Documentation of statistics for Hospitalization 2013

1 Introduction

The purpose of the statistics on hospitalization is to contribute to a description of the relationship between social conditions and admissions to (and from 2006 outpatient treatments at) hospitals. 1990 is the first year covered by the statistics. Since then the content of the statistics has continuously been extended. E.g. in 1994 the statistics was supplemented with a number of new variables to describe the social conditions at family level.

2 Statistical presentation

The statistics cover admissions to and day-care treatments at public somatic hospital departments within one calendar year. Furthermore, the statistics show how the use of hospitals varies with a range of social conditions, such as family, education, occupation, income, etc. When the statistics for 2012 was published the presentation in the statistical bank was revised and expanded. Within this the statistic for outpatients was partially integrated from 2006. With this revision also the population in some of the tables with rates standardized for age and sex was changed.

2.1 Data description

The key variables in the statistics are the number of admissions, the number of bed days, the number of outpatient treatments and the most important diagnosis. Furthermore the statistics show how the use of hospitals varies with a range of social conditions, such as family, education, occupation, income, etc. Until the statistics on hospitalization for 2008 background information from The Cohesive Social Statistics was included. After the termination of the Cohesive Social Statistics it may be considered to include other variables regarding income in future statistics on hospitalization.

2.2 Classification system

Diagnosis - according to the International Classifications of Diseases ICD - on aggregated 23 and 99 groups. (More on IDC10 and classification of diseases available on The SKS-browser)

Admisssions (acute, planned)

Furthermore other classifications from other statistics are used on the background variables.

2.3 Sector coverage

Health sector

2.4 Statistical concepts and definitions

Ambulant behandlet person: Personer, som har modtaget ambulant behandling en eller flere gange i løbet af året.

Ambulant behandling: En ambulant behandling foretages på sygehuset ved et besøg på ambulatorium eller afdeling. I registret opgøres patienttype som ambulante patienter, når patienttypen ikke er indlagt patient (eller er skadestuepatient - indtil 2014).

Indeks (ifm standardisering): Indeks ud fra køn- og aldersstandardiserede beregninger, som gør det muligt at sammenligne på tværs af uddannelses-, indkomst, socioøkonomiske grupper mv. Indeks over 100 viser hyppigere behandling end gennemsnittet, mens indeks under 100 viser sjældnere behandling end gennemsnittet. Indeksene kan ikke sammenlignes mellem mænd og kvinder, og de er heller ikke beregnet til analyse af udviklingen over tid. Især i grupper med få individer kan indekset udvikle sig kraftigt fra år til år, da der ikke skal så meget til før resultatet varierer.

Indlagt person: Personer, der har været indlagt på sygehus en eller flere gange i løbet af året.

Indlæggelse: Afsluttet indlæggelse på somatiske offentlige sygehuse, hvor patienttypen er som indlagt patient i modsætning til ambulant patient (eller skadestuepatient - indtil 2014).

Sengedage ved indlæggelser: Antal sengedage ved indlæggelser.

2.5 Statistical unit

The unit is number of admissions and bed days for inpatients and the number of outpatient treatments.

2.6 Statistical population

2.7 Reference area

Denmark

2.8 Time coverage

The statistics has been produced on the present basis since 1990. (Statistics prior to 2006 are to be found in the archive of statbank.dk)

2.9 Base period

N/A

2.10 Unit of measure

Number.

2.11 Reference period

The reference period is the calendar year in which the admission/treatment take place.

2.12 Frequency of dissemination

Yearly

2.13 Legal acts and other agreements

The Act on Statistics Denmark § 6. There is no EU Regulation related to the statistics on hospitalizations.

2.14 Cost and burden

There is no response burden as the data are collected via registers.

2.15 Comment

[Hospitalization rates](#).

3 Statistical processing

Data are processed and checked in the different stages of production.

3.1 Source data
- National Register of Patients operated by Statens Serum Institut (before 2012: by the National Board of Health) and following registers operated by Statistics Denmark:
- The Population Statistics Register, see the following declaration of contents under the subject Population and elections: The population 1. January, Household and family statistics and Immigrants and their descendants
- The Medical Register of Births and Deaths (up to and including 2005), see the declaration of contents for Medical birth and death statistics under the subject Population and elections
- The Central Register of Buildings and Dwellings, se the declaration of contents for Census of Housing under the subject Construction and housing
- The Educational Classification Module, see the declaration of contents for Education of the population under the subject education and culture
- The Employment Classification Module
- The Register of Prosperity Statistics, see the declaration of contents for Family Income Statistics under the subject Income, consumption and prices
- Before 2008: The Register of Transfer Payments, see the declaration of contents for Coherent Social Statistics under the subject Social conditions, health and justice

3.2 Frequency of data collection

Yearly

3.3 Data collection

Register

3.4 Data validation

The data undergo a probability check in form of a comparison with data from the previous year. Explanations of possible big deflections in the distribution of key variables are looked for, possible by contacting the 'National Board of Health' (Statens Serum Institut).

3.5 Data compilation

N/A

3.6 Adjustment

N/A

4 Relevance

N/A

4.1 User Needs

Users: Ministries (especially the Ministry of Justice), the local police authorities, courts, municipalities and counties, different organizations, educational institutions, research or scientific institutions, the media, private firms and private individuals. **Applications:** Public and private planning, education, research/science and public debate.

4.2 User Satisfaction

The statistics on hospitalization are frequently used by the press and the tables in the statbank.dk are used frequently.

4.3 Data completeness rate

N/A

5 Accuracy and reliability

The National Board of Health validates the National Register of Patients and the reliability of the data in the register is in general regarded as high. In 1990 an evaluation of the quality of the data in the National Register of Patients was carried out. The result of this evaluation was that the administrative information (e.g. dates) had a high level of reliability while the medical data (e.g. diagnoses) had a lower level of reliability. However, as Statistics Denmark uses the codes of diagnoses at an aggregated level this is not assessed to be of major importance. For an assessment of the reliability of the other registers of persons statistics, which are operated by Statistics Denmark and used in the statistics on hospitalization, reference is made to the specific declarations of contents of these registers.

5.1 Overall accuracy

The accuracy of the statistics on hospitalizations is considered to be good.

5.2 Sampling error

N/A

5.3 Non-sampling error

N/A

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 accuracy of the statistics on hospitalizations is considered to be good. The data come from a single administrative register system, and Statistics Denmark receives one register extract containing all the admissions and outpatient treatments reported from the hospitals to the authorities in Denmark.

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.

6 Timeliness and punctuality

The publishing time for the statistics is about 10 months. The statistics are usually published without delay in relation to the scheduled date.

Only final figures are published.

6.1 Timeliness and time lag - final results

The publishing time for the statistics is about 10 months.

The statistics are produced yearly. The statistics are published in News from Statistics Denmark 4-5 weeks and in Statistical News about 2 months after Statistics Denmark has received the necessary information from the 'National Board of Health'. The time of delivery of the data from the National Board has before 2012 varied during the years. This has implied that the statistics have been published between 1 and 1½ year after the end of the reference period.

Time lag: 2013: 9 months, 21 days 2012: 10 months, 19 days 2011: 9 months, 5 days 2010: 11 months, 22 days 2009: 21 months, 11 days 2008: 26 months, 29 days 2007: 16 months, 25 days 2006: 17 months, 17 days

6.2 Punctuality

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

7 Comparability

The statistics have been prepared on the same basis since 1990. Generally comparability over time is good. Though due to changes in the grouping of the diagnosis in 1994 and concepts of the back ground variables caution is recommended when comparing figures. In the years 1995 and 2008 labour market conflicts among nurses have reduced the activities. Outpatient treatments are only available from 2006.

7.1 Comparability - geographical

EUROSTAT/OECD collect annual data in joint questionnaire from the member states on hospitalizations. The range of items included in the different groups differs between countries and comparisons based has to be made with caution.

7.2 Comparability over time

The same primary data have been used since 1990 when the statistics were compiled for the first time. On 1 January 1994 the new International Classification of Diseases (ICD10) was introduced. This replaced the former ICD8-classification. This implies that caution has to be exercised in comparing the disease pattern before and after 1 January 1994. Furthermore, the development in the disease pattern can be influenced by changes in the practice of recording. For instance, there has been a considerable increase in the number of admissions with diagnoses in the group Symptoms, signs and ill-defined conditions. This is due to an increasing tendency to record symptoms in stead of a specific disease as long as the disease is not clearly defined. The information in the National Register of Patients on admissions caused by road traffic accidents is up to and including 1994 regarded as defective. Since 1995 the information is regarded as adequate. When looking at the use of hospitals in 1995 the trade dispute among hospital nurses this year has to be taken into consideration. The use of the background information in the statistics has continuously been extended, cf. item. 0.4. Consequently, some of the statistics cannot be found for all years.

7.3 Coherence - cross domain

The National Board of Health issues yearly statistics about the activity at hospitals. These statistics are also based on the information in the National Register of Patients. The statistics on the population's use of hospitals are comparable with these statistics, except the definition of the group of people covered by the statistics: In most of the tabulations the statistics on the population's use of hospitals only cover people living in Denmark as of 1 January in the specific year. This implies that people who were born or immigrated to Denmark during the year are not covered by the statistics. Another difference is that the statistics in the population's use of hospital assign people according to their municipality/county as of 1 January in the specific year, while the statistics from the National Board of Health assign people according to their municipality/county as of the date of admission.

7.4 Coherence - internal

Data are internally consistent.

8 Accessibility and clarity

News from Statistics Denmark

StatBank Denmark: Hospitalizations

- Key-figures (in combination with outpatients, per January 1st): INDAMP01, INDAMP02, INDAMP03
- Hospitalizations (also patients and bed days): IND01, IND02, IND03, IND04, IND05
- Patients (only per January 1st, dominant diagnosis): INDP01, INDP02
- Standardized rates (population per January 1st.): INDP03, INDP04, INDP05, INDP06, INDP07, INDP08, INDP09, INDP10

8.1 Release calendar

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

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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

News from Statistics Denmark: The latest release can be found here: [NYT 2013](http://News from Statistics Denmark: The latest release can be found here: [NYT 1. kvt. 2014](#)

8.5 Publications

Yearly publications (paragraphs): *Statistical Yearbook*, *"Statistisk Tiårsoversigt"*.

8.6 On-line database

The statistics are published in StatBank Denmark. Subject: Living conditions, Health, Hospitalizations: [Hospitalisations](http://www.statbank.dk/xxxx]

8.7 Micro-data access

The Register of Hospitalizations stores complete data on the population's use of hospitals at the level of individuals. Furthermore, complete data on all admissions and outpatients at the level of individuals are stored. This information can be used in compiling other or more detailed statistics than those published.

8.8 Other

N/A

8.9 Confidentiality - policy

Publication from the register will be in accordance to the data privacy policy of Statistics Denmark: [Data privacy policy](#).

8.10 Confidentiality - data treatment

The statistics on hospitalizations do not make identification possible.

8.11 Documentation on methodology

The content of the Register of Hospitalization is documented in Statistics Denmark's documentation system (TIMES).

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 this statistics is in the division of Social Statistics. The person responsible is Kamilla Heurlén, tel. +45 3917 3493, e-mail: kah@dst.dk

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