STATISTICS DENMARK

Documentation of statistics for Health Insurance Statistics 2020

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1 Introduction

These statistics focus on the correlation between social conditions and the primary public health service. The statistics are based on annual extracts from the joint municipal system of public health insurance (Det Fælleskommunale Sygesikringssystem) used by the regions to settle accounts for health services with the individual providers (e.g. physicians, dentists etc.). The statistics have been compiled since 1986, but are comparable from 2006 onwards.

2 Statistical presentation

The statistics cover visits to the general practitioners and therapists in the primary national health service. The statistics include the number of contacts, the associated costs and the number of recipients. The statistics have been affected by COVID-19 in the sense that there have been far more contacts with general practitioners, especially e-consultation, which covers, for example, test results on COVID-19 tests. In addition, there is a decline in physiotherapy, which is also thought to be related to COVID-19.

2.1 Data description

The statistics compile the number of recipients and services and the costs incurred in connection with these in the public health insurance system within one calendar year. The statistics include the services, e.g. consultations with general practitioners or medical specialists, dental care, treatments by physiotherapists or chiropractors etc. which are settled via the joint municipal system, which means that a part of the total costs of the public health insurance is not included in the statistics (such as drug reimbursement, travellers' health insurance etc.).

2.2 Classification system

In connection with publications, the following classifications of Visits to physicians etc. are applied:

- Medical speciality/nature of the service, aggregate (code for type of physician, and breakdown of consultations with GP) with 21-grouping
- Medical speciality/nature of the service (more detailed breakdown by medical specialists etc.) with 47-grouping

The applied grouping of medical speciality/nature of the service can be retrieved from tariff folders at http://www.okportal.dk Furthermore, other classifications from other sets of statistics are applied:

- Socio-economic status (self-employed persons; assisting spouses; chief executives; high-level employees; mid-level employees; ground-level employees; other employees; unemployed persons; students; retired persons and persons receiving early retirement benefit; persons outside the labour force; not stated). Note that socio-economic status was revised in the Register-based Labour Force Statistics released in May 2015, where a prioritisation has resulted in more students and fewer children. In Visits to physicians etc. 2014, the statistics broken down by socio-economic grouping are recalculated for 2009-2013.

- Income level (1st quartile; 2nd quartile; 3rd quartile; 4th quartile). Note: new version of The Income Register in the spring of 2015. In Visits to physicians etc. 2014, the statistics broken down by socio-economic grouping are recalculated for 2011-2013.

- Family type (singles without children in the home; singles with children in the home; couples without children in the home; couples with children in the home)

- Ancestry (persons of Danish origin; immigrants; descendants)

- Geography (municipalities; provinces; regions)

2.3 Sector coverage

Primary health care sector in Denmark.

2.4 Statistical concepts and definitions

Contact: Contact is a visit to the physician, which includes consultations at a clinical practice, telephone and e-mail consultations and house calls. A visit to the physician involves one contact, but may also involve an extended number of individual services.

Person with contact: Person who has been in contact with/visited a physician

Public health insurance expenses: Expenditures in connection with the services received by persons with contacts/visits to physicians via the public health insurance.

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2.5 Statistical unit

- Number of persons with contact/visits to physicians etc.
- Number of contacts/visits to physicians
- Public expenditures in DKK 1,000 of services
- Contacts per person
- Share (of the population) with contact

2.6 Statistical population

Contacts (visits to physicians etc. - including telephone and e-communication) in the primary public health service.

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics cover the time period from 2006 and forward.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

- Number (contacts, persons)
- DKK 1,000 (expenditures)
- Contacts per person
- Share with contact

2.11 Reference period

The reference time is the calendar year in which the service (the contact and expenditure) took place.

2.12 Frequency of dissemination

Yearly.

2.13 Legal acts and other agreements

There is no EU regulation concerning the statistics on visits to physicians etc.

2.14 Cost and burden

There is no response burden as the data are collected via the joint-municipal register for public health insurance.

2.15 Comment

Visits to Physicians.

3 Statistical processing

A review of the collective agreement's tariff folders regarding new services leads to an indication as to whether the service must be included under contacts or not. In addition to the fee that is directly linked to a service, Statistics Denmark makes a special calculation for general practitioners adding basic fee and clinical practice cost fees. We do so to create an improved basis of comparison between the expenses for general practitioners and medical specialists etc. The received register data is connected with background data from Statistics Denmark and assessments are made.

3.1 Source data

The joint municipal system of public health insurance is the primary source. In addition to this, supplementary sources are applied such as Tariff folders in the ok portal (services) and calculation of practice cost fees etc. Internal sources:

- The register of population statistics (family type, ancestry)
- The register of income statistics (level of income) for the previous year
- Register-based Labour Force Statistics (socio-economic status) as of November the previous year.

3.2 Frequency of data collection

Yearly.

3.3 Data collection

Register.

3.4 Data validation

The data received are compared with data from the previous year, and any major fluctuations examined to reassure quality. For the purpose of statistical production data are analyzed thoroughly, and further studies made on the basic data if needed.

3.5 Data compilation

Number of contacts is calculated on the basis of the number of services and indication of whether the service is considered a contact or not. With effect from 2006, sex and age have been imputed for the minor group of children that is registered under the civil registration number of the accompanying adult. Connection with other details about family relations, ancestry, socio-economic status and income. Personal files are created with the aggregate number of contacts and aggregate gross fee. Statbank Denmark tables are created from the above-mentioned data basis.

3.6 Adjustment

From 2005, the register was cleansed of observations for which there are no reimbursements via the public health insurance (the gross fee equals 0). This applies primarily to physiotherapy and dental treatment. Accordingly, data is assessed for 2005 both by the old method of assessment by which data is not cleansed, and the new assessment method by which data is cleansed.

There is a very small number of records for which the number of contacts is negative. For 2008, there are 3,869 negative records (corresponding to 0.3 per thousand of all records). For 2009 and 2010, there are 788 and 771 negative records, respectively. This is due to technical settlement adjustments in the register, i.e. not adjustments made by Statistics Denmark. For 2013, Statistics Denmark has been informed by CSC Scandihealth that they have found small inaccuracies (regarding October, November and December 2013) in the submitted data, because adjustments in Region Midtjylland (Central Denmark Region) have been assessed with incorrect operational signs.

4 Relevance

Statistics Denmark estimates that to a wide extent, these statistics meet the users' needs. It is estimated, however, that extending the statistics with use of pharmaceuticals could increase the usefulness.

4.1 User Needs

- Users: Municipalities, regions, ministries, organisations, private companies and private individuals.
- Fields of application: Public planning purposes, research and public debate.

4.2 User Satisfaction

We are in contact with users on a regular basis either by mail or by telephone, and user needs and views are noted in a log. Occasionally, we are in contact with various organisations such as Danish Regions (RLTN) and the Danish Dental Association regarding the quality of the statistics.

4.3 Data completeness rate

Under preparation.

5 Accuracy and reliability

The register has full coverage and the data is of relatively high quality. Changes in collective agreements from one year to the next may render comparison over time difficult in fields with a relatively narrow scope. The assessment of the number of contacts depends on the specific breakdown of services in the health insurance system. In connection with changed breakdowns, certain services which should rightfully be considered as contacts may be left out.

5.1 Overall accuracy

Since the information originates from the statutory administration, the accuracy is considered to be high.

In assessing whether a service should be included under contacts, there is an element of lack of accuracy.

The register also includes information about services given to persons without a valid civil registration number – typically foreigners. For these persons, it is not possible to break down on sex and age.

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

Measurement error in connection with changes in collective agreement, when it is assessed whether new services are to be counted as contacts or not. Measurement error if there are services in the register which do not exist in the tariff folder from www.okportal.dk.

Up to and including 1995, 0-15 year-old children did not have their own national health insurance card, but were registered under the accompanying adult's civil registration number and given a special mark to indicate that the service was provided to a child. However, this has not been done in all instances. For this reason, the statistics include an unknown number of men and presumably even more women who should have been registered as children. Another issue that contributes to the underestimated number of children is the fact that an adult who has visited the physician with several children or with the same child on multiple occasions during the year, only appears as one person (one child). From 1996 onwards, all persons – except for unnamed new-born babies – have their own national health insurance card with their own civil registration number under which they should be registered. In spite of this, a minor group of children are still reported under the civil registration number of the accompanying adult. It implies a further risk of double counting of these children, as they may first have been registered under the civil registration number of an adult and subsequently under their own civil registration number.

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

Statistics Denmark estimates that data from Det Fælleskommunale Afregningsregister (the joint municipal settlement register) (public health insurance register) is of high quality. Changes in the collective agreement services from one year to the next may imply some uncertainty in the calculation of contacts.

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

Only final figures are published. As an exception, Visits to physicians etc. 2014 has undergone revisions in socio-economic status from 2009 and income distribution from 2011 due to revision of the source.

6 Timeliness and punctuality

Under preparation.

6.1 Timeliness and time lag - final results

Only final numbers are compiled. The statistics are published within 6 months after the end of the reference period. In some cases there have been delays which cause the statistics to be published later.

6.2 Punctuality

The statistics are usually published without delay in relation to the scheduled date.

7 Comparability

Data basis for assessments of visits to physicians etc. (health insurance statistics) is Det Fælleskommunale Afregningsregister (joint municipal settlement register). Delimitation and definition of contacts (or use of services instead of contacts) may result in statistics that do not seem to be directly comparable. Typically, any – often minor – differences can be attributed to method and delimitation. The overall picture is unambiguous.

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7.1 Comparability - geographical

Direct comparison with international statistics is not immediately possible. For comparable international data, we recommend that you look at data from Eurostat and the OECD, which make comparable data collections and publish data (e.g. OECD´s publication Health at a Glance) that is comparable to a certain extent in this field. There are a number of organisational and institutional conditions that we must keep in mind when analysing any differences.

7.2 Comparability over time

Since an increasing number of service providers have joined the system through the years, you should exercise caution when comparing over time.

For the years 1984, 1985 and 1986, the register relies on a 10 per cent sample that contains services for persons born on day 14, 15 or 16 of a month; from 1987 onwards the register includes all services and persons covered by the agreements between the regions and the organisations representing the various service providers. Originally, it was typically physicians who held agreements with the former counties, whereas, today, a number of new service providers, e.g. psychologists and physiotherapists, have entered into agreements and accordingly, are included in the statistics.

In particular the number of contacts statistics may present difficulties when you make comparisons over time. Several methods have been applied over time to specifically delimit the services to be considered as contacts. This has involved a certain measure of data breaks in the number of contacts between the years up to 2005 and from 2006 onwards. From 2006, a revision has been made in the calculation of contacts.

From 2006, the register includes an imputed amount for the general practitioners' basic fee etc. The total amount is broken down on the individual receivers of services from general practitioners in proportion to the gross fee. For visits to dentists, the first visit (including checkup) is registered as contact, whereas subsequent visits in the course of the same dental treatment procedure are not registered as contacts.

Physiotherapy is often administered as team training, so that the individual physiotherapist can train several persons at a time. The training of each person is assessed as a contact. For riding physiotherapy, the calculation will be uncertain for the same reasons that apply to physiotherapy.

In 2009, a large decline was seen in the number of dental contacts. This decline is not real but is owing to two types of service regarding preventive treatment ('502920', '502930') which are no longer included as contacts at the recommendation of the Danish Dental Association. This does not give a true and fair view of the development in contacts with dentists from 2008 to 2009 of approximately 500,000.

In 2011, the figures indicate a major increase in contacts etc. with chiropodists, which is explained by a prolonged conflict that was resolved by a collective agreement in this field on 1 June 2011. (For a long period of time, it has not been possible to calculate the number of contacts with chiropodists for two reasons: First of all, the breakdown of services makes it difficult to determine whether it counts as contact or not and consequently difficult to calculate the number of contacts. Second, there was no collective agreement in this field from June 2005 to June 2011. During this time, the major part of the fee to chiropodists was settled without the involvement of the public health insurance system and for this reason it was not included in the statistics.)

In 2011, there is a large decline in General practitioner, prevention etc., which is due to the discontinuation of service code "0106 Aftalt forebyggelseskonsultation" (agreed preventive consultation) and the tightened requirements for using the new code "0120 Aftalt specifik forebyggende indsats" (agreed specific preventive measures).

For 2011, the number of contact to psychologists is underestimated on a scale of 20,000 (roughly estimated), because specific services not included in the tariff folder should have been included as contacts. This did not happen until 2012 onwards.

For 2012, a further number of service codes have been included for psychologists, codes that are not mentioned explicitly in the tariff folder. These service codes have not been included for previous years, which is why the development for psychologists from 2011 to 2012 is overrated.

Due to a pilot project on Bornholm in 2012, the number of contacts with general practitioners is underestimated by approximately 112,000 for that year. The tariff folder for 2012 includes Assistance from an interpreter, and this does not result in changes in the number of contacts. Upon careful consideration, it has been decided not to include the expenses for assistance from an interpreter for 2012.

In 2013, the number of dental contacts dropped by 22 per cent as this field was narrowed in 2013, so that in future reimbursement is only granted for cleaning of teeth, and reimbursement for checkup on diagnostic findings is discontinued.

For 2013, Statistics Denmark has been informed by CSC Scandihealth that they have found small inaccuracies (regarding October, November and December 2013) in the submitted data, because adjustments in Region Midtjylland (Central Denmark Region) have been assessed with incorrect operational signs.

In 2014, socio-economic groups (soc_stil to soc_status) were revised in the Register-based Labour Force Statistics, and the period 2009-2013 has been recalculated. This amounts to a break in the socio-economic grouping between 2008 and 2009.

In 2014, the income register was revised, and the period 2011-2013 has been recalculated, but it has not had any noteworthy impact on the breakdown by income quartiles.

7.3 Coherence - cross domain

Total health expenditure appears from the regional accounts, table REGR31 in Statbank Denmark. The total amount for the health insurance reimbursements appears from the regional accounts. The Danish Health Authority has previously published periodic statistics on the population's use of the public health insurance. Both of these assessments are exclusive of the background information that exists in the Health Insurance Register of Statistics Denmark. The Danish Health Authority has incorporated a number of detailed tables on health insurance at http://www.sundhedsdata.sst.dk. Delimitations and definitions are not consistently identical with those in the assessment by Statistics Denmark. The difference concerns in particular services categorised as prevention etc., which are not included by the Danish Health Authority. Danish Regions also make an assessment of visits to physicians etc.

7.4 Coherence - internal

Data are internally consistent.

8 Accessibility and clarity

Nyt fra Danmarks Statistik and Statbank Denmark, http://www.dst.dk/stattabel/1316

Annual publications (selected sections): Statistical Ten-Year Review.

8.1 Release calendar

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

8.2 Release calendar access

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

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.

8.4 News release

Further information is available at: Health Insurance Statistics

8.5 Publications

The statistics are presented in Statistical Ten-Year Review and Denmark in Figures, which can be found in Statistics Denmark's web pages.

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8.6 On-line database

The statistics are published in the StatBank under the subject in the following tables:

- SYGP1: Number of persons with contacts covered by public health insurance by region, type of benefits, age and sex
- SYGPS1: Recievers og public health insurance by region, type of benefits, age and sex
- SYGK1: Contacts covered by the public health insurance by region, type of benefits, age and sex
- SYGKS1: Contacts covered by the public health insurance by region, type of benefits, age and sex
- SYGU1: Public health insurance expenses by region, type of benefits, age and sex
- SYGUS1: Public health insurance expenses by region, type of benefits, age and sex
- SYGP2: Number of persons with contacts covered by public health insurance by region, type of benefits, age and sex
- SYGPS2: Recievers og public health insurance by region, type of benefits, age and sex
- SYGK2: Contacts covered by the public health insurance by region, type of benefits, age and sex
- SYGKS2: Contacts covered by the public health insurance by region, type of benefits, age and sex
- SYGU2: Public health insurance expenses by region, type of benefits, age and sex
- SYGUS2: Public health insurance expenses by region, type of benefits, age and sex
- SYGFAM: Population by key figures, type of benefits, family type, sex, age and time
- SYGHER: Population by key figures, type of benefits, ancestry, sex, age and time
- SYGIND: Population by key figures, type of benefits, income level, sex, age and time
- SYGSOC: Population by key figures, type of benefits, socioeconomic status, sex, age and time
- SYGSIK: Population by region, health insurance group and time
- LIGEHB6: Consultations with the general practitioner by region, sex, age, family type and time
- LIGEHI6: Gender equality indicator of consultation with the general practitioner by indicator, region, age, family type and time

8.7 Micro-data access

External access to de-identified micro-data is only available via Statistics Denmark's Research Services.

8.8 Other

There are no separate restrictions in the access to data. The health insurance register with de-identified micro-data exists in PSD (Statistics Denmark internal database) and as module data (SD internal database), and data can be made available to employees in e.g. Statistics Denmark's Research Services and SD Consulting on application in this regard.

8.9 Confidentiality - policy

Publication from the register will be in accordance to the data privacy policy of Statistics Denmark: Data privacy policy.

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8.10 Confidentiality - data treatment

The statistics are not published at a level detailed enough for individuals to be identified.

8.11 Documentation on methodology

The basis and contents of the statistics are described (in Danish) in "Statistiske Efterretninger, Sociale forhold, sundhed og retsvæsen". Statistical Information for 2012 is the last version of this. Furthermore, the content of the register of health insurance is documented (in Danish) in Statistics Denmark's documentation system (TIMES) including selected variables such as Højkvalitetsdokumentation (high quality documentation): Højkvalitetsdokumentation.

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

In terms of administration, these statistics belong in the office Social and Health. Charlotte Wind von Bennigsen is the head of statistics, tel. +45 3917 3047, e-mail: cwb@dst.dk

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Welfare and Health, Social Statistics

9.3 Contact name

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