Documentation of statistics for
Labour Usage in Social Care 2016

1 Introduction

The purpose of the statistics are to describes the staff working with nursing and care in the municipal and regional sectors and the staff working in municipal dental care and health care. The statistics are used to describe the number of employees by budget accounts from the authorized budget plan for municipalities and regions and the use of different kinds of personnel over time in the mentioned areas. The statistics have been compiled since 2008, but are revised in 2016.

2 Statistical presentation

The statistics are a yearly measurement of municipal and regional staff working with nursing and care and the staff working in municipal dental care and health care. The statistics are based on information covering February only and measure the number of fulltime employees working with municipal and regional nursing and care and municipal dental care and health care. The number of fulltime employees are grouped by municipalities, regions, occupation and the budget account used by municipalities and regions.

2.1 Data description

The statistics are a yearly measurement of municipal and regional staff working with nursing and care and the staff working in municipal dental care and health care. The statistics measure the number of fulltime employees working with municipal and regional nursing and care and municipal dental care and health care. The statistics are used to describe the use of different kinds of personnel over time in the mentioned areas. The statistics are based on the monthly data reported to the statistics of earnings for the municipal sector and are calculated on basis of the reported data for February only. The number of fulltime employees are grouped by municipalities and regions and selected occupations from DISCO-08 in Structure of Earnings. Furthermore the fulltime employees are grouped by selected budget accounts used by municipalities and regions. The statistics have been compiled since 2008, but is revised in 2016. Consequently data for 2016 are not comparable to data published in previous years.

2.2 Classification system

The statistics use two kinds of classifications. The first is DISCO codes, which are used to classify the occupation of the employees such as doctor or nurse. The second classification is the authorized budget plan for municipalities and regions, which is used to classify the expenses. The individual employee is placed in a certain part of the budget and a specific DISCO code.

2.3 Sector coverage

The statistics cover municipal and regional nursing and care and municipal dental care and health care.

2.4 Statistical concepts and definitions

Fulltime employee: A person who is employed 37 hours all of February. A person who is employed for 20 hours a week the whole month and another person who is employed 17 hours the whole month amounts to one fulltime employee when combined.

2.5 Statistical unit

The statistics measure the number of fulltime employees. The number of fulltime employees are calculated on basis of the number of hours worked during February.

2.6 Statistical population

Employees in municipal and regional care and nursing and employees in municipal dental care and health care.

2.7 Reference area

The statistics cover Denmark.

2.8 Time coverage

These statistics cover the year 2016. Cf. 7.2 Comparability over time for a description of earlier data.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

The unit of measure is number of fulltime employees.

2.11 Reference period

01-02-2016 - 29-02-2016

2.12 Frequency of dissemination

The statistics are published on a yearly basis.

2.13 Legal acts and other agreements

The information is collected in accordance with the Act on Statistics Denmark §6

2.14 Cost and burden

Data is extracted from the public pay transfer systems. Consequently, the respondents (institutions, municipalities and counties) are not directly involved in reporting data, apart from being responsible for maintaining a few statistical variables in the pay systems.

2.15 Comment

More information can be requested by contacting Statistics Denmark directly.

3 Statistical processing

The statistics are based on data for February reported to the statistics of earnings for the municipal sector. Based on the authorized budget plan for municipalities and regions, institutions from the selected budget accounts, are selected. The number of fulltime employees are calculated on basis of the employees actual hours worked. The number of fulltime employees are summarized and grouped by municipalities, regions, budget accounts and selected occupations. A certain check is made concerning whether the institutions are connected to the right budget accounts and whether the occupation of the employees are considered to be correct. Furthermore the data are controlled for large variances over time.

3.1 Source data

The statistics are based on the data for February reported to the statistics of earnings for the municipal sector and are calculated on basis of the reported data for February only. Data are collected by the office for municipal and regional wage data (KRL) and are transmitted to Statistics Denmark.

3.2 Frequency of data collection

Data are collected monthly and the statistics are calculated on basis of data covering all of February.

3.3 Data collection

All data is collected using wage data which the municipalities and regions enter about their employees in their own pay transfer systems. Data are complemented by a few extra variables that are collected for statistical use only. Data are collected by the office for municipal and regional wage data (KRL).

3.4 Data validation

The municipalities and regions connect institutions and employees to budget accounts in the authorized budget plan for municipalities and regions. The municipalities do not always use the budget plan homogeneously. The office for municipal and regional wage data (KRL) has validated the budget accounts in detail and these validated budget accounts are used in the statistics. However, some institutions are not included in the statistics of KRL and the budget accounts of these institutions are not validated by KRL. In these cases the budget accounts reported by the municipalities are used instead. In some cases Statistics Denmark validate institutions connection to the budget accounts. To some extent it is validated whether the right institutions are selected and whether relevant institutions are connected to budget accounts that are not included in the statistics.

Furthermore the occupation of the employees are to some extent validated.

Data are checked for variances in fulltime employees over time, across municipalities, budget accounts and occupation. Big fluctuations over time are investigated. It is checked whether institutions have been reclassified to other budget accounts and whether the municipalities have changed the DISCO code of the employees. Reclassifications between budget accounts are discussed with KRL whereas changes in occupation are difficult to validate.

3.5 Data compilation

Data that are not considered to be the actual wage payment are excluded from the wage data for February. Data without hours paid and without gross pay are excluded. From the authorized budget plan of municipalities and regions, institutions are selected. These are institutions that are connected to budget accounts that are included in the statistics. The actual hours worked by the employees are recalculated to fulltime employees. If the work hours of an employee account to more than one fulltime employee the number of fulltime employee is reduced to one. The number of fulltime employees are summarized and grouped by municipalities, regions, budget accounts and selected occupations (DISCO-codes). Institutions are primarily connected to the municipality that is the responsible authority. in some cases where this is not possible the institution is connected to the municipality where the institution is situated geographically.

3.6 Adjustment

No adjustments are made other than what is already described under 3.4 Data validation and 3.5 Data compilation.

4 Relevance

These statistics are relevant for ministries, organizations and the public in general for planning and analysis purposes.

4.1 User Needs

The most common users of this statistic are ministries, organizations and the public in general. The released tables measure staff working with in nursing and care. The tables give the relevant ministries an opportunity to track the resource consumption across sectors. This is consistent with the overall user needs. There is a wish to connect data on personnel usage, directly with data on usage of care facilities so that it is possible to monitor personnel usage pr. user for example. This is expected to be possible in the future with data from the municipal service indicators.

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 a shorter publishing times, will increase user satisfaction in the future.

4.3 Data completeness rate

The statistics cover fulltime employees within the selected municipal and regional budget accounts and within the selected groups of occupation (DISCO-codes).

5 Accuracy and reliability

The data are associated with some uncertainty. This is primarily due some uncertainty concerning connection of institutions and employees to budget accounts and connection of occupations to employees. This might cause variations over time in number of fulltime employees within municipalities, both for the municipality as a whole and when data are grouped by budget accounts and occupations. Data for the country as a whole are expected to be more stable over time.

5.1 Overall accuracy

There are some uncertainty concerning connecting institutions and employees to budget accounts. The occupation of the employees is also to a certain extent associated with some uncertainty as the disco-codes in some cases are connected to the employees by keys between wage classes and the disco-nomenclature. In some cases it is only possible to connect a disco-code to the employees at the highest level. The uncertainty is expected to have the greatest impact at the municipality level where as the data are considered to be more accurate for the country as a whole. If the work hours of an employee account to more than one fulltime employee the number of fulltime employee is reduced to one.

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

The statistics are based on the monthly data reported to the statistics of earnings for the municipal sector and is based on February. Data are delivered from the pay transfer systems that most municipalities use. Institutions that use other pay transfer systems will not be included in the statistics. Coverage errors might occur if employees are misclassified under a wrong budget account. This means that employees that should not be included might be included in the statistics by mistake. On the other hand, employees that ought to be included might be missing from the statistics by mistake. The coverage errors are not expected to have a great impact on data for the country as a whole.

The occupation of the employees is also to a certain extent associated with some uncertainty as the disco-codes in some cases are connected to the employees by keys between wage classes and the disco-nomenclature. In some cases it is not possible to identify a six digit disco code (the most detailed level) on basis of the wage class. Instead the employee will get at disco-code at a lower level which might be only at the level of one digit. The municipalities has recently gotten increased access to connect disco-codes to their employees. This might improve the quality of the disco-codes but might also in some cases cause errors if the municipalities misinterpret the disco-nomenclature. The increased access for the municipalities to connect disco-codes to their employee might in any case cause variations in the disco-codes of the employees over time.

Measurement errors are considered to be limited. The number of fulltime employees are reduced to one fulltime employee if the summarized work hours of the employee exceed one employee.

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 data are associated with some uncertainty. This is primarily due some uncertainty concerning connection of institutions and employees to budget accounts and connection of occupations to employees. This might cause variations over time in number of fulltime employees within municipalities, both for the municipality as a whole and when data are grouped by budget accounts and occupations. Data for the country as a whole are expected to be more stable over time.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

Only final figures are published.

6 Timeliness and punctuality

The statistics for 2016 are published around 15 months after the end of the reference period. As the statistics are revised in 2016 the statistics are released later than normal. The statistics for 2017 are expected to be released December 2017. Subsequently the statistics are expected to be released in June.

6.1 Timeliness and time lag - final results

The statistics for 2016 are published around 15 months after the end of the reference period. As the statistics are revised in 2016 the statistics are released later than normal. The statistics for 2017 are expected to be released December 2017. Subsequently the statistics are expected to be released in June. Only final figures are released.

6.2 Punctuality

The statistics for 2016 are published around 15 months after the end of the reference period. As the statistics are revised in 2016 the statistics are released later than normal. The statistics for 2017 are expected to be released December 2017.

7 Comparability

The statistics have been compiled since 2008, but is revised in 2016. Consequently data for 2016 are not directly comparable to data published in previous years. No comparable results from other countries are available. The authorized budget plan for municipalities and regions that is used to select the relevant employees is unique to Denmark.

7.1 Comparability - geographical

No comparable results from other countries are available. It is not possible to compare internationally, because the authorized budget plan is unique to Denmark.

7.2 Comparability over time

The statistics have been compiled since 2008, but is revised in 2016. Consequently data for 2016 are not directly comparable to data published in previous years. Compared to the earlier data the selection of which institutions and employees that are included in the statistics have been looked through and revised. At the same time the grouping by occupation has been changed and is now in accordance with the DISCO-nomenclature DISCO-08. All employees at the selected budget accounts are included in the statistics regardless of occupation where as only selected occupations were included previously. The data for 2008 to 2015 are comparable over time. However, the new classification of occupations was introduced to the statistics between 2010 and 2011. Consequently, data grouped by occupation are not comparable between 2010 and 2011. The previous DISCO-nomenclature DISCO-earnings was replaced by DISCO-08.

7.3 Coherence - cross domain

The office for regional and municipal wage data (KRL) compiles statistics that to some extent are comparable. However, They do not use the same DISCO classifications as Statistics Denmark. Furthermore the corrections made by statistics Denmark might cause further deviations. Finally, Statistics Denmark includes institutions and employees that are not included in the statistics of KRL. Furthermore Statistics of Denmark compile statistics of earnings that are based on the same data. Corrections and selection of data are, however, different and results of the two statistics are therefore not comparable.

7.4 Coherence - internal

The statistics are based on one source only and there is a high degree of internal consistency in data.

8 Accessibility and clarity

Data is published in the StatBank under the subject Elderly people receiving social bebefits and the subject Visits to physicians.

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

For the year 2016 these statistics are not published in a Danish press release. When data for 2017 are published it is expected to publish a Danish press release describing 2016 and 2017.

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8.5 Publications

Not relevant for these statistics.

8.6 On-line database

These data are published in the StatBank under the subject [Elderly people receiving social benefits](#) :

- [RES13](#): Staff working with municipal and regional nursing and care, full-time employees by region, occupation and time
- [RES14](#): Staff working with municipal and regional nursing and care, full-time employees by region, main account and time

This table is published in the StatBank under the subject [Visits to physicians](#)

- [RES15](#): Staff in municipal dental care and health care, full-time employees by region, function and time

8.7 Micro-data access

Their is no access to the underlying micro-data.

8.8 Other

Not relevant for these statistics.

8.9 Confidentiality - policy

The statistic follows Statistics Denmark's general [Data Confidentiality Policy](#)

8.10 Confidentiality - data treatment

The statistics follow Statistics Denmark's general Data Confidentiality Policy. Results that cover two or less fulltime employees are not published.

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 administrative placement of these statistics is the division of Personal Finances and Welfare. The person responsible is Birgitte Lundstrøm phone : +45 39 17 34 01, e-mail : bls@dst.dk

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