ANNEX A

Relationship of the ICHA to Other Classifications

Introduction

Annex A aims to support the mapping of categories of the three core classifications of SHA 2011 with international economic classifications used within the frameworks of the System of National Accounts (SNA) and the European System of Social Protection Statistics (ESSPROS). Each of the three core classifications of SHA 2011 – ICHA-HC, ICHA-HP and ICHA-HF – focuses on specific characteristics of actors (organisations) and transactions that differ from those of the other classifications. This annex briefly discusses some of the conceptual issues involved and then presents correspondence tables with the classification categories of the SNA and ESSPROS. Despite similar terms and some overlap with the main categories, there is no one-to-one relationship between the classifications of SHA and those of the two other statistical systems. Both users and compilers should also be aware that the international classifications undergo regular revisions and can be differently applied by countries. The same holds for the actors (organisations) used as statistical units in SHA and the economic entities (institutional units) used in SNA. The cross-tables of this annex, therefore, can only serve as a tentative guide to map the different classifications. Furthermore, the classifications discussed are not the only available classifications in the statistical systems of the countries.

The classifications of SNA occupy a central position in economic statistics because activities of the whole economy are either classified according to the industries and sectors of the economy, or structured by the goods and services produced and their uses by purpose, which includes the production and consumption of the health care sector. In addition, health activities captured in some of the more specialised statistical systems, such as the balance of payments statistics, or employment in health care classified by labour force statistics, are themselves integrated into the System of National Accounts data. Not only are the general aggregates of SNA, such as gross domestic product (GDP), of interest to SHA compilers, but also specific health care aggregates of SNA. The analysis of health accounts data used in conjunction with SNA often refers to the share of GDP devoted to health expenditure as one of the key indicators of health accounts. Current health care expenditure of SHA, presented as a percentage of GDP, exhibits the share of consumption of health care by the resident population in relation to national income. Another indicator is the share of public expenditure on health care as a percentage of total government spending. This shows the financial burden of health care expenditures on total government funds. In the following, specific health care aggregates of SNA are outlined and discussed from the perspective of the boundary of SHA, while the accounting links to the aggregates of SNA are presented in Annex B.

The correspondence tables outlined in this annex follow the structure of the SHA 2011 Manual and are built around the tri-axial relationship between health care functions, provision and financing. They distinguish between:

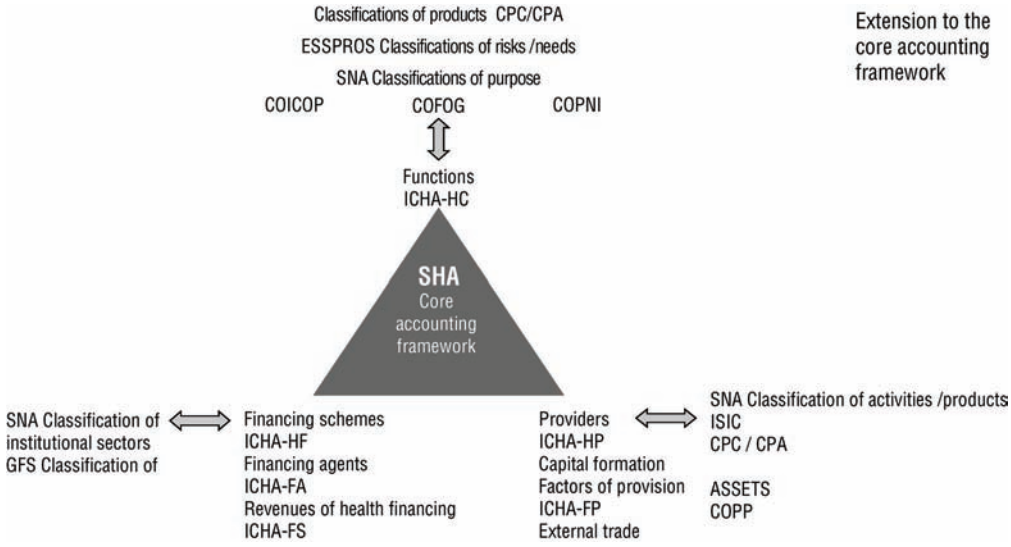
- The functional approach used in SHA (Chapter 5) and that of SNA related to the consumption of health care (description and demarcation in relation to the classification used in ESA/SNA[1], including COFOG, COICOP and COPNI);
- The functional approach used in SHA and ESSPROS (description and demarcations in relation to the classification of health risks/health benefits of ESSPROS;
- The classification of health care providers ICHA-HP (Chapter 6) and the activity classification of the ISIC/NACE related to health care;
- The structure of financing schemes of health care ICHA-HF (Chapter 7) and the institutional sectors of the SNA that correspond with the financing agents (FA) of SHA.

Figure A.1.1 shows in an illustrative way some of the potential linkages that can be made between classifications of the core accounting framework of SHA and international classifications used by other statistical systems that encompass information related to health care expenditure. From SNA perspective, the top of the triangle represents final demand for health care goods and services by residents, while the bottom right illustrates the supply side of health care. Supply and demand are balanced in SNA in the goods and service accounts from the perspective of the whole economy to include imports, exports, accumulation and intermediate use. To balance these flows, the classification of products is used (see Annex E). The second classification used in SNA to structure supply and use is the Industrial classifications of economic activities (ISIC), which classifies enterprises and establishments into groups of industrial branches. Furthermore, to analyse economic behaviour, these enterprises and establishments are classified as mutually exclusive "institutional units" and grouped into "institutional sectors" in the sector accounts of the SNA. The providers in SHA and the institutional sectors of SNA could be linked by grouping the providers according to SNA rules. However, one should note that SHA classifies each financing organisation (except households) into two separate statistical units – providers of administration (HP.7) and financing schemes (HF) – while SNA classifies each organisation as only one institutional unit grouped into one of the five institutional sectors and further subsectors (see the explanation to Table A.1.12).[2]

The bottom left of the triangle shows the potential relationship of the financing interface with the SNA Classification of Institutional Sectors and the Government Finance Statistics (GFS) Classification of Revenues. As outlined later in this annex, the financial schemes (HF) and financing agents (FA) used in SHA are not identical to the financial corporations used in the SNA sector classification (see Table A.1.11). The international guidelines on the GFS (IMF, 2001) are harmonised as much as possible with those of the SNA. Both the GFS and SNA define economic entities in terms of institutional units that are capable of owning assets, incurring liabilities, and engaging in economic activities and transactions with other entities in their own right. These characteristics render institutional units a subject of economic and statistical interest that can be satisfied by the compilation of a full set of accounts, including balance sheets (see Annex B).

The correspondence tables presented in this annex draw attention to international classifications, which can be considered as a minimum structure of expenditures. National statistical systems translate and/or adapt structures from international systems into the national statistical environment in practice. However, while in certain statistical domains

Figure A.1.1. **Correspondence between classifications of the SNA/ESSPROS and SHA**



Source: IHAT for SHA 2011.

national systems may offer more detailed structures than those required within the international classifications framework, in others data feasibility might be more limited for various reasons, including the historical development of statistical systems, different economic and social structures or policy priorities. Therefore, the correspondence tables presented give only a rough guide that might be further developed depending on national conditions.

Health care aggregates of the SNA and ESSPROS and their relation to SHA

Health care aggregates of other statistical systems such as SNA and ESSPROS differ from those of SHA due to the scope of health care goods and services included, the types of transactions selected and the estimation methods used. In the following, a short overview is given about the main deviations between SNA aggregates and SHA. More detailed information is available in the correspondence tables presented later in this annex.

Ten aggregates of SNA and ESSPROS are presented, which show health care consumption, provision and financing based on the compilations of these other two statistical systems. The aggregates are not necessarily different; however, their interpretation varies depending on the chosen perspective. For example, SNA aggregates (1) and (2) of Table A.1.1 present the same SNA aggregate from different perspectives of consumption. The two ESSPROS aggregates (5) of Table A.1.1 and (10) of Table A.1.4 are also identical, except that in the first case the interpretation is related to consumption and in the second case to financing. As the classifications vary according to the perspective or purpose of the classification, the respective aggregates express these different approaches.

SNA and ESSPROS health care aggregates by function (purposes)

Based on the classifications by purpose, SNA allows the compilation of several aggregates related to health care consumption. Table A.1.1 presents four of them: (1) Final consumption expenditure on health, (2) Actual final consumption of health care, (3) Actual

final individual consumption of health care and (4) Actual final collective consumption of health care. Any reflection about the comparability of these SNA aggregates with SHA aggregates should always consider the objectives of the accounts (final consumption vs. actual consumption), the types of transactions involved (purchase of consumption goods and services vs. purchases of capital goods) and the definition of health care (health care vs. non-health care).

Two of them, *i.e.* **(1) Final consumption expenditure of health care** and **(2) Actual final consumption of health care,** are compiled from different perspectives: "who spends" (final consumption expenditure, which relates to the use of disposable income account) and "who consumes" (actual final consumption, which relates to the use of adjusted disposable income account). The aggregates of the two concepts are the same (see Box B.1.1 of Annex B). However, in the first case all health care expenditures incurred by general government are presented as consumption of government. In the second case, all those general government expenditures that are by nature services delivered to individuals are presented as consumption of households. As a consequence, the breakdown of expenditures by purpose remains the same in both aggregates, but they differ in the breakdown of consumption by the institutional sectors (Households, NPISH, General Government). Government and NPISH expenditures of individual consumption are also named "social transfers in kind".[3]

Both aggregates (1) Final consumption expenditure of health care and (2) Actual final consumption of health care deviate from the SHA aggregate "Current health expenditure" due to a different health care boundary, which results in several activities not being covered under the COFOG and COICOP. Besides occupational health care and "remunerated" unpaid household production, the SHA borderlines in relation to social care have to be considered (see Table A.1.1).

The aggregates **(3) Actual individual consumption of health care** and **(4) Actual collective consumption of health care** are sub-aggregates[4] of (2) Actual final consumption of health care. National statistics usually provide further information about the breakdown of (3) Actual individual consumption of health care based on COICOP and actual collective consumption of health care based on COFOG. One should note that some social transfers in kind, accounted under (3), may be receivable by non-residents, for example, emergency medical treatment in a public hospital for a non-resident tourist, but SNA assumes that the figures involved are likely to be very small compared with total social transfers in kind and that all social transfers in kind can be shown as payable to resident households.[5] SHA departs from this assumption and considers as actual individual consumption of households only those transfers in kind that are actually provided to residents and consumed by residents. Therefore, from the viewpoint of the SHA: the aggregates of actual final consumption and final consumption expenditures as well as the sub-aggregates are not identical.[6]

The SNA aggregate P.42 Actual collective consumption of health care covers collective health care services as part of HC.6 Preventive care and HC.7 Governance and health system & financing administration. One should note that some countries classify social health insurance administration under COFOG 10 Social protection, and some under COFOG 01 General administration.

The last health care aggregate discussed here is **(5) In-kind social protection expenditures on Sickness/Health care** based on ESSPROS. This aggregate also differs from

Table A.1.1. **SNA and ESSPROS health care aggregates related to consumption**

No	Aggregate	Statistical system	Compilation	Deviation from SHA
(1)	Final consumption expenditure on health care	SNA	P.31 Individual consumption expenditure on health + P.32 Collective consumption expenditure on health = P31-Housholds 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" unpaid household production in the form of transfer payments (social benefits in cash) for home care of sick, disabled and elderly persons provided by family members 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.
(2)	Actual final consumption of health care	SNA	P.41 Actual individual consumption of health care + P.42 Actual collective consumption of health care = 06 COICOP Households +13.2 COICOP NPISH +14.2 COICOP Government + COFOG 07.5 and 07.6	The SNA aggregate on health does not comprise expenditures covered in categories captured by other purposes, *e.g.* expenditures for private insurance administration. See Tables A.1.5 and A.1.6 for detailed correspondence between HC and COICOP, COFOG.
(3)	Actual individual consumption of health care	SNA	06 COICOP Households +13.2 COICOP NPISH +14.2 COICOP Government	The SNA aggregate includes expenditures reimbursed by private insurance (excluding administration). It includes social transfers in kind as consumption of households while final consumption expenditures cover social transfers in kind under government consumption.
(4)	Actual collective consumption of health care	SNA	COFOG 07.5 and 07.6	The SNA aggregate on collective consumption might deviate from collective consumption in SHA, which encompasses health preventive programmes (part of HC.6), and health system financing/administration (HC.7). Research and development in health (COFOG 07.5) is not recorded under the SHA core framework but as memorandum items in the capital account.
(5)	In-kind social protection expenditures on Sickness/ Health care	ESSPROS	Sickness/Health care benefit in kind	ESSPROS aggregate covers in-kind benefits related to direct provision and reimbursement of health care goods and services although due to different health care boundary, the scope of health care goods and services in ESSPROS is limited as compared to SHA 2011 (*e.g.* SHA includes expenditure related to collective preventive programme, long-term care (health) services provided at home by family members, the latter being recorded under Sickness/Health care benefit in cash. Other ESSPROS functions may comprise expenditure that is included as health care goods and services in SHA 2011.

* SNA 2008 allows P32-NPISH* collective consumption of health. See SNA 2008, p. 598: "It has been recognized that it is possible for NPISHs to have collective consumption though no excessive efforts should be made to try to identify such instances."

Source: IHAT for SHA 2011.

SHA 2011 in the scope of health care goods and services included, as it covers only expenditure directed – via social benefits in kind – to individuals. Consequently, by definition neither out-of-pocket expenditure of households nor expenditure on collective services related to preventive care are covered. Furthermore, it excludes care allowances (cash benefits) in the case of long-term care (health) to households as providers of home care. The breakdown of health care expenditure and the level of information details in both statistical systems vary significantly, so there is not a one-to-one relationship. Both SHA and ESSPROS use the statistical information of financing schemes, although the scope of the schemes is not the same. In ESSPROS, benefits are made through collectively-organised schemes by government and/or any collective agreements, irrespectively of whether they are publicly or privately administered. [See correspondence between the functional

classification (ICHA-HC) of SHA and ESSPROS.] Therefore any individual agreements, *i.e.* private households or individuals who insure themselves solely on their own initiative (*e.g.* voluntary private health insurance, out-of-pocket expenditures) are not taken into account by ESSPROS. A later section of this annex describes in greater detail the correspondence between ICHA-HC and ESSPROS.

The health aggregate of COFOG classifies all types of government outlays for the purpose of health.[7] It comprises the complete set of different public expenditures, like local government expenditures for employees, waste management, energy, depreciation, etc. in public hospitals, purchases of social health insurance funds for private hospital treatment, central government expenditures for gross capital formation, subsidies, property income, securities and shares or equity, loans, capital transfers, as well as social benefits in cash and other current transfers, pharmaceutical expenditures and expenditures for types of medical durables, non-durables and equipment (see Table A.1.2). The expenditure amount exhibited under the category 07 Health of COFOG is bigger than that exhibited under category 14.2 COICOP Government, because the latter captures only expenditures for individual final consumption (see Table A.1.2, "Government outlays on health (COFOG 07)" and "Final consumption expenditure on health (COICOP Government)".

SNA health care aggregates by provider industry

From the perspective of health care provision, the SNA compiles several aggregates based on the ISIC (rev. 4) classification of economic activities, in particular those recorded under category 86 Human health activities, *i.e.* **(6) Output of production of human health activities** at basic prices and **(7) Gross value added of human health activities**. The measure of output presented by the SNA for human health activities according to the borderlines of division 86 of the ISIC encompasses 8610 Hospital activities, 8620 Medical and dental practice activities and 8690 Other human health activities, although each of these items may include non-health activities (provided as secondary activities) or certain services such as cosmetic surgery provided with an aesthetic purpose, which in both cases are excluded from the health care boundary of SHA 2011. On the other hand, the SHA concept is broader than that of the ISIC (division 86), as it relates to several other ISIC classes, *e.g.* 8710 Residential nursing care facilities, 4772 Retail sale of pharmaceuticals, 8412 Regulation of activities of providing health care and 6512 Non-life insurance. In general, the estimate for the human health activities aggregate as defined by ISIC division 86 is less than SHA current health expenditures. Table A.1.10 presents the correspondence between the classification of health care providers ICHA-HP (Chapter 6) and the ISIC activity classification related to health care.

Other deviations result from the fact that the aggregate "Output of production" of SNA includes production for non-residents, while SHA focuses on the consumption of residents. Furthermore, there are different price concepts. Intermediate inputs and final consumption are measured at purchasers' prices, whereas output is measured at either basic prices or producers' prices. In contrast, SHA focuses on purchasers' prices, with some adjustments.

The aggregate **(7) Gross value added of human health activities** at basic prices is the central measure in the SNA, derived as the balancing item in the production account. Gross value added is itself equal to output (valued at basic prices) minus intermediate consumption (valued at purchasers' prices).[8] Gross value added represents the

Table A.1.2. **Government outlays on health (COFOG) according to categories in Austria, 2009 (in million EUR)**

Code	ESA 1995 (general government)	7.0 Health	7.1 Medical products, appliances and equipment	7.2 Outpatient services	7.3 Hospital services	7.4 Public health services	7.5 R&D Health	7.6 Health *n.e.c.*
P.5 +	Gross capital formation +	142.6	–	25.0	63.5	3.5	24.4	26.2
K.2	Acquisitions and disposals of non-financial non-produced assets							
D.1	Compensation of employees	2117.7	0.0	406.0	514.4	178.3	309.5	709.4
D.3	Subsidies	4665.0	23.9	133.9	4456.5	0.8	49.8	
D.4	Property income							
D.62 +	Social benefits other than social transfers in kind	142.6	–	25.0	63.5	3.5	24.4	26.2
D.6311 +	Social security benefits, reimbursements	13769.6	3281.5	3999.3	6328.1	160.7		
D.63121 +	Other social security benefits in kind, for which the service is produced by market producers and purchased by general government units							
D.63131	Social assistance benefits in kind, for which the service is produced by market producers and purchased by general government units							
P.2	Intermediate consumption	836.8	2.3	109.0	244.1	161.3	112.7	207.4
D.29 +	Other taxes on production, payable +	60.9	–	11.4	17.7	4.3	9.3	18.2
D.5 +	Current taxes on income and wealth, payable +							
D.8	Adjustment for the change in the net equity of households in pension funds reserves							
D.7	Social benefits other than social transfers in kind	293.0	12.8	114.8	114.6	42.8	4.3	3.7
D.9	Capital transfers	636.0	–	16.6	615.5	1.1	2.9	
	Government outlays (expenditure =TE) on health (COFOG 07)	22521.6	3320.4	4816.0	12354.5	552.8	512.9	964.9
TE	Total government expenditure (all COFOGs)	143526.7						
P.3	**Final consumption expenditure on health care (COICOP – government)**	15541.2	3283.8	4115.0	6359.4	448.2	368.3	966.6
P.31	Individual government consumption expenditure on health care	13758.2						
P.32	Collective government consumption expenditure on health care	1334.9						
P.3	Final consumption expenditure (COIPCOP - government)	54610.7						

Source: Eurostat database.

Table A.1.3. **SNA Health care aggregates by provider industry**

No	Aggregate	Statistical system	Compilation	Deviation from SHA
(6)	Output of production of human health activities at basic prices (or producers' prices)	SNA	86 ISIC	This SNA aggregate does not cover several activities included in health, *e.g.* retail sales of pharmaceuticals; see Table A.1.10 for detail correspondence between the ICHA-HP and ISIC. Included are health care services utilised by non-residents (exports); not included are imported health care services.
(7)	Gross value added of human health activities at basic prices	SNA	86 ISIC	This SNA aggregate does not cover the value added of several activities included in health, *e.g.* retail sales of pharmaceuticals; see above. See also Chapter 10 and Annex B.

Source: IHAT for SHA 2011.

contribution of labour and capital to the production process. Although the core account of the SHA does not provide any measure of value added, one should be aware that the measure of final consumption in the SNA is also a measure of value added created by economic activities.

The specific SNA health care aggregates, shown in Table A.1.3, are not defined by the classification of purpose, but by the classification of activities. At the level of activities and products, usually the most detailed information can be found in the SNA. Table A.1.7 presents the correspondence between the functional classification of the SHA and the Central Product Classification (CPC) of the SNA.

SNA and ESSPROS health care aggregates by financing side

A further set of specific SNA health care aggregates can be derived for the financing side. To do this, the classifications of purpose in combination with the classification of institutional sectors are relevant.

The SNA exhibits the structure of health care financing ("who spends?") in the breakdown of final consumption expenditures by institutional sectors, households, NPISH and government, together usually expressed as private consumption[9] and the consumption of government.

The SNA aggregate **(8) Household final consumption expenditure on health** corresponds to a large extent with expenditure recorded under several categories of the financing schemes under the SHA 2011 classification, that is. HF.1.1.2 Compulsory private insurance + HF.1.3 Compulsory medical savings accounts + HF.2 Voluntary health care payment schemes + HF.3 Household out-of pocket payment. As by definition, corporations in the SNA do not record consumption, the expenditures of private insurance and medical savings accounts are handled as reimbursements.[10]

Reimbursements[11] of private health insurance are the settlement of a claim by the insurance company, which is treated as a current transfer to the claimant, and as a consequence is included in the SNA aggregate of the individual consumption of households. Therefore, out-of-pocket-financed health expenditures in SHA form a less comprehensive aggregate than household expenditures in SNA. In SHA, the term "Household out-of-pocket payment (HF.3)" includes direct expenditures, excluding cost-sharing and cost-sharing with third-party payers.

The SNA aggregate **(9) Government outlays on health** derived from COFOG 07 is a comprehensive measure of publicly-financed health expenditures. It exhibits all government outlays with the function "health". However, it does not correspond to current health care expenditures financed by governmental schemes (HF.1.1) and social health insurance schemes (HF.1.2.1). This is for three reasons: *i*) the health consumption boundary of COFOG differs from that of SHA, *e.g.* in the personal care services to be included; *ii*) the specific focus of SHA is on the consumption of the resident population; and *iii*) COFOG comprises outlays for transactions of non-consumption purposes as *e.g.* capital formation.

The aggregate (10) In-kind social protection financing of Sickness/Health care of ESSPROS is equal to (5) In-kind social protection expenditures on Sickness/Health care.

Table A.1.4. **SNA and ESSPROS health care aggregates related to financing**

No	Aggregate	Statistical system	Compilation	Deviation from SHA
(8)	Household final consumption expenditure on health	SNA	06 COICOP Households	06 COICOP includes expenditures of households not covered in Household out-of-pocket payment (HF.3) as pre-payments for medical care or pharmaceuticals that are reimbursed by private insurance companies. COICOP 06 is therefore a more comprehensive aggregate. In SNA, the compilation of household expenditures sometimes includes NPISH (02 COPNI).
(9)	Government outlays on health	SNA	07 COFOG	07 COFOG aggregate relates to governmental schemes (HF.1.1) and social health insurance schemes (HF.1.2.1), but includes transactions for non-consumption purposes as capital formation, outlays for non-residents, and scope of services covered.
(10)	In-kind social protection financing of Sickness/Health care	ESSPROSS	1. Sickness/Health care (benefit in kind)	ESSPROS includes governmental schemes (HF.1.1) and social health insurance schemes (HF.1.2.1) as well as compulsory private insurance schemes (HF.1.2.2). ESSPROS aggregate does not include voluntary private insurance (only compulsory) and out-of-pocket payments.

Source: IHAT for SHA 2011.

Correspondence between the functional classifications of SHA and SNA

Overview

The SNA applies several "functional" classifications to the basic transactions of consumption in order to classify these transactions by purpose, as health, education, defence, etc. The main classifications by purpose are:

- The Classification of the Individual Consumption by Purpose (COICOP);
- The Classification of the Functions of Government (COFOG);
- The Classification of the Purposes of Non-profit Institutions Serving Households (COPNI);[12] and
- The Classification of Outlays of Producers by Purpose (COPP).

The first three classifications can be used for partial analysis of consumption of health care. These three classifications are compatible with each other with respect to the health care services and goods covered. However, they refer to different institutional sectors (households, government and NPISH), meaning that the calculation of a total for the whole economy has to consider these differences (SNA 2008, 2.154). The last of these four classifications (COPP) of transactions by purpose of the SNA is used for the classification of expenditures for intermediate consumption, and therefore not presented here. To identify all transactions related to a particular "functional" activity, such as, for example, health, the SNA recommends developing this classification further, outside the central framework in a satellite account. Table A.1.5 gives a general overview of the correspondence between categories of health care in SHA and in the first three SNA classifications mentioned above.

The health parts of the three classifications, COICOP, COFOG and COPNI expenditures, follow similar patterns by structuring expenditures into classes of health care goods and classes of health care services, although they use different codes and levels of detail. It is

also important to note the overlapping between the classifications in Table A.1.5. This is because COICOP has to be able to serve the compilation of consumption following the two approaches: final consumption expenditures and actual final consumption. In the case of final consumption expenditures, the columns (1), (4) and (5) are used, and in the case of actual final consumption expenditures, the columns (1), (2) and (3) and the collective consumption part of column (4). Please note that the intention of Table A.1.5 is to present the relationship between HC and these international classifications of the SNA, but not the relationship of these international classifications with each other. For example, HC.6.1 Preventive care relates to 14.2.8 Public health services with reference to "individual services" (IS), as specified in COFOG 07.4.0, but one also has to consider in the compilation of HC.6.1 the part of expenditure classified under the COFOG Code 07.6.0 Health *n.e.c.* as a preventive type of "collective services" (CS) that can then be mapped with the collective part of the information, education and counselling programmes (IEC).

The COICOP is used to classify the *individual* consumption expenditure not only of households, but also of Non-profit Institutions Serving Households (NPISH) and of General Government:[13]

- Divisions 01 to 12: Individual consumption expenditure of households;
- Division 13: Individual consumption expenditure of NPISH;
- Division 14: Individual consumption expenditure of general government.

The purpose breakdowns within Divisions 13 and 14 of the COICOP replicate the purposes in the classifications for NPISH and general government, that is to say, in COPNI and COFOG respectively. Thus, once the consumption expenditures of NPISH and general government have been classified according to the COPNI and COFOG, the individual consumption expenditures in these two classifications can be transferred directly into Divisions 13 and 14 of the COICOP.

In the health division, the COICOP broadly distinguishes between three groups: medical goods, outpatient services and hospital services. The same holds for the COFOG and COPNI. But the COFOG distinguishes three additional groups: Public health services, R&D Health and Health *n.e.c.*; the COPNI includes three additional groups: Public health services, R&D Health and Other health services.

In all three classifications, there is a quite good correspondence between medical products for outpatients (HC.5) and medical products listed under 06.1 COICOP (households), 02.1 COPNI and 07.1 COFOG, although there is not a perfect match between the HC and the COICOP, COPNI and COFOG.[14] With regard to outpatient and inpatient medical services, the three classifications do not provide subcategories of curative, rehabilitative and preventive services, and are still too aggregated for the purposes of SHA.

COFOG (Health 07)

In the COFOG, government outlays on health are grouped into six groups and 14 classes including expenditure on goods and services provided to *individual* persons and services provided on a *collective* basis. Expenditures on individual services are allocated to groups (07.1) through (07.4); expenditures on collective services are assigned to groups (07.5) and (07.6). Collective health services are concerned with matters such as administration and operation of government agencies engaged in applied research and experimental development

Table A.1.5. **Cross-check of the classification of health care functions (ICHA-HC) with SNA classifications**

ICHA-HC	Title of headings	COICOP Households (1)	COICOP NPISH (2)	COICOP Government (3)	COFOG (4)	COPNI (5)
HC.1	**Curative care**					
HC.1.1	Inpatient curative care	06.3	13.2.7	14.2.7	07.3	02.3
HC.1.2	Day curative care	06.3	13.2.7	14.2.7	07.3	02.3
HC.1.3	Outpatient curative care	06.2	–	–	07.2	02.2
HC.1.3.1	General curative outpatient care	06.2.1	13.2.4	14.2.4	07.2.1	02.2.1
HC.1.3.2	Dental curative outpatient care	06.2.2	13.2.5	14.2.5	07.2.3	02.2.2
HC.1.3.3	Specialised curative outpatient care	06.2.1	13.2.6	14.2.4	07.2.2	02.2.1
HC.1.4	Home-based curative care	06.2.1, 06.2.3	13.2.4, 13.2.6	14.2.4, 14.2.6	0.7.2.1, 0.7.2.3, 07.2.4	02.2.1, 02.2.3
HC.2	**Rehabilitative care**					
HC.2.1	Inpatient rehabilitative care	06.3	13.2.7	14.2.7	07.3	02.3
HC.2.2	Rehabilitative day care	06.3	13.2.7	14.2.7	07.3	02.3
HC.2.3	Rehabilitative outpatient care	06.2.3, 06.2.1	13.2.6, 13.2.4	14.2.6, 14.2.4	07.2.2, 07.2.4	02.2.1 02.2.3
HC.2.4	Rehabilitative home-based care	06.2.3	13.2.6	14.2.6	07.2.4, 07.3.4	02.2.3
HC.3	**Long-term care (health)**					
HC.3.1	Long-term inpatient care (health)	06.3, 12.4.0	13.2.7	14.2.7	07.3, 10.1.2	02.3
HC.3.2	Day cases of long-term care (health)	06.3, 12.4.0	13.2.7	14.2.7	07.3	02.3
HC.3.3	Outpatient long-term care (health)	06.3, 12.4.0	13.2.7	14.2.7	07.2.4	02.2.3
HC.3.4	Home-based long-term care (health)	06.3, 06.2.3, 12.4.0	13.2.7, 13.2.6	14.2.7, 14.2.6	07.2.4, 10.1.1, 10.2.0	02.2.3, 02.3
HC.4	**Ancillary services non-specified by function**					
HC.4.1	Laboratory services	06.2.3	13.2.6	14.2.6	07.2.4	02.2.3
HC.4.2	Imaging services n.s.f.	06.2.3	13.2.6	14.2.6	07.2.4	02.2.3
HC.4.3	Patient transportation n.s.f.	06.2.3, 06.3	13.2.6, 13.2.7	14.2.6, 14.2.7	07.2.4 ,7.3	02.2.3, 02.3
HC.5	**Medical goods non-specified by function**					
HC.5.1	Pharmaceuticals and other medical non–durable goods					
HC.5.1.1	Prescribed medicines	06.1.1	13.2.1	14.2.1	07.1.1	02.1.1
HC.5.1.2	Over-the-counter drugs (OTC)	06.1.1	13.2.1	14.2.1	07.1.1	02.1.1
HC.5.1.3	Other medical non durable goods	06.1.2	13.2.2	14.2.2	07.1.2	02.1.2
HC.5.2	Therapeutic appliances and other medical goods					
HC.5.2.1	Glasses and other vision products	06.1.3	13.2.3	14.2.3	07.1.3	02.1.3
HC.5.2.2	Orthopaedic appliances and other prosthetics	06.1.3	13.2.3	14.2.3	07.1.3	02.1.3
HC.5.2.3	Hearing aids	06.1.3	13.2.3	14.2.3	07.1.3	02.1.3
HC.5.2.4	All other medical durables including medical technical devices	06.1.3	13.2.3	14.2.3	07.1.3	02.1.3
HC.6	**Preventive care**					
HC.6.1	Information, education and counselling programmes		13.2.8	14.2.8	07.4, 07.6	02.4
HC.6.2	Immunisation programmes		13.2.8	14.2.8	07.4, 07.6	02.4
HC.6.3	Early disease detection programmes		13.2.8	14.2.8	07.4, 07.6	02.4

Table A.1.5. **Cross-check of the classification of health care functions (ICHA-HC) with SNA classifications** *(cont.)*

ICHA-HC	Title of headings	COICOP Households (1)	COICOP NPISH (2)	COICOP Government (3)	COFOG (4)	COPNI (5)
HC.6.4	Health condition monitoring programmes		13.2.8	14.2.8	07.4, 07.6	02.4
HC.6.5	Epidemiologic surveillance and risk and disease control programmes		13.2.8	–	07.6	02.4
HC 6.6	Preparing for disaster and emergency response programmes		13.2.8	–	07.6	02.4
HC.7	**Governance and health system & financing administration**					
HC.7.1	Governance and health system administration:	–	13.2.8	–	07.6.0	02.6
HC.7.2	Administration of health financing	12.5.3	13.2.8	–	07.6.0	02.6
HC.9	**Other health care services not elsewhere classified (*n.e.c.*)**					
HC.RI	**Reporting items**					
HC.RI.1	Total pharmaceutical expenditure (TPE)					
HC.RI.2	Traditional, Complementary and Alternative Medicines (TCAM)					
HC.RI.2.1	Inpatient TCAM					
HC.RI.2.2	Outpatient and home-based TCAM					
HC.RI.2.3	TCAM goods					
HC.RI.3	Prevention and public health services					
HC.RI.3.1	Maternal and child health, family planning and counselling	–	13.2.8	14.2.8	07.4	02.4
HC.RI.3.2	School health services	–	13.2.8	14.2.8	07.4	02.4
HC.RI.3.3	Prevention of communicable diseases	–	13.2.8	14.2.8	07.4	02.4
HC.RI.3.4	Prevention of non-communicable diseases	–	13.2.8	14.2.8	07.4	02.4
HC.RI.3.5	Occupational health care	–	–	–	–	–
HC.RI.3.6	All other miscellaneous public health services	–	13.2.8	14.2.8	07.4 ,07.6.0	02.4
HC.R	**Health care-related classes**					
HC.R.1	Long-term care (social)	12.4.0	13.5.0	14.5.0	10.1.1, 10.1.2 10.2.0, 10.7.0 10.9.0	05.1
HC.R.1.1	In-kind long-term social care	12.4.0	13.5.0	14.5.0	10.1.1, 10.1.2 10.2.0, 10.7.0 10.9.0	05.1
HC.R.1.2	Long-term social care cash benefits			14.5.0	10.1.2	
HCR.2	Health promotion with multi-sectoral approach	–	13.6.3	–	05	08.1.0

n.e.c.: not elsewhere classified; n.s.f.: non-specified by function; n.s.k.: not specified by kind.

Source: Updated version of SHA 1.0 Table 9.5 Cross-classification of ICHA-HC and SNA 93 classifications.

related to health (07.5) and those related to formulation, administration, co-ordination and monitoring of overall health policy; plans, programmes and budget, preparation and enforcement of legislation and standards for the provision of health services, including the production and dissemination of general information, technical documentation and

statistics on health (07.6). Activities recorded under COFOG 07.5 R&D Health are not covered by the SHA core account. But, as in SHA, overhead expenses connected with the administration of a group of hospitals, clinics, surgeries, etc., are considered to be individual expenditures and are classified to groups (07.1) through (07.4), as appropriate.

In the following, an overview is given about the six health groups of the COFOG. Information on the correspondence between the functional classification of the SHA (HC) and COFOG as well as possible deviations from SHA is given in Table A.1.6.

The COFOG category 07.1 *Medical products, appliances and equipment,* which comprises three classes 07.1.1 *Pharmaceutical products* (IS), 07.1.2 *Other medical products* (IS) and 07.1.3 *Therapeutic appliances and equipment* (IS), corresponds closely to SHA category HC.5 Medical goods non-specified by function. This COFOG group covers both prescribed and non-prescribed medical goods. They are intended for consumption or use outside a health facility or institution. Such products, when dispensed directly to outpatients by medical, dental and paramedical practitioners or to inpatients by hospitals and the like, are included in *Outpatient services* (07.2) or *Hospital services* (07.3). The COFOG does not distinguish between curative, rehabilitative, long-term care and ancillary services. The compilation of the corresponding SHA subcategories of HC therefore requires additional information.

The category of 07.2 *Outpatient Services* comprises four classes 07.2.1 *General medical services* (IS), 07.2.2 *Specialised medical services* (IS), 07.2.3 *Dental services* (IS) and 07.2.4 *Paramedical services* (IS). These outpatient services may be delivered at home, in individual or group consulting facilities, in 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 dispensed directly to outpatients by medical, dental and paramedical practitioners and auxiliaries. Co-payments for public services are not included. Therefore, additional information on the procedures governing these payments is necessary for SHA data compilation of HC.1.3 and HC.2.3 Outpatient curative and rehabilitative care.

Medical, dental and paramedical services provided to inpatients by hospitals and the like are included in *Hospital services* (07.3), which comprises four classes: 07.3.1 *General hospital services* (IS), 07.3.2 *Specialised hospital services* (IS), 07.3.3 *Medical and maternity centre services (IS)* and 07.3.4 *Nursing and convalescent home services* (IS). The focus is on the corresponding curative and rehabilitative inpatient services (HC1.1) and (HC.2.1) of SHA, rather than on long-term care inpatient services (HC.3.1). In the COFOG, hospitals are defined as institutions that offer inpatient care under the direct supervision of qualified medical doctors. Hospitalisation is defined as occurring when a patient is accommodated in a hospital for the duration of the treatment. It covers the services of military base hospitals, the services of institutions serving old people in which medical monitoring is an essential component, and the services of rehabilitation centres providing inpatient health care and rehabilitative therapy where the objective is to treat the patient rather than to provide long-term support. Hospital day-care and home-based hospital treatment is included in COFOG 07.3, as are hospices for terminally ill persons. Medical centres, maternity centres, nursing homes and convalescent homes also providing inpatient care are recorded under COFOG 07.3.3 and 07.3.4, even if their services are supervised and frequently delivered by staff with lower qualifications than medical doctors. In SHA,

nursing homes and convalescent homes are not classified as hospitals, but as long-term care facilities. COFOG 07.3 does not cover facilities for providing long-term services such as institutions for disabled persons and rehabilitation centres that primarily provide long-term support (10.1.2) and facilities usually out of the SHA boundary, like retirement homes for elderly persons (10.2.0). Neither does it cover payments to patients for loss of income due to hospitalisation (10.1.1). Social long-term care expenditures are reported in COFOG 10 *Social protection*.

Hospital services include medicaments, prostheses, medical appliances and equipment and other health-related products supplied to hospital patients. As under SHA, this COFOG item also includes the non-medical expenditure of hospitals on administration, non-medical staff, food and drink, accommodation (including staff accommodation) and so on.

The group 07.4 *Public health services* of the COFOG comprises only one class 07.4.0 *Public health services* (IS), which includes individual services in the provision of public health services, including: administration, inspection, operation or support of public health services, such as blood bank operation (collecting, processing, storing, shipping), disease detection (cancer, tuberculosis, venereal disease), prevention (immunisation, inoculation), monitoring (infant nutrition, child health), epidemiological data collection, family planning services and so forth; as well as the preparation and dissemination of information on public health matters. In general, this group includes: public health services delivered by special teams to groups of clients, most of whom are in good health, at workplaces, schools or other non-medical settings; public health services not connected with a hospital, clinic or practitioner; public health services not delivered by medically qualified doctors; and public health service laboratories. It excludes: medical analysis laboratories (07.2.4) and laboratories engaged in determining the causes of disease (07.5.0). As a result, this group is not directly comparable with HC.6 *Preventive care* of SHA, as on the one hand it comprises part of administrative services related to overall administration recorded in SHA under HC.7 *Governance and health system & financing administration,* and on other hand it may not include some of the collective preventive services that are recorded under COFOG 07.6 *Health n.e.c.*

The group 07.5 *R&D Health* with the only class 07.5.0 *R&D Health* (CS) is not part of current health expenditures and should not be included in the core accounts, but can be included in the memorandum item R&D in the Capital formation account. Definitions of basic research, applied research and experimental development are given under (01.4) and (01.5) of the COFOG.

The group 07.6 *Health n.e.c.* comprises also only one class 07.6.0 *Health n.e.c.* (CS), which is reserved for collective health services such as the administration, operation or support of activities such as the formulation, administration, co-ordination and monitoring of overall health policies, plans, programmes and budgets; preparation and enforcement of legislation and standards for the provision of health services, including the licensing of medical establishments and medical and paramedical personnel; and the production and dissemination of general information, technical documentation and statistics on health. It includes: health affairs and services that cannot be assigned to (07.1), (07.2), (07.3), (07.4) or (07.5). For the compilation of SHA, it might be necessary to split this group between HC.6 *Preventive care* and HC.7 *Governance and health system & financing administration.*

COICOP

As mentioned above, the structure of the COICOP division 06 *Health* follows a breakdown into groups similar to the COFOG for the individual services. While the first group 06.1 *Medical products, appliances and equipment* comprises exactly the same classes as COFOG, 07.1 *Medical products, appliances and equipment*, the following two groups 06.2 *Outpatient services* and 06.3 *Hospital services* differ in their classes. However, countries might apply more detailed classifications of individual expenditures, *e.g.* in the household budget survey, so that the correspondence between SHA and COICOP shown in Table A.1.6 gives only tentative information.

The second COICOP group 06.2 *Outpatient services* includes three classes: 06.2.1 *Medical services* (S), 06.2.2 *Dental services* (S) and 06.2.3 *Paramedical services* (S). The third group 06.3 *Hospital services* comprises only one class *06.3.0 Hospital services* (S) and no further breakdown in comparison with the COFOG. The services of residential care for elderly persons, institutions for disabled persons and rehabilitation centres providing primarily long-term support are covered under COICOP class 12.4.0 *Social protection* (S). As in the COFOG, no distinction is made between curative and rehabilitative health care.

One special problem related to the COFOG and COICOP is the identification of administrative costs related to public and private insurance financing. In SNA, private health insurance is a part of non-life insurance. The compilation of the output of private insurance, which is relevant for the compilation of administrative costs in SHA, follows the rules set for non-life insurance. The output of the insurance industry is determined in a manner intended to mimic the premium-setting policies of the insurance corporations. The basic method for measuring non-life insurance output is the following: Output equals total premiums earned plus premium supplements less adjusted claims incurred (SNA 2008, 6.185). Further details are provided in Chapter 6 of SNA 2008. In the case of social insurance, the output is determined in the same way as all non-market output as the sum of costs. Administrative records kept by social insurance and private insurance companies usually contain sufficient information to separate transactions on individual consumption and administration. The administration of social and private insurance corresponds roughly to COFOG 07.6 *Health n.e.c.* and COICOP 12.5.3 *Insurance connected with health*.

COPNI

COPNI (Classification of the Purposes of Non-profit Institutions) is used to identify the socio-economic objectives of current transactions, capital outlays and acquisition of financial assets by NPISH. Many of NPISH have a single purpose and therefore can be unambiguously allocated to one of the purposes listed in the classification. Some of them even if broadly defined NPISH – as religious organisation, can perform two types of activities that serve different purposes, for example they can run hospitals and organise religious ceremonies. If it is not possible to identify a separate institutional unit for each purpose, then the NPISH as a whole will have to be assigned to that purpose which predominates in terms of employment or total expenditures. Following SNA 2008, COPNI can normally[15] be assumed to include only individual consumption.

The health division of COPNI is structured similarly to COFOG and comprises six groups: 02.1 *Medical products, appliances and equipment*, 02.2 *Outpatient services*, 02.3 *Hospital services,* 02.4 *Public health services*, 02.5 *R&D Health*, 02.6 *Other health services*. The three classes of the first group 02.1 Medical products follow exactly the structure of COFOG and

Table A.1.6. **Correspondence between classification of health care functions (ICHA-HC) and COFOG and COICOP-Households**

ICHA-HC	Functions	COFOG	COICOP-Households	Comments
HC.1	**Curative care**			
HC.1.1	Inpatient curative care	07.3 Hospital services	06.3 Hospital services	These COFOG and COICOP groups refer to inpatient services. A further split into curative, rehabilitative and long-term care health is required based on additional information.
		07.3.1General hospital services (IS)	06.3.0 Hospital services (S)	HC.1.1 includes stay overnight of non-rehabilitative services and excludes hospital day-care and home-based hospital treatment.
		07.3.2 Specialised hospital services (IS)	As above	SHA splits further into HP.1.2 Mental health hospitals and HP.1.3 Specialised hospitals (other than mental health hospitals).
		07.3.3 Medical and maternity centre services (IS)	As above	SHA includes stay overnight in maternity clinics under HP.1.3 Specialised hospitals; see also RI.3.1 Maternal and child health; family planning and counselling.
		07.3.4 Nursing and convalescent home services (IS)	As above	Rehabilitation centres providing inpatient health care and rehabilitative therapy to be reported under HC.2 in SHA, long-term care (health) under HC.3.
HC.1.2	Day curative care	As above	As above	HC.1.2 includes *e.g.* elective surgery carried out within one day.
HC.1.3	Outpatient curative care	07.2 Outpatient services	06.2 Outpatient services	These COFOG and COICOP groups include outpatient services in hospitals. HC.1.3 requires the separation of outpatient acute and curative services from rehabilitative, ancillary and preventive services.
HC.1.3.1	General curative outpatient care	07.2.1General medical services (IS)	06.2.1 Medical services (S)	SHA excludes under outpatient curative care HC.4.1 Laboratory services + HC.4.2 Imaging diagnosis directly delivered to consumers.
HC.1.3.2	Dental curative outpatient care	07.2.3 Dental services (IS)	06.2.2 Services of dentists (S)	HC.1.3.2 includes dentures except delivery directly to patients, but excluded in COFOG: to be reported under 07.1.3 and in the COICOP under 06.1.3.
HC.1.3.3	Specialised curative outpatient care	07.2.2 Specialised medical services (IS)	06.2.1 Medical services (S)	SHA excludes under outpatient curative care HC.4.1 Laboratory services + HC.4.2 Imaging diagnosis directly delivered to consumers.
HC.1.4	Home-based curative care	07.2.4 Paramedical services (IS)	06.2.3 Paramedical services (S)	The COFOG includes ambulance services under this item.
HC.2	**Rehabilitative care**			
HC.2.1	Inpatient rehabilitative care	07.3.1 General hospital services (IS)	06.3.0 Hospital services (S)	HC.2.1 depends very much on the organisation of rehabilitation in a country; the cases of inpatient rehabilitation are treated either in specialised departments or hospitals; excludes acute services.
		07.3.2 Specialised hospital services (IS)	As above	See above.
		07.3.3 Medical and maternity centre services (IS)	As above	HC.2.1 inpatient rehabilitative care includes maternity convalescent services; preventive care and delivery needs to be separated, see also RI.3.1 Maternal and child health; family planning and counselling.
		07.3.4 Nursing and convalescent home services (IS)	As above	COFOG 07.3.4 Nursing and convalescent home services should include rather curative and rehabilitative care than long-term support
HC.2.2	Rehabilitative day care	As above	As above	The cases of day care rehabilitation are either to specialised departments or to hospitals within the same day
HC.2.3	Rehabilitative outpatient care	07.2.2 Specialised medical services (IS)	06.2.1 Medical services (S)	Rehabilitative outpatient care is rather included under COFOG 07.2.2 and 07.2.4; HC.2.3 excludes HC.4.1 Laboratory services + HC.4.2 Imaging diagnosis directly delivered to consumers

Table A.1.6. **Correspondence between classification of health care functions (ICHA-HC) and COFOG and COICOP-Households** *(cont.)*

ICHA-HC	Functions	COFOG	COICOP-Households	Comments
HC.2.4	Rehabilitative home-based care	07.2.4 Paramedical services (IS)	06.2.3 Paramedical services (S)	See above
		07.3.4 Nursing and convalescent home services (IS)		COFOG 07.3.4 Nursing and convalescent home services should include rather curative and rehabilitative care than long-term support
HC.3	**Long-term care (health)**			Less intensive treatment than in hospital curative care; the COFOG division 10 Social protection and COICOP division 12.4 Social protection might also include expenditures for long-term care (health),
HC.3.1	Long-term inpatient care (health)	07.3.4 Nursing and convalescent home services (IS)	06.3.0; Hospital services (S)	Excludes rehabilitation centres providing inpatient health care and rehabilitative therapy where the objective is to treat the patient rather than to provide long-term support
HC.3.2	Day cases of long-term care (health)	07.3.2 Specialised hospital services 07.3.4 Nursing and convalescent home services (IS)		HC.3.2 has no corresponding item in COFOG and requires special separation of expenditures for day cases of long-term care
HC.3.3	Outpatient long-term care (health)	07.2.4 Paramedical services (IS)		HC.3.3 refers to regular outpatient visits or to the provision of remote monitoring services.
HC.3.4	Home-based long-term care (health)	07.2.4 Paramedical services (IS)		HC.3.4 can involve specialised health care at home and services in support of informal (family or community) care. IADL services are long-term care (social), see HC.R.1.
		10.1.1 Sickness (IS) 10.1.2 Disability (IS)	12.4.0 Social protection (S)	These COFOG and COICOP items might include assistance with daily tasks, but which is in general rather long-term care (social) than (health). They might include also long-term inpatient and day care.
HC.4	**Ancillary services n.s.f.**			HC.4 requires services that only in the case directly delivered to patients to be considered
HC.4.1	Laboratory services non-specified by function	07.2.4 Paramedical services (IS)	06.2.3 Paramedical services (S)	Outpatient medical services of COFOG and COICOP exclude public health service laboratories (07.4.0); laboratories engaged in determining the causes of disease (07.5.0).
HC.4.2	Imaging services n.s.f.	As above	As above	See above
HC.4.3	Patient transportation n.s.f.	07.2.4 Paramedical services (IS)	06.2.3 Paramedical services (S)	Ambulance services operated by hospitals not included in COFOG and COICOP under paramedical services but in expenditures for hospital services
		07.3 Hospital services	06.3 Hospital services (S)	See above
HC.5	**Medical goods non-specified by function**	07.1 Medical products, appliances and equipment	06.1 Medical products, appliances and equipment	Not included in COFOG products directly dispensed by medical doctors to outpatients.
HC.5.1	Pharmaceuticals and other non durable goods			HC.5.1 includes all pharmaceuticals delivered to outpatients except veterinary products
HC.5.1.1	Prescribed medicines	07.1.1 Pharmaceutical products (IS)	06.1.1 Pharmaceutical products (ND)	HC.5.1.1 includes prescribed medicines provided in response to a prescription issued by a licensed medical practitioner or pharmacist; includes as COFOG and COICOP administration, operation or support of the provision of pharmaceutical products
HC.5.1.2	Over-the-counter drugs (OTC)	As above	As above	HC.5.1.2 excludes products of personal care such as those stated in COICOP 12.1 and notably in 12.1.3 class with articles for personal hygiene: toilet soap, medicinal soap, cleansing oil and milk, shaving soap, shaving cream and foam, toothpaste, etc.; beauty products: sunbathing products, etc; other products: sanitary towels, etc.
HC.5.1.3	Other medical non durable goods	07.1.2 Other medical products (IS)	06.1.2 Other medical products (ND)	HC.5.1.3 is comparable with these items of COFOG and COICOP
HC.5.2	Therapeutic appliances and other medical goods	07.1.3 Therapeutic appliances and equipment (IS)	06.1.3 Therapeutic appliances and equipment (D)	COFOG and COICOP includes here dentures: SHA includes dentures in HC.1.3.2, if not directly provided by laboratories to consumers;

Table A.1.6. **Correspondence between classification of health care functions (ICHA-HC) and COFOG and COICOP-Households** *(cont.)*

ICHA-HC	Functions	COFOG	COICOP-Households	Comments
HC.5.2.1	Glasses and other vision products	As above	As above	SHA excludes sunglasses not fitted with corrective lenses
HC.5.2.2	Orthopaedic appliances and other prosthetics	As above	As above	COFOG and COCOP excludes: hire of therapeutic equipment (included in paramedical services)
HC.5.2.3	Hearing aids	As above	As above	SHA reports audiological diagnosis and treatment by physicians under HC.1.3.3; hearing implants if delivered directly by the physician as benefit In-kind under curative care; audiological training under HC.1.3.9.
HC.5.2.4	All other medical durables including medical technical devices	As above	As above	SHA excludes: protective goggles, belts and supports for sport
HC.6	**Preventive care**			
HC.6.1	Information, education and counselling programmes	07.4 Public health services 07.6 Health *n.e.c.* (CS)	Not available	COFOG 07.4 includes individual preventive services. Collective preventive services are part of 07.6 Health *n.e.c.* as monitoring (infant nutrition, child health), epidemiological data collection, family planning services and so forth. As Governance and health system and financing administration is also included in COFOG 07.6 further separation is needed
HC.6.2	Immunisation programmes	As above	As above	Separation only at the level of administrative data possible
HC.6.3	Early disease detection programmes	As above	As above	HC.6.3 includes also ancillary services as diagnostic services and imaging
HC.6.4	Health condition monitoring programmes	As above	As above	See above
HC 6.5	Epidemiologic surveillance and risk and disease control programme	07.6 Health *n.e.c.* (CS)	Not available	In COFOG 07.6 only collective services included: Excluded individual services; in COICOP no items.
HC 6.6	Preparing for disaster and emergency response programmes	07.6 Health *n.e.c.* (CS)	Not available	As above
HC.7	**Governance and health system & financing administration**			
HC.7.1	Governance and health system administration	07.6.0 Health *n.e.c.* (CS)	Not available	SHA involves in this category the general public service component which is part of the government function health COFOG 07.6. However, also the health part of the overall planning and statistical services (as expressed in COFOG 01.3) might be relevant
HC.7.2	Administration of health financing	07.6.0 Health *n.e.c.* (CS)	Not available	See above
		10.9.0 Social protection *n.e.c.* (CS)		COFOG does not classify all relevant expenditures for administration under 07.6.0; one should therefore also check other relevant items.
HC.9	**Other health care services not elsewhere classified**			
Reporting items:				
HC.RI.1	Total pharmaceutical expenditure (TPE)	Not available	Not available	Not available in COFOG, COICOP.
HC.RI.2	Traditional, Complementary and Alternative Medicines (TCAM)	Not available	Not available	Included in other items mentioned above.
HC.RI.2.1	Inpatient TCAM	Not available	Not available	Included in other items mentioned above.
HC.RI.2.2	Outpatient and home-based TCAM	Not available	Not available	Included in other items mentioned above.
HC.RI.2.3	TCAM goods	Not available	Not available	Included in other items mentioned above

Table A.1.6. **Correspondence between classification of health care functions (ICHA-HC) and COFOG and COICOP-Households** *(cont.)*

ICHA-HC	Functions	COFOG	COICOP-Households	Comments
HC.RI.3	Prevention and public health services	07.4.0 Public health services (IS) 07.6.0 Health *n.e.c.* (CS)	Not available	See HC.6 above; includes both individual and collective services; therefore collective preventive care items to be split from COFOG 07.6.
HC.RI.3.1	Maternal and child health; family planning and counselling	07.4.0 Public health services (IS)	06.2.1 Medical services (S)	See above.
HC.RI.3.2	School health services	07.4.0 Public health services (IS)	Not available	See above.
HC.RI.3.3	Prevention of communicable diseases	07.4.0 Public health services (IS)	Not available	See above.
HC.RI.3.4	Prevention of non-communicable diseases	07.4.0 Public health services (IS)	Not available	See above.
HC.RI.3.5	Occupational health care	07.4.0 Public health services (IS) 07.6.0 Health *n.e.c.* (CS)	Not available	COFOG includes only public provided occupational health care as expenditures for Occupational health institute; see also ONS 2004 SHA-Guidelines.
HC.RI.3.9	All other miscellaneous preventive care services	07.4.0 Public health services (IS) 07.6.0 Health *n.e.c.* (CS)	Not available	See above.
Health care related items:				
HCR.1	Long-term care (social)	10.1.2 Disability IS) 10.2.0 Old age (IS) 10.7.0 Social exclusion *n.e.c.* (IS)		• Only benefits in kind, such as assistance with daily tasks provided to persons temporarily unable to work due to sickness or injury (home help, transport facilities, etc.). • Administration of social protection only to be considered with the relevant share.
HCR.1.1	In-kind long-term social care		See above	See above
HCR.1.2	Long-term social care cash-benefits		See above	See above
HCR.2	Health promotion with multi-sectoral approach			Activities under this item are part of various COFOG functions [COFOG, 04 Economic Affairs (various industries); and 06.3 Water supply which includes Supervision and regulation of water purity].

n.e.c.: not elsewhere classified; n.s.f.: non-specified by function; n.s.k.: not specified by kind.

CS: Collective services; IS: Individual services; ND: non-durable goods; SD: semi-durable goods; D: durable goods; S: services.

Note: Research and development is considered as current consumption only when it relates to improvements in the day to day operation of services. It is defined as investment when it refers to innovations leading to additional income and generation of assets such as patents. This means that current expenditure on research and development has been transferred to an item of factors of provision. Following the SNA, the output of research and development should be capitalised as "intellectual property products" except in cases where it is clear that the activity does not entail any economic benefit to its producer (and hence owner) in which case it is treated as intermediate consumption.

Spending on army field hospitals is not included in COFOG 07.3 but is to be included in the SHA functional classification.

Source: IHAT for SHA 2011.

COICOP. The breakdown of the second group 02.2 *Outpatient services* into classes goes in line with COICOP, which means there is one class 02.2.1 Medical services and not two classes as in COFOG distinguishing between general and specialised medical services. The other four groups of COPNI contain only one class.

The correspondence codes between HC and COPNI are listed in Table A.1.5. As COPNI follows the structure of COFOG and COICOP, Table A.1.6 might also be used to get further information about the correspondence of the items.

CPC/CPA

In order to study transactions in goods and services in detail, the SNA uses the Central Product Classification (CPC). Products are goods and services in the terminology of the SNA. The main purpose of the CPC is to provide a framework for the international comparison of statistics dealing with products. In the construction of CPC, the nature of the product and the industry of origin were taken into account. With regard to health care services and goods various categories of the CPC are relevant. Most health care goods and services fall into the division 93 *Human health and social care services* which comprises five classes 931 *Human health services*, 932 *Residential care services for the elderly and disabled*, 933 *Other social services with accommodation* and 934 *Social services without accommodation for the elderly and disabled* and 935 *Other social services without accommodation*. Table A.1.7 gives an overview on the correspondence between the CPC and SHA 2011. The European Classification of Products by Activity (CPA) is the corresponding European classification to CPC.[16] Further information about CPC is presented in Annex E.

Correspondence between classification of health care functions (ICHA-HC) and ESSPROS

ESSPROS aims to provide a comprehensive and coherent description of social protection interventions[17] performed by both public and private bodies that intend to relieve households and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor individual arrangement involved. In practice, various bodies, both government-controlled schemes and those not controlled by government, can be included in the countries' list of social protection schemes; the most frequent of these include:[18]

- Social security funds;
- Central, state and local government agencies;
- Insurance companies (in Denmark, the pension funds running labour market pensions can delegate the administration of these pensions to insurance companies);
- Mutual benefit societies;
- Public or private employers that provide benefits to their current and former employees directly;
- Private welfare assistance institutions and charitable organisations (for instance, the Red Cross).

Consequently, all insurance policies taken out on the private initiative of individuals or households solely in their own interest (voluntary insurance) are excluded. For instance, the payment of a capital sum or an annuity to the holder of a savings account or of voluntary health insurance is not considered to be social protection. SHA is broader on this point, because it includes also individual arrangements, including all household out-of-pocket expenditure as well as those of corporations and NPISH.

Social benefits are broken down by ESSPROS function and by type. The *function* of a social benefit refers to the primary purpose for which social protection is provided, irrespective of legislative or institutional provisions. In other words, the functional breakdown of social benefits reflects all interventions of social protection schemes by grouping them according to the eight types of risks, *i.e.* sickness/health care, disability, old age, survivors, family/children, unemployment, housing and social exclusion. The *type of*

Table A.1.7. **Correspondence between classification of health care functions (ICHA-HC) and CPC**

ICHA-HC	Functions	CPC Code	Title of headings	Comments
HC			**HEALTH**	
HC.1	**Curative care**			
HC.1.1	Inpatient curative care	9311	Inpatient services	HC.1.1 includes stay overnight of non-rehabilitative services and excludes hospital day-care and home-based hospital treatment.
HC.1.2	Day curative care	93119	Other services for inpatients	HC.1.1 includes only day cases of non-rehabilitative services within the same day; *e.g.* elective surgical services 93111for inpatients and gynaecological services for inpatients.
HC.1.3	Outpatient curative care	9312	Medical and dental services	The CPC excludes, like the COICOP and COFOG, Laboratory services (93195 Medical laboratory services) + Imaging diagnosis (93196 Diagnostic-imaging services). SHA excludes only diagnostics directly delivered to consumers.
HC.1.3.1	General curative outpatient care	93121	General medical services	HC.1.3.1 requires separation between curative, rehabilitative and preventive services.
HC.1.3.2	Dental curative outpatient care	93123	Dental services	The CPC includes also dental services delivered in hospitals to inpatients under this item. HC.1.3.2 includes dentures except delivery directly to patients.
HC.1.3.3	Specialised curative outpatient care	93122	Specialised medical services	The CPC excludes Laboratory services + Imaging diagnosis directly delivered to consumers (see above).
HC.1.4	Home-based curative care	93121 93122 93192 93199	General medical services, Specialised medical services Nursing services Other human health services *n.e.c.*	Curative services delivered at home are included in the categories of outpatient medical services. The separation of HC.1.4 needs further information.
HC.2	**Rehabilitative care**			
HC.2.1	Inpatient rehabilitative care	9311 93119	Inpatient services Other services for inpatients	HC.2.1 excludes acute services. The cases of inpatient rehabilitation are referred either to specialised departments or to specialised hospitals.
HC.2.2	Rehabilitative day care	93119	Other services for inpatients	The cases of day care rehabilitation refer either to specialised departments or to hospitals within the same day.
HC.2.3	Rehabilitative outpatient care	93121 93122 93193 93199	General medical services Specialised medical services Physiotherapeutic services Other human health services *n.e.c.*	Rehabilitative outpatient care is not an item of CPC and has therefore to be derived from medical and non-medical rehabilitative services accordingly.
HC.2.4	Rehabilitative home-based care	As above	As above	See above.
HC.3	**Long-term care (health)**			SHA includes under long-term care (health) less intensive care than in hospitals.
HC.3.1	Long-term inpatient care (health)	93210 93301 93303	Residential health care services other than by hospitals; Residential care services for children and for adults suffering from mental retardation, mental health illnesses or substance abuse	HC.3.1 includes only long-term inpatient care (health) with stay overnight and excludes day-care and home-based treatment; no separate item in CPC.
HC.3.2	Day cases of long-term care (health)	93210	Residential health care services other than by hospitals	HC.3.2 only includes day cases of long-term care; no separate item in CPC.
HC.3.3	Outpatient long-term care (health)	93192	Nursing services	HC.3.3 includes personal "body help" type. services (*e.g.* help with ADL, while "assistance or home help" type services (*e.g.* help with IADL) should be separately counted separately as long-term care (social); see also HCR.1 below.
HC.3.4	Home-based long-term care (health)	93192 93199	Nursing services Other human health services *n.e.c.*	HC.3.4 includes ADL services at patient's home; long-term social personal care is reported in SHA as HC.R.1. See above.
HC.4	**Ancillary services n.s.f.**			
HC.4.1	Laboratory services n.s.f.	93195	Medical laboratory services	The CPC might include also services delivered to other providers as "intermediate consumption". HC.4.1 includes only services in the case directly delivered to patients.

Table A.1.7. **Correspondence between classification of health care functions (ICHA-HC) and CPC** *(cont.)*

ICHA-HC	Functions	CPC Code	Title of headings	Comments
HC.4.2	Imaging services n.s.f.	93196	Diagnostic imaging services	See above.
HC.4.3	Patient transportation n.s.f.	93194	Ambulance services	The CPC comprises services involving the transport of patients by ambulance, with or without resuscitation equipment or medical personnel; HC.4.3 includes transportation in conventional vehicles by non-specialised providers, such as taxis when authorised and the costs are reimbursed by health insurance.
HC.5	**Medical goods non-specified by function**			The CPC distinguishes different forms of retail trade 621 Non-specialised store retail trade services; 622 Specialised store retail trade services; 623 Mail order or internet retail trade services; 624 Other non-store retail trade services Medical goods are usually distributed by specialised store retail trade services, therefore only this group is listed below.
HC.5.1	Pharmaceuticals and other non- durable goods	62273	Specialised retail trade of pharmaceutical products	The CPC classifies pharmaceutical products from the perspective of production as defined in "352 Pharmaceutical products".
HC.5.1.1	Prescribed medicines	62273	As above	The CPC makes no distinction in prescribed/non-prescribed.
HC.5.1.2	Over-the-counter drugs (OTC)	62273	As above	SHA excludes products of personal care such as those stated in COICOP 12.1 and notably in the 12.1.3 class with articles for personal hygiene: toilet soap, medicinal soap, cleansing oil and milk, shaving soap, shaving cream and foam, toothpaste, etc.; beauty products: sunbathing products, etc; other products: sanitary towels, etc.
HC.5.1.3	Other medical nondurable goods	62274	Specialised retail trade of Medical and orthopaedic goods	The CPC classifies the production of medical non-durable goods, such as clinic thermometers or bandages, under various headings.
HC.5.2	Therapeutic appliances and other medical goods	62274	Specialised retail trade of Medical and orthopaedic goods	SHA classifies denture in HC.1.3.2 if not delivered directly by denturists.
HC.5.2.1	Glasses and other vision products	62522 87154	Specialised retail trade of Photographic, optical and precision equipment Maintenance and repair services of medical, precision and optical instruments	SHA excludes sunglasses not fitted with corrective lenses.
HC.5.2.2	Orthopaedic appliances and other prosthetics	62274	Specialised retail trade of Medical and orthopaedic goods	
HC.5.2.3	Hearing aids	62274 87154	Specialised retail trade of Medical and orthopaedic goods Maintenance and repair services of medical, precision and optical instruments	SHA excludes under HC.5.2.3 audiological diagnosis and treatment by physicians. (HC.1.3.3) and hearing implants (HC.1, curative care) as well as audiological training covered under outpatient rehabilitation (HC.2.3).
HC.5.2.4	All other medical durables including medical technical devices	62733	Mail order or internet retail trade services	Includes specialised telematic equipment for emergency calls from the patient's home and/or for the remote monitoring of medical parameters.
HC.6	**Preventive care**	91122 9312	Public administrative services related to health care Medical and dental services	The CPC does not include a special class for preventive care; collective preventive care partly included under public administrative services, individual preventive care partly included human health services. HC.6 requires more detailed information
HC.6.1	Information, education and counselling programmes	As above	As above	See above.
HC.6.2	Immunisation programmes	As above	As above	See above.
HC.6.3	Early disease detection programmes	As above	As above	See above.
HC.6.4	Health condition monitoring programmes	As above	As above	See above.

Table A.1.7. **Correspondence between classification of health care functions (ICHA-HC) and CPC** *(cont.)*

ICHA-HC	Functions	CPC Code	Title of headings	Comments
HC.6.5	Epidemiologic surveillance and risk and disease control programme	As above	As above	See above.
HC 6.6	Preparing for disaster and emergency response programmes	As above	As above	See above.
HC.7	**Governance and health system & financing administration**			
HC.7.1	Governance and health system administration	91122 91310	Public administrative services related to health care Administrative services related to sickness, maternity or temporary disablement benefit schemes	SHA includes in this category the general public services that are part of the government function through the overall planning and statistical services.
HC.7.2	Administration of health financing	71322 91310	Health insurance services Administrative services related to sickness, maternity or temporary disablement benefit schemes	For compilation, see Chapter 6 of SNA 2008. Administration is only a part of the premiums paid for private insurance (see ONS 2004, SHA-Guidelines, p. 142).
HC.9	**Other health care services not elsewhere classified (*n.e.c*)**			
Reporting items				
HC.RI.1	Total pharmaceutical expenditure (TPE)	352	Pharmaceutical products	The CPC allows the identification of the whole supply/use of pharmaceuticals in the country, which differs from use by residents.
HC.RI.2	Traditional, Complementary and Alternative Medicines (TCAM)			Included in other items mentioned above.
HC.RI.2.1	Inpatient TCAM			Included in other items mentioned above.
HC.RI.2.2	Outpatient and home-based TCAM			Included in other items mentioned above.
HC.RI.2.3	TCAM goods			Included in other items mentioned above.
HC.RI.3	Prevention and public health services			See HC.6.
HC.RI.3.1	Maternal and child health; family planning and counselling			See HC.6.
HC.RI.3.2	School health services			See HC.6.
HC.RI.3.3	Prevention of communicable diseases			See HC.6.
HC.RI.3.4	Prevention of non-communicable diseases			See HC.6.
HC.RI.3.5	Occupational health care			See HC.6.
HC.RI.3.9	All other miscellaneous preventive care services			See HC.6.
Health care-related items				
HCR.1	Long-term Social Care	9322 9330	Residential care services for the elderly and persons with disabilities; Other social services with accommodation	Only benefits in kind, such as assistance with daily tasks provided to persons temporarily unable to work due to sickness or injury (home help, transport facilities, etc.).
HCR.1.1	In-kind long-term social care			See above.
HCR.1.2	Long-term social care cash-benefits			Cash benefits are not part of CPC.
HCR.2	Prevention with multi-sectoral approach			Private expenses, if any, included in different non-health categories.

n.e.c.: not elsewhere classified; n.s.f.: non-specified by function; n.s.k.: not specified by kind.

Source: IHAT for SHA 2011.

benefit refers to the form in which the protection is provided. These can take many forms; however, in the core ESSPROS system these are limited to benefits in cash, *i.e.* cash payment to protected people, and benefits in kind that include reimbursements of expenditure made by protected people and goods and services directly provided to protected people. A brief description of other ESSPROS functions and their relevance to SHA are presented below in Table A.1.8

Table A.1.8. **Definitions of the functions of social protection (ESSPROS)**

Function	Description	Relevance for SHA
1. Sickness/ Health care	Income maintenance and support in cash in connection with physical or mental illness, excluding disability. Health care intended to maintain, restore or improve the health of the people protected irrespective of the origin of the disorder.	All medical care falls under this function irrespective of the need or risk against which it is provided. For example, specific medical care provided to expectant mothers and disabled persons is included here and not under the Family/children and Disability functions.
2. Disability	Income maintenance and support in cash or kind (except health care) in connection with the inability of physically or mentally disabled people to engage in economic and social activities. All medical care specific to disability is reported under the Sickness/health care function	Long-term care (social): Practical help provided to disabled people to assist them with daily tasks. Home help is included in this category, as well as the payment of an allowance to the person who looks after the disabled person. Furthermore, provision of specific goods and services (other than medical care) and vocational training to further the occupational and social rehabilitation of disabled people are included. These services may be provided in specialised institutions. Medical rehabilitation – such as physiotherapy – is included in the Sickness/health care function.
3. Old age	Income maintenance and support in cash or kind (except health care) in connection with old age.	Long-term care (social) in connection with elderly. This function includes provision of lodging and sometimes board to retired people either in specialised institutions (old people's homes, nursing homes) or staying with families. Assistance in carrying out daily tasks: practical help provided to old people to assist them with daily tasks. Home help is included in this category, as well as the payment of an allowance to the person who looks after an elderly person. Other benefits in kind: miscellaneous goods and services for retired people to enable them to take part in leisure and cultural activities, to travel and/or participate in community life. These include reductions in prices, tariffs and fares for old age pensioners where they are expressly granted for social protection; these other benefits are outside the boundary of SHA.
4. Survivors	Income maintenance and support in cash or kind in connection with the death of a family member.	Not relevant to SHA
5. Family/children	Support in cash or kind (except health care) in connection with the costs of pregnancy, childbirth and adoption, bringing up children and caring for other family members.	Not relevant to SHA
6. Unemployment	Income maintenance and support in cash or kind in connection with unemployment.	Not relevant to SHA
7. Housing	Help towards the cost of housing.	Not relevant to SHA
8. Social exclusion not elsewhere classified	Benefits in cash or kind (except health care) specifically intended to combat social exclusion where they are not covered by one of the other functions.	Social care in relation health care: Rehabilitation of alcohol and drug abusers: treatment of alcohol and drug dependency aimed at reconstructing the social life of the abusers, making them able to live an independent life. The treatment is usually provided in rehabilitation centres or special institutions.

Source: IHAT for SHA 2011.

For the purposes of a mapping exercise between SHA and ESSPROS functions, the benefits in kind recorded under sickness/health care function are of particular relevance. The prevalence of one or other form of benefit in kind depends on the way in which the health care system is organised and how health care goods and services are financed within it. In that respect, the following three main patterns of health care provision can be mentioned:

- Under the indirect system, the social protection scheme provides medical care benefits for protected people by paying all or part of the cost of the medical care supplied by the providers. The patient pays the medical bill, all or part of which is then reimbursed by the social protection scheme. *The benefits therefore take the form of reimbursements*. This pattern of provision is predominant in outpatient medical care and in private hospital care in France and Luxembourg, but can be found elsewhere too, for example in Belgium, and partially in Greece, Cyprus and Switzerland.
- Under the direct system, the institutional unit running the social protection scheme owns, operates and controls the necessary medical facilities and employs the medical, paramedical and administrative staff. In this system *benefits are directly provided to the protected people*. This pattern of provision is typical for inpatient and specialised outpatient medical care in national health services (Denmark, Cyprus Malta, Sweden and United Kingdom) and for some sickness insurance schemes for employees (Spain, Greece);
- In an alternative pattern of provision, *intermediate between the two above* – known as a direct settlement system – the social protection scheme enters into a variety of contracts or agreements with health care providers. The medical care is provided to the beneficiary free or at a co-payment rate by the providing unit (which is not a social protection scheme). The providing unit is then reimbursed by the social protection scheme. This type of benefit is also recorded as directly provided. This mode of provision is typical for primary care practices in most European countries and can be found in the case of hospital care and specialised outpatient medical care in Belgium, Germany, the Netherlands and Austria, but also in other countries (in Bulgaria, the Czech Republic, Estonia, Lithuania, Hungary, Poland, Romania, Slovenia and the Slovak Republic).

The scope of health care goods and service that are covered under the Sickness/health care function includes in particular:

- Services: medical and paramedical services provided by general practitioners, specialists and other health care personnel; laboratory tests and other examinations; dental care; physiotherapy; thermal cures; transport of sick people; preventive treatment such as vaccinations; and accommodation in the case of a stay in hospital or other medical institution. Medical services as defined here cover those services provided within and outside medical institutions.
- Goods: pharmaceutical products; medical prosthesis (optical and acoustical aids; orthopaedic; dental and other prosthesis); and dressings and medical supplies.

Although the mapping between ESSPROS social protection schemes and the HF financing schemes classification is close to a one-to-one relation, divergences appear in the HC classification of functions and the scope of ESSPROS benefits in kind/functions, which differ since the two frameworks have different health care boundaries. With respect to preventive care, the Sickness/Health care function of ESSPROS covers only those preventive measures through which an individual may benefit (for example, a medical check-up).

Contrary to the SHA preventive programmes related to various campaigns that alert the general public to health hazards (for example, smoking, alcohol or drug abuse) are not recorded by ESSPROS. It also does not define a function in the case of occupational accidents and diseases. Statistical data on this type of expenditure are not comparable, as they reflect the definition of an occupational hazard adopted by each country in its own legislation and practice. Furthermore, benefits provided in the event of occupational accidents or diseases may range from sickness cash benefits to health care provision, from rehabilitation benefits to disability pensions. Table A.1.9 gives more detailed information about the correspondence between the functional classification of SHA 2011 and social benefits of ESSPROS, which are broken down by function and by type. It clearly shows that the different approaches used in the two frameworks do not allow for direct mapping between detailed functions of SHA and those of the ESSPROSS aggregated level recorded as social benefits. In order to make such links, it would be necessary to trace background information related to benefits in kind and in cash on the level of each country's national schemes.

Table A.1.9. **Correspondence between classification of health care functions (ICHA-HC) and ESSPROS**

Source: SHA 2011		ESSPROS				Comments
ICHA-HC	Functions	Functions	Code	Description	Type	
HC.1	Curative care	S	1111211/1112211 1111212/1112212	Inpatient health care - Direct provision - Reimbursement	bik	Under these ESSPROS items any type of inpatient medical care (preventive, curative, rehabilitative and LTC) is included; to isolate their value, more detailed information from national schemes is necessary; HC.1.2 Day care hospitalisation is by convention recorded under ESSPROS items for inpatient care; requires additional information at the level of national schemes.
		S	1111222/1112222 1111224/1112224	Outpatient health care - Other direct provision - Other reimbursement	bik	Under these items any type of outpatient medical care (prevention, cure, rehabilitation and LTC) is included, with the exception of expenditure on pharmaceutical products. It includes also medical care provided at home. To isolate the value for HC.1.4 more detailed information from national schemes/ providers is necessary.
HC.2	Rehabilitative care	S	1111211/1112211 1111212/1112212	Inpatient health care - Direct provision - Reimbursement	bik	Under these ESSPROS items any type of inpatient medical care (prevention, cure and rehabilitation) is included. To obtain HC.2.1 requires more detailed information at level of schemes/providers; HC.2.2 Day care hospitalisation is by convention recorded under ESSPROS items for inpatient care.
		S	1111222/1112222 1111224/1112224	Outpatient health care - Other direct provision - Other reimbursement	bik	Under these three items any type of outpatient medical care (prevention, cure and rehabilitation) is included. To obtain HC.2.3 requires more detailed information at level of national schemes/ providers.
		S	As above	As above	bik	HC 2.4 is part of ESSPROS items for outpatient care; To obtain HC.2.4 requires more detailed information at level of schemes/ providers.
		SE	1181202/1182202	Rehabilitation of alcohol and drug abusers	bik	Special item of ESSPROS; separation of rehabilitation requires additional information about type of services at the level of schemes.
HC.3	Long-term care (health)	S	1111211/1112211 1111212/1112212	Inpatient health care - Direct provision - Reimbursement	bik	HC.3 is only partly covered in the sickness/health care function and requires additional information for separation from curative and rehabilitative care.
		D	1121201/1122201	Accommodation	bik	Not directly comparable; in ESSPROS it is likely that more long-term care (social) is included.
		O/A	1131200/ 1132200	Benefits in kind	bik	See above.
		S	1122202/1121202	Home help means-tested non means tested	bik	HC 3.4 is part of ESSPROS items for outpatient care, but might include also expenditures under home care. To obtain HC.3.4 requires more detailed information at level of schemes/providers.

Table A.1.9. **Correspondence between classification of health care functions (ICHA-HC) and ESSPROS** *(cont.)*

Source: SHA 2011		ESSPROS				Comments
ICHA-HC	Functions	Functions	Code	Description	Type	
		D	1122113/1121113	Periodic care allowance	cb	This is a benefit paid to disabled people who need frequent or constant assistance (which might be considered long-term assistance) to help them meet the extra cost of attendance (other than medical care). Therefore the social aspect should be separated. ESSPROS includes care allowances of compulsory long-term care schemes but not voluntary insurance.
		D	1121202/1122202	Assistance in carrying out daily cases	bik	Only relevant in case of connected health services, otherwise social care, see HCR.1.
		OA	1131202/1132202	Assistance in carrying out daily cases	bik	See above HC.3.1 "assistance in carrying out daily task", can also be for inpatient care.
HC.4	Ancillary services (non-specified by function)	S	1111222/1112222 1111224/1112224 1111230/1121204 1112230/1122204	Outpatient health care - Other direct provision - Other reimbursement Other benefits in kind	bik	In ESSPROS laboratory services and diagnostic imaging are not separately recorded. Therefore the categories HC.4.1-HC.4.2 are included under outpatient care (direct provision and other reimbursement). These SHA items require more detailed information from national schemes/providers. Similarly, transport of sick people is a part of medical care (inpatient or outpatient) in ESSPROS, or included under other benefits
HC.5	Medical goods non-specified by function	S	1111221/1112221 1111223/1112223	Outpatient health care: of which: pharmaceutical products - Direct provision - Reimbursement	bik	Under these ESSPROS items pharmaceutical products provided either directly or reimbursed are recorded. However, it is not possible to distinguish between prescribed and OTC medicines.
		S	1111222/1112222 1111224/1112224	Outpatient health care - Other direct provision - Other reimbursement	bik	Therapeutic appliances and other medical goods: The definition of medical care specifies that goods such as medical supplies are considered as goods covered by medical care (and thus might be included under outpatient health care).
HC.6	Preventive care		1111222/1112222	Outpatient health care: Other direct provision non-means-tested and means-tested		Only *individual* preventive care is covered in ESSPROS, usually under outpatient care. Preventive campaigns/collective preventive care are not part of social protection covered by ESSPROS.
HC.7	Governance and health system & financing administration					Administration costs are explicitly recorded only in the core system of ESSPROS by schemes; sometimes schemes providing sickness/health care benefits can also provide other benefits classified under other functions. Administration costs should be split accordingly; administration of private-non-compulsory insurance not included in ESSPROS.
HC.9	Other health care services not elsewhere classified (*n.e.c*))					
Reporting items						
HC.RI.1	Total pharmaceutical expenditure (TPE)					Not available in ESSPROS
HC.RI.2	Traditional, Complementary and Alternative Medicines (TCAM)					Not available in ESSPROS

Table A.1.9. **Correspondence between classification of health care functions (ICHA-HC) and ESSPROS** *(cont.)*

Source: SHA 2011		ESSPROS				Comments
ICHA-HC	Functions	Functions	Code	Description	Type	
HC.RI.3	Prevention and public health services according to SHA 1.0)	S	1111222/1112222 1111224/1112224	Outpatient health care - Other direct provision - Other reimbursement	bik	See HC.6 above; collective preventive care not included in ESSPROS, *e.g.* anti-smoking campaigns, health education campaigns, etc. Individual preventive care, services of genetic counselling related to mother and child health (HC.RI.3.1) or activities that are related to individual screening, immunisation, and vaccination can be included under core system or under other sickness/health care functions, therefore their separation requires detailed information on the level of national schemes. School health services are often in the educational budget of governments and are therefore often not included in ESSPROS Screening, immunisation, vaccination activities: separation requires detailed information from schemes; Function for the event of occupational accidents and diseases is not separately defined in ESSPROS; therefore either covered in the core system or under other sickness/health care or disability depending on the country's special regulations.
		F/C	1151200/1152204	Other benefits in kind	bik	Difficult to separate health issues in ESSPROS from this item; Family planning services are included here but this item also includes holiday and leisure centres, miscellaneous goods – so social not health.
		F/C	1151200/1152204	Other benefits in kind	bik	Difficult to separate health issues in ESSPROS from this item; Family planning services are included here but this item also includes holiday and leisure centres, miscellaneous goods – so social not health.
Health care related items						
HCR.1	Long-term Social Care	D OA	1121201/1122201 1131201/1132201	Accommodation	bik	ESSPROS contains comprehensive information about social care but in a different structure; therefore, analysis at the level of national schemes is necessary. In-kind long-term care is not directly comparable, see above.
		D OA	1121202/1122202 1131202/1132202	Assistance in carrying out daily cases	bik	Should be included, as it refers to help to assist in daily tasks.
		D	1121203/1122203	Rehabilitation	bik	ESSPROS includes items other than medical rehabilitation, *e.g.* vocational rehabilitation

bik = benefits in kind; cb = cash benefits.

n.e.c.: not elsewhere classified; n.s.f.: non-specified by function; n.s.k.: not specified by kind.

D = Disability; F/C = Family/Children; OA = Old age; S = Sickness/Health care; SE = Social exclusion.

Correspondence between the classification of health care providers (ICHA-HP) and ISIC

In SHA, all statistical units are classified in the HP-classification into groups which deliver health care services and goods or which provide insurance or administration. The consumption of services mirrors the delivery of services. Chapter 6 outlines the classification rules for ICHA-HP. Table A.1.10 which shows the correspondence between the ICHA-HP health care provider classification and the economic classification of providers by the ISIC/NACE highlights the differences in the principal activity used in these two classifications.[19]

Most activities of health care providers fall into ISIC division 86 *Human health activities,* which includes only three classes 8610 *Hospital activities*, 8620 *Medical and dental practice*

activities and 8690 *Other human health activities*. The NACE split the second group further into 86.21 *General medical practice activities*, 86.22 *Specialist medical practice activities* and 86.23 *Dental practice activities*.

Several issues need to be considered when comparing provider units and financing units with ISIC/NACE. First, the production value of provider units, *e.g.* hospitals (ISIC 8610), does not usually correspond exactly to the provision of health care. Second, the definition of the economic/institutional units, *e.g.* other health care providers (ISIC 8690), does not necessarily correspond with ICHA-HP. Third, the classification of economic agents/ institutional units in the SNA is different.[20] In the SNA, institutional units are created using the main activity principle. This means that based on the activities performed by any economic unit, the most important activity (in terms of output share, production process or the use of inputs or any combination of these criteria) determines the classification of that unit in the ISIC or NACE classification. As a consequence of this main activity principle, economic units with dominant non-health care activities are considered to be outside the health care branch and are consequently not included in the production value of the units classified in ISIC/NACE 86 (human health activities).

Because of the very broad scopes of the three classes of ISIC, further information from national statistics are required in order to be able to classify providers properly in SHA. Many health care providers are self-employed health care professionals: the corresponding international classification of health care professionals is ISCO. As in ambulatory care, a wide variety of informal and less-than-fully-qualified health care providers might exist in many countries. SHA 2011 recommends that these categories should be recorded in accordance with their qualification, following the rules of ISCO 08. Therefore, Table A.1.10 Correspondence between ICHA-HP – ISIC also refers to the relevant ISCO Codes.

Table A.1.10. **Correspondence between classification of health care providers (ICHA-HP) and ISIC**

Provider code *SHA 2011*	Type of provider	ISIC Rev 3	ISIC Rev 4	Categories	Comments
HP.1	**Hospitals**				Comparable definition
HP.1.1	General hospitals	8511	8610	Hospital activities	The ISIC does not distinguish the type of hospital activity: general, mental or other specialised activity.
HP.1.2	Mental health hospitals	8511	8610	Hospital activities	See above.
HP.1.3	Specialised hospitals (other than mental hospitals)	8511	8610	Hospital activities	See above.
HP.2	**Residential long-term care facilities**				The ISIC includes also establishments with dominant social characteristics in Division 87 *Residential care activities.*
HP.2.1	Long-term nursing care facilities	8519/ 8531	8710	Residential nursing care facilities	Comparable definition between the ISIC and SHA.
HP.2.2	Mental health and substance abuse facilities	8519/ 8531	8720	Residential care activities for mental retardation, mental health and substance abuse	Comparable definition between the ISIC and SHA.
HP.2.9	Other residential long-term care facilities		8730/ 8790	• Residential care activities for the elderly and disabled • Other residential care activities	Not directly comparable; ISIC 8730 and 8790 includes residential facilities where medical treatment is not an important element.

Table A.1.10. **Correspondence between classification of health care providers (ICHA-HP) and ISIC** *(cont.)*

Provider code *SHA 2011*	Type of provider	ISIC Rev 3	ISIC Rev 4	Categories	Comments
HP.3	**Providers of ambulatory health care**				
HP.3.1	Medical practices	8512	8620	Medical and dental practice activities	Comparable definition between the ISIC and SHA, but may include also ambulatory health care centres, see HP.3.4.
HP.3.1.1	Offices of general medical practitioners	8512	8620	Medical and dental practice activities	See ISCO 08: 2211 Generalist medical practitioners.
HP.3.1.2	Offices of mental medical specialists	8512	8620	Medical and dental practice activities	See ISCO-08: 2212 Specialist medical practitioners.
HP.3.1.3	Offices of medical specialists (other than mental medical specialists)	8512	8620	Medical and dental practice activities	See ISCO-08: 2212 Specialist medical practitioners.
HP.3.2	Dental practices	8512	8620	Medical and dental practice activities	See ISCO-08: 2261 Dentists.
HP.3.3	Other health care practitioners	8519	8690	Other human health activities	This ISIC item compromises all activities for human health not performed by hospitals, medical doctors or dentists. See ISCO 08: 2221 Nursing professionals, 2222 Professional midwife, 3230 Traditional and complementary medicine associate professionals, 3255 Physiotherapy technicians and assistants, 3259 Health associate professionals *n.e.c.*
HP.3.4	Ambulatory health care centres				
HP.3.4.1	Family planning centres	8519	8620	Medical and dental practice activities	ISIC item comprises family planning centres providing medical treatment on outpatient basis, such as sterilisation and termination of pregnancy, without accommodation; *e.g.* fertility clinics.
HP.3.4.2	Ambulatory mental health and substance abuse centres	8519	8620 8690	Medical and dental practice activities Other human health activities	Outpatient detoxification centres, drug addiction centres, mental health centres etc., without medical doctors providing services.
HP.3.4.3	Free-standing ambulatory surgery centres	8519	8620 8690	Medical and dental practice activities Other human health activities	Medical Centres primarily engaged in providing surgical and not conservative services.
HP.3.4.4	Dialysis care centres	8519	8620 8690	Medical and dental practice activities Other human health activities	If not included in hospitals, *e.g.* centres of nephrologists with dialysis units.
HP.3.4.9	All other ambulatory multi-speciality centres	8519/ 8531	8620 8690	Medical and dental practice activities Other human health activities	Multi-speciality outpatient polyclinics.
HP.3.5	Providers of home health care services	8519/ 8531	8690/ 8810	Other human health activities Social work activities without accommodation for the elderly and disabled	See ISCO 08: 0322 Nursing and midwifery associate professionals; 5322 Home-based personal care workers.
HP.4	**Providers of ancillary services**				
HP.4.1	Providers of patient transportation and emergency rescue		8690	Other human health activities	The ISIC item includes ambulance transport of patients by any mode of transport including airplanes. These services are often provided during a medical emergency: not included is transportation by taxis; see ISCO 08: *e.g.* 3258 Ambulance workers.

Table A.1.10. **Correspondence between classification of health care providers (ICHA-HP) and ISIC** *(cont.)*

Provider code *SHA 2011*	Type of provider	ISIC Rev 3	ISIC Rev 4	Categories	Comments
HP.4.2	Medical and diagnostic laboratories	8519	8690	Other human health activities	The ISIC includes X-ray laboratories and other diagnostic imaging centres as well as blood analysis laboratories. Medical and diagnostic laboratory activities for inpatients are included under ISIC 8610 hospital services.
HP.4.9	Other providers of ancillary services	8519	8690	Other human health activities	HP.4.9 comprises other providers of ancillary services not explicitly listed above
HP.5	**Retailers and other providers of medical goods**				
HP.5.1	Pharmacies	5231	4772	Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles in specialised stores	The ISIC also includes retail sale of medical and orthopaedic goods, perfumery and cosmetic articles. See ISCO 08: 2262 Pharmacists, 3213 Pharmaceutical technicians and assistants.
HP.5.2	Retail sellers and other suppliers of durable medical goods and appliances	5239	4773	Other retail sale of new goods in specialised stores	ISIC 4773 also includes *e.g.* retail sale of watches, clocks and jewellery, etc. See also ISIC 3313: Repair of electronic and optical equipment included.
HP.5.9	All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	5231/ 5239	4772/ 4773	See above	See above.
HP.6	**Providers of preventive care**	7512	8412	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security	ISIC division 84 includes activities of a governmental nature that are normally carried out by the public administration, including the enactment and judicial interpretation of laws and their pursuant regulation; the administration of programmes based on them; legislative activities; taxation.
HP.7	**Providers of health care system administration and financing**				
HP.7.1	Government health administration	7512	8412	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security	The ISIC also includes other public programs, *e.g.* education, culture, sport, recreation, environment, housing and social services.
HP.7.2	Social health insurance agencies	7530	8430	Compulsory social security activities	Social security, workers compensation, unemployment insurance and similar social welfare programs.
HP.7.3	Private health insurance administration agencies	6603	6512	Non-life insurance	The ISIC also includes *e.g.* travel insurance, property insurance, motor, marine, aviation and transport insurance, pecuniary loss and liability insurance.
HP.7.9	Other administration				
HP.8	**Other secondary health care providers**				
HP.8.1	Households as providers of home health care	9700	9820	Undifferentiated service-producing activities of private households for own use	Only to be considered in the case of paid services (*e.g.* through cash allowances for LTC)

Table A.1.10. **Correspondence between classification of health care providers (ICHA-HP) and ISIC** *(cont.)*

Provider code *SHA 2011*	Type of provider	ISIC Rev 3	ISIC Rev 4	Categories	Comments
HP.8.2	All other industries as secondary provider of health care				This class of SHA might include a wide set of industries with health care as a secondary industry
HP.8.9	Rest of the economy				This class of SHA comprises social care providers and establishments that promote health with a multi-sectoral approach but do not provide health care services.
		8519/ 8531	8730 8790 8810/ 8890	Residential care activities for the elderly and disabled Social work activities without accommodation	Long-term social care providers.
			7120	Technical testing and analysis	Testing activities in the field of food hygiene; testing and measuring environmental indicators: air and water pollution etc; periodic road-safety testing of motor vehicles.
HP.9	**Rest of the world**				

Correspondence between the Classification of Financing Schemes (ICHA-HF) and institutional sectors of the SNA

As mentioned above, the structure of health care financing is shown in SNA from an institutional perspective by the breakdown of final consumption based on the three institutional sectors: households, NPISH and government.[21] In SHA 2011, the ICHA-HF Classification of Financing Schemes provides a classification for health care expenditures from the financing side. ICHA-HF is following a concept of schemes that differs from the institutional sectors of SNA. In SHA, the following criteria have been selected for the classification of schemes: a) the legal basis of the financing scheme, b) the mode of participation, c) the basis for benefit entitlement, d) the benefits (covered package; coverage of services), e) the method of raising funds, and f) the mechanism and extent of the pooling and re-allocation of funds. Further details are given in Chapters 7and 8.

Users and compilers should be aware of the connection between schemes and institutional sectors. Each statistical unit of SHA, or economic agent, can be aggregated into institutional groups, in SNA institutional sectors (see Table A.1.9). One should note:

- Consumers may in certain circumstances be at the same time providers of home health care;
- Financing schemes (or the financing agents managing them) are providers of administration.

As the classification of statistical units of health care providers includes all provider units and financing units in the universe of health accounts, this allows creating a mutually exclusive classification of economic units. Also, all statistical units of SHA can be classified by industries (ISIC/NACE, see Table A.1.10 herein).

There are three criteria used in SNA to classify institutional units – asset and liabilities, activities and transactions – which must together form an institutional unit. The corporate enterprise is a typical example. It has assets and liabilities, engages in production and sells to other enterprises. In contrast to SNA, in SHA, ownership and control do not play a prominent role in the classification of health care providers and financing schemes. The link to the institutional sectors of SNA can therefore provide useful additional information,

e.g. the involvement of NPISH. A good example is the Classification of Financing Schemes by their corresponding institutional structure, the financing agents (FA), and the further classification into the SNA institutional sectors (see Table D.1.11 and Annex D).

As mentioned above, SNA exhibits the structure of financing in the breakdown of final consumption expenditures by the three institutional sectors: General government (S.13), Households (S.14) and NPISH (S.15). The financing by non-financial corporations (S.11) and financial corporations (S.12) via reimbursements of household expenditures are integrated into households (S.14) in SNA (see Table A.1.11). SHA provides a more complete picture of "who spends" by disentangling the health care expenditures into out-of-pocket insurance and reimbursements by private insurance (*e.g.* Preferred Provider Organisations (PPOs) with private insurance[22] or voluntary private insurance). In the case where government controls the rates of contributions and benefits of insurance schemes, or if it routinely makes up any shortfall in scheme funds, the scheme would be classified under the general government sector (S.13) in SNA. For example, the statutory health insurance funds of France and Germany belong to the institutional sector S.13 General Government, which corresponds with FA.1 General Government in SHA.[23] The same holds for Medicare in the United States. In contrast, Private and Non-Profit Health Plans operating in the United States, which are classified as voluntary insurance HF.2.1 in SHA, belong to the institutional sector S.12 Financial corporations in SNA. This item corresponds with FA.2 Insurance corporations in SHA 2011. The same holds for Compulsory Sickness Funds in Switzerland because their premium rates vary and are not income based, members can change funds, and government does not own the funds. The complexity of financing arrangements in health makes the allocation of financing schemes sometimes not easy particular if a scheme is engaged in different activities as health care provision and health care financing and related to different financing agents.

Table A.1.11. **Correspondance between classification of financing schemes (ICHA-HF) and institutional sectors of SNA (examples)**

	Institutional sectors of SNA				
	Non-financial corporations (S.11) FA.3	Financial corporations (S.12) FA.2	Consumption in SNA		
			Households (S.14) FA.5	NPISH (S.15 FA.4)	General government (S.13)FA.1
Financing schemes of SHA 2011					
Governmental schemes (HF.1.1)					Government health administration (HF.1.1)
Compulsory contributory schemes (HF.1.2, HF.1.3)		Medical savings accounts (HF.1.3)			Social health insurance (HF.1.2)
Private insurance (HF.1.2.2 and HF.2.1)		Compulsory private insurance (HF.1.2.2) Voluntary private insurance (HF.2.1)			
NPISH financing schemes (HF.2.2) Enterprise financing schemes (HF.2.3)	Preferred provider organisations with private insurance (HF.2.3.2)	NPISH financing schemes (HF.2.2)			
Households (HF.3)			Household out-of-pocket payment (HF.3)		

Source: IHAT for SHA 2011.

It is not just financing schemes that can be presented using the analytical capacity of the institutional sector classification of SNA, but also health care providers (see Table A.1.12). In many countries a large share of primary providers are part of the institutional sector "Non-financial corporations" (S.11). The grouping of providers into institutional sectors is a precondition of sector accounts, which are outlined in Annex B. Each provider can relate only to one institutional unit in SNA. Chapter 4 of SNA 2008 provides a detailed guide to sectoring institutional units. For example, hospitals, whether public or private, are usually classified under Non-financial corporations (S.11) in the SNA, because most services are provided on market rules. Units supplying health services on a non-market basis remain an integral part of the local government unit to which they belong (S:13). As already mentioned, institutional sectors aim to support the analysis of economic behaviour as provision, consumption, financing, income redistribution or capital accumulation. They are also used to study the public and private mix of the economy. For example, the output measurement of the UK National Accounts distinguishes four private sectors (private non-financial corporations, private financial corporations, households, NPISH) and three public sectors (public corporations, central government and local government). Therefore, for a national analysis of the health economy, one might further subsector the institutional sectors.

Table A.1.12. **Correspondence between classification of health care providers (ICHA-HP) and institutional sectors of SNA (examples)**

Health care providers of SHA 2011	Institutional sectors of SNA				
	Non-financial corporations (S.11)	Financial corporations (S.12)	Households (S.14)	NPISHs (S.15)	General government (S.13)
Primary providers (HP.1-HP.6)	Offices of doctors (HP.3.1), pharmacies (HP.5.1). private hospitals (HP.2); Laboratories (HP.4.2)			Non-profit general hospitals (HP.1.1), ambulances (HP.4.1) etc.	Public university hospitals (HP.1) Public health institute (HP.6)
Health care system administration and financing (HP.7)		Private health insurance administration (HP.7.3) Non-profit insurance plans (HP.7.3, HP.7.9)			Government-funded health administration (HP.7.1) Social health insurance administration (HP.7.2)
Households (HP.8.1)			Households as home health care providers (HP.8.1)		
Other secondary health care providers (HP.8.2)			All other industries as secondary providers of health care (HP.8.2)		
Rest of the economy (HP.8.9)				Social care providers (HP.8.9)	

Source: IHAT for SHA 2011.

Notes

1. SNA 93 includes four classifications of expenditure according to purpose (formerly called functional classifications).
2. The reason for the different approaches of SHA and SNA is that SHA is interested in showing the total outlays on health care spent by insurance, while SNA compiles productive output, which is defined by the following formula to calculate output: Actual premiums earned plus premium

supplements minus adjusted claims incurred, where adjusted claims are estimated from past experience in order to eliminate volatile variations in claims (SNA 2008, 17.27).

3. "The whole of individual consumption of general government is treated as social transfers in kind in the redistribution of income in kind account and in the use of adjusted disposable income account."(SNA 2008, 9.95).

4. SNA paragraph 2.104: "Actual final consumption of households covers goods and services which are effectively available for individual consumption by households, regardless of whether the ultimate bearer of the expense is government, NPISHs or households themselves. Actual final consumption of government and NPISHs is equal to consumption expenditure less social transfers in kind, or, in other words, collective consumption."

5. See SNA 2008, 9.16.

6. In SNA, actual collective consumption (P.42) equals final collective consumption (P.32) in SNA by definition which means "who consumes" equals "who spends" for collective services. In SHA, the concepts "who consumes" and "who spends" might lead to different figures. Take, for example, administrative costs for the treatment of foreigners in domestic hospitals, which should be subtracted in SHA, because the dominant perspective of SHA is the consumption by residents.

7. For the detailed list of all categories of transactions covered by the COFOG, see UN (2000), Table 2.1.

8. When the consumption of fixed capital is additionally deducted, the result is net value added.

9. The individual consumption expenditure of NPISH is usually integrated into the final consumption expenditure of households.

10. In SNA, no final consumption is recorded for corporations, because corporations are not considered to be final users of goods and services, except for capital products (see SNA 2008, A4.16).

11. "A special case of benefits payable in kind is that of reimbursements, when the household initially makes a cash outlay but the government reimburses some or all of the expense. For example, when a payment is made by an employee or other member of a resident household for health or education benefits and these are subsequently reimbursed by government, they are not shown as a social insurance benefit and thus as part of compensation of employees but as part of the expenditure by government on health services provided to individual household members. The expenditure by government on individual services is part of government final consumption expenditure and not part of household final consumption expenditure nor of compensation of employees" (SNA 2008, 8.104).

12. By definition, the other two institutional sectors of the SNA – non-financial corporations and financial corporations – cannot consume.

13. Individual consumption expenditures are those that are made for the benefit of individual persons or households. All consumption expenditures by households are defined as individual; COICOP Divisions 01 through 12 identify the purposes for which these expenditures are made; All consumption expenditures of NPISH are also treated, by convention, as being for the benefit of individual households; COICOP Division 13 identifies the purposes for which the expenditures of NPISH are made; but, only some of the consumption expenditures of general government are defined as individual (COICOP Division 14).

14. The corresponding codes for the COICOP (NIPSH) are 13.2.1, 13.2.2, 13.2.3; for the COICOP (government) 14.2.1, 14.2.2, 14.2.3.

15. "It is possible for NPISH to produce collective services. For example a privately funded non-profit institution may undertake medical research and make its results freely available. However, unless such activities are evident and quantifiable, the assumption can be made that the expenditure of NPISH is on individual goods and services only" (SNA 2008, 9.107).

16. The classification of production activities used in SNA, which is ISIC (in Europe NACE), is closely related to the CPC, or CPA and so one might try to link the items of HCxHP to CPC/CPA. Norway and Portugal have tried to build up correspondence tables between CPC/CPA and HPxHC. In Norway, for example, the classification of products consists of a six-digit code. One can tell by the product number the type of service, the producer of the service, and to some extent the financing source. The CPA product classification combined with data on purpose, also from the national accounts, is the basis for the mapping from Norwegian National Accounts to SHA. For each and every specific combination of product by purpose there is a link to a specific HC, HF and HP. This code list is established as an integral part of the technical framework of the system of Norwegian National Accounts, and the mapping is carried out within this framework. For details see Brændvag (2008).

17. The interventions cover the financing of the benefits and related administrative costs, as well as the actual provision of benefits.
18. See the ESSPROS Manual, Eurostat (2008).
19. The NACE is the European Classification of Economic Activities; it is derived from the ISIC, in the sense that it is more detailed than the ISIC. The ISIC and NACE have exactly the same items at the highest levels, while the NACE is more detailed at lower levels.
20. Several national studies have tried to match the activity classifications used by SNA and SHA. A comparison between the activities of the NAICS and the US NHEA can be found in Hartman *et al*. (2010), Table 4.
21. By definition, corporations do not consume.
22. A PPO is a medical plan where coverage is provided to subscribers through a network of selected health care providers, although in some cases subscribers may go outside the network and pay a larger share of the cost (see CMS, 2010).
23. Following the Eurostat Manual on Government Deficit and Debt, the institutional subsector "social security funds (S.1314)" includes all central, state and local institutional units whose principal activity is to provide social benefits and which fulfil each of the following two criteria: 1) by law or by regulation certain groups of the population are obliged to participate in the scheme or to pay contributions; 2) general government is responsible for the management of the institution in respect of the settlement or approval of the contributions and benefits independently from its role as supervisory body or employer.