

**Documentation of statistics for  
Social benefits for senior citizens 2021**

## 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, nursing homes, exercise services, rehabilitation, preventative home visits as well as 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. The statistics of preventative home visits are influenced by the COVID-19 pandemic, since there is a decline in visits in both 2020 and 2021.

### 2.1 Data description

The statistics currently include 17 indicators and a number of tables. It is possible to separate the 17 indicators into 7 effect indicators and 10 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](#). 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 number of readmissions (for people > 67-year-olds)

**Background indicators** - Number of hours of referred and provided home care to citizens covered of free choice (own home) - Number of referred hours of home care for citizens in nursing homes/nursing homes - Number of recipients of practical help/personal care who are subject to free choice - Number of nursing home places - Number of elderly people who receive rehabilitation/training – Number of completed preventative home visits - Proportion of home care recipients and proportion of first-time referred home care recipients who use a private contractor – Number of home care recipients who change supplier - Number of elderly people who use free housing for nursing home - The average waiting time for nursing homes

**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 § 84 stk.2 and § 94. 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 - municipal or private contractor.

**Provided home care (own choice):** 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 care worker, the visit is reported electronically. 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 – municipal or private contractor.

**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.

**Provided home care in nursing home:** Consists of the indicators of the number of citizens provided to practical help or personal care in nursing homes. The indicator is based on the municipalities' report of residents in nursing homes covered by the Social Housing Act section 5, stk 2, and nursing homes covered by Law of Social Service section 192, and residents who is provided home care by Law of Social Service section 83.

**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.

**Housing offers:** Consist of indicators about the average waiting time for nursing homes for citizens who are covered by the home nursing guarantee as well as number of citizens of 67 years and above who take advantage of the free choice of nursing homes. The indicator highlights the amount of citizens, 67 years and above, who are provided one of the municipality's nursing home offers, and who either wish to use their free choice of nursing homes, 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 nursing homes. Furthermore, the average waiting time in days for citizens covered by the home nursing guarantee 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. . The municipality is required to offer a minimum of one annual visit to citizens of 80 years and above.

**Training and Maintenance Training:** Consist of the indicator of number of elderly recipients who receives 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.

**Clinical pathways and readmissions:** Consist of the indicators clinical pathways and readmissions plus 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, where home care recipients on 67 years and above are asked about their satisfaction of the help they are receiving to personal care and practical help after Law of Social

Service section 83. 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: If there are multiple municipalities who lacked to report the data or have not confirmed their data, the data for the municipalities is not summarized to region and country total for the individual indicator. This concerns following indicators: *Rehabilitation, Home nursing and House offers*.

Following indicators are included calculated region and/or country total: *Preventative home visits, Referral and provided home care, Provided home care in nursing homes and Training*.

There are data for region and the whole country for Quality of service

## **2.3 Sector coverage**

Covers the municipal sector, except from admissions, length of stay and readmissions covered by region.

## **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 and recipients of services.

## **2.6 Statistical population**

Recipients of benefits following the following clauses in the Law of Social Service (SEL), Social Housing Act (ALM) and the Health Act (SUL): - Preventive home visits, SEL § 79 a - Referred and provided care, § 83 in a private home - Referred care on temporary stays after § 84, 2 - Referred care delivered after § 94 - Rehabilitation, SEL § 83A - 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. - Nursing home SEL§ 192 - Admissions and re-admissions: Citizens aged 67 or more who have been admitted or re-admitted to hospital care.

## **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 in own home:** Data from 2011 and forward. -**Regularly home care according to plan: Data from 2012 and forward** -**Referred home care in nursing home:** Data from 2008 -**Training and maintenance training and preventative home visits:** Data from 2008 and forward. -**Free choice of housing: Data from 2009 and forward.** -**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

01-01-2021 - 31-12-2021

## 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 system:** Most of the information is already in the municipalities care systems. Though, some of the municipalities have to implement specific care system modules to fulfil Statistics Denmark's demand of giving the information. In connection with Statistics Denmark's detection for errors the municipalities spent time to correct data and re-sent it. The information is used to create the indicators about home care, average waiting time, readmissions and preventative home visits.
- **Information from Statens Seruminstitut (a public enterprise under the Danish Ministry of Health):** The respondent burden is zero, as the information is already collected by Statens Seruminstitut. The information is used to create indicators about clinical pathways and readmissions.
- **Information from the Ministry of Social Affairs:** The respondent burden is zero. The information is used to create indicators about quality of service.

NY - \*\* Information from the municipalities' care systems (EOJ) : **Most of the information is already available in the municipals' 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](#).

The COVID-19 pandemic and the closure of Denmark have led to a decrease in the number of preventive home visits, especially in the months where the country has been under lockdown.

## 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 actual published indicators are based on following sources: In general, information from the municipalities' care systems (in Danish, EOJ) is used to calculate the indicators. Statistics Denmark receives the data on either monthly or yearly basis.

Acute readmissions are based on Register for Patients from the Agency of Health.

To calculate a total for the country 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 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 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

The reported data is collected in tables in a report for the individual deliveries, which is sent to each municipality. The municipality must review the tables and is responsible for validating the data. Any error must be corrected by the system supplier or by the municipality, after which data can be forwarded to Statistics Denmark. The municipality must approve that data is used for statistics and publication. Some municipalities can only approve data for some months and/or some deliveries. Unapproved months and non-approved deliveries for the individual municipality thus do not become one part of the published figures. If the data has a development beyond what is expected, then Statistics Denmark asks the municipality to explain the development. If this cannot be done, then the municipality corrects the data before they can be included in the publication.

Before publishing data from the municipalities' EOJ (electronic care record), a comprehensive error search in Statistics Denmark takes place. All municipalities are asked to confirm their data. Only data, which is approved by the municipality, is included. Debugging is done for invalid data formats, outdated person and company numbers, and dead citizens.

### 3.5 Data compilation

**Calculation of annual total:** If a municipality has only approved a few months during the year, an annual total is calculated either by obtaining information from the corresponding months, which have been approved in the previous year of publication, or by calculating an average based on data for the approved months. If a municipality has approved data for 10 months, the average is thus calculated based on the 10 months.

**Calculation of the national total:** If a municipality has not approved data for the year in question at all, data from previous years are used when a national total is made.

**Calculation of age:** The age of the citizen is changed to the age of the citizen at the end of the year in question.

**Provided home care in own home:** The information that Statistics Denmark receives is a weekly average of provided home care in number of minutes per month. If a person both receives private and municipal assistance, the citizen is counted under private home assistance. If a recipient, for example, is provided 1 hour of personal care every two weeks, is the average number minutes per week set to 30 minutes. In 2019, practical help is reported with 0 minutes changed to 1 minute with the system suppliers. This means that 0-time services such as food service is included.

**Referred home care in own home:** Every month, Statistics Denmark receives a delivery with registrations of visits and referred visits that have been in the municipality's electronic care record (EOJ). There are 3 system providers of EOJ. This has implications for the use of data, as the deliveries are used differently depending on which system supplier the municipality uses.

3 data deliveries from the EOJ are used to calculate referred home care: · L1.1 Start and stop hours · L1.4 Referral home care · L1.3 Provided home care.

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

Report L1.4 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 care worker. The report counts the actual minutes spent by the care worker.



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. Therefore, visits of the private suppliers of home care are for some municipalities not part of the reporting of L1.3. Therefore, persons from L1.4 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 by either the municipalities or Statistics Denmark.

Data from the Municipality of Copenhagen has until 2020 been supplied from two different sources (Health Services and Social Services). Copenhagen has therefore been included in micro-data the municipal codes 102 and 103 for the two administrations in the municipality. From 2020, data will be collected from the administrations in a delivery and is therefore referred to as municipality code 101 going forward.

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.

**Rehabilitation:** From 2019, a new register table has been made for Rehabilitation courses, which contains the number of rehabilitation courses per month, where for the period 2017-2018 it was rehabilitation courses for the entire 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 housing:** There is not a total for free choice of housing.

**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.

**Readmissions:** In the spring of 2018 it was decided by the National Board of Health to implement a new definition of readmissions and in spring 2021 the indicator is rearranged to include data from the 3. version of the register of patients (LPR3). 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 primary admission (last contact in the admission).

**Length of stay:** In spring 2018, the National Board of Health data decided to implement a new definition of length of stay and in spring 2021, the indicator is rearranged to include data from the 3. version of the Register of Patients (LPR3). The definition is based on the new definition of residence, where time-related contacts are considered a coherent stay. The length of stay is only calculated for stays with a duration of more than 12 hours, for instance hospitalization. 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. 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**

A working group with Statistics Denmark, KL, the Ministry of Health and the Danish authority of medicine and health deals with, among other things users' needs and satisfaction with the statistics.

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

Not relevant for these statistics.

### **5 Accuracy and reliability**

The municipalities are sent control tables, which they are asked to approve. Only approved information is included in the statistics. In the event of a lack of approvals, previous years' information are included in national totals and averages. For the publication in 2021, between 94 and 98 municipalities are included, depending on indicator. Lack of approval may be due to the municipality registration practices, which condition which data is reported and system or supplier change, where it may happen that the reported data is flawed. Difference in several areas of registration practices between municipalities can cause biases.

## 5.1 Overall accuracy

The precision of the statistics is primarily affected by the fact that some municipalities do not report or cannot approve their data and are therefore not included in the statistics. The municipality has the opportunity to report data on excel, which is especially the case for the statistics regarding referred and provided home care as well home nursing care can influence the accuracy of the data.

When the municipality does not approve data for the year, Statistics Denmark imputes approved data for previous year to calculate the annual and national total. For Preventive home visits, the municipality must have approved minimum 8 months of data before Statistics Denmark lists annual and country totals the statistics bank. This is due to a significant seasonal variation.

Home care: The source is the municipalities' administrative EOJ systems, and their reliability submitted information must generally be considered high. For referred and provided home care the municipalities have different limits for when referred are carried out for SEL § 83, SEL § 95 and SUL § 138, of which the latter two are not included in the statistics regarding referred and provided home care. That means that municipalities that refer citizens who are the target group for SUL § 138, SEL § 95 and SEL § 83, to SEL § 83 typically has an average higher referred and provided time. All information is approved by the municipalities and quality assured by Statistics Denmark before publication. It is not necessarily all months that are reported by the municipalities, and this can cause uncertainty. The citizens visited for the first time in Referred home care will usually be missing or absent when the municipalities report data on Excel or if the municipality has changed the subject system, which affects the reliability of the variable first-time visitors. Rehabilitation: More and more municipalities introduce rehabilitation according to the Social Service Act § 83a, and it is different whether the municipalities report this training as home care or as rehabilitation or maintenance training or whether for some years they report during home care and during training in other years. Training: For training information, however, it applies that some municipalities find it difficult to distinguish between training according to The Service Act (section 86, subsections 1 and 2) and the Health Act (section 140). Benefits according to the Health Act can therefore appear in the statistics. Preventive home visits also differ between municipalities. Home nursing care in your own home: It may happen that the municipality reports data from psychiatric and social housing facilities, which will be included in data, which deals with one's own home. Housing choice: Since there are now statistics for several years, you can compare over the years and this provides greater reliability, as the development can be used in troubleshooting. The municipalities before publication approve all information. Course and readmissions: LPR is validated by the Danish Health Authority, and the reliability of the register's information must generally be considered high

## 5.2 Sampling error

The User Satisfaction Survey is a sample survey

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

Coverage errors are estimated to be very limited, as the counts are total counts. However, in 2021 there is between 0 and 4 municipalities that do not approve the individual deliveries each year. The highest coverage is seen for referred home care, home nursing and nursing homes. See coverage rate for Referred home care, Home nursing, Nursing home, Preventive home visits, Referred and provided home care on the High Quality Variables page

- 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.
- Housing choice: The municipality mistakenly changes citizens who are on the free choice list or on the general waiting list.

### **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.
- 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 housing: 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.
- 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

## 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:** In principle, only final figures are published. However, in case of editing and revisions in the underlying data source, published figures may be revised. Tables AED19A and AED20A are updated for the entire time series up until 2021 on the basis of The National Patient Register per the 10th of March 2022.
- **Quality of service:** Only final data is published.

## 6 Timeliness and punctuality

The statistics are published as pre-advertised. The statistics are released approximately 7 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 June of the year following the end of the reference year.

Housing offer: The statistics are published once a year in May/June.

Readmissions: The statistics are published annually, typically in August.

User satisfaction: The statistics are published every two years, typically in August.

### 6.2 Punctuality

The statistics is published without delay.-

## 7 Comparability

For the various indicators, there may be minor data breaches. For home care, rehabilitation, housing offer, preventive home visits and training, the municipalities' EOJ systems must be tendered every 5 years. For some municipalities, it means that they change suppliers, which can create small data breach and, as previously described, influence the precision of the figures. There are currently 3 suppliers on the market. In the case of hospital use, no correction has been made for the severity of the illness, why comparability between municipalities must be interpreted cautiously.

### 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 preparing the indicators, emphasis has been placed on the fact that the statistics can be compared between the municipalities and over time.

Home care, rehabilitation, home nursing, preventive home visits and training: The indicators for the current year can be compared with previous years. However, reservations are made for municipalities that have not been covered for one or more years. Reservations are also made for the municipalities that change the care system. It can give changed distributions between the numbers. Since some municipalities may be missing, data from previous years are used for these. This can cause uncertainty in regions and the national total. 2011 was the first year that the statistics of provided home care were published. For home nursing in your own home there is data back to 2016. For rehabilitation, 2017 was the first year that the statistics were published.

Housing offer: The indicator was first published for 2009, and in the coming years it will be possible to compare backwards in time.

Readmissions: Data is comparability over time

## 7.3 Coherence - cross domain

- **Home care:** Statistics for referred home care covered by 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.
- **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. 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.
- **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. 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](#) under the topic 'Living conditions'. The figures are published in the StatBank [Social benefits for senior citizens](#). See more on the topic page for the [Social benefits for senior citizens](#).



## 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](#) under the topic 'Living conditions' (in Danish only).

## 8.5 Publications

The statistics is 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:

### **Social benefits for the elderly**

- [REHAB](#): Recipients of rehabilitation by area, time, age and gender
- [VH33](#): Providers of private home care by area and time
- [AED08](#): Recipients of rehabilitation/maintenance training by area, benefit type, age, gender and time
- [AED10](#): Recipients of preventive home visits, by area, home visit, age, gender and time
- [AED19A](#): Admissions and bed rest for persons aged 67 and over, by area, unit, diagnosis and time
- [AED20](#): Readmissions for people aged 67 and over, by area, unit, diagnosis and time
- [AED21](#): Service indicators (percentage of the population) by area, services and time

**Referred help in own home - [AED022](#)**: Home help, free choice (visited hours per week) by area, benefit type, age, gender and time

- [AED021](#): Home care, free choice (hours visited, weekly average per recipient) according to area, benefit type, age, gender and time
- [AED06](#): Recipients screened for home care, free choice, by area, benefit type, hours per week,

age, gender and time

- [AED14](#): Recipients screened for home care, free choice, changing supplier according to area, benefit type, age, gender and time
- [AED12](#): Recipients registered for home care, free choice, who use a private supplier according to area, benefit type, age, gender and time
- [AED13](#): First-time referred, free choice, using private supplier by area, benefit type, age, gender and time

**Provided care in own home** - [AED01](#): Home care, free choice (provided hours per week) after area, benefit type, age, gender and time

- [AED02](#): Home care, free choice (hours provided, weekly average) by area, benefit type, age, gender and time
- [AED023](#): Recipients of provided home care, free choice, by area, service type, hours per week, age, gender and time
- [AED012](#): Recipients of provided for home care, free choice, who use private supplier by area, benefit type, age, gender and time

**Housing for the elderly** - [AED16](#): Free choice of accommodation and average waiting time for nursing homes for people 67 years and above by unit, area and time

- [AED07](#): Recipients of home care and nursing home, by area, age, gender and time

## 8.7 Micro-data access

Researchers and analysts from authorized research institutions can access Micro-data through Statistics Denmark's [Research Scheme](#)

## 8.8 Other

Anonymized basic statistics of the statistics can be made against payment. Read more about [costume-made solutions](#) or get more information by contacting DST Consulting.

## 8.9 Confidentiality - policy

[Data Privacy Policy](#) 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 and Health. The persons responsible are Henrik Huusom, tlf. 39 17 38 66, e-mail: [hhu@dst.dk](mailto:hhu@dst.dk), Sofie Biering-Sørensen, tlf. 29 17 33 68, e-mail: [sbs@dst.dk](mailto:sbs@dst.dk). It is also possible to contact Claus Østberg, tlf. 39 17 34 28, e-mail: [coj@dst.dk](mailto:coj@dst.dk) and Ramije Idrizi, tlf. 39 17 34 48, e-mail: [rai@dst.dk](mailto:rai@dst.dk)

Responsible for Indicator about Clinical Pathways and Readmissions is Sundhedsdatastyrelsen, [kontakt@sundhedsdata.dk](mailto:kontakt@sundhedsdata.dk).

### **9.1 Contact organisation**

Statistics Denmark

### **9.2 Contact organisation unit**

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### **9.3 Contact name**

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N/A