Documentation of statistics for
Labour Usage in Social Care 2015

1 Introduction

The statistic describes personnel usage in nursing and in the municipal and regional sectors. The purpose is to inform generally on the use of different kinds of personnel over time in the mentioned sectors.

2 Statistical presentation

The statistic contains data on personnel usage in municipalities and regions in nursing and care. The personnel usage is split on work function, municipality and the budget account where the wage is taken from. The statistic contains data from 2008.

2.1 Data description

The statistic contains data on personnel usage distributed on municipalities and regions within nursing and care. The personnel is split into groups based on work function, municipality and the budget account where the wages come from. The statistic contains data from 2008. The statistic is generated based on register data on wages in the municipal and regional sector.

2.2 Classification system

The statistic use two classifications standards. The first is DISCO codes, which are used to classify job types such as doctor or nurse. The second classification is the authorized budget plan for municipalities and regions, which is used to classify the expenses. Which is then again used to classify the wage expenses in this statistic. The individual worker is placed in a certain part of the budget and a specific DISCO code.

2.3 Sector coverage

Nursing and care functions in the municipal and regional sectors.

2.4 Statistical concepts and definitions

Fulltime employee: The sum of the actual working time for all employees, divided by the standard workweek of 37 hours.

2.5 Statistical unit

The statistic is summarized in terms of fulltime employees. The number of fulltime employees represent the sum of the delivered work hours in a given time hours, divided by the standard length of a full time work week, ie. 37 hours.

2.6 Statistical population

Employees in care and nursing in municipalities and regions

2.7 Reference area

Denmark

2.8 Time coverage

2008 - 2014

2.9 Base period

Not relevant for this statistic

2.10 Unit of measure

Number of fulltime employees.

2.11 Reference period

01-01-2014 - 31-12-2014

2.12 Frequency of dissemination

Yearly

2.13 Legal acts and other agreements

Law on Statistics Denmark §6

2.14 Cost and burden

The statistics is based on register data. Therefore there is no burden on the data providers. Data is gathered by the office for municipal and regional wage data.

2.15 Comment

More information can be requested from Statistics Denmark

3 Statistical processing

Data is summarized, but is not treated with statistical methods apart from that. It is purely a register based statistic. Data is subject to error correction. Primarily if very large variance is detected for some municipalities over time.

3.1 Source data

Data originates in the office for municipal and regional wage data.

3.2 Frequency of data collection

The collected data covers all of march.

3.3 Data collection

All data is collected using wage data which the municipalities and regions enter about their employees in the own wage management systems. It is a purely register based statistics. The statistic is thus based only on administrative data.

3.4 Data validation

Data is checked for variance over time, across municipalities, budget account and work function. If there are very big fluctuations over time in some data, then this is investigated, to check if fx a big work place has been reclassified, or if other errors occurred. A few times a municipality have had its data corrected. Normally a municipality is contacted to agree on the correction. Corrections are relatively rare, and an error must influence the national numbers somewhat before municipalities are contacted. The reason for this is that basic error correction should have been discovered at the office for municipal and regional wage data. Mostly when many employees are reclassified it is because a municipality have actively decided to reclassify, and it is seldom due to an actual error.

3.5 Data compilation

The data is very complete, and there is no imputation or other estimations.

3.6 Adjustment

No relevant for this statistic. Data is always collected for march only.

4 Relevance

It is estimated that the statistic covers the user needs to a reasonable degree. It is also estimated that the users are generally satisfied with the published tables. The most common users are the relevant interest organization, ministries and the public in general.

4.1 User Needs

The publicly available tables show personal usage in nursing and care. This is a good fit with the overall user need. There is a clear wish to connect data on personnel usage, directly with data on usage of care facilities. So that one can monitor personnel usage pr. user for example. This something that will be possible in the future with data from the municipal service indicators. The most common users of this statistic are the relevant interest organizations, ministries and the public in general.

4.2 User Satisfaction

On the basis of an ongoing dialog the users are estimated to be satisfied with the published tables. The tables gives the relevant ministries an opportunity to track the resource consumption across sectors. The linking of wage data and handicap data from the municipal service indicators, in addition to the shorter publishing times, will increase user satisfaction in the future.

4.3 Data completeness rate

Data is estimated to be very complete.

5 Accuracy and reliability

The numbers are associated with some uncertainty. The is primarily due to the different ways municipalities use the budget accounts and the DISCO classification. The municipalities can have some workers classified under budget accounts in a way that deviates from standard practice. This can make the numbers vary quite a bit from one year to the next. The have been examples of municipalities moving hundreds of workers around between accounts each year. The choice of accounts is at the discretion of the municipalities and the interpretation of the relevant rules.

5.1 Overall accuracy

For the national numbers the precision is good. It can be hard to compare individual municipalities though.

5.2 Sampling error

Not relevant for this statistic.

5.3 Non-sampling error

Coverage errors, where a municipality misclassify some employees is the biggest source of errors.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

The quality is estimated to be good for the national numbers. One must be careful with comparing individual municipalities though.

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

There have only been a few revision, and they have affected less than 2 percent of the relevant population. Data is revised at the next publication, if some data points are reported to contain errors. Errors are typically discovered in the following year.

6 Timeliness and punctuality

Publishing takes around 8 months. From 2015 this time is expected to be significantly shortened.

6.1 Timeliness and time lag - final results

Production time has so far been around 8 months. From 2015 this is expected to be reduced significantly.

6.2 Punctuality

Publications have so far not been delayed.

7 Comparability

Comparability across borders is limited, because the budget classification used to find the relevant employees is only used in Denmark. Comparability across time is good, except for a break in data from 2010 and 2011, due to a change of the DISCO classification.

7.1 Comparability - geographical

It is hard to compare internationally, because the account budget classifications is unique to Denmark

7.2 Comparability over time

The data is comparable over time, but there is a break in between 2010 and 2011 because the variable for work function is changed. This is because of a change in the DISCO codes.

7.3 Coherence - cross domain

The office for regional and municipal wage data have their own statistics, which is somewhat comparable. They do not use the same DISCO classifications as Statistics Denmark, and they do not include all the same individuals. The error correction work done by statistics Denmark will also mean some deviations.

7.4 Coherence - internal

There is a high degree of internal consistency, as there is only one data source.

8 Accessibility and clarity

Data is published in the statbank, under the matrices RES10 and RES11. Microdata from this statistic is not distributed, and is not used in other statistics.

8.1 Release calendar

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

8.2 Release calendar access

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

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.4 News release

One yearly news article is published.

8.5 Publications

The statistic is part of the 10 year review.

8.6 On-line database

The following matrices are available:

- RES10: Staff working with nursing and care, full-time employees by region, occupation and main account
- RES11: Staff in municipal dental care and health care, full-time employees by region and function

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8.7 Micro-data access

Data used for this statistic is from a larger set of wage data. Therefore this limited dataset is of little interest to scientist who prefer to use the full wage dataset, from the department on wages and sick leave.

8.8 Other

Data is not distributed to other parties.

8.9 Confidentiality - policy

The statistic follows the general guidelines from Statistics Denmark on data confidentiality.

8.10 Confidentiality - data treatment

The published tables are tested for discretion problems.

8.11 Documentation on methodology

There is no further documentation

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 statistics is placed in office for Household Economics and Welfare. The responsible person is Olav Grøndal phone : +45 39 17 31 07, e-mail : ogd@dst.dk

9.1 Contact organisation

Statistics Denmark

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