

**Documentation of statistics for  
Elderly - Indicators 2018**

## 1 Introduction

The purpose of these statistics is to display the quality level of municipal services in the elderly care. The statistics are a part of a cross-public cooperation, intended to ensure coherent documentation of important areas of municipal service, as well as to increase the comparability of the services provided in the different municipalities. The statistics are used to determine impact targets, frameworks and results requirements for key management initiatives and are comparable from 2008 onwards. Statistics Denmark is responsible for the composition and publication of the statistics.

## 2 Statistical presentation

The statistic is an annual survey including a number of national impact- and background indicators which document and describe the quality of the municipal effort at the elderly area. The indicators consist of referral and provided home care, home nursing, exercise services, rehabilitation, preventative home visits as well as clinical pathways and readmissions. Primarily, the indicators are targeted at the elderly area, however home care, exercise services, home nursing as well as nursing homes also include data for citizens under 67 years.

### 2.1 Data description

The statistics currently include 19 indicators and a number of tables. It is possible to separate the 19 indicators into 7 effect indicators and 12 background indicators. The purpose of the indicators is to uncover the quality of the services that are provided to the elderly. You can read more about the indicators at our topic page for the [Elderly Area] (<https://www.dst.dk/en/Statistik/emner/tvaergaaende/de-kommunale-serviceindikator/aeldre>). The 19 indicators and a description of the basis for these indicators are presented below:

**\*\* Impact indicators \*\*** - The quality of the help - The stability of the help - Number of helpers - Knowledge of free choice - Knowledge of flexible home care -The average number of hospital days (for people > 67-year-olds) - The average number of readmissions (for people > 67-year-olds)

**Referred home care:** Consist of indicators on the number of referral hours of consistent home care and the number of recipients of personal help and practical care in own home and in nursing homes/nursing dwellings, number of recipients of home care who change contractor and first-time referred recipients who use private contractor. The indicators are based on the municipalities' referrals concerning home care and consist of the referral help offered by the municipalities under the law of Social Service section 83. The officer from the municipality pays the citizen a visit to clarify the extent of care services needed. When the officer has made an assessment of the services needed, a decision about the extent of help will be made on the basis of the law, the quality standard in the municipality and a concrete individual assessment. The statistics illustrate the number of people who are referred to home care and the number of average weekly hours in a given month, to which the referral concerns. The indicators can be divided into the services: personal care and practical help and type of supplier.

**Provided home care:** Consist of the indicators on the number of provided hours of permanent home care and number of recipients of personal care and practical help in own home and number of home visits that are implemented as planned. The indicator is based on the reported start and stop hours for each visit, and the indicator consist of the permanent personal help the citizen is provided from the municipality under the Law of Social Service section 83. Each time the citizen is paid a visit from a home help, the visit is reported in the hardware. For some municipalities it is the planned start and stop hours for the visit that is reported and for others it is the actual provided hours. This depends on which IT supplier the municipality uses. The provided home care is based on these

records. The indicators can be divided into the services: personal care and practical help and type of supplier.

**\*\* Rehabilitation \*\*:** Includes the Rehabilitation indicator. The indicator illustrates the number of people who have received rehabilitation in accordance with Section 83a of the Social Service Law, where the municipality must offer a time-limited rehabilitation course to persons with disabilities if it is assessed that the functional capacity can be improved and thus reduce the need for assistance.

**Home nursing:** Includes all services on delivered home nursing visits. The indicator highlights the number of people who have received home nursing according to §138 of the Health Act. For some municipalities, the planned home nursing services are reported and for other municipalities it is the actual services reported. This depends on which IT provider municipalities have.

**Nursing homes and average waiting time for nursing homes:** Consist of indicators about the average waiting time for nursing homes/nursing dwellings and the number of elderly who use free choice of dwelling for nursing homes/nursing dwellings and who either wish to use the free choice of dwelling or is referred to the general waiting list. The general waiting list consists of citizens with no specific wishes expressed in accordance with the municipalities' free choice of dwelling. Furthermore, the average waiting time in days is illustrated. Elderly who choose the free choice are not included in the calculation of waiting time. This is also the case for younger people with varying reduced physical and mental capacity.

**Preventative home visits:** Consists of the indicator preventative home visits. The indicator illustrates the number of recipients of preventative home visits and number of persons who have received a visit under the Law of Social Service section 79a, where the municipality as a minimum must offer citizens aged 75 and older a visit.

**Training and Maintenance Training:** Consist of the indicator "elderly recipients of rehabilitation and maintenance rehabilitation". The indicator illustrates recipients who have received rehabilitation and/or maintenance rehabilitation under the Law of Social Service section 86, part 1 and 2. Thus, the indicator does not include rehabilitation under the Law of Health section 140.

**\*\* Rehabilitation \*\*:** Includes the Rehabilitation Indicator. The indicator shows the number of persons who have received rehabilitation under the Law of Social Service section 83a, where the municipality must offer a time-limited rehabilitation course for persons with impaired functioning if assessed the ability to function can be improved and thus reduce the need for help.

**Clinical pathways and readmissions:** Consist of the indicators clinical pathways and readmissions plus discharges and length of stay for persons aged 67 and older at selected groups of diagnoses.

**Quality of service:** Every second year the Ministry of Health is responsible for making a qualitative survey. The qualitative service indicators include five indicators about user satisfaction. The survey is a sample, which is representative to the proportion of home care recipients who is 67 years or older.

## **2.2 Classification system**

Municipality, region and country total: Should many municipalities lack to report, the data for the municipalities is not summarized to region and country total for the individual indicator. This concerns following indicators: *preventative home visits, referral hours at nursing homes, \*rehabilitation, home nursing and \* Training.*

Furthermore, figures are not calculated for region and country total for these indicators: *home visits implemented as planned and free choice of dwelling.*

There are data for region and the whole country for *quality of service.*

## **2.3 Sector coverage**

Covers the municipal sector.

## **2.4 Statistical concepts and definitions**

First-time referred that choose private home care: First-time referred that choose a private home help, is stated as share in percent of all first-time referred. If a citizen both gets private and municipal help, the citizens are calculated under private home care.

Recipients that choose private home care: Recipients that choose private home care is stated in percent of all recipients. At nursing home/nursing dwellings the share of citizens that has chosen free choice (in contrast to general waiting lists) compared to all places at nursing homes.

## **2.5 Statistical unit**

Services, hours of service, recipients distributed at sex and age.

## 2.6 Statistical population

Recipients of benefits following the following clauses in the Law of Social Service (SEL), the Law of living condition (ALM) and the Health Act (SUL):

- Preventive home visits, SEL § 79 a,
- Delivered and referred help, § 83,
- Rehabilitation, SEL § 83 a,
- Training, SEL § 86 p. 1 and 2
- Home nursing, SUL § 138,
- General housing for the elderly, ALM § 5
- Nursing home SEL§ 192
- Procedures and re-admissions: Persons in Citizens over the age of 67 who have undergone a hospital course or have been re-admitted.

NY Recipients of services of the following sections of the Danish Social Service Law (SEL), the Law of living condition (ALM) and the Health Care Act (SUL): - Preventive home visits, SEL § 79 a, - Delivered and referred help, § 83, - Rehabilitation, SEL § 83 a, - Training, SEL § 86 p. 1 and 2 - Home nursing, SUL § 138, - General housing for the elderly, ALM § 5 - Nursing home SEL§ 192 - Procedures and re-admissions: Persons in Citizens over the age of 67 who have undergone a hospital course or have been re-admitted.

## 2.7 Reference area

Denmark.

## 2.8 Time coverage

- **Referral home care:** Data from 2008 and forward. For some of the underlying indicators there are data later than 2008.
- **Provided home care:** Data from 2011 and forward.
- **Training and maintenance training and preventative home visits:** Data from 2008 and forward.
- **\*\* Provided home care \*\*:** Data from 2011 and forward. The indicator *Home care visits that are planned according to plan* contains data from 2012 and forward.
- **Free choice of dwelling:** Data from 2009 and forward.
- **Clinical pathways and readmissions:** Data from 2007 and forward.
- **Quality of service:** Data for 2008, 2009, 2011 and 2013. The survey will be made every second year.
- **Rehabilitation:** Data from 2017 and forward.
- **Home nursing:** Data from 2016 and forward.

All indicators that Statistics Denmark is responsible for are published.

## 2.9 Base period

Not relevant for these statistics.

## 2.10 Unit of measure

The unit of measurement is number. Recipients, hours and share are published.

## 2.11 Reference period

01-01-2017 - 31-12-2017

## 2.12 Frequency of dissemination

All indicators are yearly.

## 2.13 Legal acts and other agreements

Information from the municipalities' care systems (EOJ) is obtained in accordance with the Law on Legal Security and Administration in the social area section § 82, which states that the municipalities are obliged to submit statistical information requested by the Ministry of Health.

There is no EU regulation.

## 2.14 Cost and burden

- **\*\* Information from the municipalities' care systems (EOJ) \*\***: Most of the information is already available in the municipalities' care systems. However, some of the municipalities have to implement specific EOJ-modules in order to fulfill Statistics Denmark's requirements of reporting information. In connection with Statistics Denmark's detection for errors, the municipalities spent time correcting data and re-transmitting. The information is used to create indicators dealing with home care, waiting time, readmissions and preventative home visits.
- **\*\* Information from The Danish Health Data Authority\*\***: The burden of the respondent is equal zero, as the information is already collected by SSI (Statens Serum Institut). The information is used to create indicators of clinical pathways and readmissions.
- **\*\* Information from the Ministry of Health\*\***: The burden of the respondent is equal zero. Information is used to create indicators of quality of service.

## 2.15 Comment

More information concerning the basis of the indicators used at the elderly area, is to be found at the elderly documentation website: [Elderly] (<https://www.dst.dk/aeldre>).

## 3 Statistical processing

Before publishing data from the municipalities' EOJ system (electronic care journal), tables and figures are developed, which all municipalities are asked to approve. After the approval, Statistics Denmark detects for data errors as missing numbers, abnormal values and etc.

### 3.1 Source data

The currently published indicators are based on following sources:

The municipalities' care systems (EOJ) is used to calculate the indicators. Statistics Denmark receives data either on a monthly or yearly basis.

Clinical pathways and readmissions are based on the National Health Administration's Patient Register (LPR) , and private hospitals/clinics' reports to the Danish Health Authority.

To calculate the total number regarding referral hours at nursing homes, rehabilitation and preventative home visits, the population register from Statistics Denmark is used. The register includes and describes people who live in Denmark, in detail, on the basis of the available information from the register of personal identity numbers.

To calculate the quality of service, a sample based on telephone interviews and personal interviews is used. The Ministry of Health is responsible for the investigation.

The agreement of documentation at the elderly area includes a number of impact indicators and background indicators. The majority of the effect indicators will be collected every second year via a national sample-based user survey, while the majority of the background indicators will be based on individual-based data obtained directly from the municipalities' care systems rather than manually aggregated information. It is agreed that the documentation regarding the elderly area must be anchored and compiled in Statistics Denmark.

### 3.2 Frequency of data collection

For referral home care, provided home care, nursing homes, home nursing as well as training services, data is collected automatically every month. This frequency is not the same as the frequency of publishing, which is yearly. For preventative home visits, waiting time for nursing homes, clinical pathways and readmissions data is collected yearly. According to the analysis of quality of service, data is collected every second year.

### 3.3 Data collection

Data is collected through the municipalities' EOJ systems (electronic care journal), where data is sent directly from the municipalities' systems to Statistics Denmark through the municipality's IT-supplier. In cases where municipalities have problems sending through EOJ, Excel spreadsheets received encrypted by Statistics Denmark is used. Data concerning clinical pathways and readmissions is received on Excel spreadsheets. Average waiting time is summarized data for each municipality and is received by mail. Numbers on clinical pathways and readmissions are received from The Danish Health Data Authority on spreadsheets. Quality of service is received as a SAS dataset from the Ministry of Health.

### 3.4 Data validation

All data received by the municipalities is detected for errors by Statistics Denmark such as invalid formats of data, personal identification numbers, company numbers and dead citizens.

### 3.5 Data compilation

**Home care:** Before usage of data from the municipalities care system a thorough error detection is

made by Statistics Denmark. All municipalities are asked to confirm their data. Only data, which is either approved by the municipalities or Statistics Denmark is used. Detection takes place for errors in terms of invalid formats of data, personal numbers, company numbers and dead citizens. Citizens, who have received both municipal and private help only appear under private home care in the statistics.

**Referral care in own home:** Where the total for the country is calculated, data from earlier years are used for the municipalities which have not reported data. When data from earlier years are used, the age of the citizen is changed to the citizen's age at the end of the year in question. The information Statistics Denmark receives is a weekly average every month for referral home care in minutes. If a recipient e.g. is referred to one hour personal help every second week, the number of minutes, in average, are 30 minutes.

**Provided home care in own home:** Every month each municipality reports registration of referrals and provided visits from the municipalities' care systems (in Danish, EOJ). At the moment there are three suppliers of care systems. This is of importance for the usage of data as the reports are used differently according to which care system the municipality is using. To calculate provided home care three reports are used from the care system:

· L1.1 Start and stop hours · L1.2 Referral home care · L1.3 Provided home care.

Report L1.1 includes information about the visit for the planned home care visits, where the home helper has registered a start and stop time for the visit.

Report L1.2 is a registration on all citizens in the municipalities, who are referred to permanent home care after the rules about free choice. The referral home care is divided into personal help and practical care.

Report L1.3 includes information about the duration of the provided (actual) visit of the home helper. The report counts the actual minutes spent by the home helper. Originally, report L1.3 should cover all provided home care. Yet, the quality and the coverage appear to be defective for many municipalities. Therefore, the following method to work out provided home care has been decided: All persons who have received a visit according to report L1.3 are part of the population of home care receivers if the municipality or Statistics Denmark has approved the report.. Not all private suppliers have access to report data about provided home care in the municipalities care systems. So visits of the private suppliers of home care are for some municipalities not part of the reporting of L1.3. Therefore, persons from L1.2 who are referred to home care are included instead. The referred services are corrected with a factor to calculate the provided help, as the provided help typically is lower than the referred help. The ratio between these two 'types of help' is found at a national level and on supplier type against a background of municipalities. For these municipalities both data about referred and provided help is found valid and approved either by the municipalities or Statistics Denmark. For some municipalities there can be only partly information about the private provided help. These services are included in the statistics and the municipalities' other referred services are adjusted with the national ratio and are included in the total provided home care. The above mentioned apply to the municipalities that do not use CSC (CSC is an enterprise that supplies a EOJ system) as a supplier. For the municipalities that have CSC as a supplier report L1.1 is included instead of L1.3. Also regarding the report L1.1, the data about private provided help are insufficient. Therefore, the same method is used here as for report L1.3. to impute private provided help. When a total for the country is calculated, data from previous years are used for the missing municipalities. In such cases, the age of the citizen is changed to the citizen's age at the end of the year in question. Data from Copenhagen Municipality is received from two different sources (Health Administration and Social Administration). If data is missing for both or for one of the administrations, then the conversion factor is based on how the conversion factor was between delivered and referred help in the previous year. In 2013 and 2016, there was no data available from the Social Administration in the Copenhagen Municipality.

**\*\* Rehabilitation \*\*** If a municipality has only approved a few months during the year, we calculate an annual total by using the information in the months approved by the municipality. In 2017, Århus and Odsherred had not approved all months of the year.

**Home nursing:** Some municipalities report both home nursing in the residents own homes, nursing homes and psychiatric housing, and other municipalities only report home nursing in the residents homes. In order to have comparable data between municipalities, we have removed residents in nursing homes from the data, and the register is called 'Home Care in own home'. There may still be residents of psychiatric housing in the data, but this problem is considered to be minor

**Free choice of dwelling:** There is not a total for free choice of dwelling.

**Preventative home visits:** When a total for the country is calculated, data from previous years are used for lacking municipalities. In such cases, the age of the citizen is changed to the citizen's age at the end of the year in question. If there are not data from previous years, the register of population is used. Regarding the municipalities which report data and municipalities with data from the year before, a share is found for the part of the population who has received a preventative home visit. This share is multiplied to the population in the municipalities which have not reported data, in order to find the number of receivers. This is summed up with the known municipalities to a total for the country.

**Training:** When a total for the country is calculated, data from previous years are used for the lacking municipalities. In such cases, the age of the citizen is changed to the citizen's age at the end of the year in question. If there are not data from previous years, the register of population is used. Regarding the municipalities which report data and municipalities with data from the year before, a share is found for the part of the population who receives training. This share is multiplied to the population in the municipalities which have not reported data, in order to find the number of recipients. These are summed up with the known municipalities to a total for the country.

**Clinical pathways and readmissions:** In the spring of 2018 it was decided by the National Board of Health to implement a new definition of readmissions. The new definition is used in table AED20A on data back to 2012, so the numbers are comparable over time. The new definition uses non-specific readmissions, since no specific relationship between primary admission and readmissions has been established beyond time, for example. disease relationships in the form of the same / corresponding diagnosis. All acute readmissions within 30 days after discharge are included in the definition. The readmissions are related to the municipality where the patient's address is registered at the end of the admission at the primary hospital (last contact in the admission). LPR is based on contact registration. This means that if a patient is moved from one department to another at the same hospital, an administrative discharge will be made from the first department and immediately afterwards an admission at the next department. In LPR this process is registered as two separate contacts. Similarly, when moving between different hospitals. Thus, a patient can be administratively admitted and discharged many times in the period from the patient enters the door of the hospital and until the patient is home again without the patient at any time is out of the hospital. In order to clarify when the patient is no longer in the hospital's care, it is necessary to determine the actual date of discharge. For this purpose, it is necessary to clarify whether the different contacts are temporally coherent. Continuous contacts are considered a coherent stay. A hospitalization is defined as a periodically close stay at one or more hospitals (consisting of one or more contacts) and for a total duration  $\geq 12$  hours. A number of connection rules are used that define when the contacts can be seen as a coherent stay and when the hospital's care ceases. Currently, two contacts are connected if they occur with  $\leq 4$  hours distance between the start and end

### **3.6 Adjustment**

No corrections of data are made in addition to those already described under data validation and data processing.

## **4 Relevance**

The authorities and public institutions and the population use the indicators for analysis, research, debate, etc. Annually, the statistics and developments in method etc. are presented in Statistics Denmark's two committees for users: Regions and Municipalities as well as Welfare Statistics. The focus is to ensure more valid documentation at the elderly area. This is achieved by retrieving the information directly from the municipalities' care systems (EOJ), which is constantly updated as a part of the municipalities' case management.

### **4.1 User Needs**

**\*\* Users \*\***: Ministries, boards, municipalities, regions, municipal organizations, trade unions, nongovernmental organizations, consulting companies, private companies, researchers, journalists, students and citizens.

**\*\* Areas of use \*\***: The scopes of application are for planning, analysis, statements, research, articles, public debate and legislation.

When establishing the statistics, special attention has been paid to the indicators that serve both local and national considerations. The statistics must provide input to give the Government and the Parliament a better overview of efforts, results and effects at the elderly area. In order to ensure a high quality of data, the aim is that the national documentation is based on data that has a local application.

### **4.2 User Satisfaction**

Annually, the statistics and developments in method etc. are presented at Statistics Denmark's two committees for users: Regions and Municipalities as well as Welfare Statistics.

### **4.3 Data completeness rate**

Not relevant for these statistics.

## **5 Accuracy and reliability**

For home care, nursing homes, free choice of dwelling, preventative home visits and training, a total census has been used, but not all municipalities approve data each year. The User Satisfaction Survey is a sample survey.

Clinical pathways and readmissions: There is no sample uncertainty as it is a total count.

### 5.1 Overall accuracy

- **Home care, preventative home visits, home nursing, training and rehabilitation:** The source is the administrative care systems in the municipalities, and in general the reliability of the data is very high, though, in terms of rehabilitation, some of the municipalities have difficulties to distinguish between rehabilitation in light of the two laws, the Law of Service and the Law of Health. Therefore, services in accordance with the Law of Health might occur in the statistics. More and more municipalities introduce training and therefore it is different, whether the municipalities report this training as home care or as training or training maintenance, or if they for some years report the service under home care and for other years under training. In terms of provided home care, some municipalities have indicated that these services can be included nursing help, but it is not possible to remove these. All information is approved by the municipalities or Statistics Denmark before publishing. Not all months are reported by the municipalities, and this might lead to insecurity. In Ringkøbing Skjern Municipality, there has been a decline in the referred hours from October 2017, mainly due to the fact that, in connection with the implementation of FSIII, services have been moved from §83 to §138, for example. removal of support stockings. The municipality of Vesthimmerland has in 2017 included §94 and §95 in the referred hours. In Mariagerfjord Municipality, during 2017, citizens who receive rehabilitation after §83A will be included in the referred hours.
- **Free choice of dwelling:** As there gradually is statistics for several years, one is able to compare data for the years, and this gives a bigger reliability, as the development can be used in the error detection. All information is approved by the municipalities or by Statistics Denmark before publishing.
- **Clinical pathways and readmissions:** The register of patients (LPR) is validated by the Health Agency and the reliability of the information of the register is considered high.

### 5.2 Sampling error

The User Satisfaction Survey is a sample survey

### 5.3 Non-sampling error

The survey is a total census.

There is between 0 and 20 municipalities that do not approve individual deliveries every year. The highest coverage is seen for visited home care, where only 0 to 5 municipalities cannot approve their data. In regards to home nursing, 15 and 20 municipalities cannot approve their data.

- **In general for home care, preventative home visits and training:** Measurement errors may be due to invalid personal identification numbers or company numbers. It could also be due to the municipality has reversed practical care and personal help.

### 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

- **In general for home care, home nursing, preventative home visits, training, and rehabilitation:** The quality is estimated to be high but cannot be measured. Most data come from the municipalities' care systems. At the moment there are three suppliers at the market for care systems. There might be differences between the three systems, which can be seen if the municipality changes supplier, as there might be small data breaks. In the total for the country, where lacking municipalities are included by using data from the year before, there might be uncertainty as we do not get raises/falls from these municipalities. In cases where municipalities have not reported and data is enumerated from the other municipalities and the register of population, there might be uncertainty. Yet, there is not missing data from the big municipalities.
- **Home care:** The reports involved are monthly. Not all municipalities are covered with adequate data. So there is varying coverage of the month for the municipalities, which is a source of uncertainty. Some few municipalities are missing, which gives an uncertainty in proportion to the total country. Moreover, there could be variations throughout the year that have not been registered. For instance, if there has been a fall from January to December, and the municipality only report in January, the fall will not be part of the statistics. Some municipalities have claimed that there might be nursing care in the reported data, but it is not possible to separate these. Some municipalities report rehabilitation under permanent home care, while other municipalities report this under services for training.
- **Free choice of dwelling:** The latest years 97 or 98 municipalities have reported, and it is possible to compare several years.
- **Preventative home visits:** Not all municipalities have reported data, which leads to uncertainty regarding the total country.
- **Training and maintenance training:** From 2010 Statistics Denmark started to receive encrypted data in Excel from the municipalities that had not been reported before. This has caused that Statistics Denmark now has data from many municipalities, meaning that a total for the country can be calculated. Yet, there is an uncertainty for the whole country as some municipalities still have not reported. It is uncertain to which extent training under the Law of Health is in the statistics.
- **Clinical pathways and readmissions:** The register of patients (LPR) is made on basis of the reports from the individual hospitals. Data is reported to LPR, when the hospitalisation is finished. This is estimated to be done for almost 100 per cent of cases.
- **Quality of service:** A random sample is made every second year, which is representative compared to the share of home help recipients aged 67 and older. In 2013, Capacent (a survey company) has contacted 11,907 people among citizens age 67 and older for an interview. 80.5 per cent of this group has completely or partly done either a telephone interview or an interview by a visit.

## 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

- **\*\* Home care, free choice of dwelling, rehabilitation, home nursing, preventative home visits and training \*\***: In principle, only final figures are published. Subsequently there might be errors and changes. If this happens there will be revised for earlier years at the yearly update. Method changes are also revised at the yearly update. It is currently discussed how far back a revision shall be made. So far, data is revised back to 2008, when the statistics started, if errors or changes are reported. Revision is done once yearly in connection with the publication of the new annual data.
- **Clinical pathways and readmissions and quality of service**: Only final data is published.

## 6 Timeliness and punctuality

The statistics are published as pre-advertised. The statistics are released 6 to 9 months after the reference period has ended.

### 6.1 Timeliness and time lag - final results

**\*\* Home care, rehabilitation, home nursing, preventive home visits and training \*\***: The statistics are published in the summer of the following year after the year of reference. - **\*\*Free choice of dwelling** The statistics came out the first time for the year 2009 and is published once yearly in May/June. - **Clinical pathways and readmission**: The statistics are typically published in August. From the time Statistics Denmark has received the needed information from the Health Agency, usually two days will pass by before the data is available.

### 6.2 Punctuality

It is expected that the statistics is published without delay.

## 7 Comparability

- **In general for home care, free choice of dwelling, preventative home visits, training and rehabilitation**: Every fifth year the municipalities' care systems must be invited to tender. For some municipalities this results in a change in the IT-supplier, which will give minor data breaks. Currently there are 4 suppliers on the market. **Clinical pathways and readmissions**: No corrections for the degree of difficulty of the diseases have been made, meaning that comparison between the municipalities has to be done carefully.

### 7.1 Comparability - geographical

There are no international standards or statistics published by international organizations that are directly comparable to these statistics.

## 7.2 Comparability over time

When drawing up the indicators indicators, it is attached importance that the statistics can be compared among the municipalities and over time.

- \* Home care, rehabilitation, home nursing, preventative home visits and training \*: The indicators for the year in question are comparable to previous years. However, when a municipality changes the IT provider of the EOJ system, there may be changes in data, as registration practices in the new system may change. Common Language III (Fællesprog III) was also rolled out to all municipalities in 2017 and 2018. Common Language III is a method for documentation and exchange of data at the health and the elderly area, which can affect whether services are defined as home nursing or home care. This can give offsets of home care and home nursing data. If a municipality has not approved data for one year, previous years data for the municipalities are used to calculate regional and country totals. This may cause uncertainty in the totals. Provided home care was published for the first time in 2011. For home nursing, there is data from 2016 and onward. Rehabilitation came out for the first time in 2017.
- **Free choice of dwelling:** The indicator came out first time in 2009
- **Clinical pathways and readmissions:** Data are comparable over time.

## 7.3 Coherence - cross domain

- **Home care:** Statistics for referred home care free choice is based on information about people, who are referred to receive home care and the service of home care that is covered by the referral. The municipalities' reported data with referred and provided home care are compared in the error detection and when contact with the municipalities takes place.
- **Free choice of dwelling, preventative home visits, home nursing, rehabilitation and quality of service:** There are no other statistics about the subject.
- **Clinical pathways and readmissions:** Statistics Denmark and the Agency of Health publish other yearly statistics that are also built on the register of patients, and those statistics contain information about clinical pathways. It seems that the indicator for length of stay cannot be compared with these statistics as the indicator only covers some chosen diagnosis groups for persons age 67 and older. Furthermore, a comparison is difficult as the number of clinical pathways per discharge is calculated on the basis of sex and age standardisation. Information about readmissions cannot be found in other statistics.

## 7.4 Coherence - internal

- **In general for home care, preventative home visits, home nursing, training and rehabilitation:** For the municipalities that cannot report via their care system, data is received in Excel spreadsheet. It is not always that the spreadsheet is adequate. For instance, the date for first-time referral can be missing in cases where the municipality has sent in Excel spreadsheet for referred time.
- **Clinical pathways and readmissions:** It is provided that the underlying populations are comparable, e.g. in the occurrence of the individual diseases. In Denmark the occurrence of the individual disease differs considerable from municipality to municipality. Moreover, a certain variation in age and sex distribution is seen. To handle the differences in population between the municipalities, the material is standardized in terms of age and sex differences and stratified in satisfactory diagnosis groups. Readmissions are only standardized at regional and country level due to the low number of observations at the municipality level. Corrections are not made for the severity of the diseases or in case of competitive diseases, as the necessary data to make such corrections isn't available. Because of the missing corrections direct comparison between the municipalities must be considered carefully.

## **8 Accessibility and clarity**

The statistics are published in [News from Statistics Denmark ] (<https://www.dst.dk/en/Statistik/nyt>) under the topic 'Living conditions'. The figures are published in the StatBank [Social benefits for the elderly] (<http://www.statistikbanken.dk/10048>). See more on the topic page for the [Elderly Area] (<https://www.dst.dk/en/Statistik/emner/tvaergaende/de-kommunale-serviceindikator/aeldre>).

### **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**

The statistics are published once a year in [News from Statistics Denmark] (<https://www.dst.dk/en/Statistik/nyt>) under the topic 'Living conditions'.

### **8.5 Publications**

The statistics were included in the Statistical Yearbook until 2017.

## 8.6 On-line database

The statistics are published in the StatBank under the subjects [Elderly care](#), Social services for elderly in the following tables:

- [REHAB](#): Recipients referral to rehabilitation by region, age, sex and time
- [AEDo1](#): Home care, free choice (provided hours per week) by region, type of benefits, age, sex and time
- [AED16](#): Free choice of dwelling and average waiting time for nursing homes by unit, region and time
- [AED14](#): Recipients referral to home care, free choice, by region, type of benefits, age, sex and time
- [AED17](#): Home visits implemented as planned by region and time
- [AED19](#): Discharges and length of stay (days) for persons aged 67, by region, unit, diagnosis and time
- [AED20](#): Clinical pathways and readmissions for persons aged 67, by region, unit, diagnosis and time
- [AEDo22](#): Home care, free choice (referral hours per week) by region, type of benefits, age, sex and time
- [VH33](#): Private suppliers of home help by region and time
- [AED21](#): Service indicators (per cent of all individuals) by region, services and time
- [AED13](#): First-time referred recipients, free choice, who use private contractor, by region, type of benefits, age, sex and time
- [AEDo6](#): Recipients referral to home care, free choice, by region, type of benefits, hours per week, age, sex and time
- [AED12](#): Recipients referral to home care, free choice, who use private contractor by region, type of benefits, age, sex and time
- [AEDo21](#): Home care, free choice (referral hours average per week per recipients) by region, type of benefits, age, sex and time
- [AEDo8](#): Recipients of rehabilitation and maintenance rehabilitation by region, type of benefits, age, sex and time
- [AEDo12](#): Recipients of home care, free choice, who use private contractor by region, type of benefits, age, sex and time
- [AEDo23](#): Recipients of home care, free choice, by region, type of benefits, hours per week, age, sex and time
- [AEDo2](#): Home care, free choice (provided hours average per week) by region, type of benefits, age, sex and time
- [AED10](#): Recipients of preventative home visits by region, home visits, age, sex and time
- [AEDo7](#): Recipients referral to home care, nursing homes/nursing dwellings) by region, age, sex and time
- [LIGEHI12](#): Gender equality indicator on referral people to home care by indicator, region, age, family type and time
- [LIGEHI13](#): Gender equality indicator on referral hours to home care (average) by indicator, region, age, family type and time

## 8.7 Micro-data access

Researchers and analysts from authorized research institutions can access microdata through Statistics Denmark's [Research Scheme] (<https://www.dst.dk/en/TilSalg/Forskningsservice/Dataadgang/Projektrettelse>)

## 8.8 Other

Anonymized basic statistics of the statistics can be made against payment. Read more about [costume-made solutions] (<https://www.dst.dk/da/TilSalg/skraeddersyede-loesninge>) or get more information by contacting DST Consulting.

## 8.9 Confidentiality - policy

[Data Privacy Policy] (<https://www.dst.dk/ext/292786082/0/formid/Datafortrolighedspolitik-i-Danmarks-Statistik--pdf>) in Statistics Denmark is followed.

## 8.10 Confidentiality - data treatment

For bed days and readmissions discretion have been made, where municipalities with fewer than 5 observations (ie 1-4 observations) are discretioned. Municipalities with 0 observations will not be discretioned. When calculating frequencies where the denominator is between 5-9 the frequency is discretioned, because a frequency based on a low denominator often will be incorrect. The number of regional and country-level landings and bed days is rounded up / down to the nearest 5, as they are included at lower aggregation levels in municipality tables and may make it possible to figure out how many people hide behind a discretioned number. For readmissions, there is also rounded up / down to the nearest 5. The remaining statistics are published at a level that does not require discretion.

## 8.11 Documentation on methodology

Description inclusive an example of how first-time referred citizens using a private supplier is calculated is to find in the note: [calculation of first-time referred citizens using a private supplier](#)

## 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 are in the division of Welfare. The person responsible is Sofie Biering-Sørensen, tlf. +45 39 17 33 68, e-mail: [sbs@dst.dk](mailto:sbs@dst.dk) and Ane Sørensen, tlf. 3917 3345, email [atd@dst.dk](mailto:atd@dst.dk) .

- Responsible for Indicator about Clinical Pathways and Readmissions is Jens Maltbæk, [jepm@sundhedsdata.dk](mailto:jepm@sundhedsdata.dk), tlf.+45 32 68 92 69

### 9.1 Contact organisation

Statistics Denmark

### 9.2 Contact organisation unit

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N/A