

Swedish National  
Breast Cancer Study

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**Karma**

## **Variables from the National in-patient register, 1964-, in Karma (1year lag)**

The Socialstyrelsen in-patient national patient register provides data on health care utilization and health care production of statistics, research, evaluation, description, planning, and general community information.

The patient register contains four types of information:

1. Data on patient birth, sex, age, home county, municipality, parish
2. Information on the care unit: hospitals, clinics.
3. Administrative data on the care episode: enrollment date, discharge date, length of stay, planned care, enrollment means, discharge means, agreement type.
4. Medical data: principal diagnosis, secondary diagnoses, external causes of injury and poisoning, surgical data

For more details, see

<https://www.socialstyrelsen.se/statistik-och-data/register/patientregistret/>

### **sjukhus – Reporting hospital**

Code originally based on Socialstyrelsen hälso- och sjukvårdsförteckning health list (last published in 1992). It was later expanded with codes to cover the new hospital and reorganizations.

### **mvo – medical specialty**

Code describing what medical area the treating personnel belongs to, e.g. cardiology, neurology.

### **lt\_klin – Reporting clinic**

Code originally based on Socialstyrelsens hälso- och sjukvårds-förteckning health-care plan (last published in 1992). It was later expanded with codes to cover the new clinic types, centers, etc.

### **lkf\_in - reported home parish in care episode**

Home parish where the patient were registered in the care episode. Recorded with the help of the list "country divisions", published by Central Bureau of Statistics. The first two numbers refers to county, the next two municipalities and the two final assembly. For overseas living patients have been used county code '99' followed by two spaces for recent years, the loss in the reporting of registered residence by information from the records of the total population.

For variable interpretation, see <http://www.scb.se>. Search for lkf.

### **lkf - county, council, home parish**

Home parish where the patient were registered in the care episode. Recorded with the help of the list "country divisions", published by Central Bureau of Statistics. The first two numbers refers to county, the next two municipalities and the two final assembly. For overseas living patients have been used county code '99' followed by two spaces for recent years, the loss in the reporting of registered residence by information from the records of the total population.

For variable interpretation, see <http://www.scb.se>. Search for Ikf.

### **hdia - main diagnosis**

The variable refers to the condition (illness, injury, etc.) whose treatment and investigation was the main cause of the patient's hospital stay. For the period 1964-1996, the register up to six diagnoses per care episode. From 1997, the register up to eight diagnoses. From 2009 it is possible to report any number of diagnoses per care episode. Diagnoses are recorded using the Swedish classification based on WHO's International Classification.

Diseases Year 1964-1968: ICD7

Year 1969-1986: ICD8

Year 1987-1996: ICD9

Year 1997 - : ICD10 (Exception: Skåne released for ICD10 1998) Poisoning Diagnoses are to some extent coded with ATC-code, using FASS.

For ICD variable interpretation, see  
<http://www.who.int/classifications/icd/en/>  
<http://www.wolfbane.com/icd/index.html>

### **diagnos – other diagnoses**

The variable refers to the condition (illness, injury, etc.) whose treatment and investigation was not the main cause of the patient's hospital stay. For the period 1964-1996, the register up to six diagnoses per care episode. From 1997, the register up to eight diagnoses. From 2009 it is possible to report any number of diagnoses per care episode. Diagnoses are recorded using the Swedish classification based on WHO's International Classification.

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### **atc - ATC diagnose codes**

ATC diagnose code according to the WHO.

### **ekod1-ekod2 - E code 1-2**

The injury / poisoning external cause.

### **op – performed surgeries**

For the period 1964-1996, the register up to six operations (procedures) per care episode. Surgery has been registered with the code number from the current edition of the Socialstyrelsen "Classification of operations."

From 1997 used "Classification of surgical operations, 1997". It is possible since 1997 for the registration of up to 12 surgical codes. Besides operationskod diagnosis and serial number, surgery dates and anesthesia codes reported (optional). From 2009 it is possible to report any number of operations per care episode.

### **pekare - surgery pointer**

The order number of the diagnosis for which the operation in question is performed.

### **opd1-opd30 - surgery date 1-30**

Surgery date

**insatt – registration referred from**

- 1 = from another hospital / clinic
- 2 = from special kind of living, e.g. elderly care
- 3 = from home (other than 1 and 2)

**utsatt – discharge referred to**

- 1 = to another hospital / clinic
- 2 = to special kind of living, e.g. elderly care
- 3 = to home (other than 1, 2, and 4)
- 4 = diseased

**indatum - registration date**

Date of registering the patient (not date of diagnosis). Year with four digits, month and day with two digits (YYYYMMDD). Same as variable "indatuma".

**utdatum - discharge date**

Date of discharging the patient. Year with four digits, month and day with two digits (YYYYMMDD). Same as variable "utdatuma".

**pvard - planned treatment**

- 1 = yes, that admission has been agreed in advance
- 2 = no

**nation – nationality of patient**

Birth country from 2001.

**senutv - date of latest emigration**

Date of emigration.

### **seninv - date of latest immigration**

Date of immigration.

### **civil - marital status**

G = married

OG, O = not married

S = divorced

Ä = widow / widower

RP = registered partnership

SP = separated partnership

EP = surviving partnership

## **System variables**

### **round\_national\_in\_patient**

Round of in-patient registration, i.e. the order number of times the study participant were registered as an in-patient. Used for stratifying order of in-patient events.

### **year\_national\_in\_patient**

Year of in-patient registration. Used for stratifying time series data.

### **month\_national\_in\_patient**

Month of in-patient registration. Used for stratifying time series data.

**source\_reg\_national\_in\_patient**

Available national in-patient register data.