts, providing useful information for policy makers.

40. Create supply and use tables for health care and long-term social care. Using a supply and use framework should help ensure consistency and completeness of the analysis of health care and social care. An example of how to build the supply and use tables are given in the annex, Table 11 and Table 12, while Table 13 indicates how to build the financing by sector and health functions. To simplify the tables, only one-digit levels of the classifications are used.

41. The differences between *SHA 2011* and *SNA* are in practice marginal. It is recommended that the *SNA* concepts and definitions are used in the extended accounts and it is also recommended that *SHA* harmonize the guidelines accordingly. Double work and inconsistency between the systems should be avoided. Therefore, it is considered important that *SHA* and *SNA* are harmonized to the extent possible, see proposal in paragraph 43.

42. The classifications for functions (HC), providers (HP) and financing schemes (HF) from *SHA* 2011 should be included in the *SNA* for use in the extended accounts, after an assessment is made of whether the *SHA* functional classification (HC) defines the most relevant supplementary details for health and social care in a national accounting context. Some elements of the *SHA* classification should be reexamined for this purpose (e.g. the feasibility of distinguishing expenditures between curative and rehabilitative care).

4.3 Proposed Changes to the *SHA 2011*

This Guidance Note also makes the following recommendations:

43. Harmonization of *SHA 2011* and the *SNA* to the extent possible should be a goal for the next revision of the SHA. Important changes to be considered; first, expenditures on R&D in health should be recognized as capital formation. Second, the valuation of unpaid household work should be extended to cover all household production of health and social care beyond what is now included in the SHA based on dependency allowances.

44. The product classification of *Annex E* of *SHA 2011* should be reviewed to ensure consistency with the *SNA product classification (CPC)*. Even though there may be differences regarding details in the two systems, they should be consistent at an aggregate level. The review could include identification of additional products that are relevant for policy decisions.

45. There should be a review of the SHA classifications and COICOP 2018 to ensure consistency between the classifications and, thus, help linking procedures.

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Annex A: Tables

Table 1: Health Care Product Classification in the *SHA*

Code	*Description*	*CPC Code*	*CPA Code*
01	Hospital services	9311	86.1
01.1	Hospital surgical services	93111	86.10.11
01.2	Hospital gynaecological and obstetrical services	93112	86.10.12
01.3	Hospital rehabilitation services	--	86.10.13
01.4	Hospital psychiatric services	93113	86.10.14
01.5	Intensive care services	--	--
01.9	Other hospital services	93119	86.10.15
02	Day care services	--	--
02.1	Day care surgical services	--	--
02.2	Day care gynaecological and obstetrical services	--	--
02.3	Day care rehabilitation services	--	--
02.4	Day care psychiatric services	--	--
02.5	Other day care services	--	--
03	Medical and dental practice services	9312	86.2
03.1	General medical practice services (outpatient)	93121	86.21
03.2	Specialist medical practice services	93122	86.22
03.3	Dental practice services	93123	86.23
04	Other medical services	9319	86.9
04.1	Midwives' services	93191	86.90.11
04.2	Nursing services	93192	86.90.12
04.3	Physiotherapeutic services	93193	86.90.13
04.4	Patient transport services, among others ambulance services	93194	86.90.14
04.5	Medical laboratory services	93195	86.90.15
04.6	Diagnostic imaging services without interpretation	93196	86.90.17
04.7	Blood, sperm and transplant organ bank services	93197	86.90.16
04.9	Other medical services n.e.c.	93199	86.90.19
05	Residential care services	932	87
05.1	Residential nursing care services	9321	87.1
05.9	Other residential care services	9330	87.90
06	Nursing care services without accommodation	934	88
06.1	Nursing care services without accommodation for the elderly and disabled	--	88.1
06.9	Other nursing care services without accommodation	935	88.9

Source: Adapted from *SHA 2011* pp. 468-495.
Note: CPC = Central Product Classification (in the *SNA*); CPA = Classification of Products by Activity (the European equivalent of the CPC).

Table 1: Health Care Product Classification in the *SHA* (continued)

Code	*Description*	*CPC Code*	*CPA Code*
07	Retail trade services in medical products	62	47
07.1	Retail trade services of pharmaceutical goods and medical non-durables	62273	47.00.74
07.2	Retail trade services of medical durables and orthopaedic products	62274	7.00.75
07.3	Retail trade services of optical goods and services of opticians	--	--
07.4	Mail order or internet retail trade services in medical products	--	623
07.9	All other retail trade services in medical products and their repair	--	--
08	Preventive services	--	--
08.1	Information and counselling programs	--	--
08.2	Immunization programs	--	--
08.3	Early disease detection programs	--	--
08.4	Health condition monitoring programs	--	--
08.5	Epidemiologic surveillance and risk and disease control programs	--	--
08.6	Disaster and emergency response programs of health systems	--	--
09	Governance, management, and health system administration	91	87
09.1	Governance and administrative health (excluding those for mandatory schemes)	911	84.1
09.2	Administrative services regarding mandatory schemes	913	84.3
10	Health insurance, except mandatory schemes	--	65
10.1	Health insurance services	7132	65.12.1
11	Health and social care goods and services produced by households for own use	--	--
MP.1			
MP.2			
MP.3			
MP.4			

Source: Adapted from *SHA 2011* pp. 468-495.
Note: CPC = Central Product Classification (in the *SNA*); CPA = Classification of Products by Activity (the European equivalent of the CPC).

Table 2: Classification of Health Care Functions in the *SHA* at First-Digit Level

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

Source: Adapted from *SHA 2011* table 5.1.

Table 3: Classification of Health Care Providers in the *SHA* at First-Digit Level

HP.1	Hospitals
HP.2	Residential long-term care facilities
HP.3	Providers of ambulatory health care
HP.4	Providers of ancillary services
HP.5	Retailers and providers of medical goods
HP.6	Providers of preventive care
HP.7	Providers of health care system administration and financing
HP.8	Rest of economy
HP.9	Rest of the world

Source: Adapted from *SHA 2011* table 6.2.

Table 4: Classification of Health Care Financing Schemes in the *SHA* at First-Digit Level

HF.1	Government schemes and compulsory contributory health care financing schemes
HF.2	Voluntary health care payment schemes
HF.3	Household out-of-pocket payment
HF.4	Rest of world financing schemes (non-resident)

Source: Adapted from *SHA 2011* table 7.3.

Table 5: Correspondence between ICHA-HC and CPC Ver. 2

ICHA-HC	*Function*	*CPC Code*	*Title*
HC.1	**Curative care**		
HC.1.1	Inpatient curative care	9311	Inpatient services
HC.1.2	Day curative care	93119	Other services for inpatients
HC.1.3	Outpatient curative care	9312	Medical and dental services
HC.1.4	Home-based curative care	93121	General medical services
		93122	Specialized medical services
		93192	Nursing services
		93199	Other human health services, n.e.c.
HC.2	**Rehabilitative care**		
HC.2.1	Inpatient rehabilitative care	9311	Inpatient services
		93119	Other services for inpatients
HC.2.2	Rehabilitative day care	93119	Other services for inpatients
HC.2.3	Rehabilitative outpatient care	93121	General medical services
		93122	Specialized medical services
		93193	Physiotherapeutic services
		93199	Other human health services, n.e.c.
HC.2.4	Rehabilitative home-based care	As above	As above
HC.3	**Long-term care (health)**		
HC.3.1	Inpatient LTC (health)	93210	Residential health care services…
		93301	Residential care services…
HC.3.2	Day cases of LTC (health)	93210	Residential health care services…
HC.3.3	Outpatient LTC (health)	93192	Nursing services
HC.3.4	Home-based LTC (health)	93192	Nursing services
		93199	Other human health services, n.e.c.
HC.4	**Ancillary services, n.s.f.**		
HC.4.1	Laboratory services, n.s.f.	93195	Medical laboratory services
HC.4.2	Imaging services, n.s.f.	93196	Diagnostic imaging services
HC.4.3	Patient transportation, n.s.f.	93194	Ambulance services
HC.5	**Medical goods**		
HC.5.1	Pharmaceuticals and other	62273	Specialized retail trade of pharma…
HC.5.2	Therapeutic appliances and other	62274	Specialized retail trade of medical…
HC.6	**Preventive care**		
HC.6.1	Information, educ, counselling	91122	Public administrative services…
		9312	Medical and dental services
HC.6.2	Immunization	As above	As above
HC.6.3	Early disease detection	As above	As above
HC.6.4	Health condition monitoring	As above	As above
HC.6.5	Epidemiologic surveillance	As above	As above
HC.6.6	Disaster and emergency response	As above	As above
HC.7	**Governance and administration**		
HC.7.1	Governance and health sys. adm.	91122	Public administrative services…
		91310	Administrative services related to…
HC.7.2	Adm. of health financing	71322	Health insurance services
		91310	Administrative services related to…

Source: Summarized from *SHA 2011* table A.1.7.
Note: ICHA-HC = Classification of Health Care Functions in the System of Health Accounts 2011.

Table 6: Correspondence between ICHA-HP and ISIC Rev. 4

ICHA-HP	*Type of Provider*	*ISIC Code*	*Categories*
HP.1	**Hospitals**		
HP.1.1	General hospitals	8610	Hospital activities
HP.1.2	Mental health hospitals	8610	Hospital activities
HP.1.3	Specialized hospitals	8610	Hospital activities
HP.2	**Residential LTC facilities**		
HP.2.1	LTC nursing facilities	8710	Residential nursing care facilities
HP.2.2	Mental health facilities	8720	Residential care activities…
HP.2.9	Other residential LTC facilities	8730	Residential care activities…
		8790	Other residential care activities
HP.3	**Providers of ambulatory care**		
HP.3.1	Medical practices	8620	Medical and dental practices
HP.3.2	Dental practices	8620	Medical and dental practices
HP.3.3	Other health care practitioners	8690	Other human health activities
HP.3.4	Ambulatory care centers	8620	Medical and dental practices
HP.3.5	Providers of home health care	8690	Other human health activities
		8810	Social work activities…
HP.4	**Providers of ancillary services**		
HP.4.1	Patient transportation and rescue	8690	Other human health activities
HP.4.2	Medical and diagnostics labs	8690	Other human health activities
HP.4.9	Other ancillary services	8690	Other human health activities
HP.5	**Retailers and other providers**		
HP.5.1	Pharmacies	4772	Retail sale of pharmaceuticals…
HP.5.2	Retail sellers of medical goods	4773	Other retail sale of new goods…
HP.5.9	Miscellaneous suppliers	4772	See above
		4773	See above
HP.6	**Providers of preventive care**	8412	Regulation of activities…
HP.7	**Administration and financing**		
HP.7.1	Government health adm.	8412	Regulation of activities…
HP.7.2	Social health insurance agencies	8430	Compulsory social security
HP.7.3	Private health insurance agencies	6512	Non-life insurance
HP.8	**Other secondary providers**		
HP.8.1	Households	9820	Private households for own use…
HP.8.1	Households	9820	Private households for own use…

Source: Summarized from *SHA 2011* table A.1.10.
Note: ICHA-HP= Classification of health care providers in the system of Health Accounts 2011.

Table 7: Relation of Consumption to *SNA* and *SHA* Aggregates

	SNA 2008	*SHA 2011*
Final consumption expenditure on health care	P.31 Individual consumption expenditure on health + P.32 Collective consumption expenditure on health = P31 – Households individual consumption of health + P31 – NPISH individual consumption of health + P31 – Government individual consumption of health (part of COFOG 07) P32 – Government collective consumption of health (part of COFOG 07)	*SHA* additionally includes a) Occupational health care (intermediate consumption within establishments) minus an estimated share of occupational health in the net administration of health providers and other medical industries. b) "Remunerated" household production in the form of social benefits in cash for home care of sick, disabled and elderly persons provided by family members usually for the purpose of LTC. c) "Health care activities" not classified as health care in *SNA*, e.g., health care in social care institutions, or administration of social insurance. The borderlines in the *SNA* are determined by COICOP and COFOG.

Source: Extract from table A.1.1. of *SHA 2011*.

Table 8: Own-Use Production Work of Service Activities and Market Counterparts

	CPC Ver. 2.1		*ISIC Rev.4*
Child Care	93222	Residential care services for young disabled persons	8720
	93301	Residential care services for children suffering from mental retardation, mental health illnesses, or substance abuse	8790
	93302	Other social services with accommodation for children	8810
	93492	Other social services without accommodation for children	8710
Adult Care	93210	Residential health care services other than by hospitals	8730
	93221	Residential care services for the elderly	8730
	93223	Residential care services for disabled adults	8720
	93303	Residential care services for adults suffering from mental retardation, mental health illnesses, or substance abuse	8790
	93304	Other social services with accommodation for adults	8810
	93411	Vocational rehabilitation services for persons with disabilities	8890
	93412	Vocational rehabilitation services for unemployed persons	8810
	93491	Other social services without accommodation for the elderly	9609

Source: Extract from table 4.1 of the UNECE *Guide to Valuing Unpaid Household Service Work*.

Table 9: Questions to Identify Households Providing Health Care or Social Care

Number	*Question*
16	Do you have any of the following long-lasting conditions or difficulties? (a) Blindness or a serious vision impairment (b) Deafness or a serious hearing impairment (c) A difficulty with basic physical activities such as walking, climbing stairs, reaching, lifting or carrying (d) An intellectual disability (e) A difficulty with learning, remembering or concentrating (f) A psychological or emotional condition (g) A difficulty with pain, breathing, or any other chronic illness or condition
17	If 'Yes' to any of the categories specified in Question 16, do you have any difficulty in doing any of the following? (a) Dressing, bathing or getting around inside the home (b) Going outside the home alone to shop or visit a doctor's surgery (c) Working at a job or business or attending school or college (d) Participating in other activities, for example leisure or using transport
22	Do you provide regular unpaid personal help for a friend or family member with a long-term illness, health problem or disability? *Include problems which are due to old age* *Personal help includes help with basic tasks such as feeding or dressing* If 'Yes', for how many hours per week?

Source: Extract from the Census of Population of Ireland. The 2016 form is available on the Central Statistics Office at: https://www.cso.ie/en/media/csoie/census/census2016/2016censusforms/65995_English_Household_2016_New_Version_Do_Not_Complete.pdf.

Table 10: Indicators Based on Final Consumption Expenditures and Capital Formation

Axis	*Indicator*	*CU*	*%GDP*	*Per Capita CU*	*Percent-age of CHE*
General	Total current health and social care expenditure	X	X	X	
	Total current health expenditure plus capital spending	X	X	X	
Health Functions	Preventive spending				X
	Curative spending				X
	Inpatient spending				X
	Outpatient spending				X
	Total pharmaceutical spending	X	X	X	X
	Health expenditures on LTC	X			X
	Social care (spending	X			X
Providers	Hospital health spending				X
	Ambulatory health spending				X
	Social care spending				X
Financing Schemes	Government health schemes				X
	Compulsory contributory health insurance				X
	Voluntary health insurance				X
	Out of pocket health expenditures				X
Capital Formation	Total public spending on capital formation	X			X
	Total private spending on capital formation	X			X
	Spending on capital formation by hospitals	X			X

Source: Adapted from table 15.1 of *SHA 2011*. CU = currency unit (national, USD, or Euro), CHE = current health expenditures and adjusted for the inclusion of social long-term care.

Table 11 Health output, by provider and health functions. Current prices.

Supply												
		HP.1 Hospitals	HP.2 Residential long-term care facilities	HP.3 Providers of ambulatory health care	HP.4 Providers of ancillary services	HP.5 Retailers and other market producers of medical goods	HP.6. Providers of preventive care	IP.7 roviders of ealth care ystems and inancing	IP.8)ther econdary ealth care roviders	mports	Taxes less subsidies on products	tal
Health functions and Social care function	HC.1 Curative care											
	HC.2 Rehabilitative care											
	HC.3 Long-term care (health)											
	HC.4 Ancillary services (non-specified by function											
	HC.5 Medical goods n.s.f.											
	HC.6 Preventive care											
	HC.7 Governance and health systems and financing administration											
	H.C.9 Other health care services not elsewhere classified											
	HCR.1 Long-term care (social)											
Total output = Total current expenditure												
R&D (own account and for sale)												

Table 12 Health expenditure, by consumer and health function. Current prices.

Use									
		Final consumption expenditures					Intermediate consumption – market producers	Exports	Total
		Central government	State government	Local government	NPISH	House-holds			
Health functions and Social care function	HC.1 Curative care								
	HC.2 Rehabilitative care								
	HC.3 Long-term care (health)								
	HC.4 Ancillary services (non-specified by function								
	HC.5 Medical goods n.s.f.								
	HC.6 Preventive care								
	HC.7 Governance and health systems and financing administration								
	HC.9 Other health care services not elsewhere classified								
	HCR.1 Long term care (social)								
Total output (intermediate and final consumption) = Total current expenditure									
		Gross fixed capital formation in health industry (ISIC 85)							
		Central govern-ment	State govern-ment	Local govern-ment	NPISH		Market producers in education industry		Total
R&D (both purchased and produced for own account)									
Capital formation (excluding R&D)									
Total gross fixed capital formation									

Table 13 Financing, by sector and health function. Current prices.

		Health and social care functions									Total
		HC.1 Curative care	HC.2 Rehabili-tative care	HC.3 LTC health	HC.4 Ancillary services	HC.5 Medical goods	HC.6 Preventive care	HC.7 Governance and health systems and financing administration	HC.9 Other health care services not elsewhere classified	HCR.1 LTC social	
Resources											
Central govern-ment	Final consumption expenditure of central government										
	Plus - transfers / subsidies to other sectors (detail to be country specific)										
	Less – transfers / subsidies from other sectors (detail to be country specific)										
	Central government financing										
State govern-ment	Final consumption expenditure of state government										
	Plus - transfers / subsidies to other sectors (detail to be country specific)										
	Less - transfers / subsidies from other sectors (detail to be country specific)										
	State government financing										
Local govern-ment	Final consumption expenditure of local government										
	Plus - transfers / subsidies to other sectors (detail to be country specific)										
	Less - transfers / subsidies from other sectors (detail to be country specific)										
	Local government financing										

NPISH	Final consumption expenditure of NPISH										
	Plus - transfers to other sectors (detail to be country specific)										
	Less – transfers / subsidies from other sectors (detail to be country specific)										
	NPISH financing										
House-holds	Final consumption expenditure of households										
	Plus - transfers to other sectors (detail to be country specific)										
	Less – transfers / subsidies from other sectors (detail to be country specific)										
	Household financing										
Other sectors[3]	Intermediate consumption										
	Plus - transfers to other sectors (detail to be country specific)										
	Less – transfers / subsidies from other sectors (detail to be country specific)										
	Other sectors financing										
Rest of the world (exports)											
Total resources											

[3] Corporate sectors and households as producers.