

**Documentation of statistics for  
District Nursing 2015 Month 12**

## 1 Introduction

Statistics on home nursing is a revitalisation of the part of the indicators on municipal health regarding home nursing, where data are collected directly for the care systems of the municipalities. The statistic give the number of recipients, visits and services of home nursing.

## 2 Statistical presentation

The statistic of home nursing has information on number of visits and recipients of home nursing and on services delivered on types. The statistic is published in three tables in StatBank Denmark.

### 2.1 Data description

Home nursing is one of several areas in the municipal health care. The other areas are prevention and advancement, rehabilitation following discharge from hospital, alcohol and drug abuse and children´s health.

The statistic was first published on March 23rd 2016 with monthly data on municipalities showing:

- Visits by home nurses or delegates (compiled by Statistics Denmark according to time of delivered service)
- Recipients of visits by home nurses or delegates. Furthermore an indicator of recipients compared to population size is presented.
- Home nursing services delivered. These services is also divided by type of service.

With the arrangement about the economy for 2006 for the municipalities a cross-public co-operation started, which has to ensure a coherent documentation on important areas of municipal services. One of these areas was municipality health, which encompass home nursing. Statistics Denmark (in cooperation with The National Board on Health) were responsible for compiling and publishing indicators on municipal health care. Indicators for home nursing were published for the years 2011-2013.

In the origin four home nursing indicators was published:

- Net current expenditure on home nursing care (DKK per inhabitant)
- Recipients of visits by district nurses (number per 1,000 inhabitants)
- Visits by district nurses per recipient per month, by type of service
- Preventive hospitalization of recipients of visits by district nurses by cause and region (percent)

### 2.2 Classification system

Municipality, region and country. The type of home nursing service is categorized according to nurse specific areas (before 2013).

### 2.3 Sector coverage

The municipal sector.

## **2.4 Statistical concepts and definitions**

Visits of home nursing: Visits of home nursing is compiled by Statistics Denmark. Visits can be conducted by other staff members than educated nurses.

Recipients of home nursing: The number of citizens who receive home nursing services is transmitted to Statistics Denmark each month for each municipality via their care systems. However data are missing from some municipalities, and there can be periods, where data from a municipality also is missing. This can be due to changes of the care system provider etc.

Home nursing services: Home nursing services are provided by the municipality according to 'the law of health' (Sundhedsloven). The services are divided in types (12 types, 'other' and 'acute'). Please notice, that the types are according to the guidelines in 2005 and not the latest guideline from 2013.

## **2.5 Statistical unit**

Visits, recipients and services.

## **2.6 Statistical population**

Recipients of home nursing care. Citizens who receive home nursing care from the municipality according to the law of health ("Sundhedsloven").

## **2.7 Reference area**

Denmark

## **2.8 Time coverage**

From January 2014 to December 2015.

## **2.9 Base period**

Not relevant for these statistics.

## **2.10 Unit of measure**

The unit is number for visits, recipients and services. The unit for type of service is per cent. Recipients are also presented in the unit number per 1,000 inhabitants.

## **2.11 Reference period**

01-01-2014 - 31-12-2015

## **2.12 Frequency of dissemination**

Yearly.

## **2.13 Legal acts and other agreements**

Information on home nursing from the care systems of the municipalities is collected according to "Økonomiaftalen" for 2006 between the Department of Finance and the Local Government Denmark (KL).

There is no EU-regulation.

## **2.14 Cost and burden**

The statistics are based on data automatically transferred from the municipalities. There is no direct respondent burden.

## **2.15 Comment**

On the homepage [home nursing](#) further information on these statistics is available.

## **3 Statistical processing**

Before using the data from the municipal care systems Statistics Denmark perform a validation process. There is no subsequent acceptance of data by the municipalities. The municipalities can transmit revised data, which will be part of the coming version of the statistics. Statistics Denmark compile the number of visits on the timestamp for the delivered service. There are made no imputations, correction of data nor seasonal adjustment.

### **3.1 Source data**

Data on home nursing is collected automatically via the care systems in the municipalities. Data are transmitted via KMD to Statistics Denmark. The data delivery is named L101.1, and it encompasses information on the home nursing services delivered to citizens, the time and the type of the service.

### **3.2 Frequency of data collection**

Data are transmitted currently to Statistics Denmark once per month per municipality. A municipality can transmit data for the same period several times, in case of this the used version is the latest.

### **3.3 Data collection**

Data are collected via the care systems of the Municipalities. This happens with an automatic transmit of data to Statistics Denmark, where data are stored in a register. The care systems used for home nursing are primarily from KMD Care and CSC. Avaleo is used in a few cases.

### **3.4 Data validation**

Data are validated twice. Firstly technically and secondly the content. The technical validation is automatically and takes place when data are received, here the formats etc. are checked. Before production of the statistics a date is set, which delimits the data included in the validation of the content and the subsequent statistical process. The date limit was February the 2nd 2016 for the period 2014M01 to 2015M12. Please note, that data delivered later for the same period will be included in the following version of the statistics.

The validation of the content happens yearly by checking data thoroughly over the periods, and also the level of activities in each municipality compared to the rest. In this process check lists are compiled and studied in a prioritized order. Some of these check lists encompass ratios, where data are seen in relativity, e.g. services per recipient, visits per recipient and services per visits.

Ideally the validation of content should result in a correction or explanation of all unlikely deliverances. However Statistics Denmark has for the statistics on home nursing chosen a more pragmatic validation, where potential less likely data are included in the statistics and only the most unlikely deliverances are excluded. The statistics is produced on the data where only 43 of 2,051 deliverances are excluded.

Historically the partners who took the initiative to collect data on home nursing have expressed expectation, that the visibility of data in the long run would be beneficial to the quality of data. When the data collection was established it did not include a systematic dialogue with the municipalities including an approval of data, which is the case on other areas e.g. elderly care and disability services.

### **3.5 Data compilation**

The validated data undergo several processes in the statistical production system, where some steps are very simple and other less simple. Age of recipient from birth date is used and number of visits are compiled. The timestamp for the home nursing service is rounded and one visit to the same recipient on the same day within the same hour could appear as to visits in the data from the municipality e.g. at 1.10 o'clock and 1.15 o'clock. After the data processing the data are transferred to the closed part of Stat Bank Denmark, where yet another check procedure is conducted before publication.

### **3.6 Adjustment**

No corrections are made. Some data are excluded during the validation process.

## **4 Relevance**

The authorities and public institutions and citizens can use the statistics for analysis, research, debate etc. Yearly the statistics can be presented at two of Statistics Denmark's committees for users: Regions and Municipalities respectively Welfare Statistics.

#### **4.1 User Needs**

Ministries, agencies, municipalities, regions, municipal organizations, unions, nongovernmental organizations, consultants, private companies, researchers, journalists, students and citizens. Scopes of application could be for planning, analysis, statements, research, articles, public debate and preparation of bills.

#### **4.2 User Satisfaction**

Information on user satisfaction is obtained at meetings in two committees for users, at regular meetings with the health data authorities and also at meetings with the local government of Denmark.

#### **4.3 Data completeness rate**

There are no regulation or guidelines.

### **5 Accuracy and reliability**

Data must be taken with reservations for the differences in the ways municipalities register. Over time within one municipality changes can also occur regarding coverage and/or practice, which can lead to shift in level. Since data are not available for all municipalities it is not possible to publish data for the regions and the whole country.

#### **5.1 Overall accuracy**

Data display a degree of uncertainty. There may be significant variations in the ways the municipalities organize and register home nursing.

There are differences in the way delegated home nursing services performed by other than district nurses are registered, which complicate comparability. Furthermore the coverage of home nursing services can vary, since some municipalities include nursing centers and others do not.

The services are divided into type of services according to a standardized set of nursing services. The statistics use a version from before 2013 and thus not use the most recent version of these types.

In a few municipalities significant shifts in level can be observed. Reasons for this is best explained by the relevant municipalities.

#### **5.2 Sampling error**

Not relevant for these statistics.

#### **5.3 Non-sampling error**

The coverage is not complete. Approximately 85 of 98 municipalities monthly transfer data on home nursing to Statistics Denmark. 93 municipalities has at some point delivered data.

## **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 quality of the statistics on home nursing is not optimal, since large variations between municipalities are observed. The definition of data and the implementation in the care systems was in 2010. There are several sources to uncertainty in data, e.g. differences in the municipalities way of organizing, planning and delivering home nursing services. Also there are different care system providers and thus different it system, which can cause differences. Cautiousness is advised when comparing between municipalities.

## **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**

If new data or revised data are delivered for already published periods, this new data will be part of the following new version of the statistics.

# **6 Timeliness and punctuality**

The statistics is published in March, less than three months after the end of the reference period.

## **6.1 Timeliness and time lag - final results**

The statistics is published in March, less than three months after the end of the reference period. In the following publication previous periods are revised according to new or revised data from the municipalities.

## **6.2 Punctuality**

Data is on time.

## **7 Comparability**

Comparability across time should be possible, though the comparability depends on the practice used in each municipality and possible changes in this over time. As regards the comparability on type of services this is assessed to be poor.

### **7.1 Comparability - geographical**

There are no international comparable data on this area. Among the Nordic countries interest in statistics in this field has increased.

### **7.2 Comparability over time**

Comparability across time should be possible. There are changes in definition over time. However for a number of municipalities not minor changes can be observed. The reasons for this will typically be available at the relevant municipality. Possible reasons can be changes in the ways the municipality register, changes in the coverage, or change of care system provider.

### **7.3 Coherence - cross domain**

Statistics on home nursing can, when it comes to municipal activities, be seen in relation to the Service indicators for elderly etc.

### **7.4 Coherence - internal**

Internal coherence.

## **8 Accessibility and clarity**

Data are available on StatBank Denmark and via the homepage [home nursing](#).

### **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 Calendar can be accessed on our English website: [Release Calendar](#).

### **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**

There is no specific news release for this statistics.

#### **8.5 Publications**

There are no publications, where this statistics of home nursing is presented.

#### **8.6 On-line database**

Statbank Denmark

- HJSP01: Recipient of home nursing by region and age groups
- HJSP02: Home nursing by unit, region and age groups
- HJSP03: Visits (types) from home nurse by region and type of benefits

#### **8.7 Micro-data access**

Non-identifiable micro-data is available via the Research Services of Statistics Denmark.

#### **8.8 Other**

None.

#### **8.9 Confidentiality - policy**

[Data Confidentiality Policy at Statistics Denmark](#) is followed. It is not possible to get access to non-identifiable individual data.

#### **8.10 Confidentiality - data treatment**

In the Stat Bank table HJSP02 cells with less than three observations are removed.

#### **8.11 Documentation on methodology**

Not relevant for these statistics.

#### **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 statistic are in the division of Population and Education. The person responsible is Kamilla Heurlén, tel. +45 39 17 34 93, e-mail: kah@dst.dk

### **9.1 Contact organisation**

Statistics Denmark

### **9.2 Contact organisation unit**

Personal Finances and Welfare, Social Statistics

### **9.3 Contact name**

Kamilla Heurlén

### **9.4 Contact person function**

Responsible for the statistics

### **9.5 Contact mail address**

Sejrøgade 11, 2100 Copenhagen

### **9.6 Contact email address**

kah@dst.dk

### **9.7 Contact phone number**

+45 39 17 34 93

### **9.8 Contact fax number**

+45 39 17 39 99