Socialstyrelsen

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Department of Registers and Statistics
Statistik 2
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Statistical register's production and quality - National Register of Interventions in Municipal Health Care

The following is a description of the National Register of Interventions in Municipal Health Care, which contains information on people who have received municipal health care and the patient-related procedures performed by licensed health care professionals with the municipality as healthcare provider in Sweden.

Reference period

Since 2007, the Register includes information on persons who have received any intervention in the municipal health care system, broken down by calendar month. Since 2009, data are available for all months.

- 2007 September only
- 2008 June to December only
- 2009 onwards January to December

From 2019 onwards, information is also available on health care procedures carried out by authorised staff with the municipality as the care provider. Health care procedures are coded according to the Classification of Health Care Procedures (KVÅ).

Content

Production of the statistical register

F1 Context of the statistical register

The National Board of Health and Welfare maintains a number of personal ID number-based registers that are used as a basis for statistics and research on health care and social services. The National Register of Interventions in Municipal Health Care is one of the National Board of Health and Welfare's six health data registers. The Register is an individual register and, since 2007, contains information on all persons who have received health care for which the municipality is responsible under the Health and Medical Services Act. From 2019 onwards, information is also available on health care procedures (KVÅ) carried out by authorised staff with the municipality as the care provider.

F2 Design

F2.1 Outline of register content

The Register contains information on all persons who have received healthcare for which the municipality is responsible under Chapter 12, Sections 1 and 2, and Chapter 14, Section 1, of the Health and Medical Services Act (2017:30). Municipalities must provide good-quality health care to people in certain types of housing and activities, but not health care that is provided by doctors. The region must allocate the necessary doctors to the municipality.[1] The municipal responsibility for health care is mainly limited to certain groups that receive measures under the Social Services Act (SoL) (2001:453), and the Support and Service for Persons with Certain Functional Impairments Act (LSS) (1993:387). Municipalities are responsible for health care in

- permanent specialised housing, short-term housing[2] and day activities regulated by SoL (Chapter 12, Section 1 the Health and Medical Services Act, Chapter 3, Section 6, and Chapter 5, Sections 5 and 7 SoL).
- Housing with special services (LSS housing)[3] and daily activities that are regulated in LSS (see Govt. bill 1992/93:159 *om stöd och service till vissa funktionshindrade*, p. 182).
- One's own home, known as ordinary housing, in the form of home nursing if the region and the municipality in question have agreed that the municipality will take over responsibility for such health care (Chapter 14, Section 2, Health and Medical Services Act). All regions, except Region Stockholm, have agreements whereby the municipalities are responsible for home care in ordinary housing. However, Region Stockholm has an agreement with Norrtälje municipality.

[1] Chapter 12, Sections 1 and 3, and Chapter 16, Section 1 of the Health and Medical Services Act.
[2] In Govt. Bill 2005/06:115 *Nationell utvecklingsplan för vård och omsorg om äldre* (National development plan for health and social care for the elderly), p. 80, it is made clear that short-term housing is a special form of accommodation for the elderly according to Chapter 5, Section 5, second paragraph SoL.
[3] Chapter 5 Section 7 third paragraph SoL

The Register is divided into two sub-registers. The first sub-register (HSL) contains information on all persons who received municipal health care per calendar month and municipality. The second sub-register (HSL2) contains information on which patient-related care procedures were carried out by authorised staff with the municipality as the care provider. Note that HSL2 does not include people who have received care procedures carried out under private auspices, and therefore the number of people differs between the two sub-registers.

F2.2 Data sources

Collection of data from municipalities at individual level for persons receiving health care for which the municipalities are responsible under Chapter 12, sections 1 and 2, and Chapter 14, section 1, of the Health and Medical Services Act (2017:30). Municipalities are required to extract this information from their administrative systems and report it to the National Board of Health and Welfare, where the data are compiled into a national register.

F2.3 Time frame

Register data were collected for the first time in 2007 and related to conditions in September 2007. In 2008, data were collected for the month of June. Data for the period 1 July 2008–31 December 2018 were reported semi-annually to the National Board of Health and Welfare. From 2019 onwards, data will be provided on a monthly basis. The data must be provided by the last day of the month, two months after the month in which municipal health care was provided. Thus, municipalities have two months to submit data for each calendar month. Data relating to January must therefore be reported to the National Board of Health and Welfare by March, and so on.

F2.4 Collection procedure

F2.4.1 Data collection methods and providers

The obligation to provide information to the Register is based on *Förordningen om register hos Socialstyrelsen över insatser inom den kommunala hälso- och sjukvården* (Ordinance on the National Board of Health and Welfare's Register of Interventions in Municipal Health Care) (2006:94). The National Board of Health and Welfare's Regulations on the obligation to provide information to registers of interventions in municipal health care (HSLF-FS 2017:67) specifies what must be reported and how. The regulations have been drawn up after consultation with the Swedish Association of Local Authorities and Regions (SALAR). The data are collected at the individual level from the municipalities' operating systems to the National Board of Health and Welfare, and are sent in the form of a semi-colon-separated text file to the *Filip* portal on the National Board of Health and Welfare's website. Reminders are made mainly in writing, but telephone contact from the National Board of Health and Welfare's reporting function can also be made.

F2.4.2 Measurement

Data are collected in accordance with current regulations. Clarification of what must be collected can be found on the National Board of Health and Welfare's website. The municipalities themselves control the administrative systems used to hold this information as well as the processes necessary for extracting information from the systems. Data for the Register are extracted from the medical records of health care organisations and sent to the National Board of Health and Welfare by the municipalities.

F2.4.3 Defective deliveries

The municipalities report by submitting data in the form of text files via the *Filip* portal on the National Board of Health and Welfare's website. During reporting, automated feedback reports any irregularities in the form of an error/warning. If the feedback indicates errors, the reported file will not be accepted. The file must be corrected before it can be resubmitted. Reminders for non-deliveries or unresolved errors are mainly sent by e-mail, but telephone contact from the National Board of Health and Welfare's reporting function also occurs.

F2.5 Processing with review

F2.5.1 Coding

Not applicable.

F2.5.2 Duplicate check

Identical rows are not allowed. This is checked and cleared on delivery.

F2.5.3 Reasonableness check

After the municipalities have reported data, an automated feedback file is generated containing the number of people with municipal health care and the number of care procedures.

F2.5.4 Imputations

No imputations are made.

F2.5.5 Model-based calculations

No model-based calculations are made.

F2.5.6 Comparisons with other registers and data sources

Reported data are checked against the National Cause of Death Register (DORS), which means that it is not possible for municipalities to report information about deceased persons to the Register.

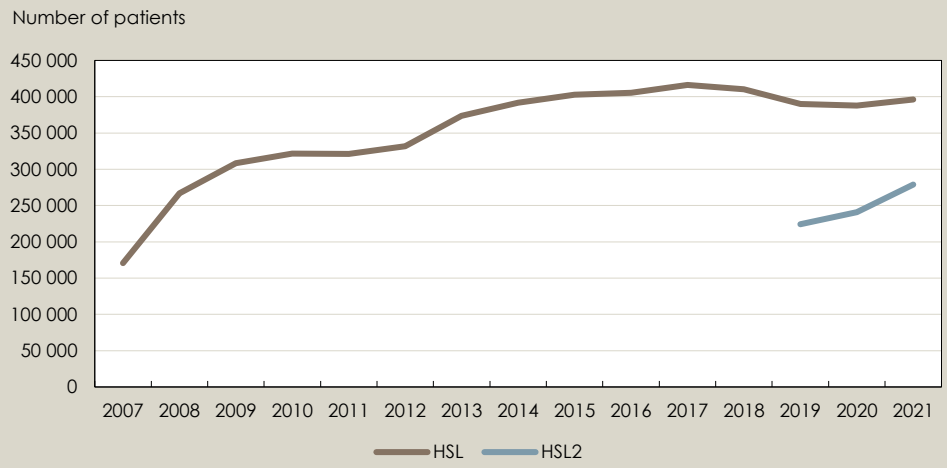
F3 Implementation

F3.1 Quantitative information

Figure 1 shows the number of patients with a valid personal ID number in the HSL and HSL2 sub-registers. The HSL sub-register includes data on all patients with municipal health care, including patients who have received care

under private auspices. Sub-register HSL2 only contains data on care procedures carried out under municipal auspices. This is the primary reason why the HSL sub-register includes more patients than the HSL2 sub-register.

Figure 1. Number of patients HSL and HSL2 sub-registers 2007–2021



Source: Register of Interventions in Municipal Health Care

During the period 2007-2016, the number of patients with municipal health care has increased significantly (sub-register HSL). The increase is largely due to the fact that more municipalities have taken over responsibility for health care in ordinary housing from the regions. In 2007, half of the municipalities had not taken over the responsibility. In 2016, only the municipalities in Stockholm County (except Norrtälje) had not taken over responsibility. In 2018-2019, the municipalities reported fewer people with municipal health care (sub-register HSL), which was due to technical problems in the operating systems of the municipalities due to the implementation of the new regulations.

The number of patients reported as receiving procedures (sub-register HSL2) has increased, which is due to more municipalities reporting procedures. More information on non-response can be found in Section K2.2.3.

F3.2 Deviations from the design

No deviations from the design.

Statistical register quality

K1 Relevance

K1.1 Objectives and information needs

K1.1.1 Register objective

Register data are collected to ensure that the public and social actors are well informed about conditions and developments in municipal health care so that an objective debate can take place and informed decisions can be made.

K1.1.2 Information needs of register users

Register data are used for the production of statistics (official statistics), monitoring, evaluation, quality assurance and research. The aim is, among other things, to highlight the extent of municipal health care in both individual municipalities and nationally. The data on care procedures make it possible to identify the type of care that people receive, and from which professional group. It should be noted, however, that these data only relate to care procedures provided by authorised health professionals (not doctors) with the municipality as the care provider. Thus, data from private healthcare providers commissioned by the municipality to provide municipal health care are not collected. The Register does not contain information on the underlying disease or other reasons for the procedure performed. Data on the health care received by patients with municipal health care from the region are not included in the Register.

K1.2 Register content

K1.2.1 Object and population

Target population for sub-registers

- HSL: persons who, at some point during the collection month, were recipients of health care for which the municipality is responsible, regardless of whether the care was provided by the municipality or a private organisation.
- HSL2: persons who have received health care under municipal auspices. The target population does not include people who have received health care from a licensed health care professional under private auspices with the municipality as the principal.

The HSL2 sub-register is an event-based register, where the observation objects are care procedures that are delimited by the date of the procedure. The sub-register does not cover health care procedures performed by

- non-licensed staff
- non-licensed staff delegated by licensed staff
- doctors
- private healthcare providers

K1.2.2 Variables

Table 1 describes the data collected from the municipalities. For a detailed description of the variables included in the Register, see the list of variables.

Table 1. Data collected from municipalities according to the regulations HSLF-FS 2017:67

Data	HSL	HSL2
Municipal code	x	x
Municipal district	x	x
Personal ID/coordination number	x	x
Alternative identification		x
Reserve number	x	x
Year and month municipal health care provided	x	
Procedure code		x
Date of procedure		x
Code for professional title 1		x
Code for professional title 2		x
Code for professional title 3		x
Code for professional title 4		x
Code for professional title 5		x

Health care procedures (procedure codes) are classified according to the Classification of Health Care Procedures (KVÅ), which is a common procedure classification for different areas of activity and professional categories within the health care system. KVÅ is a merger of the Classification of Surgical Procedures (KKÅ) and the Classification of Medical Procedures (KMÅ).

The National Board of Health and Welfare has developed a selection from KVÅ for use in municipal health care. The selection was developed together with representatives of the licensed professional groups, including nurses, occupational therapists and physiotherapists, and covers all age groups in municipal health care. The selection can be used as part of the electronic medical record, and permits local follow-up, systematic quality work and extraction of national statistics on care procedures. The selection is updated annually based on the needs of the organisations, as well as on updates to KVÅ. The National Board of Health and Welfare recommends that the municipalities use the developed selection to increase the quality of the data on care procedures and enable comparable compilation of these data. According to the current regulation HSLF-FS 2017:67, municipalities may report all care procedures classified according to KVÅ, but the procedure must be stated at the most detailed level in KVÅ.

There are two exceptions where the most detailed level ends at 000. They are QC000 (Treatment related to voice and speech functions) and QL000 (Support and training in communication). There are also other more general procedure codes in KVÅ that may not be used, and which are therefore not included in the selection. If a procedure with the same code was performed several times for the same individual during a calendar day (and by the same professional group), the code only needs to be entered once for that day. Municipalities may submit a file in accordance with Annex 2 containing several

identical rows. If there are several identical rows in the submitted file, the National Board of Health and Welfare deletes identical rows so that only one is included in the Register. Reported data on care procedures are published in the National Board of Health and Welfare's statistical database for municipal health care.

The professional title of the licensed professional group that performed the procedure is classified according to the KVÅ codes for professional title found in section XS, *Kontaktrelaterade åtgärder*. If more than one category of licensed health professional jointly performed the procedure, codes must be provided for all professional categories with a maximum of five codes per procedure. See Table 2 for authorised and unauthorised professional titles.

Table 2. Authorised and unauthorised professional titles

Authorised professional titles	Unauthorised professional titles
XS910 Occupational therapist	XS915 Doctor
XS911 Audiologist	XS916 Orthoptist
XS912 Dietician	XS920 Orderly (i)
XS913 Almoner	XS921 Nurse
XS914 Speech therapist	XS922 Other healthcare professionals
XS917 Psychologist	
XS918 Physiotherapist	
XS919 Registered nurse	
XS923 Naprapath	
XS924 Chiropractor	
XS925 Midwife	
XS926 Optician	

K1.2.3 Reference times

Since 2007, the Register includes information on persons who have received any intervention in the municipal health care system, broken down by calendar month. Since 2009, data are available for all months.

- 2007 September only
- 2008 June to December only
- 2009 onwards January to December

From 2019 onwards, information is also available on health care procedures carried out by authorised staff with the municipality as the care provider.

K2 Reliability

K2.1 Overall reliability

The reliability of the Register is generally good, reflecting the data available in the municipal patient administration systems. However, there is non-response in both the HSL and HSL2 sub-registers (see section K2.2.3 Non-response). For the sub-register HSL, there is a non-response for private health care providers.

K2.2 Sources of uncertainty

K2.2.1 Coverage

There may also be some partial non-response in the HSL sub-register. This has been observed in individual cases, including in municipalities where private care providers carry out the care procedures. As the National Board of Health and Welfare has no other information on the amount of municipal health care performed, it has not been possible to measure the extent of this non-response. Thus, there may be some coverage shortfall, i.e., individuals included in the target population who are missing from the register. However, the extent of the coverage shortfall is unknown.

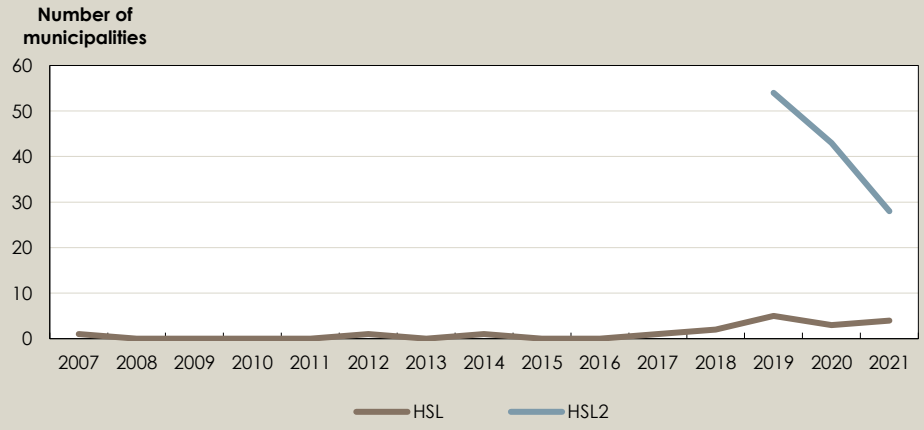
K2.2.2 Measurement

Data are collected in accordance with current regulations. Clarification of what must be collected can be found on the National Board of Health and Welfare's website. The municipalities themselves control the administrative systems used to hold this information as well as the processes necessary for extracting information from the systems.

K2.2.3 Non-response

New regulations entered into force in 2019, which meant that the National Register of Interventions in Municipal Health Care was supplemented with information regarding which patient-related care procedures were performed by authorised healthcare professionals with the municipality as the care provider. For some municipalities, it has been technically difficult to adapt their systems to be able to send data on care procedures. Information on which individuals receive municipal health care has also been affected by non-response, but not to the same extent (see Figure 2). In the following municipalities, all municipal health care, in some or all years, has been under private auspices, and thus have no obligation to report to the Register regarding care procedures, i.e., to sub-register HSL2.
2019-2022: Höganäs, Norrtälje and Sollentuna
2020-2022: Vellinge
2022. Vaxholm

Figure 2. Number of municipalities failing to provide data to sub-registers HSL and HSL2 2007–2021 (HSL) and 2019–2021 (HSL2)



Source: Register of Interventions in Municipal Health Care

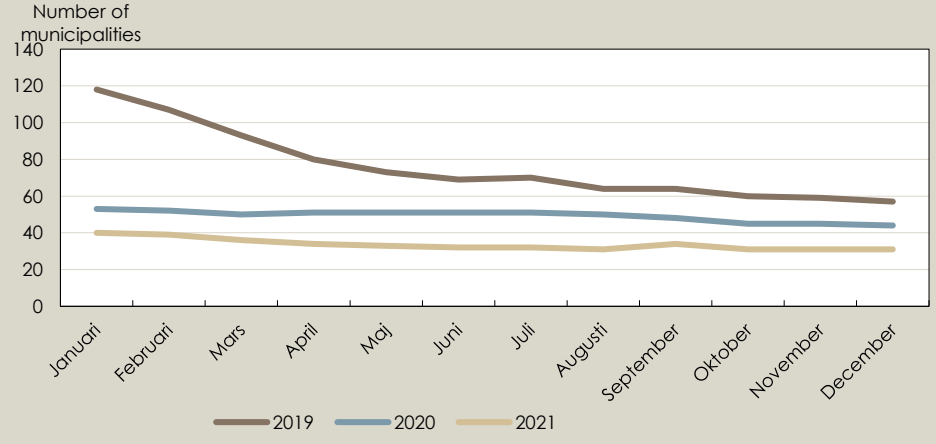
Table 3 shows the non-response rate in the HSL sub-register by month and year. There has always been some partial non-response, although it was relatively small before 2019. In 2019, between 5 and 12 municipalities did not report data from January to December. The non-response rate has since decreased, and is between 4-7 municipalities per month in 2021.

Table 3. Number of municipalities not reporting to sub-register HSL by month and year

Year	Month (number of municipalities)
2007	September (1)
2008	No non-response
2009	January-June (1)
2010	No non-response
2011	January (1), February (2), March-June (1)
2012	January-June (1), July-December (3)
2013	May - November (1)
2014	January (6), February-June (4), July-December (1)
2015	January-June (1)
2016	January-June (1), July-December (3)
2017	January-June (2), July-December (3)
2018	January-June (2), July-December (5)
2019	January (11), February (12), March-April (9), May (6), June (7), July (10), August (5), September (8), October-November (1), December (8)
2020	January (6), February (7), March-April (5), May-July (6), August (5), September-December (5)
2021	January (5), February- March (5), April-June (6), July (5), August (4), September-October (6), November-December (7)

Figure 4 shows non-response in the HSL2 sub-register by month and year. For the month of January 2019, healthcare procedures are missing for 118 municipalities. For December 2021, data are missing for 28 municipalities, including four municipalities all of whose municipal health care is under private auspices.

Figure 4. Number of municipalities failing to provide data to HSL2 per month & year



Source: Register of Interventions in Municipal Health Care

K2.2.4 Data processing

Reported data are not further processed at the National Board of Health and Welfare.

K2.2.5 Modelling assumptions

No modelling assumptions are made.

K2.3 Provisional register compared to final register

The register is not made available in provisional form.

K3 Timeliness and punctuality

K3.1 Preparation time

The production time for the two sub-registers, HSL and HSL2, is two months after the calendar month in which municipal health care was provided.

K3.2 Frequency

The Register is updated every month with the latest available information.

K3.3 Punctuality

The Register has been produced according to plan.

K4 Accessibility and clarity

K4.1 Access to the register

Register data may be disclosed for research and statistical purposes. Each request to the National Board of Health and Welfare for disclosure is subject to a confidentiality assessment. The National Board of Health and Welfare's statistical registers are subject to statistical confidentiality according to Chapter 24, Section 8 of the Public Access to Information and Secrecy Act (2009:400). Aggregated data from the Register are also available in the official statistics and through our commissioning activities.

K4.2 Dissemination of information

Information on the Register and statistics can be found on the website of the National Board of Health and Welfare, socialstyrelsen.se. The official statistics based on the Register are published annually. The publication date is indicated in the publication calendar of the National Board of Health and Welfare. Provisional data on care procedures can be found in the National Board of Health and Welfare statistics database two months after each four-month period. The statistical database contains statistics on care procedures included in the KVÅ selection produced by the National Board of Health and Welfare. The selection from the KVÅ for municipal health care is published on the National Board of Health and Welfare's website, link: https://www.socialstyrelsen.se/statistik-och-data/klassifikationer-och-koder/tillampning-av-klassifikationer-urval/kommunal-halso-och-sjukvard/.

K4.3 Documentation

The Register is further documented on the National Board of Health and Welfare's website, socialstyrelsen.se, including detailed descriptions of variables and value sets.

K5 Comparability and interoperability

K5.1 Comparability over time

Data on persons receiving municipal health care have been collected since 2007. However, the number of municipalities that have taken over health care responsibility (from the regions) in ordinary housing has varied. This type of health care is usually referred to as home nursing. This makes comparisons of the numbers of people, and comparisons between municipalities over time, difficult. In 2007, half of municipalities had not taken over responsibility for health care in ordinary housing. In 2016, only the municipalities in Stockholm County (except Norrtälje) had not taken over responsibility. After this time, statistics on the number of people receiving interventions are comparable over time.

KVÅ codes for care procedures performed are only available from 2019 onwards. It is therefore not possible to see what municipal health care was provided before this year, only that care was provided.

K5.2 Interoperability with other registers

Data in the National Register of Interventions in Municipal Health Care can be linked to other personal ID number-based registers. When merging data with the National Patient Register[4], it is important to know that the National Patient Register contains data on patients treated in inpatient care, as well as data on patients who have been treated by doctors in specialised outpatient care. Thus, the National Patient Register does not contain information on care provided in primary care. It is therefore not possible to obtain information on the care procedures and diagnoses performed/made by doctors within the framework of municipal health care, as this health care is considered primary care.

The National Register of Interventions in Municipal Health Care lacks information on why a patient has received municipal health care. To obtain information on whether a patient receives measures under SoL or LSS, the Register can be linked to the National Register of Care and Social Services for the Elderly and Persons with Impairments[5] and the National Register of Municipal Support and Service for Persons with Certain Functional Impairments[6]. Note that the National Register of Municipal Support and Service for

[4] Regulated by the National Board of Health and Welfare's and *Föreskrifter om uppgiftsskyldighet till Socialstyrelsens patientregister* (Regulations on the obligation to provide information to the National Board of Health and Welfare's patient register) (SOSFS 2013:35).

[5] Subject to the Swedish National Board of Health and Welfare's regulations on the obligation of social welfare committees to provide statistical information regarding care and social services for the elderly and persons with impairments (HSLF-FS 2016:86).

[6] Subject to the Swedish National Board of Health and Welfare's regulations on the municipality's obligation to provide information relating to support and service for persons with certain functional impairments (SOSFS 2005:21).

Persons with Certain Functional Impairments differs from the National Register of Care and Social Services for the Elderly and Persons with Impairments, as the data only concern ongoing implemented and decided measures on 1 October of each year.

General information

U1 Confidentiality and personal data processing

In the special activities of public agencies for the production of statistics, confidentiality applies in accordance with Chapter 24, Section 8 of the Public Access to Information and Secrecy Act (2009:400). However, information needed for research and statistical purposes, we well as information that is not directly attributable to an individual through his or her name, other identity code or similar relationship, may be disclosed if it is clear that the information can be disclosed without causing damage or harm to the individual or someone close to him or her.

When processing personal data, i.e., information that can be directly or indirectly attributed to a living person, the General Data Protection Regulation 2016/679[7] and the Regulation (2018:218) containing supplementary provisions to the EU General Data Protection Regulation apply.

In addition, the Act regarding official statistics (2001:99) (*Lagen om den officiella statistiken*), the Ordinance regarding official statistics (2001:100) (*Förordningen om den officiella statistiken*) and the Act regarding the health data register, aka the Health Data Register Act (1998:543), as well as the Ordinance on the National Board of Health and Welfare's Register of Interventions in Municipal Health Care (2006:94), apply to the processing of personal data.

U2 Retention and data erasure

The National Register of Interventions in Municipal Health Care is a register whose personal data must be exempt from data erasure. The Register is covered by the Swedish National Archives' Regulations regarding exemptions from data erasure and data erasure at the National Board of Health and Welfare (RA-MS 2020:22) (*Föreskrifter om undantag från gallring och gallring hos Socialstyrelsen*). Primary data, i.e., the basis for the register, may be erased five years after the basis has been received by the public agency.

The Register is a so-called living register, which means that continuous updates can change data even historically. Immediate erasure of incorrect data is permitted under RA-MS 2020:22, which means that earlier versions of the register are generally not saved by the National Board of Health and Welfare.

U3 Obligation to give information

The Act regarding official statistics (2001:99) (*Lagen om den officiella statistiken*) and the Ordinance regarding official statistics (2001:100) (*Förordningen om den officiella statistiken*), as well as the Ordinance on the National Board of Health and Welfare's Register of Interventions in Municipal

[7] Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

Health Care (2006:94), impose an obligation to provide information to the National Board of Health and Welfare.

U4 EU regulation and international reporting

The Register is not a basis for international reporting.

U5 History

In the Swedish health care system, responsibility for health care is shared between regions and municipalities. The Health and Medical Services Act (2017:30) regulates the responsibilities of the regions and municipalities in health care. Under the so-called "*ädel*" reform[8] of 1992, municipalities became responsible for certain health care services for the long-term care of the elderly and disabled. One of the reasons for the reform was that the previous division of labour between social and medical interventions was no longer deemed appropriate. Instead, social and medical skills would be integrated by coordinating professional roles and work organisations in social services and parts of the health sector. To achieve this aim, it was considered necessary to give municipalities certain health care responsibilities.[9]

U6 Contact details

Questions about the Register can be sent to the functional mailbox of the statistics unit's social services statistics team:
Unit: Statistik 2
E-mail: SOSTAT@socialstyrelsen.se
Telephone: 075 247 30 00

Version history

Version	Change	Date
1.0	The document is new	22/12/2022

[8] Govt. Bill 1990/91:14 *Om ansvaret för service och vård till äldre och handikappade m.m.*
[9] Govt. Bill 1990/ 91:14 p. 58 et. seq.).