STATISTICS DENMARK

Documentation of statistics for Health care expenditures (SHA) 2024

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1 Introduction

The statistics shows consumption expenditures on health care goods and services distributed across function, provider and financing scheme. The statistics follow the international manual System of Health Accounts (SHA2011), which is made in collaboration between OECD, Eurostat and WHO. The statistics are included in OECD's annual publication Health at a Glance. Data are consistent and comparable for the entire time period.

2 Statistical presentation

Health care expenditures is an annual and three-dimensional statistics of health care consumption expenditures in Denmark. The consumption expenditures are distributed across different health functions, providers and financing schemes, which makes it possible to identify what is consumed, where it is consumed, and who has financed the consumption. The statistics is shown in millions DKK.

2.1 Data description

The statistic is a three-dimensional annual statistic, which shows consumption expenditures distributed across health care functions, providers and financing schemes. The statistic crosses health care functions with providers and financing schemes, respectively and providers with financing schemes. This implies that it is possible to identify how health care consumption is distributed across different health care functions, where these are delivered and further how it is financed. The consumption expenditures are linked to a health care function, which is delivered by a provider such as a hospital, which further have been financed by for example government schemes.

The statistics are developed according to international standards for health care consumption expenditures following the manual A System of Health Accounts (SHA2011). Furthermore, the data is used as an input to OECD's annual publication Health at a Glance,, which purpose is to compare health care systems across countries.

- **Functions**: shows how consumption is distributed across different health care goods and services, which purpose is to fulfill certain needs. It distinguishes between curative care, rehabilitative care, long-term care, ancillary services (non-specified by function), medical goods (non-specified by function), preventive care, and governance and health system administration.
- **Provider**: shows who delivers the different kind of health care goods and services. It distinguishes between primary and secondary providers. The primary providers contains hospitals, long-term care facilities, medical and dental practices, other ambulatory health care providers such as physiotherapists and chiropractors, pharmacies, providers of ancillary services and preventive care. The secondary providers contain government health administration agencies and households.
- **Financing scheme**: shows which schemes finance the consumption of the different health care goods and services and the consumption of these at the different providers respectively. The funding of health care goods and services can come from government schemes, voluntary health care payment schemes, out-of-pocket payments and funding from non-profit organizations.

2.2 Classification system

The classifications for health care expenditures follows the international manual for health care expenditures A System of Health Accounts - SHA 2011. Below you will find a description of the main groups of each dimension. For further detail see the classifications pages.

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Health care functions

Below the overall health care functions are described. For a more detailed description see the classification page of health care functions.

Curative care: health care goods and services which intent to relieve symptoms of illness/injury, to reduce the severity of an illness/injury or to protect against exacerbation and/or complication of an illness/injury that could threaten life or normal function. Curative care distinguishes between inpatient curative care, outpatient curative care and home-based curative care.

Rehabilitative care: health care goods and services, that intent to stabilize, improve or restore impaired body functions and structures, compensate for the absence or loss of body functions and structures, improve activities and participation, and prevent impairments, medical complications and risks. Rehabilitative care distinguishes between inpatient, outpatient and home-based rehabilitative care.

Long-term care (health): consists of a range of medical and personal care services that are consumed with the primary goal of alleviating pain and suffering and reducing or managing the deterioration in health status in patients with a degree of long-term dependency. Long-term care (health) distinguishes between inpatient, outpatient and home-based long-term care.

Pharmaceuticals and other medical non-durable goods: pharmaceuticals products and non-durable medical goods intended for use in the diagnosis, cure, mitigation or treatment of disease. This includes prescribed medicines, over the counter drugs, and other medical non-durable goods. Function and mode of provision are not specified.

Therapeutic appliances and other medical durable goods: medical durable goods (glasses, hearing aids etc.) that supports deformities and/or abnormalities of the human body, orthopedic appliances, prosthetics or artificial extensions that replace missing body parts or artificial extensions that replace a missing body part, e.g. artificial limbs and other prosthetic devices, including implants: an implant is a medical device made to replace (or supplement the functionality) of a missing biological structure and other medical-technical devices. Function and mode of provision are not specified.

Preventive care: measures that aims to avoid or reduce the number or the severity of injuries and diseases, their side effects and complications.

Governance and health system administration: services that focus on the health system rather than direct health care, and are considered to be collective, as they are not allocated to specific individuals but benefit all health system users.

Memorandum items: a number of supplementary items besides the above functions that supplies additional information. This includes supplementary information about specific expenditures in side the scope of the SHA-manual like total pharmaceutical expenditure and COVID-19-related costs. Both of these items comprises of different functions. For example total pharmaceutical expenditure comprises of expenditures from inpatient curative care and non-specified medical goods like prescribed medicine and over the counter drugs. Moreover, additional information about long-term care (social) obtained, which is outside the scope of the SHA manual and thus not defined as direct health care consumption but instead as health care related. Long-term care (social) consists i.a. of practical help and food service, which are closely related to long-term care (health).

Health care providers

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Here the primary health care providers are described. The detailed description can be found on the classification page for health care providers.

Hospitals: licensed establishments that are primarily engaged in providing medical, diagnostic and treatment services that include physician, nursing and other health services to inpatients and the specialized accommodation services required by inpatients. They may also provide day care, outpatient and home health care services. A distinction is made between general, mental and specialised hospitals.

Residential long-term care facilities: comprises establishments that are primarily engaged in providing residential long-term care that combines nursing, supervisory or other types of care as required by the residents. In these establishments, a significant part of the production process and the care provided is a mix of health and social services, with the health services being largely at the level of nursing care, in combination with personal care services. The medical components of care are, however, much less intensive than those provided in hospitals.

Providers of ambulatory health care: establishments that are primarily engaged in providing health care services directly to outpatients who do not require inpatient services. This includes both offices of general medical practitioners and medical specialists and establishment specializing in the treatment of day-cases and in the delivery of home care services.

Retailers and other providers of medical goods: pharmacies, retail sellers or other establishments whose primary activity is the retail sale of medical goods to the general public for individual or household consumption or utilization. Establishments whose primary activity is the manufacture of medical goods, such as making lenses, orthopedic or prosthetic appliances for direct sale to the general public for individual or household use, are also included, as is fitting and repair done in combination with sale.

Financing schemes

A more detailed description of the financing schemes can be found on the classification page for financing schemes.

Government schemes: financing schemes that are determined by law or by the government. A separate budget is set for the programme, and a government unit has an overall responsibility for it.

Voluntary health insurance schemes: schemes based upon the purchase of a health insurance policy, which is not made compulsory by government. Insurance premiums may be directly or indirectly subsidized by the government.

NPISH financing schemes: non-compulsory financing arrangements and programmes with non-contributory benefit entitlement that are based on donations from the general public, the government or corporations.

Household out-of-pocket: a direct payment for health care goods and services from the household primary income or savings (no third-party payer is involved): the payment is made by the user at the time of the purchase of goods or use of services.

2.3 Sector coverage

Not relevant for these statistics.

2.4 Statistical concepts and definitions

Consumption expenditures: The statistic follow the SHA2011 definition of consumption expenditures, which is equal to the sum of production, interest rates, consumption of capital and social benefits in kind minus the sale of goods and services including household out-of-pocket payments.

2.5 Statistical unit

Residential units who consumes health care either in Denmark or foreign.

2.6 Statistical population

All residential units who consumes health care either in Denmark or foreign.

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics is calculated from 2010 onwards.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

The expenditures are stated in million DKK and is shown in current prices.

2.11 Reference period

The statistics follow the calendar year.

2.12 Frequency of dissemination

Annual.

2.13 Legal acts and other agreements

§ 6 i Act on Statistics Denmark

The statistics about health care expenditures and financing is regulated under Regulation 2015/359 of the Europa-Parliament and of the Council.

2.14 Cost and burden

There is no direct reporting burden as the information mainly is obtained by accounts for the central and local governments along with annual reports form various relevant websites.

2.15 Comment

Additional information can be obtained by contacting Statistics Denmark. For more information see the subject side.

3 Statistical processing

Data for this statistic are collected annually from a number of both internal and external sources using data extracts and data deliveries. The collected data are validated on a macro level by controls of time series and different reasonableness checks. When data have been validated, the classification according to SHA2011 begins followed by imposed weights gathered from supplementary sources. Lastly, data are integrated and compiled into the final result.

3.1 Source data

The statistics is compiled using a number of internal and external sources.

Internal sources

- Data extracts from Statistics Denmark's internal database DIOR (database for integrated public accounts), which stores the accounting information from the central and local governments.
- Data deliveries from the office of National Accounts in Statistics Denmark about the final consumption expenditure of households on health care goods and services. Data from this is published in Statbank's table NAHC23 for year t-3 in jun.
- Data from the Household Budget Survey are used as weights to split between general practitioners, dentists, physiotherapists etc.
- Data from table AED022 and AED03 on the number of visited hours for personal and practical help in own home and nursing homes, respectively along with table SYGUS2 on public expenditures to psychiatry. Data from table AED022 and AED03 are used to calculate a distribution key.

External sources

- Data deliveries from the Danish Health Data Authority based on DRG-grouped National Patient Register to split expenses in somatic hospitals between inpatient and outpatient curative care. In addition, data from the Register of Pharmaceutical sales are also provided.
- Data from publicly available annual reports from the patient organizations: Danish Cancer Society, Gigtforeningen, Hjerteforeningen samt Health Insurance "danmark" and Statens Serum Institut.
- Key figures from F&P concerning health insurance schemes.
- Data delivery from the JRCC Joint Rescue Center regarding the cost of ambulance flights.
- Extraordinary for 2020-2022, COVID-19-related information have been collected from the local governments and Statens Serum Institut. In addition, specific delivery is received for the treatment costs of COVID-19 patients from the Danish Health Data Authority based on DGR-grouped LPR3 data. From 2023 specific information on COVID-19-related activities is no longer collected, as COVID-19 no longer is considered a socially critical disease thus included as a part of 'normal' health activity.

3.2 Frequency of data collection

Data is collected annually.

3.3 Data collection

The majority of data is collected by data extractions from Statistics Denmark's internal database DIOR (database for integrated public accounts) and by internal data deliveries from the office of National accounts. Data extractions from DIOR are conditioned on the SHA2011 definition of consumption. By an in depth examination of the central government accounts §16 The Danish Ministry of Health and the local government accounts a code list have been prepared which determines all relevant consumption expenditures from the public accounts within the scope of SHA2011. Furthermore, a part of data is collected from supplementary sources from The Danish Health Data Authority, various patient organizations and health insurance "danmark" and F&P.

3.4 Data validation

The public part of the statistic, which is collected by DIOR data, is validated within the scope of the statistics General Government Finances. In addition, the data delivery regarding household consumption of health care goods and services from the office of National Accounts in Statistics Denmark is also validated on receipt. Data deliveries from external sources are validated on a macro level by controls of time series and different reasonableness checks.

3.5 Data compilation

When the collection of data is complete, data is classified according to the SHA2011 manual. This implies that for each consumption expenditure, an associated health function, provider and financing scheme is coded.

The classification of primary data takes place on a very detailed level, where the main account level for the central government as well as the function and grouping level for local governments are coded. The classification is made through a number of processes:

1. Data from general government finances are compared with previous years and all previous classifications are transferred to recent year.
2. New accounts are classified manually according to the SHA2011.
3. A number of cases are then applied. These cases provide additional information, which results in partial reclassification of SHA2011 coding from the first two processes. The reclassification primarily concerns expenses at the local government levels as there are several accounts that contain different SHA categories. The cases impose distribution keys such as the distribution of expenses for personal and practical help or the distribution between psychiatrists and other specialists.

For the recent year, annual reports or relevant information in order to calculate the specific cases are not always available. Thus, information from previous years will be projected by either previous growth rates or projections from other sources depending on the data basis.

Please note that during the period 2022-2024, there is increased uncertainty regarding the level of medicine expenses. For 2022-2023, the uncertainty is attributed to over-the-counter medicine from retail, which is estimated. In 2024, the overall level of household out-of-pocket expenses for prescription and over-the-counter medicine is more uncertain, as we have not received data for this. The level for prescription medicine is estimated based on the development in the regions' medicine subsidies for prescription medicine, where we assume the same development. Over-the-counter medicine is assumed to be at the same level as in 2023. This affects the following items: Household out-of-pocket (OOP), 5.1.1. Prescribed medicines, and 5.1. Pharmacies.

After the classification of data is completed, data is integrated, validated and transmitted.

3.6 Adjustment

No corrections are made other than what has already been described under Data Validation and Data Processing.

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4 Relevance

The statistic is relevant for professionals and analysts. The statistic is included in the annual publication by OECD *Health at a Glance* and will be launched in OECD's database OECD.Stat. Professionals and analysts use the statistics to get a detailed overview of the consumption of health services in Denmark.

4.1 User Needs

The purpose of the statistic is to contribute to an international comparable database concerning the consumption expenditures on health. OECD uses the statistic as input to the annual publication *Health at a Glance* and publish the data in their own database OECD.Stat. Nationally, the statistic is used by professionals and analysts to get an overview of how the expenditures for health care are distributed across the entire field of health in Denmark.

4.2 User Satisfaction

Data regarding user satisfaction is not gathered at the moment.

4.3 Data completeness rate

The statistic fulfill the demands in the regulation made by EU. The publication of data in StatBank table SHA1 is identical to the detail level transmitted to Eurostat.

5 Accuracy and reliability

The overall accuracy of the statistics is considered to be high, as the primary data sources is constituted by the general government finances. However, there are uncertainty associated with the use of a few supplementary sources such as the Household Budget Survey. Moreover, misclassifications can occur as it can be difficult to determine whether some areas are within the scope of the SHA. This implies that the uncertainty increases with the level of detail. The accuracy is therefore highest for the overall SHA-categories.

5.1 Overall accuracy

The overall accuracy of the statistics is relatively high, as the primary data source is constituted by the general government finances. Distribution weights are applied to general government finance accounts to get mere detailed information, which, however, add a degree of uncertainty. The private part of the statistics concerning household out-of-pocket payments may be subject to uncertainty due to the use of the Household Budget Survey. Moreover, the latest year will be subject to further uncertainty as projections are used for individual sources.

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

Misclassification within the SHA2011 framework can lead to systematic uncertainty. Misclassification is attempted to be reduced by a detailed review of each account and after thorough research applied with SHA-codes. Furthermore, changes can occur in the lineup of annual reports, which can lead to over or underestimation of the health care expenditures.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

The statistic reflects the consumption expenditure on health care in Denmark and is published annually four months after the end of the reference period. Data are revised back to year t-4, and the statistics are therefore relevant and meet user needs. The statistics is in accordance with SHA2011 definitions and classifications and is presented with Danish health terminology, which should result in an easy understanding. The statistics is consistent and international comparable with countries within OECD and Eurostat in the entire time period.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the Revision Policy for Statistics Denmark. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

The statistic follows the revision policy of the national accounts, where years t-2, t-3 and t-4 are recalculated simultaneously with the calculation of year t-1. The revisions previous years are published simultaneously with the publication of year t-1.

6 Timeliness and punctuality

The statistic is published for the first time four months after the end of the reference period and without delays in relation to planned release times.

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6.1 Timeliness and time lag - final results

The statistic is published annually immediately after the transmission to the international statistical offices OECD, Eurostat and WHO. From the end of the reference period, four months pass until the first release and three years and four months until the final release.

6.2 Punctuality

The statistic is published without delays in relation to the pre-announced time of publication in the release calendar.

7 Comparability

The reporting burden to the OECD, Eurostat, and WHO was acquired from the Ministry of Health in July 2019. The statistic produced according to European guidelines in relation to the manual *System of Health Accounts (SHA2011)*. The statistics are fully comparable over time and across countries for the entire time period.

7.1 Comparability - geographical

The statistic is compiled in accordance with the manual A System of Health Accounts (SHA2011), which is made in collaboration between OECD, Eurostat and WHO. Data is published by OECD, Eurostat and WHO. The statistic is fully internationally comparable with the other reporting countries.

7.2 Comparability over time

The statistics is compiled following the same method in the entire time period from 2010 onwards in the StatBank. Data prior to 2010 can be found in the international databases and were transmitted by the Ministry of Health. Thus, one should exert extreme caution when comparing with data before 2010 since the method for data published by Statistics Denmark from 2010 onwards may be different from the method used in the calculation of previously reported years.

7.3 Coherence - cross domain

The majority of data originates from the general government finances, which are included in the National Accounts, why there is a link to this. The difference between the inventories is caused by differences in the SHA classification and the concepts of National Accounts. Furthermore, the Household Budget Survey is used as an input for household consumption of health care goods and services, why there also is a link to this. Moreover, the Household Budget Survey is included as input to the National Accounts.

7.4 Coherence - internal

The statistic is internally consistent, which is ensured by consolidations of transactions and application of the concepts of national accounts.

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8 Accessibility and clarity

The statistics is published in New from Statistics Denmark and in the StatBank under Health care expenditures. For more information see the subject page. In addition, the figures are included in OECD's annual publication *Health at a Glance*. Moreover, data is published by OECD, Eurostat and WHO.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.4 News release

The statistic is published in New from Statistics Denmark: Health care expenditures.

8.5 Publications

The statistic is published in OECD's annual publication *Health at a Glance*, where data from the statistic is used as input to calculate different health indicators. These indicators are described in *Health at a Glance* and forms the basis for comparison across countries.

8.6 On-line database

The statistic is published in the StatBank under the in table:

- SHA1: Health care expenditures by function, provider, financing scheme and price unit

8.7 Micro-data access

Micro-data is not available.

8.8 Other

Data is transmitted to Eurostat, who forwards data to OECD and WHO. Transmitted data can be found in the international databases at OECD, Eurostat and WHO.

8.9 Confidentiality - policy

The statistics follows Statistic Denmark's data confidentiality policy.

8.10 Confidentiality - data treatment

The statistics is published at a level of aggregation which does not require additional discretion.

8.11 Documentation on methodology

The statistics is produced in compliance with the reference manual A System of Health Accounts - SHA 2011.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

The administrative placement of these statistics is in the division of Government Finances, Economic Statistics. The contact person is Marianne Ahle Møller, tel.: + 45 2466 0028, and e-mail: MNM@dst.dk.