Consolidated quality report on healthcare expenditure and financing statistics

2020 edition

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1 Introduction

Article 8 of the Regulation (EC) No 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work requires Member States to transmit every five years to Eurostat a report on the quality of data. The starting date of the reporting obligation is the entry into force of each implementing Commission Regulation. The Commission Regulation (EU) 2015/359 of 4 March 2015, which entered into force on 27 March 2015, is the implementing Regulation as regards statistics on healthcare expenditure and financing. Thus, national quality reports for healthcare expenditure and financing statistics (System of Health Accounts) should be published at the latest on 27 March 2020.

Following the submission of national quality reports, Eurostat is required to produce a consolidated report summarising the results of the participating countries (EU Member States, EEA/ EFTA countries/ and candidates and potential candidates) and an overall quality assessment of the health expenditure data collection.

Quality report coverage

This quality report covers 2014 to 2016 reference years and concerns healthcare expenditure data provided by EU Member States, EEA/EFTA countries and one potential candidate country (BA)

1.1.The System of Health Accounts

The central concept of the System of Health Accounts (SHA) is the consumption of health care goods and services. The System of Health Accounts - SHA 2011 released in October 2011 is a statistical reference manual giving a comprehensive description of the financial flows in health care. It provides a set of revised classifications of health care functions, providers of health care goods and services and financing schemes. The SHA classifications build on common concepts, boundaries, definitions and accounting rules for measuring consumption of health care goods and services. The use of SHA clearly enhances the coherence and comparability of health care expenditure statistics over time and between countries.

SHA is a tri-axial system in which the financing, provision and consumption dimensions are covered by the ICHA (International Classification for Health Accounts): Health Care Functions (HC), Health Care Providers (HP), Health Care Financing Schemes (HF), Revenues of Health Care Financing Schemes (FS), Factors of Health Care Provision (FP) and Capital (HK).

Data are collected through the joint health accounts questionnaire (JHAQ) that countries submit to Eurostat during the annual data collection exercise. For compiling the JHAQ, countries use data from their national health account registers, which comprise but are not limited to data based on different statistical sources:

- specific surveys performed for healthcare activities;
- household budget survey (HBS);
- administrative data sources (registers);
- data collected for the purpose of National Accounts;

- data information systems available in health (and other) ministries / departments as well as other agencies involved in health care.

The different sources may lead to differences in the coverage of time series, data validity, reliability, and comparability. Furthermore, it may not always be possible to have the health care system being consistently defined across data sources.

1.2.Legal basis

Regulation (EC) No 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work

Commission Regulation (EU) 2015/359 of 4 March 2015 implementing Regulation (EC) No 1338/2008 of the European Parliament and of the Council as regards statistics on healthcare expenditure and financing.

Data collection takes place in agreement with the Organization of Economic Co-operation and Development (OECD) and the World Health Organisation (WHO). Common definitions and data specifications from the SHA2011 methodology are used in the data collection.

1.3.Structure of the quality report

The quality concept applied in this report is in conformity with the definition developed by the European Statistical System (ESS). The present quality reports follows the Quality Assurance framework of the European Statistical System. The Quality Assurance Framework is a supporting document aimed at assisting in the implementation of the ES Code of Practice. According to the principles of the European Statistics Code of Practice, the quality of statistical data in the ESS is assessed in terms of five quality criteria:

1. Relevance,
2. Accuracy and reliability,
3. Timeliness and punctuality,
4. Coherence and comparability,
5. Accessibility and clarity.

2 Relevance

The relevance concept is defined to measure if the statistical products meet the current and potential needs of users. This concept is further subdivided between user needs, user satisfaction and completeness.

2.1.User needs

The respondents present the main users of SHA data at national level. In general, the main users of SHA data are ministries, regional and local governments, social insurance funds, research institutes for labour and social affairs, health care companies and political community for assessing health policies. In addition, SHA data are sought by researchers, students in the area of social and health care and the general public including media such as newspapers, magazines and independent journalists.

At Eurostat level, the main institutional users are the Commission Directorate-General (DGs), such as Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL), Directorate-General for Economic and Financial Affairs (DG ECFIN), Directorate-General for Health and Food Safety (DG SANTE) and the Indicators Sub-Group of the Social Protection Committee (SPC-ISG).

At European level, the following publications include statistics using SHA data:

- Statistics Explained article: "Healthcare Expenditure Statistics", 2020
- Eurostat news "Healthcare expenditure across the EU: 10% of GDP", 31/03/2020
- Statistics explained "The EU in the World - health", 2018
- State of Health in the EU reports: "Health at a Glance: Europe 2018 state of health in the EU cycle", 2018: https://ec.europa.eu/health/state/summary_en
- The 2018 Ageing report (DG ECFIN):
- https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf
- Eurostat news: "Sweden and France spent the most on health", 2017
- Working paper "HEDIC Health Expenditures by diseases and conditions", edition, 2016
- Europe in figures - "Eurostat yearbook 2012 : Health"

2.2.User satisfaction

National tools and modalities to measure user satisfaction of SHA data are described under this sub-heading. In general, most EU Member States conduct regular user satisfaction surveys. However, the user satisfaction has not been tested in seven EU Member States (BE, DK, ES, LU, LV, MT, RO) and one potential candidate country (BA), while FR, SE and CH are not performing any user satisfaction survey, but implement an ongoing dialogue with the main users and stakeholders. The user satisfaction is discussed

annually by the statistical institutes in AT and HU, and the authorities perform a general online user satisfaction survey in CZ. An *expert committee* provides every three years its opinion from the user point of view in DE. Two NSIs make reference to old surveys performed in 2016 (EE and EL). The Ministry of Health as a user is the main provider of opinions on data satisfaction in HR.

Table 2.1: Overview of tools and methods used to measure user satisfaction

	User satisfaction measured	Timeframe	Modality / tool used
BG	Yes	Annually	General satisfaction survey (not link to SHA domain)
CZ	Yes	Not mentioned	General online user satisfaction survey; - direct feedback from SHA data users
DE	Yes	Every three years	Expert committee in the field of health
EE	Yes	Last available survey in 2016	Health statistics users satisfactory survey (NIHD)
IE	Yes	Not mentioned	Trilateral meetings between Central Statistical Office, Department of Health and Health Service Executive (main government healthcare provider); queries from users are answered in as much detail as can be provided
EL	Yes	Last available survey in 2016	General user satisfaction survey
FR	No	-	Annually presented in a Committee gathering about 50 different stakeholders from all part - Ministry of Health, public authorities, health professionals, academics, social partners, industries, etc.
HR	Yes	Regularly	Ministry of Health as a user give its opinion
IT	Yes	Annually	online survey of Customer satisfaction -user requests via Web Contact Center service; analysis of accesses and paths of site navigation and information search methods
CY	Yes	Regularly	Feedback/suggestions from the users
LT	Yes	Regularly	User opinion survey
HU	Yes	Annually	Designated meeting with main users
NL	Yes	Regularly	Meetings with Ministry of Health and Institute for Public Health and the Environment
AT	Yes	Annually	Designated meeting with main users
PL	Yes	Several times per year	Direct users' consultations
PT	Yes	Not mentioned	Online user satisfaction survey
SI	Yes	Several contacts during the year	Meetings with Health Insurance Institute of Slovenia (HIIS) and Institute of Macroeconomic Analysis and Development
SK	No	-	Feedback from main users is incorporated in the compilation of SHA figures if feasible and possible

	User satisfaction measured	Timeframe	Modality / tool used
FI	No	-	No national level user survey, but regular unofficial conversation with the Ministry of Health and Social Affairs on reporting of healthcare expenditure
SE	No	-	No user survey, but ongoing dialogue with the main users
UK	No	-	Steering Group to discuss developments in SHA domain
LI	Yes	Every five years (last one in 2018)	User survey
CH	No	-	Dialogue with stakeholders to receive feedback and questions
BE, DK, ES, LU, LV, MT, RO, BA	Not tested		

2.3.Completeness

National respondents have provided qualitative information on data completeness compared with the relevant EU legislation applicable in the Member States and EEA countries[(1)]. The list of statistical variables to be provided are clearly mentioned in the Regulation.

Concerning requirements from the Commission Regulation on completeness, data are fully reported by BE, EE, LT, HU, NL, UK and almost complete for EL, IT, CY, AT, PL, SI, SK, SE (see national quality reports for the explanations). Only few respondents do not provide information on compulsory variables, but focus more on breakdowns at second digit or third digit level. However, as these breakdowns are not required by the Regulation, this information is not included in the analysis of this quality report.

One correspondent provided details on the data completeness under coverage error sub-heading. However, no correspondent provided plans to improve the degree of completeness in the future.

Table 2.2: Missing compulsory variables (or sub-categories of compulsory variables) by country

	Missing compulsory variables	Additional missing variables (sub-categories of compulsory variables)
BG	HC.3.2, HC.3.3	HC.2.4 (reported in HC.2.3)
CZ	HC.3.3, HF.1.2.2, HF.4	HC.2.2, HC.2.4, HF.3.2, HC.6.5, HC.6.6
DK	HF.2.3, HC.3.2, HC.3.3 Partially missing: HP.8	HC.1.4, HC.2.1 Reported elsewhere: HC.2.2 and HC.2.4
DE	HF.4 Reported elsewhere: HC.3.3 (in HC.3.4)	Reported elsewhere: HC.2.2 and HC.2.4
IE	HF.4 Partially missing: HF.1.1, HF.2.1, HF.2.2, HF.3 Partly reported elsewhere: HC.5	HC.1.4 (home visits by GPs are not identified separately from HC.1.3+HC.1.4)
EL		HC.2.4

(1) Commission Regulation (EU) 2015/359 of 4 March 2015 implementing Regulation (EC) No 1338/2008 of the European Parliament and of the Council as regards statistics on healthcare expenditure and financing

	Missing compulsory variables	Additional missing variables (sub-categories of compulsory variables)
ES	HC.3.3, HF.2.3, HF.4	HP.2.9, HC.6.1-HC.6.6 Reported elsewhere: HC.2.1-HC.2.4
FR	HF.4, HC.3.2, HC.3.3, HP.9	
HR	HF.2.1-HF.2.2 (partially)	HF.3.1-HF.3.2
IT	HF.4 Partially missing: HF.2.1 and HF.2.3	
CY	HF.4 from 2016 reference year onwards	
LV	HF.2.3, HF.4 Partially missing: HC.3.1	HP.8.1
LU	HF.4 (incomplete)	
MT	HF.2.2, HC.3.2, HC.3.3	
AT	HF.3 (slight deviation from SHA definition), HC.3.3 (largely reported under HC.1.3), HP.9 (partially missing),	HP.4.9 reported elsewhere HC.1.4 (largely reported under HC.1.3), HC.2.2 and HC.2.4 (not available/reported under other HC.2 sub-categories)
PL	HF.4 HF.3 (no data on cost sharing)	
PT	Partially reported: HF.4, HC.3.2, HC.3.3	Partially reported: HP.0
RO	HF.4 Reported elsewhere: HC.3.2, HC.3.3, HC.3.4, HC.5.2, HP.9	HC.6.6, HP.7.3 Partially missing: HF.3.2 Reported elsewhere: HC.1.2, HC.2.1, HC.2.2, HC.4.1,HC.4.2, HP.5.1
SI	Not fully covered: HF.2.2, HF.2.3 Reported elsewhere: HC.4.1	HC.1.2 (partially reported), HF.3.2
SK	HF.2.1, HP.2	HC.6.5, HC.6.6 Reported elsewhere: : HC.2.2, HC.2.4, HF.3.2, HC.6.2, HC6.3
FI	HC.3.2, HC.3.3	HC.6.5, HC.6.6 Underestimated: HC.6.2 and HC.6.3
SE	HF.4	HP.3.1, HP.3.3, HP.4.2, HP.4.9, HP.5.9 Reported elsewhere: HC.4.2, HC.6.3, HC.6.6, HP.2.2, HP.2.9
IS	HC.3xHF.3 Reported elsewhere: HC.3.3	
LI	HF.2.3 Reported elsewhere: HC.3.2	Reported elsewhere: HC.1.2, HC.2.2
NO	HF.4, HF.1.2/HF.1.3, HF.2.1, HF.2.2, HF.2.3	
BA	HC.3.3	HC.2.4, HC.6.6, HP.2.9, HP.3.5, HP.4.9, HP.7.9

3 Accuracy and reliability

This concept refers in general statistical sense to the fact that the statistical outputs accurately and reliably portray reality. Accuracy of statistical outputs is defined as the degree of closeness of computations or estimates to the exact or true values that the statistics were intended to measure.

Following factors may affect the accuracy of SHA data:

- Coverage of health care providers and possible double counting;
- Estimations of expenditure such as out-of-pocket (OOP) expenditure;
- Inclusion of the underground/informal/illegal healthcare;
- Data revisions.

3.1.Overall accuracy and sampling errors

In the “Overall accuracy” item of the ESQRS2.0 standard, respondents are asked to point out the main sources of error affecting accuracy and assess the overall bias of the estimates.

Seven countries (CZ, LU, LV, HU, AT, PL, SK) assess the overall accuracy of their SHA data to be “quite good”. FI considers that the overall data accuracy is good as expenditure data are collected mainly from financial reports and public administrative records. Only Household Budget Survey is used to estimate households’ expenditure in HC.5.2.1 (glasses and other vision products) and HC.5.2.3 (Other orthopaedic appliances and prosthetics). HR considers that data from Household Budget Survey and financial reports which undergo significant transformations before inclusion into SHA data are less accurate than data derived from administrative data sources. DE, EE, LT evaluate that the quality of SHA data depends significantly on the quality of the basic statistics. DE underlined that a large part of the basic statistics are full surveys, therefore, the results of the health expenditure accounts show only occasional random errors. NL reiterated that SHA tables are the result of an integration process, as well as of estimation of details within the SHA framework, therefore the character of the figures is inevitably not 100% accurate. On the other hand, the accuracy of the SE national health accounts is considered high, as the figures are based almost exclusively on the National Accounts, where the largest proportion of healthcare expenditure arises from the public sector. The same applies to DK, as most spending is from primary accounts. IE mentioned that in the area of OOP a number of techniques are used to arrive at an estimate and there are some areas of out-of-pocket expenditure that need further improvement in the estimates.

For the sub-headings 6.1 (accuracy - overall) and 6.2 (sampling error, i.e. errors due to sampling), it is important to note that with few exceptions (DE, HR, PL, UK), the concept of sampling error is considered as not applicable as the data providers do not use surveys directly for the compilation of the SHA data.

Table 3.1: Information on accuracy and sampling error

	Accuracy - overall	Sampling error
BE	No estimation technique is used. Out-of-pocket expenditure is subject at the basis to the error levels generated in the estimation of final household consumption in the framework of the National Accounts.	Not applicable.
BG	Depends significantly on the quality of the primary data sources. Most of them are administrative data (e.g. reports on budget execution) and exhaustive statistical surveys.	Not applicable.
CZ	Quite good.	Do not use any surveys directly for the compilation of SHA-data.
DK	Very good, most of the spending is from primary accounts.	Only survey used is on out-of-pocket spending coming from consumer survey. No sampling error is mentioned.
DE	Depends significantly on the quality of the basic statistics. A large part of the basic statistics are full surveys, therefore, the results of the Health Expenditure Accounts show only occasional random errors. OOP expenditure is mostly based on a residual method. Therefore under- or overestimations can occur.	In the survey "statistics of cost structure in offices of physicians" the relative standard error is below 15%. In the survey "statistics of cost structure in dental practises" the relative standard error is below 5 %.
EE	Depends on the quality of administrative data. Out-of-pocket expenditure distribution between services is estimated.	Sample surveys are not used, except for health spending of private companies.
IE	The SHA tables are the result of a number of different processes and estimation techniques. The HSE provides most of the data on government spending and a large amount of work was undertaken to code all expenditure items accurately so it can be assumed that this data are very accurate.	Only a survey for the private health insurers is used and it surveys all of the largest health insurance providers.
EL	Depends on the administrative sources (it refers to census data).	No sampling errors. HBS accuracy is checked within framework of the survey, conducted by the respective division in the NSI.
ES	Top-down method is used. For HC and HP split up, secondary sources are used. This could lead to an overestimation of some items and the underestimation of others, which cannot be corrected with the available information.	Not applicable.
FR		The only sampling technique is used to compute over-the-counter medicines, which represents around 1% of total health expenditure. About 3 different sampling techniques have been tested, which provided very similar results.
HR	Data derived from administrative data more accurate, data from HBS and financial reports undergo transformations before inclusion into SHA are less accurate.	HBS is used as the main source for HF.3 expenditure. Sampling error indicators for data categories from Household Budget Survey (according to their COICOP codes) used for SHA data compilation are presented in the QR.
IT	SHA data are the result of an integration process of data from different data sources, starting from National Accounts data. The coherence of SHA data with the National Accounts data according to the SEC2010 increase the accuracy of the estimations.	Not applicable.

	Accuracy - overall	Sampling error
CY	Integrating data sources in a given methodology and application of several estimation result in an outcome which is not 100% accurate.	No surveys are used directly for the compilation of SHA data.
LV	After quality measures and verification the overall accuracy of LV data for SHA is good.	Not applicable.
LT	Depends on the overall quality of data sources used. Primary data from administrative sources and statistical surveys are classified using ICHA codes and aggregated; in some cases estimation methods are applied. Lacks in accuracy are observed in the fields where appropriate data sources for specific categories are missing or are not comprehensive enough.	Not applicable.
LU	Most data are based on financial statements and administrative data and should thus be accurate. OOP data, OTC drug data are estimates, HF.4 is partially missing.	Not applicable.
HU	Quite good. The inpatient long-term health (HC3.1) is underestimated (no reliable data source to have an exact distinction between social and health, ADL and IADL activity, respectively). The household OOP expenditure data are based on estimations provided by National Accounts (NA), where the under-the-counter is included, and is based on NA estimations.	Not applicable.
MT	For public expenditure data provided is in general accurate, since the main variables are sourced from financial reporting of the national entities.	Data within the private expenditure component is subject to any sampling errors within the source of the data, i.e. the HBS primarily.
NL	SHA tables are the result of an integration process, as well as of estimation of details within the SHA framework, the character of the figures is inevitably not 100% accurate. Direct OOP expenditure is based on estimates, of which around 50% is a direct estimate and 50% a residual, with some minor expenditure figures based on an initial estimate and development. Some of the data on providers are also based on estimates like TCAM providers.	Not applicable.
AT	Quite good. Known under-coverages are explained in the QR.	Do not use any surveys directly for the compilation of SHA-data. Some data sources are based on results of surveys (e.g. consumer survey).
PL	Quite good. Double counting is avoided. The expenditure of ministries and other institutions are compared with the reports on the use of the state budget.	There is a sampling error in HBS used as a basis for the calculation of OOP expenditure. However, the HBS data undergoes further calculation for the NHA purpose. A summary table is provided with absolute and relative errors of average monthly expenditures on health per capita in households.
PT	Good. Any update of the main financing agents' data implies a revision in household expenditures estimates, since they are estimated as a residual value.	Not applicable.

	Accuracy - overall	Sampling error
RO	Good quality. Some over-estimations or under-estimations can occur when non-expenditure data are used. Data are underestimated for expenditure of the NPISH financing schemes that include expenditure of the main non-profit organisations for which public financial and non-financial reports were available giving the possibility of identifying health care related data. Rest of the world financial schemes data sources were not identified and this cannot be estimated if these expenditure can be included in other schemes.	Not applicable.
SI	Quite good, with some known under-coverage	No surveys are used as a data source.
SK	Quite good.	Not applicable as no survey is used directly for the compilation of SHA-data.
FI	Overall quality is good.	In households' consumption survey the relative standard error is 2.5 % concerning C06 – Health.
SE	High. The Swedish Health Accounts are based almost exclusively on the National Accounts, where the largest proportion of the healthcare expenditure arise from the public sector which, in turn, are to a large extent examined through census.	Surveys are not directly used. Government consumption calculations are the main source of the Health Accounts. Since these are largely based on census, this source does not contribute to uncertainty.
UK	Estimates of HF.1.1 are robust. SHA estimates of expenditure are reconciled between two administrative sources. A small amount of out-of-pocket expenditure (less than 1% of HF.3), relating to NHS private patient units, is estimated as a residual, after insurance and overseas payers have been accounted for.	Links to information on sampling errors for Living costs and food survey, Health Survey for England are provided in the QR.
LI	There is no information from surveys about OOP, this amount is estimated on basis of the OOP per capita in Switzerland. Not clear how close this estimation is from the true value, but from EHIS it is known that the health system in Switzerland and Liechtenstein are very similar and that people have similar health problems and similar health behaviour.	Not applicable.
NO	Depends significantly on the quality of the statistics of National Accounts. Detailed data from a range of sources integrated in the National Accounts serve as a tool for presenting the health expenditure.	Not applicable.
CH	Overall accuracy is sufficient.	Ventilation of accident insurance data to providers and functions is only covering the public accident insurers (60%), not the private insurers; Dentist practices covers only the German speaking area (about 60% of the country)
BA	Out-of-pocket expenditure is subject to the error levels generated in the estimation of final household consumption in the framework of the National Accounts.	Not applicable.

3.2.Coverage and double counting

Besides sampling errors other errors can arise during the production process. These errors include coverage errors (sub-heading 6.3.1 in the ESQRS 2.0 template), measurement errors (sub-heading 6.3.2), nonresponse errors (sub-heading 6.3.3), processing errors (sub-heading 6.3.4) and model assumption errors (sub-heading 6.3.5). Detailed information on specific error sources can be provided in the corresponding concepts. For each non-sampling error a description of the sources of error should be provided, the assessment on the level and the impact and action taken to reduce the impact should be described.

A significant number of correspondents filled in the concept of coverage error (sub-heading 6.3.1 in the ESQRS 2.0 template) while the other countries do not consider this concept applicable or are not aware of any coverage errors. A specific column on the underground/informal healthcare goods and services has been added in the table as this was largely reported by the national respondents in their quality report for this criterion.

Table 3.2: Coverage error and inclusion of informal healthcare goods and services in the health expenditure

	Coverage error	Underground/informal/illegal healthcare goods and services
BG	Health care goods and services by non-residents are included. Underestimation of LTC expenditure. An under-coverage exists in OOP-payments.	Not able to report
DE	Nothing to report	Not possible to report, but not significant for Germany
EE	Health care goods and services used by non-residents are excluded, except in case of out-pocket expenses paid directly to service provider. Health spending of private companies use module E in EKOMAR survey 2008, 2013, provided by Statistics Estonia.	Not mentioned
IE	Detailed explanations are provided for the coverage of non-profit providers, residents and non-resident concept and the boundary health care/social care.	Not mentioned
EL	Data on shadow economy are not included (for example data related to the shadow economy of home nursing care). For data that derive from ELSTAT's Household Budget Survey (HBS) accuracy is checked within the evaluation framework of the survey itself.	Not able to report
FR	The consumption by French residents abroad is excluded; and conversely that the consumption by non-residents on the French territory is included.	Not mentioned
HR	Continuously checking data for possible double-counting and in such cases revisions are performed for a complete time series of the data (last year it was discovered that certain expenditure reported by social insurance fund as final consumption was actually internal transfer from voluntary to mandatory health insurance section within the social insurance fund - immediately asked for corrected data and did revision of the time series).	Not able to report
IT	Nothing to report	Consistent with National Accounts, SHA data include informal payments

	Coverage error	Underground/informal/illegal healthcare goods and services
CY	Health care goods and services by non-residents are excluded from domestic provider revenues.	In large part included. Only illegally purchased medicines are partly missing.
LV	Health care goods and services consumed by non-residents are included. In 2020 this problem will be solved. In 2019 The Diseases Prevention and Control Centre carried out survey asking health care providers to fill in questionnaire about services provided for non-residents. Some financial data also will be available. Private expenditure will be improved, deducting from HF.3, the eligible expenses reimbursed by the state, that is, types of expenditures - planned operations and dentistry expenses, or other expenditure on health - are deducted from taxable incomes when the annual tax declaration is submitted. Accordingly, to the law On Personal Income Tax, in a year person receives 23 % of expenses for medical services.	Not able to report
LT	Coverage error is observed in estimation of pharmaceutical expenditure, the detailed information on the structure of goods provided by retailers and others providers of medical goods is not available. Some non-medical expenditure is covered in this item. Expenditure on Health care goods and services by non-residents are included in domestic provider revenues, because no relevant data source is available.	Not included due to the lack of data sources
LU	Double counting has been excluded this year, not aware of any double-counting at the moment. OTC medicines (HC.5.1.2) are estimated based on the proportion of turnover/sales of pharmacies subject to the reduced VAT rate (3%). This might include "non-pharmaceuticals" sold by pharmacies also subject to the reduced VAT rate (such as food). No data available on (OTC) pharmaceutical sales to non-residents. No data available on pharmaceuticals bought by residents abroad and/or in shops other than pharmacies (supermarkets). An under-coverage exists in OOP-payments for H.P.9 and HC.5.2, as well as HF.4.	Not mentioned
HU	There are items that are reported in more than one data sources, but these items are removed during the data providing process: - items accounted in both governmental (HF.1) and Non-profit schemes (HF.2), values are deducted from the latter; - medical goods (HF.5) reported in both voluntary health insurance schemes (HF.2.1) and Households OOP (HF.3), values are deducted from the latter.	Yes, based on NA estimations
NL	Coverage error in this case apply to the coverage of health care providers and the coverage per provider is described in detail under this sub-heading of the QR.	Not mentioned

	Coverage error	Underground/informal/illegal healthcare goods and services
AT	Household out-of-pocket payment is in large parts calculated according to the domestic concept (including exports, excluding imports health goods and services). A known under-coverage exists in OOP-payments for HP.9 (rest of world) although include expenditure for dental services in Hungary are included in the last data submission, which is the major case for medical services consumed by Austrian residents abroad. Other known under-coverages are for HP.7.1 and OOP for HC.4.3 although the effect of these can be considered relatively minor in terms of the volume of health expenditure.	In large part included. Only for illegally purchased medicines and the "shadow" economy for nursing care data are (partly) missing.
PL	Household budget surveys, serving as the main source of data for estimation of OOP expenditure do not include people in collective accommodation establishments (about 1% according to Population Census 2011), neither homeless.	Not mentioned
RO	Non-resident expenditure are not included in the private insurance scheme (HF.2.1) and in the household out-of-pocket payment schemes (HF.3) and is excluded from the social health insurance scheme (HF.1.2), but there is no mention of HF.1.1 or HF.2.2 or HF.2.3.	Not included
SI	An extensive description of the coverage of the following items is provided: Curative and rehabilitative care HC.1 and HC.2; Ancillary services HC.4; NPISH financing schemes (HF.2.2) and Enterprise financing schemes (HF.2.3), Cost-sharing with third-party payers (HF.3.2.); Out-of-pocket payments (OOP); informal payments.	Informal payments are adequately covered in health accounts because estimation of OOP is taken from National Accounts statistics (where HBS survey for OOP is taken into account and HBS survey cover also informal household expenditure); only informal payments for long-term health care HC.3 are underestimated (in this HC there is also the largest share of informal payments in Slovenia).
SK	Not aware of any double counting of expenditure items. If detected, it is removed and consolidated.	Not mentioned
FI	If noticed that double counting has been occurred, it will be eliminated and the figures will be revised. Medicines purchased outside the National Health Insurance scheme, e.g. bought from the internet, are not included.	Informal care is not included, although it should not exist in the country.
SE	The under- and over-covering that can occur is considered small and does not have any significant impact on reliability. Not able to exclude health care goods and services consumed by non-residents.	Included
UK	For general data sources, concerning the exclusion of non-residents, there are a number of instances for which services are provided to non-residents and income for these services is not recoverable. A known under-coverage exists in HF.3 for HP.9 due to lack of data. For the UK household budget survey - Living costs and food survey (LCF) - this excludes units in residential facilities.	Not mentioned

3.3.Estimation of out-of-pocket expenditure

One main component often quoted in the quality reports as a source for inaccuracies in the SHA data is out-of-pocket (OOP) expenditure. One of the main sources for the estimation of out-of-pocket expenditure is the Household budget survey (HBS).

Table 3.3: Estimation of OOP expenditure

	Out-of-pocket expenditure (coverage / estimations)
BE	Out-of-pocket expenditure is subject at the basis to the error levels generated in the estimation of final household consumption in the framework of the National Accounts.
BG	Under-coverage exists in OOP-payments, but no explanation is provided.
DE	OOP expenditure is mostly based on a residual method. Therefore under- or overestimations can occur.
EE	Out-of-pocket expenditure distribution between services is estimated.
IE	The OOP expenditure is triangulated on a number of different sources such as revenue data, household budget survey and price quantity techniques. Using a number of different techniques does allow for validation of the estimates. There are some areas of out-of-pocket expenditure that need further improvement in the estimates.
HR	Household Budget Survey is used as the main source of data for HF.3 expenditures. Sampling error indicators for data categories from Household Budget Survey (according to their COICOP codes), which are used for SHA data compilation, are presented in a specific table in the quality report.
IT	Out-of-Pocket expenditure are coherent with household expenditure on health estimated in National Accounts, classified by COICOP. However, conceptual differences exist between COICOP and SHA but sources allow transposing COICOP definitions into SHA framework.
LU	OOP data are estimates.
HU	The household OOP expenditure data are based on estimations provided by National Accounts (NA), where the under-the-counter is included, and is based on NA estimations as well.
NL	Direct out-of-pocket expenditure is based on estimates, of which around 50% is a direct estimate and 50% a residual, with some minor expenditure figures based on an initial estimate and development.
AT	Under-coverage exist for HP.9 (rest of the world) and is explained in the QR. One slight deviation from SHA-definition occurs in HF.3, were Household out-of-pocket payment is in large parts calculated according to the domestic concept (including exports, excluding imports health goods and services) and not for all residents, irrespective of the location of transaction. As a consequence, data for HP.9 (Rest of the world) is partially missing as it is not yet possible to identify all out-of-pocket payments of household for several medical services abroad.
PL	There is a sampling error in household budget surveys used as a basis for the calculation of OOP expenditure. However, the HBS data undergoes further calculation for the NHA purpose. Household budget surveys, serving as the main source of data for estimation of OOP expenditure do not include people in collective accommodation establishments (about 1% according to Population Census 2011), neither homeless.
SI	Estimation of OOP is taken from National Accounts statistics (HBS survey for OOP is taken into account and HBS survey cover also informal household expenditure); only informal payments for long-term health care HC.3 are underestimated (in this function there is also the largest share of informal payments in Slovenia).
UK	A small amount of out-of-pocket expenditure, relating to NHS private patient units, is estimated as a residual, after insurance and overseas payers have been accounted for. This represents

	Out-of-pocket expenditure (coverage / estimations)
	less than 1% of HF.3.
LI	The main imprecise value are OOP expenses, as a big part of them is estimated on the basis of Swiss OOP expenditure per capita. Due to similar living costs, similar health system and similar health condition/behaviour of inhabitants, the estimation is supposed to be good.
BA	Out-of-pocket expenditure is subject to the error levels generated in the estimation of final household consumption in the framework of the National Accounts.

4 Timeliness and punctuality

This criterion analyses if the outputs are released in a timely and punctual manner.

The national correspondents mainly report that data are provided on time, countries respecting the deadline set by the Commission Regulation 359/2015, i.e. data and reference metadata for the reference year T should be transmitted to Eurostat by 30 April T+2.

Out of 33 countries participating in the SHA data collection, only three countries mentioned delays between one day and one month in sending the first data submission. Nonconformities are mentioned by IT (data sent one day late in 2016 and two days late in 2017 after the transmission deadline by Commission Regulation), SI (delays of 12 days in 2017 or 1 month in 2016 after transmission deadline) and MT (delay of three months in 2016). For the JHAQ 2018 data collection, the questionnaires have been sent on time by national data providers with the exception of DK (two weeks delay), MT (six weeks delay) and LI (two days delay). ES has been granted a derogation with respect to the transmission of statistics defining that data and metadata for the reference year 2016 Data and metadata for the reference year 2014, 2015 and 2016 shall be delivered at the latest by 31 August N+2. CH, not covered by the Regulation, sent the data and metadata in April for reference year 2014 and in May for 2015 and 2016.

The table below summarizes the compliance of national data providers with the transmission deadline for the 2018 JHA questionnaires (2016 reference year and revisions of previous years). Only national correspondents who have validated their quality reports by the date of preparing this consolidated report are included. T is the deadline set by the Commission Regulation which for 2018 is 30 April 2018, while V is the code for the closing date of the 2018 validation.

Table 4.1: Compliance of national data providers with the transmission deadline

	First submission	Validation closed (V)	Publication on Eurostat website (V= validation date)
BE	On time	T + 4 months	V + 4 days
BG	On time	T + 4 months	V + 1 day
CZ	On time	T + 5 months	V + 1 day
DK	2 weeks delay (14/05/2018)	T + 6 months	V + 1 day
DE	On time	T + 5 months	V + 2 days
EE	On time	T + 4 months	V + 1 day
IE	On time	T + 4 months	V + 5 days
EL	On time	T + 4 months	V + 4 days
ES	Derogation until 31st of August	T + 5 months	V + 5 days
FR	On time	T + 3 months	V + 50 days(*)

	First submission	Validation closed (V)	Publication on Eurostat website (V= validation date)
HR	On time	T + 5 months	V + 3 days
IT	On time	T + 2 months	V + 50 days (*)
CY	On time	T + 7 months	V + 1 day
LV	On time	T + 5 months	V
LT	On time	T + 6 months	V +2 days
LU	On time	T + 7 months	V
HU	On time	T + 5 months	V + 5 days
MT	6 weeks delay (13/06/2018)	-	Not published
NL	On time	T + 7 months	V
AT	On time	T + 3 months	V + 35 days
PL	On time	T + 6 months	V + 1 day
PT	On time	T + 4 months	V + 5 days
RO	On time	T + 6 months	V
SI	On time	T + 7 months	V
SK	On time	T + 7 months	V + 5 days
FI	On time	T + 7 months	V + 1 day
SE	On time	T + 2 months	V + 56 days
UK	On time	T + 2 months	V + 52 days
LI	2 days delay	T + 8 months	V
NO	On time	T + 4 months	V + 9 days
CH	23/05/2018	T + 5 months	V + 1 day
BA(**)	On time	-	-

(*) Database was not ready for data processing at the time of validation, end of June 2018 (T+2 months)

(**) Validation for Bosnia and Herzegovina has been postponed for operational reasons to be performed jointly with 2019 JHAQ submission

5 Coherence and comparability

These criteria should ensure that data are consistent internally, over time and comparable between regions and countries, while combining and making joint use of related data from different sources.

The information on the breaks in series resulting from methodological changes has been imported from national metadata files under the heading 8.2 Comparability - over time and the length of comparable time series is shown under the heading 8.2.1. The longest reference period for comparable time series is provided by DE (1992 to 2016), while SI has the shortest reference period (2014-2016).

On the coherence concept, the reconciliation of the figures from SHA and other statistics such as ESSPROS, Business statistics and National Accounts are described under the sub-headings Coherence - cross domain and Coherence - National Accounts.

5.1.Coherence - cross domain

This sub-heading presents to which extent the SHA statistics are reconcilable with those statistics obtained through other data sources or statistical domains such as ESSPROS or business statistics. The order of magnitude of the effects of the differences should be assessed as well.

AT, IT, SE and SK underlined that SHA and ESSPROS are based on different underlying concepts as e.g. SHA is based on final consumption whereas ESSPROS is based on total expenditure, therefore a full coherence between these approaches is not feasible.

For NL, the SHA figures can be reconciled with figures from Business statistics (as they are an important source for the care accounts of which the SHA figures are a subset) and with ESSPROS as far as ESSPROS covers the SHA figures or the figures of the care accounts.

For SI, the SHA figures can be partly reconciled with ESSPROS statistics. A table with the correspondence between ESSPROS functions and SHA relevance functions is provided in the quality report.

In DE, data are not reconciled with other domains such as ESSPROS which is similar to LU, where ESPROSS is compiled using a different method than SHA and cannot be mapped.

PT has not considered the coherence between SHA and ESSPROS, while SHA data are consistent with concepts, definitions and classifications of the National Accounts.

In the report written by LT, it is mentioned that SHA and ESSPROS are based on different underlying concepts regarding health care function as well as covering framework. HU and SK highlighted the differences in the long-term care area, where LTC SHA core variables are only focusing on health-related LTC whereas ESSPROS takes into account also the social aspects of LTC. FI considers that the two domains are not comparable, emphasising that ESSPROS includes also cash benefit and LTC expenditure more broadly and that the valuating services are different.

Table 5.1: Coherence between SHA and other statistics (ESSPROS, Business statistics)

	Coherence with ESSPROS	Reasons for incoherence
BE	Not applicable	SHA is an estimation of final consumption expenditure.
BG	Full coherence not feasible	Compilation methods for SHA and ESSPROS are different, therefore data cannot be mapped.
CZ	Reporting expenditure on long-term social care in SHA 2011 and in the ESSPROS schemes	Correspondence tables between reporting expenditure on long-term social care in SHA 2011 and in the ESSPROS schemes are provided.
DE	Data are not reconciled with other domains such as ESSPROS	
EE	Not mentioned	
IE	SHA data are coherent with ESSPROS	SHA data are used for the ESSPROS accounts and is taken annually to update the ESSPROS data
EL	Coherence checks are carried out regarding the Social Security Funds survey of the Division of Social Statistics as well as with relevant data of the ESSPROS data format	Scheme 18 of the ESSPROS data are based (on the users side) on SHA2011 data (after the exclusion of non ESSPROS related data recorded in SHA2011).
ES	It is mentioned that the relationship between SHA and ESSPROS is set out in Annex A of the A System of Health Accounts 2011 manual, no details are provided.	
FR	A full coherence between these different approaches is therefore not feasible.	SHA and ESSPROS are based on different concepts as SHA is based on final consumption whereas ESSPROS is based on total expenditure. Also, e.g. in the domain of LTC SHA core variables are only focusing on health-related LTC whereas ESSPROS takes into account also the social aspects of LTC
HR	Regularly compared (although they are compiled by different institutions using different methodologies)	SHA and ESSPROS data are checked for any differences which cannot be explained by differences in SHA and ESSPROS methodologies
IT	Partially reconciled (General Government total current health expenditure, is reconciled across various domains, such as National Accounts-COFOG, ESSPROS, SHA)	The boundaries, the methodologies, and the purposes of the health care expenditure of SHA and ESSPROS statistics are different.
CY	Not applicable	Data from other sources are applied to SHA2011 methodology in order to compile SHA
LV	Partially reconciled	The differences for the total figures reach 1.8%, however if the results are analysed between the subgroups the differences are increased but could be interpreted

	Coherence with ESSPROS	Reasons for incoherence
LT	Full coherence not feasible	SHA and ESSPROS are based on different underlying concepts regarding health care function as well as covering framework. ESSPROS data covers total expenditure on cash and in-kind benefits for protected persons financing by programmes of government sector. Some cash benefits of ESSPROS in SHA are treated as paid services, some items of intermediate consumption in SHA are attributed to medical goods in ESSPROS. SHA data with some modifications are used for the compilation of benefits in-kind in Sickness/Health function of ESSPROS, as well as for the separation of health component of LTC from social benefits in-kind in social care establishments.
LU	Not applicable	ESPROSS is compiled using a different method than SHA and cannot be mapped
HU	Full coherence not feasible	LTC SHA core variables are only focusing on health-related LTC whereas ESSPROS takes into account also the social aspects of LTC.
NL	Partially reconciled	As far as ESSPROSS covers the SHA figures or the figures of the care accounts
AT	Full coherence not feasible	SHA is based on final consumption whereas ESSPROS is based on total expenditure; compilation methods are different, therefore data cannot be mapped.
PL	Partially reconciled	SHA and ESSPROS cannot be mapped from one to another, some SHA data referring to LTC is used for ESSPROS calculation
PT	Has not been considered	
RO	Partially reconciled	Compilation of the two are different. The ESSPROS and SHA teams are collaborating and identified the intersections of the two datasets.
SI	Partially reconciled	Inside Sickness/Health care function, Disability and Old age function and Social exclusion n.e.c, considering different health care boundaries between methodologies. A table where other ESSPROS functions may comprise expenditure that is included as health care goods and services in SHA 2011 is provided.
SK	Full coherence not feasible	SHA is based on final consumption whereas ESSPROS is based on total expenditure. In addition, ESSPROSS take into account the social aspects of LTC.

	Coherence with ESSPROS	Reasons for incoherence
FI	Not comparable	ESSPROS includes also cash benefits and LTC-expenditures more broadly. In SHA the value of the good or service is measured as equal to the sum of its production costs, while in ESSPROS expenditure are more like net costs.
SE	Full coherence not feasible	SHA is based on final consumption whereas ESSPROS is based on total expenditure. For some parts of SHA and ESSPROS where both are using the final consumption from the National Accounts coherence is achieved.
UK	Attempts to reconcile ESSPROS and SHA have proven to be difficult	Classification systems represent different distributions of government spending, although some SHA data are used in the estimates of sickness/healthcare for ESSPROS to improve comparability.
CH	Coherence with ESSPROS is not guaranteed, though some data from Health Accounts is used for ESSPROS.	
BA	Partially reconciled	
MT, LI, NO	Not mentioned	

Two countries reconcile SHA statistics with business statistics. No additional information is provided.

	Coherence with Business Statistics
BG	SHA figures can be reconciled with figures from Business statistics
NL	The SHA figures can be reconciled with figures from Business statistics (as they are an important source for the care accounts of which the SHA figures are a subset)

5.2.Coherence - National Accounts

The extent to which SHA statistics is reconcilable with National Accounts is analysed under this item of the quality report.

Eurostat is currently implementing a project on the linkage between SHA and National Accounts system focussing on the analysis of the respective methodologies and the definition of comparable (sub)-aggregates. The analysis should cover conceptual aspects and data comparison, as well as the data production process.

This sub-heading is treated differently among national correspondents. Most respondents included detailed information and explanations of conceptual differences between SHA and National Accounts, while there are national reports with no information provided (either this criterion is considered as not applicable or no analysis is conducted at national level).

National correspondents of AT, CZ, IT, PT and SI provide detailed explanations on the conceptual differences between SHA and National Accounts. FI highlighted the link between some SHA figures and National Accounts local government sector (S1313) income and production accounts. In contrast, for HR the coherence with National Accounts does not exist, National Accounts are compiled using a different method than SHA and cannot be mapped for LU, no detailed analysis has been conducted so far concerning coherence with National Accounts by PL, whereas for DK and LI the coherence with National Accounts is not applicable.

Table 5.2: Differences between SHA and National Accounts

	Differences between SHA and NA concepts mentioned in the QRs
BE	Government 'health' expenditure (larger than COFOG 7); - private insurance expenditure; - corrections of final household consumption for non-health services in hospitals and pharmacies, addition of health related items from retail sale in National Accounts.
CZ	Definition of aggregates of total expenditures, as COFOG statistics also cover expenditure that is indirectly related to the provision of health care (most of the central health authorities' costs, including expenditure on the purchase of buildings, vehicles, software or collective consumption services).
DE	National Accounts applies the domestic concept (inclusion of exports), whereas the System of Health Accounts uses the resident concept (exclusion of exports).
IE	Some veterinary goods and services are also included in the National Accounts estimates, while SHA gives the expenditure for human health. Within SHA the government health expenditure is larger than COFOG 7.
FR	SHA is based on final consumption. The concept of "consumption" comes from national accounts SEC10. No further details are provided.
IT	Out-of-pocket expenditure is coherent with household expenditure on health estimated in National Accounts, classified by COICOP. However, conceptual differences exist between COICOP and SHA but sources allow transposing COICOP definitions into SHA framework. In National Accounts health expenditure financed by insurance is included in household final consumption expenditure, whereas according to SHA it is reclassified from HF.3 to HF.2.1. Moreover, National Accounts refers to the domestic concept whereas SHA refers to the resident concept, therefore the total amount of expenditure in health goods and services on SHA does not match with National Accounts.
LV	From provider side of health services SNA uses NACE classification of economic activities 4-digit levels recorded under category 86 – Human Health including 8610, 8621, 8622, 8623 and 8690. In contrast, SHA boundary is broader, including partly NACE 87, administration, optical and vision products, medical appliances and non-durables (NACE 4774), partly - laboratory services providers which code their economic activity not as NACE 8690 but, for instance, NACE 7120, NACE 3250 or NACE 8423.
LT	Scope differences exist between National Accounts in the health classification in COFOG, COICOP, etc. a full coherence in 'scope' is as such not applicable. There are also different approaches for data collection and use of data sources: in order to meet a criteria of health care boundaries, SHA is compiled at more detailed level.
HU	Investments, and R&D are not taken into account in the Health Accounts; the National Accounts applies the domestic concepts, including the exports, whereas SHA uses the resident concept, excluding the exports.
AT	Occupational health is treated as intermediate consumption of enterprises in National Accounts (accounted for in the NACE sector of the enterprise and not necessarily within health care) whereas they are included in the final consumption within the SHA framework and therefore classified as health expenditure. SHA treats payments of central government to households in the form of nursing allowances as a proxy for household production and includes this kind of transfers as health expenditure whereas National Accounts do not recognize any form of unpaid household production at all.
PL	National Health Accounts is calculated from the side of financing agents, no detailed analyses have been conducted so far concerning coherence with National Accounts.
PT	There is no direct correspondence between SHA data and the final consumption expenditure of residents on human health activities estimated by National Accounts. SHA data covers the administration of financing and regulation of health systems, as well as includes part of social support activities with housing. SNA recommends evaluating the output of retailers by trade and distribution margins. In SHA data, the expenditure of retail providers (HP.5) considered the value of sales in goods and products valued at acquisition prices. SHA recommends following the standard SNA rules for drawing the production boundary of health care services, albeit with two exceptions: Occupational health care is included in the national totals of health care spending. In SNA, this item is recorded as ancillary services and part of intermediate production of enterprises; Part of the cash transfers to private households for care givers of home care for the sick and disabled are treated as the paid household production of health care.

	Differences between SHA and NA concepts mentioned in the QRs
RO	Differences appear in the COFOG structures as SHA is compiled (for HF.1.1 and HF.1.2) in a bottom-up approach, which leads to some differences in the distribution in COFOG categories. The broader scope of SHA leading to the inclusion of health related expenditure in social residential institutions, of occupational healthcare expenditure.
SI	The aggregate of production includes all production of operators registered in healthcare activities (group code 86 of NACE), therefore also the production of non-health products, health products and services for intermediate consumption and production of health services for foreigners, which is not the case of SHA. On the other hand, some health activities, for example, pharmacy activity and management of the health system (administration), are included in other NACE activity codes, but the latter can be taken into account in comparison of aggregates of SHA and SNA.
SK	The figures on healthcare accounts are reconcilable with NA, no differences are described and only reference to the data sources for SHA from the statistics of National Accounts is made.
FI	No relevant coherence with National Accounts exists, except for a link between some SHA figures and National Accounts local government sector (S1313) income and production accounts.
UK	What is considered long-term care (HC3) is provided as local authority financed 'social care' and not included under COFOG7. NPISH: National Accounts estimates of NPISH final consumption expenditure are not currently available at a level granular enough to be used for the health accounts; Enterprise financing: within the SNA framework, healthcare provided by businesses for employees is considered intermediate consumption rather than final consumption. For the health accounts expenditure on these services is taken from intermediate consumption data from supply and use tables produced for the National Accounts.

5.3.Coherence - internal

As described in the ESS Guidelines, each set of outputs should be internally coherent: if statistical outputs within the data set in question are not consistent, any lack of coherence in the final statistical product should be stated as well as the reasons for publishing such results.

On the internal coherence of SHA tables, most countries considered this objective as achieved in general and data consistent among the core tables, with small inconsistencies due to rounding error.

5.4.Comparability

Comparability refers to the extent of differences in applied statistical concepts, measurement tools and procedures applied, where statistics are compared between geographical areas (over countries), statistical domains or over time. In this chapter, since the time coverage of this report is limited to three reference years data (2014 to 2016), only comparability between geographical areas is applied.

The SHA 2011 Manual provides a harmonised methodological framework for the compilation of national health accounts throughout the EU. Eurostat ensures the methodological soundness of health accounts data submitted by EU Member States through its validation process.

In order to analyse geographical comparability, this report will explore:

- Coverage of the final figures by country for each of the HF, HC and HP classifications;
- Whether some countries failed to apply the methodology described in the manual. The Regulation mentions that the definitions set out in the SHA 2011 manual should be the basis of the data collection to ensure comparability of data.

Coverage in terms of financing schemes (HF)

This section lists the difficulties encountered by national respondents in providing full coverage of healthcare financing schemes (ICHA-HF classification) which could affect data comparability among countries.

It should be noted, that HF.1.1 (government schemes) and HF.1.2.1 (social health insurance schemes, where these exist) categories are fully covered by all thirty-three national respondents participating in the JHAQ data collection.

In some cases the data sources cannot provide a complete information and thus all schemes cannot be fully covered. The countries listed in the table below do not report or report partially HF.2 (Voluntary health care payment schemes) at second digit level (mainly HF.2.2 – NPISH financing schemes and HF.2.3 – enterprise financing schemes). One case of partial underreporting of household out-of-pocket payments (HF.3) is also mentioned by national correspondents.

Table 5.3: Missing or partially missing HF2 breakdowns

	Missing or partially missing HF component	National data provider's explanation
DK	HF.2.3	No national data sources that could help to identify data on enterprise financing schemes.
IE	HF.2.2 and HF.2.3 are combined and provided under HF.2.3; HF.3 is partially missing.	For HF.2.2 there are many non-profit providers of health care for those with disability. Development of an NPI database in IE will assist in the coverage of the area in future. For HF.3 imported health care service funded by OOP are not captured.
ES	HF.2.3	Data are not available.
HR	HF.2.2 partially missing	Expenditure data for 2014-2016 were received from 14 out of 78 non-governmental organisations and foundations which were contacted
IT	HF.2.3 partially missing	Data for HF.2.3 are partially missing since the estimates reported are related only to occupational health outsourced (contracted out to offices of medical specialists), that in National Accounts are included in intermediated consumption.
LV	HF.2.3	There are cases when enterprises directly finance health services (i.e. occupational health care, reimbursement of glasses) but it is not possible to separate these expenditures. However, data on HF.2.3 are provided from 2017 reference year.
MT	HF.2.3	Data are not available.
RO	HF.2.2 partially missing HF.2.3 partially missing	Data are underestimated, included are expenditure of the main non-profit organisations for which public financial and non-financial reports were available giving the possibility of identifying health care related data. Data for non-profit hospitals included in the scheme are collected through the NSI annual exhaustive survey on the activity of sanitary units. Data included represent expenditure from donations, patients, and other revenues. Although the hospitals are also financed through the health insurance fund, these expenditures were not included in the NPISH scheme. Data sources for expenditures of employers for the regular medical check-ups of employees could not be identified.

	Missing or partially missing HF component	National data provider's explanation
SI	HF.2.2 partially missing HF.2.3 partially missing	Non-profit providers of office services due to problems in data sources have not been fully covered, with the exception of one major institution. This item only includes "occupational health examinations": estimated expenditure for preventive care, data on number of preventive examination for employees multiplied by expert assessment of the average price of one examination.
SK	HF.2.1	Based on legislation of Slovakia there is no supplementary health insurance, but commercial health insurance exists. Data on insurance and insurance admission is available at National Bank of Slovakia from individual insurance agencies only for total resort "Insurance of accident and diseases" and for extract of it "individual health insurance" from report Ppn (PTZ)04-04 – for non-life insurance and from Ppn(PTZ)03-04 for insurance of accidents and diseases, if additional insurance is life insurance. Values are not available in breakdowns by payers.
LI	HF.2.3	No information available about how much enterprises spend on their employees' health.
NO	HF.2.1 HF.2.2	Category not applicable / negligible Data not available

HF.4 - rest of the world financing schemes (non-resident) proved to be the most problematic variable in terms of coverage among the different types of financing schemes. Comparability is hindered by the missing data for more than half of the EU Member States (CZ, DE, IE, ES, FR, HR, IT, CY from 2016, LV, MT, NL, PL, PT, RO, SI, SK, FI, SE) and NO as no sources are available or no medical services financed directly by a non-resident scheme are identified.

As this is a legal obligation under the Commission Regulation (EU) 2015/359 to report this variable, additional data sources should be identified to ensure full data completeness of HF.4 category in order to comply with the said Regulation.

Coverage in terms of health care functions (HC)

With the aim of simplifying the comparability analysis of the functional categories, the functions are split into three groups, i.e. curative and rehabilitative care (HC.1_HC.2), long-term care (health – HC.3 and social – HCR.1) and other functional categories (from HC.4 to HC.7).

A. Curative care and rehabilitative care

Eleven countries reported missing components for the compulsory variables related to curative and rehabilitative care (HC.1 and HC.2 and sub-aggregates)

Table 5.4: Missing or partially missing HC components

	Missing or partially missing HC component	National data provider's explanation
BG	HC.2.4	Reported under HC.2.3 (outpatient rehabilitative care);
CZ	HC.2.2	Data are missing
DK	HC.1.2_HC.2.2 and HC.1.4_HC.2.4	These categories are missing as it is not possible to distinguish the expenditure related to home-based curative care from the other HC.1 categories and to distinguish the expenditure related to curative and rehabilitative care.
DE	HC.2.2 and HC.2.4	These categories are missing and reported either in HC.2.1 or HC.2.3.
IE	HC.1.4	Home visits by GPs are not identified separately from HC.1.3 + HC.1.4.
EL	HC.2.4	This category is not provided (unfeasible to be recorded)
LV	HC.1.2 and HC.1.4 underestimated HC.2.2	No data sources available for HF.3 Underestimated for HF.3.and it is difficult to separate these services from HC.1.1.
MT	HC.2.2	Data are missing
FI	HC.2.2 and HC.2.4	Data are missing
LI	HC.1.2 and HC.2.2	Data are included in outpatient curative care (HC.1.3)
BA	HC.2.4	Missing due to lack of data sources

B. Coverage of LTC expenditure and separation of health and social components of the LTC

Long-term care data are used by the Commission services (DG EMPL, DG SANTE, DG ECFIN) to provide a comprehensive evidence-base for policy making in the context of the European Semester and for monitoring progress on the objectives of accessibility, quality and sustainability of long-term systems (Ageing reports and Joint EC-EPC Report). However, different components of LTC, mainly HC.3.2 - Day long-term care (health) and HC.3.3 - Outpatient long-term care (health) categories, are not available or partly missing for 18 out of 33 participants in the JHA data collection (EU Member States, EEA/EFTA countries and one potential candidate country).

Table 5.5: Missing or partially missing LTC components

	Missing or partially missing LTC component	National data provider's explanation
BG	HC.3.2 and HC.3.3	Data are reported under HC.1 (part of the duties of GPs or specialists)
CZ	HC.3.3	The category HC.3.3 (out-patient LTC) is new and data are missing. CZ is currently unable to determine a speciality for this category - out-patient LTC falls under the category of typical out-patient curative care under the SHA 2011 framework.
DK	HC.3.2 and HC.3.3	These categories are not possible to identify and are mainly

	Missing or partially missing LTC component	National data provider's explanation
		reported under HC.1.
DE	HC.3.3	Reported under HC.3.4, home-based long-term care (health).
IE	HC.3.4	Some providers in this category provide a wide range of services but have been coded to this category due to the predominance of their activity. For example, they provide out-patient services and residential care - some residential care provided by these categories are recorded as outpatient care.
ES	HC.3.3	Data are missing
FR	HC.3.2 and HC.3.3	These categories are missing (data are not available)
LV	HC.3.2 and HC.3.3 partially missing	HC.3.2 is partially missing - day long-term care (health) is provided by local government institutions (HP.22 and HP.29); these expenditures are underestimated because there are no additional data sources for estimating household private expenditure; HC.3.3 - there are problems with data sources for HF.3.
MT	HC.3.2 and HC.3.3	Data are missing
AT	HC.3.3	Reported mostly often as HC.1.3.1 and HC.1.3.9
PT	HC.3.2 and HC.3.3	reported under HC.1.2+HC.2.2 and HC.1.3+HC.2.3, respectively
RO	HC.3.2 HC.3.3 HC.3.4	Included in HC.3.1 for HP.1, for HF.2.1 and HF.3; Included in HC.1 for HF.1.2; Included in HC.3.1 for HP.1 for HF.2.1 and HF.3; Included in HC.3.1 for HP.1
FI	HC.3.2 and HC.3.3	These categories are missing (data are not available)
IS	HC.3.3	Reported in outpatient curative care (HC.1.3)
LI	HC.3.2	Included in outpatient curative care (HC.1.3)
NO	HC.3.2 and HC.3.3	These categories are missing
CH	HC.3.1	Reported only for nursing homes and hospitals
BA	HC.3.3	Missing due to lack of data sources

In addition, four correspondents are not able to separate the two components of long-term care (LTC (health) – HC.3 and LTC (social) – HCR.1).

Table 5.6: Issues to separate LTC health and LTC social

	Issues to separate LTC health and LTC social
BE	Probable over estimation of HC3 due to application of assumption that it is not possible to split expenditure items between HC3 and HCR1, and as it contains a medical component, all of the

	Issues to separate LTC health and LTC social
	expenditure is attributed to HC3.
EE	LTC (social) is not separated or defined in official social care services statistics collected and provided by the Ministry of Social Affairs (MoSA). All different social services and their elements must be classified according to the SHA2011, before EE can provide results.
CY	No information exists in order to split the expenditure on long-term care in Health Services and in Social Services, hence all the amount has been included under HC.3 and sub-variables.
LV	Separation between health and social component is still a problem for all chapters. The chosen approach for obtaining the data on long-term care (health) until now depended on the available data sources. The boundary of long-term care (health) was drawn up in accordance with several criteria: - financing agents; - the number of handicapped persons with physical disorders and persons with mental diseases (there is no data on persons with ADL (personal care services) and persons with IADL (assistance care activities)); - the number of medical personnel and carriers/assistant of nurses in institutions.

Moreover, for ten national respondents (BG, IE, HR, IT, MT, AT, PL, SK, IS and LI) data on LTC (social) are missing.

C. Other HC categories (HC.4 to HC.7)

There are specific cases reported by national respondents of partially missing data for the rest of HC categories classified from HC.4 (Ancillary services) to HC.7 (Governance and health system and financing administration)

Table 5.7: HC4 to HC7 functions not reported

	Missing or partially missing HC.4 to HC.7 categories' components	National data provider's explanation
CZ	HC.6.5 and HC.6.6	Data are missing
DK	HC.6.6	Data are missing (not possible to identify)
EL	HC.6.3	Reported under HC.1.3 (Outpatient curative care)
CY	HC.4.3 is partially missing	The expenditure under HC.4.3 is underreported due to the fact that in general, the expenditure on patient transportation is usually included under HC.1 (curative care). Only in cases where an ambulance from a private ambulance company is called in order to transfer a patient only, the cost is reported under HC.4.3. For cases where an ambulance of the public or private hospital is called in order to transfer a patient to or from the hospital, the respective cost is included in the total cost for treatment and cannot be distinguished from the total cost.
LV	HC.6.6	Included in HC.4.3
MT	HC.6.4	Data are not available

	Missing or partially missing HC.4 to HC.7 categories' components	National data provider's explanation
AT	HC.4.3	Partially missing for OOP expenditure relating to transportation of conventional vehicles (e.g. taxi)
	HC.5.1.2	Partially missing for medicines purchased via internet and illegally purchased medicines
	HC.6	Partially missing for occupational health care expenditure for the entire public administration as well as for hospitals, medical practices and residential long-term care facilities
RO	HC.5.2	Included in HC.1, HC.2 or HC.3 for HF.1.1 and HF.2.3
SK	HC.6.2	Reported mainly with HC.1.3 Outpatient curative care
	HC.6.3	Reported together with HC.1 Curative care
	HC.6.5 and HC.6.6	Data are missing
FI	HC.6.5 and HC.6.6	Data are missing
SE	HC.6.3	Reported under HC.4 for screening programmes as there is no data available on a sufficient detail level
NO	HC.6.5 and HC.6.6	These categories are missing
BA	HC.6.6	Missing due to lack of data sources

Coverage in terms of health care providers (HP)

In general, the compulsory variables in terms of healthcare providers are fully reported according to the SHA definitions by national respondents. However, fourteen countries present exceptions of partial coverage of healthcare providers' components.

Table 5.8: Coverage of health care providers (HP)

	Missing or partially missing HP components	National data provider's explanation
BG	HP.3.3, HP.3.5 and HP.7.3	Data are not available
DE	HP.7.9	Data are not available
IE	HP.9 is partially missing	Expenditure funded from OOP or holiday insurance is not captured
EL	HP.7.9	Data are not available
ES	HP.2.9	Data are not available
FR	HP.9	Data are missing
CY	HP.9 is partially missing	The amounts collected from charity or contributions from relatives and friends, which are used for medical care abroad are not taken into consideration
LV	HP.5.9	Not available as there are some electronic shopping and mail-order enterprises in Latvia, but there is no key to calculate what part to be taken for medical goods
	HP.8.1	Data are not available
MT	HP.5.2, HP.5.9, HP.7.2, HP.7.3 and HP.7.9	Data are missing

	Missing or partially missing HP components	National data provider's explanation
AT	HP.9 data are partially missing	Not yet possible to identify all OOP of households for several medical services abroad
	HP.7.1	Not possible to identify all health-related administration costs of ministries apart from the former Ministry of Health (now included in the Federal Ministry for Labour, Social Affairs, Health and Consumer Protection) and of regional government administration
	HP.4.9	Mostly reported under HP.3 and HP.5
RO	HP.7.3	Data are missing
	HP.9	For HF.1.1 is included in HP.1, HP.2 and HP.3
SE	HP.3.1 and HP.3.3	Data are not available
	HP.4.2 and HP.4.9	Reported in HP.1.1 (general hospitals) as most laboratory services are produced inside the hospitals. Some of these services are produced outside the hospitals, but lack of data makes it not possible to split these costs
BA	HP.2.9, HP.3.5 and HP.4.9	Missing due to lack of data sources

Cases of deviations from SHA 2011 methodology

More than one third of participating countries report difficulties in applying the SHA 2011 methodology (agreed definitions not fully applied to for different reasons).

Table 5.9: Deviations from SHA 2011 methodology

	Deviations reported by countries
DK	HC.4.1 (Laboratory services) category, laboratory services that are provided as part of an inpatient care package is reported under HC.4 rather than HC.1
	HC.4.2 (Imaging services) - Imaging services that are provided as part of an inpatient care package is reported under HC.4 rather than HC.1
IE	Data sources do not allow for the exclusion of medical costs for non-residents in general. A small amount of expenditure related to E111 and E112 expenditure has been excluded from HSE (HF.1.1) expenditure
	HC.5 category: for data confidentiality reasons some health insurance funded expenditure coded under HC.5 was recoded to HC.0
ES	HC.5.1.1 (Prescribed medicines) include only prescribed medicines using a National Health System (NHS) recipe
	HC.5.1.2 (Over-the-counter medicines) include prescribe medicines using a no-NHS recipe
IT	HF.2.1 (Voluntary health insurance schemes) data are related to voluntary non-life insurance (sickness claims) and do not report components on supplementary/complementary health insurance. The last category, despite existing in the Italian health system, is not reported as detailed information, to give exhaustive representation in National Accounts and in SHA data, are not available.
	HF.2.3 (Enterprise financing schemes) - the estimates reported are related to occupational health outsourced (contracted out to offices of medical specialists), that in National Accounts are included in intermediate consumption. The occupational health care can be also provided in-house but, at the moment, sources to estimate it are not identified. Enterprises can also finance or provide directly health care services as a part of the overall benefits for employees; also in this case, there is not an estimate of this kind of services due to the lack of detailed information in

	Deviations reported by countries
	data sources HP.9 - only the amount financed by households (HF.3) is accounted for. Data for other financing schemes, currently, are not available.
CY	HC.6 data are partially missing as the expenditure on preventive care is underestimated since some amounts related to preventive care are included in outpatient visits and ancillary services because they cannot be distinguished (i.e. mammography for prevention, visit to dentist for prevention)
LV	In HC.3 (LTC – health) there is a deviation from the definition for splitting between ADL, IADL and "outside of LTC-health". No data on level of activity limitations of persons is available. People living in LTC facilities are diverse. Another key should be used for splitting. In HP.2 (Residential long-term care facilities) - There are several obstacles which hinder application of using provider approach. The kind of providers connecting with groups or clients who received services is not strictly defined, for instance, old persons, handicapped persons with physical disorders, persons with mental diseases can live in one institution. A close definition is for “care hospitals”, but in this case these institutions are counted as hospitals. On the other hand, these institutions do not need to be registered in the Register of Health Institutions as they are not medical institutions. The criterion “to be in a register or not”, in order to prepare a provider list could not be applied.
LU	HF.2.3 is reported under HF.1.2.1 - (Big) Employers are allowed to organize and finance the legally foreseen occupational health schemes by themselves, and are in such case not obliged to join a social security-type mutual occupational health scheme. Currently 4 such cases exist. As the amount is difficult to split, the complete occupational health expenditure is reported under HF.1.2.1; OTC medicines (HC.5.1.2) are estimated based on the proportion of turnover/sales of pharmacies subject to the reduced VAT rate (3%). This might include "non-pharmaceuticals" sold by pharmacies also subject to the reduced VAT rate (such as food...). No data available on (OTC) pharmaceutical sales to non-residents. No data available on pharmaceuticals bought by residents abroad and/or in shops other than pharmacies (supermarkets...); Health expenditure (social security/CNS - hospitals) include a certain amount of capital formation under the form of "amortization" (+/- 60mEUR/year). International bodies relying on healthcare schemes other than RCAM are not included due to lack of information (example European Investment Bank). Estimated at less than 1% of resident population.
MT	HF.3 (Household out-of-pocket payments) for 2014 and 2015 include payments from non-residents while in hospitals
NL	HP.3.5 (Providers of home health care services) - as these are part of integrated institutions, they are classified according to their financial dominant activity, i.e. HP.2.1, but also provide long-term care at home. What is reported here refers to small businesses and some self-employed, from 2015 onwards.
AT	There is a slight deviation from SHA definition for HF.3, where household out-of-pocket payment is in large parts calculated according to the domestic concept (including exports, excluding imports health goods and services) and not for all residents, irrespective of the location of transaction.
PT	Deviation from SHA definition occurs in the categories HC.1.2+HC.2.2 and HC.1.3+HC.2.3 as these categories include day LTC (HC.3.2) and outpatient LTC (HC.3.3), respectively.
SI	HC.4 (Ancillary services) - (HC.4.2) Expenditure on imaging services for Roentgen and ultrasound services derived from HIIS (social health insurance) database includes this services only for outpatient patients, which is in line with SHA; while expenditure on magnetic resonance imaging - MRI and computed tomography - CT is recorded for both, inpatient and outpatient (it cannot be separated according to obtained HIIS database).

	Deviations reported by countries
NO	HC.4 category include the total of the ancillary services, also provided to inpatients.

6 Accessibility and clarity

The accessibility and clarity of the statistical outputs refer to simplicity, conditions and modalities by which users can obtain and understand data. This standard requests that outputs are presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

6.1.Eurostat dissemination policy

On Eurostat website, SHA data and metadata are available in the dedicated section on health which covers public health (including healthcare) and health and safety at work. Healthcare expenditure is part of the health care section:

https://ec.europa.eu/eurostat/web/health/overview

Users can find links to the legal basis, the methodology, Statistics Explained articles and data on health care expenditure (by provider, function and financing agent).

Data are presented in three summary (one-dimensional) tables and three cross-classification tables (2-dimensional tables).

Summary tables provide data on:

- Current expenditure by provider (ICHA-HP)
- Current expenditure by function (ICHA-HC)
- Current expenditure by financing scheme (ICHA-HF)

Cross-classification tables refer to:

- HC x HP: Health care expenditure by function and provider: data on which type of health care goods and services are supplied by which health care provider;
- HC x HF: Health care expenditure by function and by financing scheme: data on how are the different types of services and goods financed;
- HP x HF: Health care expenditure by provider and by financing scheme: data on from which health care provider and under which particular financing scheme are the services and goods purchased.

Healthcare expenditure data have been disseminated for the 33 countries participating in the SHA data collection via the Eurostat database:

https://ec.europa.eu/eurostat/web/health/data/database

6.2.National level dissemination policy

Following the principles of accessibility and clarity, links to publications, news release and online databases are provided in the national quality reports.

In CZ, DE, EE, IT, LT, HU, NL, AT, PT and NO, an annual news release follows the publication of SHA results.

Table 6.1: News releases

Annually, when national data are published	No news release at national level
CZ, DE, DK, EE, FR, IE, EL, HU, LT, NL, AT, PL, PT, SI, FI, SE, UK, LI, NO, CH	BE, BG, ES, HR, CY, LU, LV, MT, RO, SK, BA

Table 6.2: Online national databases

	Hyperlinks to national databases
BE	https://socialsecurity.belgium.be/nl/cijfers-van-sociale-bescherming/statistieken-sociale-bescherming/gezondheidsrekeningen https://socialsecurity.belgium.be/fr/chiffres-de-la-protection-sociale/statistiques-de-la-protection-sociale/comptes-de-la-sante
BG	http://www.nsi.bg/en/node/5568
CZ	https://www.czso.cz/csu/czso/statistiky
DE	https://www-genesis.destatis.de/genesis/online/logon?language=de&sequenz=tabellen&selectionname=23611* http://www.gbe-bund.de/gbe10/t?t=100003%20
EE	http://pxweb.tai.ee/PXWeb2015/index_en.html
IE	https://www.cso.ie/px/pxeirestat/Database/eirestat/System%20of%20Health%20Accounts/System%20of%20Health%20Accounts_statbank.asp?SP=System%20of%20Health%20Accounts&Planguage=0
EL	http://www.statistics.gr/en/statistics/-/publication/SHE35/-
ES	http://www.mscbs.gob.es/estadEstudios/portada/docs/KEY_DATA_SNHS_ENG_A4_092019.pdf
FR	https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/publications/panoramas-de-la-drees/article/les-depenses-de-sante-en-2018-resultats-des-comptes-de-la-sante-edition-2019
IT	http://dati.istat.it/Index.aspx?QueryId=29021&lang=en
LT	Official Statistics Portal Indicators database
HU	http://www.ksh.hu/stadat
NL	https://opendata.cbs.nl/statline/#/CBS/en/navigatieScherm/thema?themaNr=82765 and the three core tables are available separately
AT	http://www.statistik.at/web_en/statistics/PeopleSociety/health/health_expenditure/index.html
PT	https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_cnacionais2010&contexto=cs&selTab=tab3&perfil=220674570&INST=220617355&xlang=en
SI	Excel files are provided online (main aggregates as well as the three cross-classification tables)
SK	http://datacube.statistics.sk/#!/lang/en
SE	https://www.scb.se/en/finding-statistics/statistics-by-subject-area/national-accounts/national-accounts/system-of-health-accounts-sha/
UK	Excel files are provided online (SHA tables including csv files)
LI	www.etab.llv.li

Hyperlinks to national databases	
NO	https://www.ssb.no/en/statbank/list/helsesat/
CH	https://www.bfs.admin.ch/bfs/fr/home/statistiques/sante/cout-financement/cout.html

An online database is not available for CY, DK, FI, HR, LU, LV, MT, PL, RO, BA.

7 Revision of statistics

SHA data have been revised, mainly for the 2013-2015 reference years, due to implementation of the new SHA 2011 methodology, as compared to figures published during the previous collections. In general, data revisions are of a small scale, ranging from -1.0% to + 1.5%.

National data are revised according to national schedules which are detailed in the metadata file sent to Eurostat during the JHAQ transmission. In general, methodological improvements applies to the total time span for most countries, while punctual data corrections could occur (new data sources, updated statistical information based on surveys or administrative sources, errors discovered in the data compilation). When a new source of information is identified and used, the data for previous years are revised, if possible. The revisions of the National Accounts data could also trigger possible revisions (such as for out-of-pocket payments).

For Germany, revisions are generally applied to the whole time series (from 1992 to 2016 reference years) to assure data consistency across all years and are carried out every year due to revisions in the data sources.

8 Conclusions and recommendations

Information provided in this report allows us to draw some conclusions and propose some recommendations at different levels.

Data for most countries are of appropriate quality and useful for analytical purposes, and are now disseminated. Measure on users' satisfaction should be implemented for countries in which they are not yet conducted. At the level of data completeness, despite the increase of information available for users on healthcare expenditure, specific compulsory variables or breakdowns of compulsory variables are missing for some countries (see 'completeness' sub-category of national quality reports). Eurostat encourages the NSIs to improve the data completeness by investigating additional data sources (administrative data or surveys) to cover the missing information.

The punctuality of transmission of data is high with most countries (90%) submitting health care expenditure data within the legal deadline. Timeliness is an area that can be improved over time following acquired knowledge and methodology. Eurostat usually disseminates data a few days after the closure of the validation. However, for the data that has been finalised before the end of June, delays have been longer due to technical updates of the database. This issue should be investigated and addressed by Eurostat.

Data on health care expenditure is disseminated in dedicated publications (e.g. yearbook, news release) and/or in national databases. Eurostat would recommend to national respondents to develop the online documentation on methodology, including metadata, available on national institutions websites (NSIs, Ministries of Health or other agencies providing healthcare expenditure data) to better inform users and to disseminate information on national revision policies online.

For the next quality reporting cycle, national respondents are encouraged to provide information on the relevant quality dimensions both for administrative sources and for sampling. For integrative statistics as SHA, when multiple data sources are used (e.g. containing both administrative sources and surveys), the relevant quality dimensions should be filled in for each data sources (in this case for administrative sources and sampling as well), not just for multiple data sources in general.

9 Annexes

List of abbreviations used in the report

ADL: Activities of Daily Living

EC: European Commission

EEA: European Economic Area

EFTA: European Free Trade Association

EPC: European Policy Committee

ESQRS: ESS Standard Quality Report Structure

ESS: European Statistical System

EU: European Union

HBS: Households Budget Survey

HC: Classification of Healthcare Functions

HF: Classification of Healthcare Financing Schemes

HP: Classification of Healthcare Providers

HSE: Health Service Executive, responsible for the provision of health and personal social services for everyone living in Ireland

IADL: Instrumental Activities of Daily Living

ICHA: International Classification of Health Accounts

JHAQ: Joint Health Account Questionnaire (OECD-Eurostat-WHO)

LTC: Long-term Care

NACE: Statistical Classification of Economic Activities in the European Community

(FR: Nomenclature statistique des activités économiques dans la Communauté européenne)

NHA: National Health Accounts

NPISH: Non-profit institutions serving households

NSI: National Statistical Institute

OECD: The Organisation for Economic Co-operation and Development

OOP: Out-of-Pocket payments

SHA: System of Health Accounts

SNA: System of National Accounts

WHO: World Health Organisation

Countries codes

BE – Belgium
BG – Bulgaria
CZ – Czechia
DK – Denmark
DE – Germany
EE – Estonia
IE – Ireland
EL – Greece
ES – Spain
FR – France
HR – Croatia
IT – Italy
CY – Cyprus
LV – Latvia
LT – Lithuania
LU – Luxembourg
HU – Hungary
MT – Malta
NL – The Netherlands
AT – Austria
PL – Poland
PT – Portugal
RO – Romania
SI – Slovenia
SK – Slovakia
FI – Finland
SE – Sweden
UK – United Kingdom
IS – Iceland
LI – Liechtenstein
NO – Norway
CH – Switzerland
BA – Bosnia and Herzegovina

10 References

Commission Regulation No (EC) No 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work (Text with EEA relevance): https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32008R1338

Commission Regulation (EU) 2015/359 of 4 March 2015 implementing Regulation (EC) No 1338/2008 of the European Parliament and of the Council as regards statistics on healthcare expenditure and financing (Text with EEA relevance): https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32015R0359

Eurostat (2014): ESS Handbook for Quality Report, Luxembourg, edition 2014: https://ec.europa.eu/eurostat/documents/3859598/6651706/KS-GQ-15-003-EN-N.pdf

Eurostat: Quality Assurance framework of the European Statistical System: https://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646

Revised version of the SHA 2011 manual (OECD, Eurostat, WHO): https://ec.europa.eu/eurostat/documents/3859598/7985806/KS-05-19-103-EN-N.pdf

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Consolidated quality report on healthcare expenditure and financing statistics

This quality report provides users with a tool for assessing the quality of healthcare expenditure and financing statistics, which are collected following the methodology of a System of Health Accounts (SHA2011) and disseminated by Eurostat.

For the first time, an evaluation on the quality of the data has been carried out for the following components: relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility and clarity. Users will also find detailed information by country and improvements to be implemented for the next quality exercise.

For more information
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