

Documentation of statistics for Coverage of general practitioners 2023

Statistics Denmark Sankt Kjelds Plads 11 DK 2100 København Ø



# **1** Introduction

The purpose of the statistics Coverage of general practitioners is to shed light on geographical differences in the coverage of general practitioners in Denmark. The statistics are used to compare different municipality groups' coverage of general practitioners and gain insight into which geographical areas show signs of a shortage of general practitioners. The statistics are newly developed and cover the period from 2015 and onwards. The statistics are comparable throughout the period.

# **2 Statistical presentation**

Coverage of general practitioners is an annual measurement of the coverage of general practitioners stated in number of people per medical capacity. A medical capacity is an administrative unit which is used to regulate the supply of general medical services under the National Health Insurance. According to the agreement about general practice, a capacity must be able to handle approximately 1,600 registered group 1 insured persons. The statistics are grouped by municipality groups.

# 2.1 Data description

The statistics contain information on the coverage of general practitioners stated in number of people per medical capacity. Besides information on the coverage of general practitioners, the table also contains information on geography.

# 2.2 Classification system

The statistics use the <u>municipality groups classification</u>, which divides Denmark's municipalities into five groups based on the number of inhabitants in the largest city in the municipality and accessibility to jobs, respectively.

# 2.3 Sector coverage

The statistics cover the health sector.

# 2.4 Statistical concepts and definitions

Medical capacity: An administrative unit, which is used to regulate the supply of general medical services under the National Health Service. According to the agreement about general practice, a capacity must be able to handle approximately 1,600 registered group 1 insured persons. Practices with a minimum of 1,600 registered patients per medical capacity have the right to close the intake of new patients. Some practices have dispensation to close with fewer than 1,600 patients per medical capacity, and other practices have a wish for more than 1,600 patients per medical capacity. There can be several general practitioners to fill one medical capacity, and there can be several medical capacities per practice. A medical capacity can also cover different organisations, and the range of practice staff beyond the general practitioner(s), with whom the capacity is associated, can vary.

# 2.5 Statistical unit

The statistics are observed for municipalities.



# 2.6 Statistical population

The population includes all municipalities in Denmark, excluding Christiansø.

#### 2.7 Reference area

Denmark.

#### 2.8 Time coverage

These statistics cover the time period from 2015 and onwards.

#### 2.9 Base period

Not relevant for these statistics.

#### 2.10 Unit of measure

Number of people per medical capacity.

#### 2.11 Reference period

The statistics refer to 1 January in a given calendar year.

# 2.12 Frequency of dissemination

Yearly.

# 2.13 Legal acts and other agreements

Collection of the information takes place pursuant to the Act on Statistics Denmark, §6. There is no EU regulation for the statistics.

#### 2.14 Cost and burden

These statistics are based on administrative data. There is thus no direct response burden in relation to the compilation of these statistics.

# 2.15 Comment

Further information can be obtained by contacting Statistics Denmark directly.



# **3 Statistical processing**

Data for these statistics are collected yearly from the Danish Health Data Authority's key figures for general practice and population statistics. Collected data are not further validated. Instead, collected data are merged, and the information about the number of people per medical capacity is calculated for each municipality to the final statistical output.

# 3.1 Source data

Data comes from an internal statistical register and an external administrative register. Information on the number of people comes from the <u>population statistics</u>, while information on the number of medical capacities comes from the Danish Health Data Authority's <u>key figures for general practice</u>.

# 3.2 Frequency of data collection

Data are collected yearly.

# 3.3 Data collection

Data are collected directly from administrative registers.

#### 3.4 Data validation

As the collected data have already been validated, no further data validation and error detection are carried out.

# 3.5 Data compilation

The statistics integrate the population statistics' information on the number of people at the municipality level with the information on the municipalities' medical capacities, which are identified from the Danish Health Data Authority's key figures for general practice.

Data is grouped according to geography (municipality group and municipality, cf. the municipality group classification).

Coverage of general practitioners is calculated as the number of people per medical capacity.

Weights are not used.

# 3.6 Adjustment

No adjustments are made beyond what is already described under Data validation and Data compilation.



# 4 Relevance

The statistics are relevant for professionals, analysts and other interested parties as a basis for elucidation and in-depth analyses of geographical differences in the coverage of general practitioners in Denmark.

# 4.1 User Needs

Users can use the figures to gain a deeper understanding of geographical differences in the coverage of general practitioners in Denmark. This can, for example, form the basis for more detailed political and research analyses, journalistic stories, school assignments, etc.

# 4.2 User Satisfaction

The statistics have been developed based on a workshop with a task group that has given their input on which topics could be relevant to focus on when describing health differences between rural and urban areas. The final choice of health indicators has subsequently been consulted in the task group to ensure that the users of the statistics get what they need and that the statistics are relevant to the users.

# 4.3 Data completeness rate

Not relevant for these statistics.

# **5** Accuracy and reliability

The statistics are a good measure of the coverage of general practitioners in the country's municipalities since the registration of medical capacities presumably is complete as it is used to regulate the supply of general medical services under the National Health Service. The population statistics only have a minor uncertainty due to the lack of registration of illegal immigrants and delayed registration of emigrants. Revisions are not expected.

# 5.1 Overall accuracy

There is no reason to assume that there should be measurement errors in the registration of medical capacities. The registration of the number of people in the individual municipalities is, however, associated with a small degree of uncertainty, as the population statistics' population figures at the end of the year are, according to the statistical documentation, underestimated by 0.14 per cent due to illegal immigration and delayed registration of emigration.

For more detailed information on the accuracy of the source data, please refer to the documentation of the respective statistics.

# 5.2 Sampling error

Not relevant for these statistics.



# 5.3 Non-sampling error

The statistics' frame population includes all people and medical capacities registered in a municipality on 1 January in a given calendar year, for this reason, the frame population covers the entire target population.

The count of the number of people in the individual municipalities is associated with some uncertainty, as the population statistics' population figures at the end of the year are, according to the statistical documentation, underestimated by 0.14 per cent due to illegal immigration and delayed registration of emigration. However, there is no reason to assume that there should be measurement errors in the registration of medical capacities.

There is no non-response.

# 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 source data for the statistics come from the <u>population statistics</u> and the Danish Health Data Authority's <u>key figures for general practice</u>. Detailed descriptions of the quality of the source data can be found in the statistical documentation of these registers.

These statistics have been developed based on current methods.

# 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

# 5.8 Data revision practice

The statistics only publish final figures. Since these are completely new statistics, no revisions have currently been made.



# 6 Timeliness and punctuality

These statistics are published within 5 months after the end of the reference period. Publications are released on time as stated in the release calendar.

# 6.1 Timeliness and time lag - final results

The statistics' average production time is 5 months, as information on medical capacities is obtained from the Danish Health Data Authority's key figures for general practice that currently has a publication time of just over 2 months.

# 6.2 Punctuality

These statistics are published without delay with reference to the announced time of publication in the release calendar.

# 7 Comparability

The statistics are newly developed and cover the period from 2015 and onwards. The statistics are comparable throughout the period.

#### 7.1 Comparability - geographical

As far as is known, no similar international statistics exist.

#### 7.2 Comparability over time

There have been no changes in the method of assessment or the data composition, so the time series is fully comparable during the period.

However, the Danish Health Data Authority has changed the data provider by 1 July 2022, but this should not change the counting of the number of medical capacities.

#### 7.3 Coherence - cross domain

The statistics are part of a theme about differences between rural and urban areas.

Health differences between rural and urban areas are also highlighted in the statistics Overweight among children, which measure the proportion of overweight children by municipality groups, sex and age since 2012, and in the statistics Life expectancy for newborn babies, which measure the average life expectancy for newborn babies by municipality groups and sex since 2006-07.

# 7.4 Coherence - internal

The internal consistency of the statistics is ensured by first extracting the population statistics' information on the number of people in each municipality on 1 January in a given calendar year and linking this with the municipalities' number of medical capacities, which are identified from the Danish Health Data Authority's key figures for general practice on the same date.



# 8 Accessibility and clarity

In the StatBank, these statistics can be found under the subject <u>Consultations of physicians</u>. For further information, go to the <u>subject page</u>.

#### 8.1 Release calendar

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

#### 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.

#### 8.2 Release calendar access

The Release Calender can be accessed on our English website: <u>Release Calender</u>.

#### 8.4 News release

No separate Danish press release is published for these statistics.

#### 8.5 Publications

Not relevant for these statistics.

#### 8.6 On-line database

The statistics are published in the StatBank in the following tables: - <u>LABY27</u>: People per general practitioner by municipality groups.

#### 8.7 Micro-data access

There is no access to the microdata of the statistics.

# 8.8 Other

The statistics are not available elsewhere.

# 8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is applied.

#### 8.10 Confidentiality - data treatment

The statistics are published on an aggregated level, which ensures that individuals cannot be identified. Furthermore, confidentiality is applied so that there are never less than three observations in the table's data cells.

#### 8.11 Documentation on methodology

There are no separate method descriptions for these statistics.

#### 8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

# 9 Contact

The administrative placement of these statistics is in the division of Personal Finances and Welfare. The contact person is , tel.: , and e-mail: .