HOSPITAL DATA PROJECT
PHASE 2

FINAL REPORT

Part II

Annex Diagnosis

Table of contents

A.II.3 Metadata Diagnosis 7
a. Status 7
b. Data format 9
c. Metadata 49
1. Metadata for Austria 50
2. Metadata for Belgium 53
3. Metadata for Cyprus 57
4. Metadata for Czech Republic 60
5. Metadata for Denmark 63
6. Metadata for Finland 66
7. Metadata for France 69
8. Metadata for Germany 72
9. Metadata for Greece 75
10. Metadata for Hungary 78
11. Metadata for Ireland 81
12. Metadata for Italy 86
13. Metadata for Latvia 91
14. Metadata for Lithuania 94
15. Metadata for Luxembourg 97
16. Metadata for Netherlands 100
17. Metadata for Poland 103
18. Metadata for Portugal 107
19. Metadata for Slovenia 110
20. Metadata for Spain 115
21. Metadata for Scotland 119

A.II.4 Healthy newborn babies 123
d. Newborn per country 123
1. Belgium 124
2. Cyprus 126
3. Czech Republic 127
4. Finland 128
5. France 130
6. Germany 131
7. Greece 133
8. Hungary 134
9. Ireland 135
10. Italy 136
11. Latvia 137
12. Lithuania 139
13. Netherlands 141
14. Poland 142
15. Portugal 143
16. Slovenia 144
17. Spain 146
18. England 147
e. Newborn per topic 151

A.II.5 External causes (Metadata) 155

Table of contents

A.II.6 ISHMT 157

A.II.7 Validation diagnosis 167

A.II.8 Time series – examples – 171

A.II.9 Comparative analysis Diagnosis 175
a. Examples of comparitive analysis 175
b. Analysis per country 195
1. Austria 196
2. Belgium 197
3. Czech Republic 200
4. Finland 201
5. France 202
6. Ireland 204
7. Italy 216
8. Latvia 217
9. Lithuania 219
10. Netherlands 222
11. Poland 223
12. Slovenia 224
13. Spain 225

c. Analysis per topic 229
1. Topic: Tuberculosis 231
2. Topic: HIV disease 232
3. Topic: Malignant neoplasms 233
4. Topic: Diabetes mellitus (discharge rate) 234
5. Topic: Diabetes mellitus (discharge rate 2) 235
6. Topic: Diabetes mellitus (daypatients) 236
7. Topic: Mental and behavioural disorders 237
8. Topic: Mental disorders due to alcohol 238
9. Topic: Mental disorders due to use of drugs 239
10. Topic: Hypertensive disease 240
11. Topic: Angina pectoris 241
12. Topic: Heart failure 242
13. Topic: Acute upper respiratory infections 243
14. Topic: Pneumonia 244
15. Topic: Disorders of teeth 245
16. Topic: Peptic ulcer 246
17. Topic: Diverticular disease of intestine 247
18. Topic: Dermatitis, eczema and papulosquamous 249
19. Topic: Intervertebral disc disorders 250
20. Topic: Dorsalgia 251
21. Topic: Medical (legal) abortion 252
22. Topic: Congenital malformations 253
23. Topic: Symptoms, signs and abnormal clinical and laboratory findings 254
24. Topic: Pain in throat and chest 255
25. Topic: Abdominal and pelvic pain 256
26. Topic: Injuries and poisonings 257
27. Topic: Burns and corrosions 258
28. Topic: Factors influencing health status and contact with health service 259
29. Topic: Medical observation and evaluation for suspected diseases and conditions 261
30. Topic: Contraceptive management 262

Table of contents

31. Topic: Other medical care 263
32. Topic: Other factors influencing health status and contact with health service 264

Table of contents

A.II.3 Metadata Diagnosis

a. Status

Nr	Country	Diagnosis data	Metadata Diagnosis Documents	Classification used
1	Austria	99-05	2X	*ICD-9 until 2000, changed to ICD-10 in 2001*
2	Belgium	00-06	2X	*ICD-9-CM*
3	Cyprus	99-05	2X	*ICD-10*
4	Czech Republic	00-05	2X	*ICD-10*
5	Denmark	99-05	2X	*ICD-10*
6	Estonia			
7	Finland	99-05	2X	*ICD-10*
8	France	99-05	2X	*ICD-10*
9	Germany		2X	*ICD-10*
10	Greece	00-04	2X	*ICD-10*
11	Hungary	04-06	2X	*ICD-10*
12	Ireland	99-05	2X +	*For HIPE data: 1999-2004: ICD-9-CM; 2005 onwards: ICD-10-AM.* *For NPIRS Data: ICD-10*
13	Italy	01-04	2X	*ICD-9-CM*
14	Latvia	04-05	2X	*ICD-10*
15	Lithuania	01-05	2X	*ICD-10*
16	Luxembourg	02-05	2X	*ICD-10*
17	Netherlands	99-05	2X	*ICD-9*
18	Poland	99, 03-05	2X	*ICD-10*
19	Portugal	00-05	2X	*ICD-9-CM*
20	Slovenia	99-05	2X	*ICD-10*
21	Spain	99-05	2X	*ICD-9-CM*
22	England	99-05		
23	Scotland	99-05	2X	*ICD-10*
24	Northern Ireland			
25	Wales			

A.II.3 Metadata Diagnosis

b. Data format

Hospital Data Project 2

Section A:

Request for Data Files

You are requested to create and return the following files:

FILE 1: Diagnosis Data
FILE 2: External Cause Data
FILE 3: Population Data

Request for Test Data Files

The purpose of this document

The purpose of this note is to provide a detailed specification of the three data files requested from each participant country. **File 1** will contain diagnosis data. **File 2** will contain external cause data. **File 3** will contain population data. Each of the three requests are described in detail below.

General Instructions

The following general instructions apply to **the first two files (i.e. diagnosis and, external cause)**:

- **Data should refer to 1999 - 2005 if possible.**
- **Files must be submitted in ASCII comma delimited format (i.e. ASCII CSV file).**
- **The last field in each row must be separated by a carriage return/line feed (i.e. ASCII character 13 followed by ASCII character 10).**
- **Combinations of classification variables (i.e. rows) for which there is no data should be excluded from the files.**
- **Use of commas: Commas can only be used in the files to separate variables and should not be used in any other circumstances (e.g. as a decimal place or a thousand separator).**

Please note that all statistical software in general use (e.g. SAS, SPSS, etc) will offer the option of outputting data in ASCII CSV format.

File 3 containing population data will be very small and can be submitted in any format which is convenient and which includes all the information required. ASCII format, spreadsheet, or text formats will all be acceptable.

Specific instructions regarding definition and formatting of variables for each file is given

below:

FILE 1: Diagnosis

File Name

The diagnosis file should be named using the following rule:

Diag_countrycode_year-year.csv

The countrycode for your country will be found in Code Table 1 attached.
The last two digits of the year should be used and should indicate the years to which the data refers.

Example: For Ireland, for 1999-2005 diagnosis data, the name of the file will be:

diag_ie_99-05.csv

File Format

The diagnosis file will contain the 9 variables listed in the table below. The table also indicates the variable type (i.e. integer or character) and size (i.e. number of columns reserved for the variable).

File Format for File 1: Diagnosis

Variable Number	Variable Name	Type	Maximum Size
1	Year	Integer	4
2	Country Code	Character	3
3	Diagnosis Shortlist Code	Integer	4
4	Gender Code	Integer	1
5	Age Range Code	Integer	2
6	Number of Inpatient Discharges	Integer	9
7	Number of Bed Days	Integer	10
8	Mean Length of Stay	Decimal	5.1
9	Number of Day Case Discharges	Integer	9

The codes to be used for each of the variables 2,3,4 and 5 are given in the attached code tables (i.e. Code Tables 1,2,3 and 4 respectively) and variables are further defined below.

The last four fields (i.e. 6,7 ,8 and 9) give the number of inpatient discharges, bed days, mean length of stay and day case discharges.

In other words, each combination of diagnosis, gender and age range code (i.e. classification variables) will provide a row of data for which number of inpatient discharges, bed days, mean length of stay and day case discharges will be reported. Combinations of classification variables for which there is no data should be excluded from the files.

Variable Definitions

Each of the 9 variables is briefly defined below. Please refer to Section B, 'Data Transformation Table' for detailed instructions on the definitions applying to each variable. The last column of the 'Data Transformation Table' should also be completed to provide a description (i.e. meta data) about the transformation applied in each country.

Variable 1: Year

Data should refer to hospital discharges occurring during the years 1999-2005 if possible.

Variable 2: Country Code

National data only are being collected. The country code is used to identify the country submitting the data. Include non-residents in your data. See attached Code Table 1 for list of country codes.

Variable 3: Diagnosis Shortlist Code

The primary diagnosis should be used. There should be one primary diagnosis per hospital discharge. See attached Code Table 2 for list of diagnosis shortlist codes. The list gives code numbers and indicates the groups of ICD-10 and ICD-9 codes corresponding to the shortlist categories. Please note that full ICD chapters are also included as separate codes.

Variable 4: Gender Code

This variable is used to classify hospital discharges as 'Male' or 'Female.' Exclude cases where gender is unknown if the case cannot be allocated to a male or female category. See attached Code Table 3.

Variable 5: Age Range Code

See attached Code Table 4. Exclude cases where age is unknown.

Variable 6: Number of Inpatient Discharges

The Common Data Set (CDS) definition of an inpatient is given in Section B, 'Data Transformation Table'. The data file will give the numbers of inpatient discharges for each specified group (i.e. each combination of values for the classification variables above).

Variable 7: Number of Bed Days

Inpatients only contribute to bed days. Bed days are calculated by summing the lengths of stay (date of discharge minus date of admission) for all inpatients in the group.

Variable 8: Mean Length of Stay

Average length of stay for all inpatient discharges in each group. This variable should be reported with 1 decimal point (e.g. 5.1 days).

Variable 9: Number of Day Case Discharges

A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day. The data file will give the numbers of day case discharges for each specified group (i.e. each combination of values for the classification variables above).

FILE 2: External Cause

File Name

The external cause file should be saved using the following rule:

ext_countrycode_year-year.csv

The countrycode for your country will be found in Code Table 1 attached.

The last two digits of the year should be used and should indicate the year to which the data refers.

Example: For Ireland, 1999-2005 external cause data, the name of the file will be:

ext_ie_99-05.csv

File Format

The external cause file will contain 9 variables as listed in the table below. Note that the format is exactly the same as File 1: Diagnosis with the exception of Variable 3 which refers to 'External Cause Shortlist Code'.

File Format for File 2: External Cause

Variable Number	Variable Name	Type	Maximum Size
1	Year	Integer	4
2	Country Code	Character	3
3	External Cause Shortlist Code	Integer	4
4	Gender Code	Integer	1
5	Age Range Code	Integer	2
6	Number of Inpatient Discharges	Integer	9
7	Number of Bed Days	Integer	10
8	Mean Length of Stay	Decimal	5.1
9	Number of Day Case Discharges	Integer	9

The Code Tables 1, 3 and 4 also apply to the Variable Numbers 2, 4, and 5 respectively in File 2.

Please refer to Code Table 5 for a list of the shortlist codes to be used for the classification of external causes.

Variable Definitions

The variable definitions given for **File 1: Diagnosis** above should also be used for **File 2: External Cause** with the exception of Variable Number 3 which is defined below:

Variable 3: External Cause Shortlist Code

Counts are to be based only on those cases with a main diagnosis that falls in the ICD chapter relating to injuries, poisonings and certain other consequences of external cause (i.e. ICD-10 codes S00 to T98, ICD-9 codes 800 to 999 or HDP shortlist diagnosis codes 1900 – see code table 2). Thus cases with a main diagnosis in this chapter should also have an associated external cause and this is what is being counted in this table. If more than one external cause is coded, only the first mentioned external cause should be included. Where no external cause has been coded, this should be coded as missing.

Code Table 5 provides a written description of the external causes to be included in the data and indicates the ICD-9 codes and ICD-10 codes pertaining to each external cause as well as the HDP codes to be used in the external cause data file.

Please refer to Section B, Part 1, 'Data Transformation Table' for a detailed definition and guidance on external cause. The last column of the 'Data Transformation Table' should also be completed to provide a description (i.e. meta data) about the transformation applied in each country.

FILE 3: Population

Population data are requested by age (see Code Table 4) and gender (see Code Table 3) for 1999 - 2005.

File Name

The population file should be saved using the following rule:

pop_countrycode_year-year.txt

The countrycode for your country will be found in Code Table 1 attached.

The last two digits of the year should be used and should indicate the years to which the data refers.

Example: For Ireland, 1999-2005 population data, the name of the file will be:

pop_ie_99-05.csv

File Format

For population data returned in ASCII CSV format the table below will apply. Please note that population data are required for 1999-2005 separately for males and females and for the age groups specified in Code Table 5. This data can be supplied as a excel document, spreadsheet or ASCII file whichever is most convenient to you.

File Format for File 4: Population

Variable Number	Variable Name	Type	Size
1	Year	Integer	4
2	Country Code	Character	3
3	Gender Code	Integer	1
4	Age Range Code	Integer	2
5	Number of Persons	Integer	9

Variable Definitions

If submitting population data in ASCII format please use supplied codes. Country codes are listed in Code Table 1. Gender codes are given in Code Table 3. Age range codes are given in Code Table 4.

Example of Data File

Below is a small example of how a file containing data should look. The file format will be the same for Files 1 and 2. Only variable 3 will change for diagnosis and external cause respectively. This example is for diagnosis data (file 1). Each variable is separated by a comma and variables appear in the following order:

Variable	Variable Name
1	Year
2	Country Code
3	Diagnosis Shortlist Code
4	Gender Code
5	Age Range Code
6	Number of Inpatient Discharges
7	Number of Bed Days
8	Mean Length of Stay
9	Number of Day Case Discharges

Sample file – diag_ie_99-05.csv:

```
1999,ie,0101,1,1,532,3458,6.5,0
1999,ie,0101,1,2,452,2598,5.7,0
1999,ie,0101,1,3,635,3687,5.8,0
1999,ie,0101,1,4,357,2358,6.6,0
1999,ie,0101,1,5,102,365,3.6,0
1999,ie,0101,1,6,116,458,3.9,0
1999,ie,0101,1,7,33,115,3.5,0
1999,ie,0101,1,8,16,68,4.3,0
1999,ie,0101,1,9,45,301,6.7,0
1999,ie,0101,1,10,48,265,5.5,0
1999,ie,0101,1,11,98,463,4.7,0
1999,ie,0101,1,12,32,68,2.1,0
1999,ie,0101,1,13,156,958,6.1,0
1999,ie,0101,1,14,354,2564,7.2,0
1999,ie,0101,1,15,456,1015,2.2,0
1999,ie,0101,1,16,735,9845,13.4,0
1999,ie,0101,1,17,543,3284,6.0,0
1999,ie,0101,1,18,1135,8795,7.7,0
1999,ie,0101,1,19,1313,10895,8.3,0
1999,ie,0101,1,20,1258,16895,13.4,0
1999,ie,0101,1,21,1456,18201,12.5,0
1999,ie,0101,2,1,543,3458,6.4,0
1999,ie,0101,2,2,658,2598,3.9,0
1999,ie,0101,2,3,985,3687,3.7,0
1999,ie,0101,2,4,489,2358,4.8,0
1999,ie,0101,2,5,99,365,3.7,0
1999,ie,0101,2,6,120,458,3.8,0
```

CODE TABLES

1 TO 5

Code Table Number	Table Name
1	Country Code
2	Diagnosis Shortlist Code
3	Gender
4	Age
5	External Shortlist Code

Code Table 1: Country Codes

Please note that the country codes are the only character variable in the data set.

Country Codes

Country Code	Name of Country
AT	Austria
BE	Belgium
CY	Cyprus
CZ	Czech Republic
DK	Denmark
EE	Estonia
FI	Finland
FR	France
DE	Germany
GR	Greece
HU	Hungary
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
NL	Netherlands
PL	Poland
PT	Portugal
SL	Slovenia
ES	Spain
UK	United Kingdom

Code Table 2: Diagnosis Shortlist Codes

The table below (International shortlist for hospital morbidity tabulation (ISHMT) - Eurostat/OECD/WHO, Version 2006-11-24) has 5 columns.

Column 1 gives the code to be used in the submission of data.

Column 2 provides a text description of the categories of illness covered by the code.

Column 3 gives the ICD-10 codes which will need to be grouped to produce the test data set for each shortlist item.

Column 4 gives the corresponding ICD-9 codes for those countries using the ICD-9 classification.

Column 5 indicates the ICD Chapter in both ICD-9 and 10 to which the codes are related.

Note that the data will include totals for each corresponding ICD-10 Chapter.

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
0100	**Certain infectious and parasitic diseases**	**A00-B99**	**001-033, 0341-0992, 0995-134, 1360, 1362-139, +042-044 or 2795, 2796 for HIV (varies according to country)**	**I**
0101	Intestinal infectious diseases except diarrhoea	A00-A08	001-008	**I**
0102	Diarrhoea and gastroenteritis of presumed infectious origin	A09	009	**I**
0103	Tuberculosis	A15-A19, B90	010-018, 137	**I**
0104	Septicaemia	A40-A41	038	**I**
0105	Human immunodeficiency virus [HIV] disease	B20-B24	042-044 or 2795, 2796 (varies according to country)	**I**
0106	Other infectious and parasitic diseases	remainder of A00-B99	remainder of 001-139, except 0340, 0993, 0994, 135, 1361	**I**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
0200	**Neoplasms**	**C00-D48**	**140-239**	**II**
0201	Malignant neoplasm of colon, rectum and anus	C18-C21	153, 154	**II**
0202	Malignant neoplasms of trachea, bronchus and lung	C33-C34	162	**II**
0203	Malignant neoplasms of skin	C43-C44	172, 173	**II**
0204	Malignant neoplasm of breast	C50	174, 175	**II**
0205	Malignant neoplasm of uterus	C53-C55	179, 180, 182	**II**
0206	Malignant neoplasm of ovary	C56	1830	**II**
0207	Malignant neoplasm of prostate	C61	185	**II**
0208	Malignant neoplasm of bladder	C67	188	**II**
0209	Other malignant neoplasms	remainder of C00-C97	remainder of 140-208	**II**
0210	Carcinoma in situ	D00-D09	230-234	**II**
0211	Benign neoplasm of colon, rectum and anus	D12	2113, 2114	**II**
0212	Leiomyoma of uterus	D25	218	**II**
0213	Other benign neoplasms and neoplasms of uncertain or unknown behaviour	remainder of D00-D48	remainder of 210-239	**II**
0300	**Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism**	**D50-D89**	**135, 2790-2793, 2798, 2799, 280-289**	**III**
0301	Anaemias	D50-D64	280-285	**III**
0302	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D65-D89	135, 2790-2793, 2798, 2799, 286-289	**III**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
0400	**Endocrine, nutritional and metabolic diseases**	**E00-E90**	**240-278**	**IV**
0401	Diabetes mellitus	E10-E14	250	**IV**
0402	Other endocrine, nutritional and metabolic diseases	remainder of E00-E90	remainder of 240-278	**IV**
0500	**Mental and behavioural disorders**	**F00-F99**	**290-319**	**V**
0501	Dementia	F00-F03	2900-2902, 2904-2909, 2941	**V**
0502	Mental and behavioural disorders due to alcohol	F10	291, 303, 3050	**V**
0503	Mental and behavioural disorders due to use of other psychoactive subst.	F11-F19	292, 2940, 304, 3051-3059	**V**
0504	Schizophrenia, schizotypal and delusional disorders	F20-F29	295, 2970-2973, 2978-2979, 2983-2989	**V**
0505	Mood [affective] disorders	F30-F39	296, 2980, 3004, 3011, 311	**V**
0506	Other mental and behavioural disorders	remainder of F00-F99	remainder of 290-319	**V**
0600	**Diseases of the nervous system**	**G00-G99**	**320-359, 435**	**VI**
0601	Alzheimer's disease	G30	3310	**VI**
0602	Multiple sclerosis	G35	340	**VI**
0603	Epilepsy	G40-G41	345	**VI**
0604	Transient cerebral ischaemic attacks and related syndromes	G45	435	**VI**
0605	Other diseases of the nervous system	remainder of G00-G99	remainder of 320-359	**VI**
0700	**Diseases of the eye and adnexa**	**H00-H59**	**360-379**	**VII**
0701	Cataract	H25-H26, H28	366	**VII**
0702	Other diseases of the eye and adnexa	remainder of H00-H59	remainder of 360-379	**VII**
0800	**Diseases of the ear and mastoid process**	**H60-H95**	**380-389**	**VIII**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
0900	**Diseases of the circulatory system**	**I00-I99**	**390-459 except 435 and 446**	**IX**
0901	Hypertensive diseases	I10-I15	401-405	**IX**
0902	Angina pectoris	I20	413	**IX**
0903	Acute myocardial infarction	I21-I22	410	**IX**
0904	Other ischaemic heart disease	I23-I25	411-412, 414	**IX**
0905	Pulmonary heart disease & diseases of pulmonary circulation	I26-I28	415-417	**IX**
0906	Conduction disorders and cardiac arrhythmias	I44-I49	426, 427	**IX**
0907	Heart failure	I50	428	**IX**
0908	Cerebrovascular diseases	I60-I69	430-434, 436-438	**IX**
0909	Atherosclerosis	I70	440	**IX**
0910	Varicose veins of lower extremities	I83	454	**IX**
0911	Other diseases of the circulatory system	remainder of I00-I99	remainder of 390-459 except 435 and 446	**IX**
1000	**Diseases of the respiratory system**	**J00-J99**	**0340, 460-519**	**X**
1001	Acute upper respiratory infections and influenza	J00-J11	0340, 460-465, 487	**X**
1002	Pneumonia	J12-J18	480-486	**X**
1003	Other acute lower respiratory infections	J20-J22	466 (acute lower respiratory infections other than acute bronchitis, acute bronchiolitis and pneumonia were not separated in ICD-9, no J22 equivalent)	**X**
1004	Chronic diseases of tonsils and adenoids	J35	474	**X**
1005	Other diseases of upper respiratory tract	J30-J34, J36-J39	470-473, 475-478	**X**
1006	Chronic obstructive pulmonary disease and bronchiectasis	J40-J44, J47	490-492, 494, 496	**X**
1007	Asthma	J45-J46	493	**X**
1008	Other diseases of the respiratory system	J60-J99	remainder of 460-519	**X**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
1100	**Diseases of the digestive system**	**K00-K93**	**520-579**	**XI**
1101	Disorders of teeth and supporting structures	K00-K08	520-525	**XI**
1102	Other diseases of oral cavity, salivary glands and jaws	K09-K14	526-529	**XI**
1103	Diseases of oesophagus	K20-K23	530	**XI**
1104	Peptic ulcer	K25-K28	531-534	**XI**
1105	Dyspepsia and other diseases of stomach and duodenum	K29-K31	535-537	**XI**
1106	Diseases of appendix	K35-K38	540-543	**XI**
1107	Inguinal hernia	K40	550	**XI**
1108	Other abdominal hernia	K41-K46	551-553	**XI**
1109	Crohn's disease and ulcerative colitis	K50-K51	555, 556	**XI**
1110	Other noninfective gastroenteritis and colitis	K52	558	**XI**
1111	Paralytic ileus and intestinal obstruction without hernia	K56	560	**XI**
1112	Diverticular disease of intestine	K57	562	**XI**
1113	Diseases of anus and rectum	K60-K62	565, 566, 5690-5694	**XI**
1114	Other diseases of intestine	K55, K58-K59, K63	557, 564, 5695, 5698, 5699	**XI**
1115	Alcoholic liver disease	K70	5710-5713	**XI**
1116	Other diseases of liver	K71-K77	570, 5714-573	**XI**
1117	Cholelithiasis	K80	574	**XI**
1118	Other diseases of gall bladder and biliary tract	K81-K83	575, 576	**XI**
1119	Diseases of pancreas	K85-K87	577	**XI**
1120	Other diseases of the digestive system	remainder of K00-K93	remainder of 520-579	**XI**
1200	**Diseases of the skin and subcutaneous tissue**	**L00-L99**	**680-709**	**XII**
1201	Infections of the skin and subcutaneous tissue	L00-L08	680-686	**XII**
1202	Dermatitis, eczema and papulosquamous disorders	L20-L45	690-693, 6943, 696-6983, 6988, 6989	**XII**
1203	Other diseases of the skin and subcutaneous tissue	remainder of L00-L99	remainder of 680-709	**XII**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
1300	**Diseases of the musculoskeletal system and connective tissue**	**M00-M99**	**0993, 1361, 2794, 446, 710-739**	**XIII**
1301	Coxarthrosis [arthrosis of hip]	M16	Not a concept in ICD-9 at four-digit level. Can only be defined by using the optional fifth digit 5 to 715, i.e. 715.15, 715.25, 715.35 and 715.95	**XIII**
1302	Gonarthrosis [arthrosis of knee]	M17	Not a concept in ICD-9 at four-digit level. Can only be defined by using the optional fifth digit 6 to 715, i.e. 715.16, 715.26, 715.36 and 715.96	**XIII**
1303	Internal derangement of knee	M23	717	**XIII**
1304	Other arthropathies	M00-M15, M18-M22, M24-M25	0993, 711-716, 718, 719, **7271***, **7284***	**XIII**
1305	Systemic connective tissue disorders	M30-M36	1361, 2794, 446, 710, 725, 7285	**XIII**
1306	Deforming dorsopathies and spondylopathies	M40-M49	720, 721, 7230, 7240, 737	**XIII**
1307	Intervertebral disc disorders	M50-M51	722	**XIII**
1308	Dorsalgia	M54	7231, 7234, 7236, 7241-7243, 7245	**XIII**
1309	Soft tissue disorders	M60-M79	**726***, **7270***, **7272-7279***, 7280-7283, 7286-7289, 729	**XIII**
1310	Other disorders of the musculoskeletal system and connective tissue	M53, M80-M99	remainder of 710-739	**XIII**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
1400	**Diseases of the genitourinary system**	**N00-N99**	**0994, 580-5996, 5998-629, 7880**	**XIV**
1401	Glomerular and renal tubulo-interstitial diseases	N00-N16	580-5834, 5838, 5839, 5900-5902, 5908, 5909, 591, 5933-5935, 5937, 5996	**XIV**
1402	Renal failure	N17-N19	5836, 5837, 584-586	**XIV**
1403	Urolithiasis	N20-N23	592, 594, 7880	**XIV**
1404	Other diseases of the urinary system	N25-N39	0994, 587-589, 5903, 5930-5932, 5936, 5938, 5939, 595-597, 5980, 5981, 5988, 5989, 5990-5995, 5998, 5999, 6256	**XIV**
1405	Hyperplasia of prostate	N40	600	**XIV**
1406	Other diseases of male genital organs	N41-N51	601-608	**XIV**
1407	Disorders of breast	N60-N64	610, 611	**XIV**
1408	Inflammatory diseases of female pelvic organs	N70-N77	614-616	**XIV**
1409	Menstrual, menopausal and other female genital conditions	N91-N95	6250-6255, 6258-627	**XIV**
1410	Other disorders of the genitourinary system	remainder of N00-N99	remainder of 580-629	**XIV**
1500	**Pregnancy, childbirth and the puerperium**	**O00-O99**	**630-676 (no exactly equivalent ICD-9 codes for the three phases)**	**XV**
1501	Medical abortion	O04	635	**XV**
1502	Other pregnancy with abortive outcome	O00-O03, O05-O08	630-634, 636-639	**XV**
1503	Complications of pregnancy predominantly in the antenatal period	O10-O48	640-646, 651-659	**XV**
1504	Complications of pregnancy predominantly during labour and delivery	O60-O75	660-668, 6690-6694, 6698, 6699	**XV**
1505	Single spontaneous delivery	O80	650	**XV**
1506	Other delivery	O81-O84	6695, 6696, 6697	**XV**
1507	Complications predominantly related to the puerperium	O85-O92	670-676	**XV**
1508	Other obstetric conditions	O95-O99	647, 648	**XV**
1600	**Certain conditions originating in the perinatal period**	**P00-P96**	**760-779**	**XVI**
1601	Disorders related to short gestation and low birth weight	P07	765	**XVI**
1602	Other conditions originating in the perinatal period	remainder of P00-P96	remainder of 760-779	**XVI**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
1700	**Congenital malformations, deformations and chromosomal abnormalities**	**Q00-Q99**	**740-759**	**XVII**
1800	**Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified**	**R00-R99**	**780-799 except 7880, but including 5997**	**XVIII**
1801	Pain in throat and chest	R07	7841, 7865	**XVIII**
1802	Abdominal and pelvic pain	R10	7890	**XVIII**
1803	Unknown and unspecified causes of morbidity (incl. those without a diagnosis)	R69	7999	**XVIII**
1804	Other symptoms, signs and abnormal clinical and laboratory findings	remainder of R00-R99	remainder of 780-799 except 7880, but including 5997	**XVIII**
1900	**Injury, poisoning and certain other consequences of external causes**	**S00-T98**	**800-999**	**XIX**
1901	Intracranial injury	S06	8001-8004, 8006-8009, 8011-8014, 8016-8019, 8031-8034, 8036-8039, 8041-8044, 8046-8049, 850-854 (Definition includes relevant ICD-9-CM codes.)	**XIX**
1902	Other injuries to the head	S00-S05, S07-S09	8000, 8005, 8010, 8015, 802, 8030, 8035, 8040, 8045, 830, 870-873, 900, 910, 918, 920, 921, 925 (Definition includes relevant ICD-9-CM codes.)	**XIX**
1903	Fracture of forearm	S52	813	**XIX**
1904	Fracture of femur	S72	820, 821	**XIX**
1905	Fracture of lower leg, including ankle	S82	823, 824	**XIX**
1906	Other injuries	S10-S51, S53-S71, S73-S81, S83-T14, T79	805-812, 814-819, 822, 825-829, 831-848, 860-869, 874-897, 901-904, 911-917, 919, 922-924, 926-939, 950-959	**XIX**
1907	Burns and corrosions	T20-T32	940-949	**XIX**
1908	Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly non-medicinal as to source	T36-T65	960-989	**XIX**
1909	Complications of surgical and medical care, not elsewhere classified	T80-T88	996-999	**XIX**
1910	Sequelae of injuries, of poisoning and of other consequences of external causes	T90-T98	905-909	**XIX**
1911	Other and unspecified effects of external causes	remainder of S00-T98	990-995	**XIX**

Code Table 2: Diagnosis Shortlist Codes

ISHMT Diagnosis codes	Heading	ICD-10 Code	ICD-9 Code	ICD Ch.
2100	**Factors influencing health status and contact with health services**	**Z00-Z99**	**V01-V82**	**XXI**
2101	Medical observation and evaluation for suspected diseases and conditions	Z03	V71	**XXI**
2102	Contraceptive management	Z30	V25	**XXI**
2103	Liveborn infants according to place of birth ("healthy newborn babies")	Z38	V30-V39	**XXI**
2104	Other medical care (including radio-therapy and chemotherapy sessions)	Z51	V071, V58	**XXI**
2105	Other factors influencing health status and contact with health services	remainder of Z00-Z99	remainder of V01-V82	**XXI**
0000	**All causes**	**A00-Z99 (excluding V, W, X and Y codes)**	**001-V82 (excluding E800-E999)**	

Code Table 3: Gender Codes

Only codes of 'Male' or 'Female' are permitted. In some countries, 'Unknown' can be recorded. Where there is a process for allocation 'Unknown' to 'Male' or 'Female' please use this.

Gender Codes

1 = Male
2 = Female

Code Table 4: Age Range Codes

Details of how you calculate 'age' for hospital data in your country should be supplied as meta data. Please exclude cases where age is unknown.

Age Range Codes

Age Range Codes		
1	=	" < 1"
2	=	" 1 to 4"
3	=	" 5 to 9"
4	=	"10 to 14"
5	=	"15 to 19"
6	=	"20 to 24"
7	=	"25 to 29"
8	=	"30 to 34"
9	=	"35 to 39"
10	=	"40 to 44"
11	=	"45 to 49"
12	=	"50 to 54"
13	=	"55 to 59"
14	=	"60 to 64"
15	=	"65 to 69"
16	=	"70 to 74"
17	=	"75 to 79"
18	=	"80 to 84"
19	=	"85 to 89"
20	=	"90 to 94"
21	=	"95 and over"

Code Table 5: External Cause Shortlist Codes

Counts are to be based only on those cases with a main diagnosis that falls in the ICD chapter relating to injuries, poisonings and certain other consequences of external cause (i.e. ICD-10 codes S00 to T98, ICD-9 codes 800 to 999 or HDP shortlist diagnosis codes 1900 – see code table 2). Thus cases with a main diagnosis in this chapter should also have an associated external cause and this is what is being counted in this table. If more than one external cause is coded, only the first mentioned external cause should be included. Where no external cause has been coded, this should be coded as missing (HDP External Cause Code 9).

HDP External Cause Code	Heading	ICD-10 codes	ICD-9 codes
1	Land transport accidents	V01-V89	E800-E829, E846-E848
2	Accidental falls	W00-W19	E880-E888
3	Accidental poisoning	X40-X49	E850-E869
4	Intentional self-harm	X60-X84	E950-E958
5	Assault	X85-Y09	E960-E968
6	Event of undetermined intent	Y10-Y34	E980-E988
7	Complications of medical and surgical care	Y40-Y84	E870-E879, E930-E949
8	Other external causes	remainder of V01-Y95	E830-E845, E890-E929, E989, E990-E999
9	External cause not known or not reported, i.e. mis Note: This group applies only to cases with a mai sis shortlist code 1900.		

Hospital Data Project 2

Section B
Request for Meta Data

Part 1

Data Items for Inclusion in the Common Data Set

The purpose of this document

The purpose of this document is to detail the descriptive meta data on data items required for submission to the Common Data Set. The completion and return of this document is also the means by which the Project documents the transformations that each country is making to its own hospital activity data set in order to satisfy the definitions of the Common Data Set.

Contents of this Document

Data Transformation Table
In the Data Transformation Table below, column one details the data item being collected for the Common Data Set. Column two details the definition of this data item for the Common Data Set. Column three provides guidance on the definition of this data item; in particular, this guidance may ask for additional information/meta data to be supplied by countries submitting data to the common data set. This additional information/meta data is to be inserted in column four. The guidance information in column three refers to various annexes. The purpose of each annex is explained in the guidance information.

Annexes
Annex 1 Example of completed Data Transformation Table.

The purpose of this annex is to provide you with an example of how you should complete your Data Transformation Table.

Actions for Participant Countries

Complete the Data Transformation table by filling in details in column four and return it to Mark Boll (hdp2@prismant)

Data Items for Inclusion in the Common Data Set - Data Transformation Table

Please provide the information requested in the far right hand column of Part 1 below. For data items that have CDS coding categories specified, please list the codes in your national data set that are grouped to give each CDS code.
To help you complete this form, you may like to look at the example of a completed form provided at Annex 1.

Name of Country Completing the Table: _____

(please type in the name of your country in the space provided above)

Data item	CDS definition	Guidance on information requested	Please provide information in this column
Gender	1 Male 2 Female	If some records in your national data are coded to gender categories other than 'male' or 'female' (e.g. 'unknown') and if you have a process for allocating "unknowns" to "males" or "females" then please use this. If you do not have such a process then please exclude these records. It would be helpful to get some idea of the size and percentage of the gender coded to categories other than male or female. Please give details in the 4th column.	
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	Please state whether your data comply with this CDS requirement; if not, please give details. If age is unknown please exclude. Please give details of how you calculate age in your data set.	

Data item	CDS definition	Guidance on information requested	Please provide information in this column
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	Please state which classification is used to record diagnosis in your country (ICD–10, ICD–9–CM, etc). Please state whether your can provide data grouped according to the categories defined in Section A. If not, please give details.	
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	Please state which classification is used to record external cause in your country (ICD–10, ICD–9–CM, etc). Please state whether your can provide data grouped according to the categories defined in Section A. If not, please give details.	

Data item	CDS definition	Guidance on information requested	Please provide information in this column
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	Please state whether your data comply with this CDS requirement; if not, please give details	
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	Please state whether your data comply with this CDS requirement; if not, please give details	
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	Please state whether your data comply with this CDS requirement. If you have used a different method to calculate total bed days please provide details.	

Data item	CDS definition	Guidance on information requested	Please provide information in this column
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	Please state whether your data comply with this CDS requirement; if not, please give details	

Hospital Data Project 2

Section B
Request for Meta Data

Part 2

Coverage Issues for the Common Data Set

Purpose of this Document

The purpose of this document is to provide guidance on which patients are to be included in the Common Data Set and which patients are to be excluded from the Common Data Set; i.e., the coverage of the Common Data Set. The document is also designed to collect descriptive information from each country on whether it conforms to the Common Data Set coverage definitions and, if not, the extent to which it diverges from these definitions.

Contents of this Document

Coverage Issues Table

In the Coverage Issues Table below, column one details four issues (a) coverage, (b) nature of individual records, (c) patients' place of residence and (d) year for which data is provided. Column two provides the definitions of these issues for the Common Data Set. Column three provides guidance on these definitions and requests information for clarification purposes from countries submitting data to the Common Data Set. This information is to be inserted into column four by each country.

Annexes

Annex 1 – Coverage of the Common Data Set

This annex contains detailed information on which patients are included and which patients are excluded from the Common Data Set as agreed in HDP1.

Annex 2 – Example of Completed Coverage Issues Table

The purpose of this annex is to provide you with an example of how you should complete and return you Coverage Issues Table

Actions for Participant Countries

Complete the Coverage Issues Table by filling in details in column four and return it to
Mark Boll (hdp2@prismant.nl)

Participant Country Common Data Set Coverage Issues

Please provide the information requested in the far right hand column of the table below.
To help you complete this form, you may like to look at annex 1 and the example of a completed form provided at Annex 2.

Name of Country Completing the Table: _____

(please type in the name of your country in the space provided above)

	CDS definition	**Guidance on information requested**	**Please provide information in this column**
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	Please give details of the data you are providing to the CDS, e.g. do your data cover: • both inpatient and day care? • all hospitals in your country? • activity in any organisations other than hospitals?	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes** **No** If, **No**, please specify differences and, if possible, the number of records involved.
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	Please state whether your data comply with this CDS requirement. For countries that hold data on a different basis (e.g. department discharges; consultant episodes), please explain how you have provided data in a way that meets this requirement	

Patients' place of residence	National level data only for the pilot exercise.	Please state, if possible, the proportion of residents of other countries treated in your hospitals.	
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	Please state whether your data comply with this CDS requirement. If not, please specify which years are being provided.	

Coverage of the Common Data Set

Common Data Set (CDS) coverage should be defined by the following OECD System of Health Accounts function categories:
HC.1.1 In-patient curative care
HC.1.2 Day cases curative care
HC.2.1 In-patient rehabilitative care
HC.2.2 Day cases rehabilitative care
Countries are asked to provide data with discharges for inpatients and day cases separately identifiable. There is no requirement to separately identify discharges for curative and rehabilitative care.
The following points further clarify specific inclusions and exclusions (refer also to the definitions of key terms below):

- Outpatient care should be excluded. The key distinction between outpatients and inpatients / day cases is an administrative one—outpatients are not formally admitted to the institution, whereas inpatients and day cases are formally admitted.
- Palliative care provided in hospitals should be included, but palliative care provided in special palliative care centres should be excluded.
- Psychiatric, maternity and geriatric patients should be included.
- The CDS should contain data for all hospitals, including mental health and substance abuse and other specialty hospitals. It should also contain data for other providers of inpatient and day case curative and rehabilitative care that is of a similar nature to that provided in hospitals. As an example, day surgery centres and rehabilitation centres should be included where data for these providers are included in the national hospital data collection for a country. Palliative care centres should be excluded.

Countries will be asked to provide meta data (information about their data) outlining what providers, other than hospitals, are included in their CDS data set, and also any categories of hospital for which they cannot provide data. Countries will also be asked to state whether the coverage of their CDS data differs in any way from the guidelines outlined above (e.g. if data on day cases or maternity patients cannot be provided).

Definitions of key terms

The following definitions of key terms are based closely on definitions given in the OECD's System of Health Accounts (SHA page references are given).

Curative care

An episode of curative care is one in which the principal medical intent is to relieve symptoms of illness or injury, to reduce the severity of an illness or injury or to protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function. Inclusions: obstetric services; cure of illness or provision of definitive treatment of injury; the performance of surgery; diagnostic or therapeutic procedures. Palliative care is excluded. (p. 115)

Rehabilitative care

An episode of rehabilitative care is one in which the emphasis lies on improving the functional levels of the persons served and where the functional limitations are either due to a recent event of illness or injury or of a recurrent nature (regression or progression). Included are services delivered to persons where the onset of disease or impairment to be treated occurred further in the past or has not been subject to prior rehabilitation services. Rehabilitative care is generally more intensive than traditional nursing facility care and less intensive than acute (curative) care. (p. 117)

Inpatient care

An inpatient is a patient who is formally admitted to an institution for treatment and/or care and stays for a minimum of one night. Inpatient care includes accommodation provided in combination with medical treatment when the latter is the predominant activity provided during the stay as an in-patient. (p. 112)

For CDS data, patients who are admitted as inpatients but who do not in fact remain overnight for some reason (e.g. death) should be recorded as inpatients. Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.

Day care (also referred to as Day Case)

Day care comprises medical and paramedical services delivered to patients that are formally admitted for diagnosis, treatment or other types of health care with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day. (p. 113)

Outpatient care

An outpatient is not formally admitted to the facility and does not stay overnight. An outpatient is a person who goes to a health care facility for a consultation/treatment, and who leaves the facility within several hours of the start of the consultation without being 'admitted' to the facility as a patient. (p. 113)

Hospital

A hospital is a licensed establishment primarily engaged in providing medical, diagnostic and treatment services that include physician, nursing, and other health services to in-patients, and the specialised accommodation services required by in-patients. (p. 137)

General hospitals

Hospitals providing diagnostic and medical treatment (both surgical and non-surgical) to in-patients with a wide variety of medical conditions. These hospitals may provide other ser-

vices, such as outpatient services, anatomical pathology services, diagnostic X-ray services, clinical laboratory services, operating room services for a variety of procedures and pharmacy services. General hospitals include general acute care hospitals, community, county and regional hospitals (other than specialty hospitals), hospitals of private non-profit-organisations (e.g. Red Cross), teaching hospitals, university hospitals, army, veterans and police hospitals and prison hospitals. (p. 137)

Mental and substance abuse hospitals

Hospitals primarily providing diagnostic and medical treatment, and monitoring services, to inpatients with mental illness or substance abuse disorders. The treatment often requires extended stay in an inpatient setting. These hospitals usually provide other services, such as outpatient care, clinical laboratory tests, diagnostic X-rays, and electroencephalography services. (p. 138)

Specialty (other than mental health and substance abuse) hospitals

Hospitals primarily providing diagnostic and medical treatment to inpatients with a specific type of disease or medical condition (other than mental illness or substance abuse disorders). This includes hospitals providing long-term care for the chronically ill and hospitals providing rehabilitation and related services to physically challenged or disabled people. These hospitals may provide other services, such as outpatient services, diagnostic X-ray services, clinical laboratory services, educational and vocational services, and psychological and social work services. (p. 138)

c. Metadata

A.II.3 Metadata Diagnosis

1. Metadata for Austria

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should include and exclude the following: Include: In-patient curative care Day cases curative care In-patient rehabilitative care Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. Psychiatric, maternity and geriatric patients should be included. Palliative care provided in hospitals should be included. Exclude: Outpatients and, Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes** ~~**No**~~ If, **No**, please specify differences and, if possible, the number of records involved.
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*One data set for each hospital discharge including deaths with basic information of hospital and patient (e.g gender and age, but no patient identification), one main diagnosis, other diagnoses and procedures.*
Patients' place of residence	National level data only for the pilot exercise.	*Data incude all hospital stays in Austria including hospitals stays of residents of other contries (1,5-2% of all hospital stays)*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-9 until 2000, changed to ICD-10 in 2001*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*ICD-9 until 2000, changed to ICD-10 in 2001* *Main diagnosis: Diagnosis finally established as the main reason for the hospital stay (discharge diagnosis)*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*CDS requirement (1999-2005)*
Gender	Male Female	*= CDS definition*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*= CDS definition*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*= CDS definition*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*All patients who are admitted and discharged on the same day. (Intention of discharging on the same day is not recorded in all cases)*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*= CDS definition*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*= CDS definition*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*External Cause Data not available.*

2. Metadata for Belgium

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* ~~***Yes***~~ ***No*** *If, **No**, please specify differences and, if possible, the number of records involved.* *CDS data include inpatient and day care provided in all Belgian acute care hospitals.* *Psychiatric patients in acute care hospitals are included.* *Psychiatric patients in psychiatric hospitals, psychiatric nursing care homes, psychiatric wards in general hospitals and sheltered housing initiatives are excluded (115828 stays in 2003).* *Information on the Minimal Psychiatric Registration (statistiques pluriannuelles en soins de santé mental – MPR 1999-2003) you can find on our website:* *https://portal.health.fgov.be/pls/portal/docs/PAGE/INTERNET_PG/HOMEPAGE_MENU/GEZONDHEID-ZORG1_MENU/ZORGINSTELLINGEN1_MENU/REGISTRATIESYSTEMEN1_MENU/MPGMINIMALEPSYCHIATRISCHEGEGEVENS1_MENU/PUBLICATIONS1_HIDE/PUBLICATIONS1_DOCS/RAPPORT%20NATIONAL%201999%20-%202003.PDF* *In-patient rehabilitative care in speciality hospitals are excluded.*

A.II.3 Metadata Diagnosis

	CDS definition	Diagnosis Data File
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Belgium collects records for all hospital stays in the Minimal Clinical data (see our website* https://portal.health.fgov.be/portal/page?_pageid=56,512876&_dad=portal&_schema=PORTAL)
Patients' place of residence	National level data only for the pilot exercise.	*The estimated proportion is 1.1 for the years 1999-2004 together.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-9-CM*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Belgium uses ICD-9-CM. Diagnoses have been grouped according to the CDS shortlist.* *CDS data reflect the primary diagnosis recorded for the discharge episode in each hospital stay*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 1999-2004.*
Gender	Male Female	*1018 discharges are coded to "unspecified" or "unknown" gender for the period 1999-2004 and are eliminated in Belgium's CDS data.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Belgium's CDS data comply with this requirement.* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with CDS requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Data comply with CDS requirement.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with CDS requirement.* *Total bed days calculated as discharge date minus admission date, summed for each group, inpatients only.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Belgium uses ICD-9-CM. Diagnoses have been grouped according to the external cause shortlist.*

3. Metadata for Cyprus

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* ***Yes,** our data comply with the CDS inclusions and exclusions* ***No,*** *Our data include only inpatients. The data refer to the general, rural and special hospitals (chronic and psychiatric hospital).The data refer to the public sector only, due to lack of accurate and detailed information for the private sector.* *If, **No**, please specify differences and, if possible, the number of records involved.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Cyprus data comply with this requirement.*
Patients' place of residence	National level data only for the pilot exercise.	*Although the Patient's place of residence is recorded in the hospital's records, the accuracy of this information is not reliable, thus we consider it not available.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Cyprus uses ICD-10. Diagnoses have been grouped according to the CDS shortlist.* *In 2004 and 2005, 1.9% of primary diagnoses were missing. They were left blank.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 1999-2005*
Gender	Male Female	*In 2005, there were 64 (0.1%) discharges that were not coded as Males or Females. They were excluded.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*The Diagnosis Data file complies with this requirement.* *In the Population file, the years 1999-2001 have a category "80 +". The rest of the years 2002-2005 comply with this requirement. The population data refer to end year population.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Cyprus data comply with this requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Cyprus data comply with this requirement.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Cyprus data comply with this requirement.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Cyprus data comply with this requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Not Available*

4. Metadata for Czech Republic

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* ~~***Yes***~~ ***No.** Palliative care in special centres (hospices) is included. Long-term care cases of hospitalization in hospitals are included.* *If, **No**, please specify differences and, if possible, the number of records involved.* *…..1868 records* *…..2152 records* *…..2371 records (data refers to hospitalization cases in hospices)*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Data are prepared from hospital discharges.* *Multi-episode cases (transfers between departments) have been combined into one discharge record. There were 106,716 such cases in the year 2005* *Day-cases were identified by the same admission and discharge dates (without deaths in the first day) Only some day-cases are reported, i.e. those that are considered as hospitalization cases).* *As basis dg. for multi-episode cases (transfers between departments) was taken the one from the first episode.*
Patients' place of residence	National level data only for the pilot exercise.	*There are only 0,3% of hospitalized foreigners (from all hospitalized persons) in the Czech Republic*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Diagnoses are classified according to ICD-10.* *Diagnoses have been grouped according to the ISHMT shortlist.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*Calendar years 2000-2005.*
Gender	Male Female	*Czech's data comply with the requirement.* *Records with unknown gender have been excluded.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Czech's data comply with the requirement.* *Records with unknown age have been excluded.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with CDS requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Day case is considered a hospital case where the date of admission and the date of discharge are identical.* *Data doesn'tt include day cases that are not considered as hospitalization cases.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with CDS requirement. For cases of deaths of hospitalized patients on the first day of hospitalization the number of bed days is considered as 1.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*External causes are classified according to ICD-10.* *Diagnoses have been grouped according to the external cause shortlist.*

5. Metadata for Denmark

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below ~~**Yes**~~ **No** If, **No**, please specify differences and, if possible, the number of records involved. *The data for psychiatric patients has been provided in a separate file, otherwise the requirements are met.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*The data is based on hospital records for each individual, including deaths in hospitals.*
Patients' place of residence	National level data only for the pilot exercise.	*The proportion of patients from other countries treated in Danish hospitals is less than 1 percent per year.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*The ICD-10 classification is being used. The Data has been grouped according to the given shortlist defined in Section A*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 1999-2005*
Gender	Male Female	*The data comply with the definitions*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*The data comply with the definitions. Age is derived from the date of birth*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*The data comply with the CDS requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*It is not known whether the intent was to discharge the patient on the same day, therefore the number of day-care patients include all inpatients not staying overnight.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*The bed days have been calculated according to the CDS requirement.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*The total bed days have been calculated in the requested way.* *The mean length of stay for psychiatric patients has not been calculated. The reason is that for the psychiatric patients this number does not provide any useful information, because of the big difference between the lengths of stay for psychiatric patients.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*The data has not been grouped according to the given categories, due to the fact that the given chapters of ICD-10 is not used in Denmark. The Nordic Classification Scheme is being used instead. It is however possible to translate the Nordic scheme back to ICD-10 codes for some of the requested data. The data is not based on the primary diagnosis dataset, in this dataset a new type of patient is also included. This new type of patient, is a patient who is not admitted but turns up at an emergency room and whose injury is treated immediately. This type of patient may resemble what in this study is being referred to as a day-care patient, but the definition is not the same as the definition for a day-care patient.*

6. Metadata for Finland

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** In-patient curative care Day cases curative care In-patient rehabilitative care Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. Psychiatric, maternity and geriatric patients should be included. Palliative care provided in hospitals should be included. **Exclude:** Outpatients and, Palliative care provided in special palliative care centres.	*In-Patients receiving curative and rehabilitative care in all hospitals, including specialty and private hospitals, are covered.* *Healthy liveborn infants are not included.* *Out-patients have been excluded.* *Palliative care provided in special palliative care centres are not included.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Data supplied by Finland to the HDP common data set is based on discharges from hospitals.*
Patients' place of residence	National level data only for the pilot exercise.	*In Finland approximately 0.5% of discharges relate to non-residents.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*ICD-10*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*Years 1999-2005*
Gender	Male Female	*Finnish Data complies with HDP definition.* *Only Male and Female are coded in Finland (Data item derived from PIN).*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Finnish Data complies with HDP definition.* *In Finland age is calculated as Date of Admission minus Date of Birth*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with CDS requirements.* *Only Patient who stayed at least one night in hospital are counted as in-patients.* *In 1999, about 4,000 patients died on day of admission.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Data comply with CDS requirements.* *Day cases in Finland are defined as those patients who are admitted and discharged on the same day, including those who died on day of admission.* *In 1999, about 4,000 patients died on day of admission.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with CDS requirements.* *Finnish Data complies with HDP definition.* *Except only Patient who stayed at least one night in hospital are counted as in-patients.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirements.* *Finnish Data complies with HDP definition.* *Except only Patient who stayed at least one night in hospital are counted as in-patients.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*ICD-10*

7. Metadata for France

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* ~~**Yes**~~ **No** *If, **No**, please specify differences and, if possible, the number of records involved.* *We include maternity, inpatients curative care, day cases curative care, geriatric patients and palliative care when they are provided into departments of curative care.* *We cannot include, until now:* *Psychiatric patients except if they are hospitalized into departments of curative care* *Rehabilitative care* *Multiple hospitalizations in a same short period for day care (like hemodialysis, chemotherapy or radiotherapy) are excluded.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Yes, our data comply exactly with the CDS requirement*
Patients' place of residence	National level data only for the pilot exercise.	*All the results sent until now are on the residents in France, excluding residents in overseas territories and foreign countries. It would be possible to get the figures of all the hospitalized people except for 1999.* *IN 2006, residents in France (including overseas territories) were99.74 % of the hospitalized patients.* ***Non resident patients were 45 287, i.e. 0.26 % of the 17 498 289 hospitalizations***

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD 10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*We use ICD 10* *We group data according to the Short List*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*All the years are OK, except 1999: for that year, the patients who reside in overseas territories older than 90 are in a unique group and we cannot separate those over 95 years.*
Gender	Male Female	*In 2006, the percentage of patients with no defined gender was 2.5 per ten thousand (2.5 / 10 000). Every year, they are excluded from the final data base.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Age is calculated as :* *Date of entrance in the hospital – (minus) Birth date*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Yes (but it is not true for the bed days. See below)*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*We do the same thing, but we are not sure all the patients are hospitalized with the intention of day case discharge. That is because the entry coding is presently not reliable enough to exclude the patients where they had an unplanned discharge the day of entrance.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Yes, except for deaths or transfers to another hospital on day of admission. These patients are counted as inpatients, but have a length of stay =0.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Yes*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	We do not code external causes

8. Metadata for Germany

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* ~~***Yes***~~ ***No*** ☑ *If, **No**, please specify differences and, if possible, the number of records involved.* ***Included** are inpatients and day cases in curative care and psychiatric, maternity and geriatric patients of all hospitals in Germany, also records for healthy liveborn infants. If palliative care is provided in hospitals, it is included in the records (we know in what departments the patients were hospitalised, but there is no department named "palliative" so we do not know how many patients are treated this way.)* ***Excluded** are all patients in rehabilitation care, outpatients and palliative care provided in special palliative care centres.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*German data complies with the CDS requirements*
Patients' place of residence	National level data only for the pilot exercise.	*2000-2006: 0,2% - 0,3% of all patients*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD 10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Germany uses the ICD-10 to record diagnosis.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*German data complies with the CDS requirements*
Gender	Male Female	*In 2006 287 patients (0,002%) were coded to 'unknown' gender.* *In 2006 46,6% of the patients were male and 53,4% female.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*The German data comply with this requirement. Age is defined as the age at day of admission.* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*German data comply with the requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*German data comply with the requirement.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*German data comply with the requirement.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*German data comply with the requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Germany uses the ICD-10 to record external cause.*

9. Metadata for Greece

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes** **No** √ If, **No**, please specify differences and, if possible, the number of records involved. *Provided data concern all hospitals in Greece, except rehabilitation centers.* *It is not possible to provide data for day cases, because for reimbursement reasons, they are reported as in patient cases.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Our data comply with the CDS requirement.*
Patients' place of residence	National level data only for the pilot exercise.	*1999: 0.85%* *2000: 0.74%* *2001: 0.60%* *2002: 0.60%* *2003: 0.50%* *2004: 0.50%* *Source: National Statistical Service of Greece*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD 10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*We have provided data according the ICD 10 classification concerning diagnosis.* *Concerning the procedures, we have not adopted the ICD-9-CM, yet. We estimate that in a couple of years, we will be able to provide data according the ICD-9-CM.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*For procedures, the provided data concern the year 2004.* *For diagnosis, the provided data concern the period 2000-2004*
Gender	Male Female	*In Greece, we don't have any ''unknown'' records concerning the gender.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Concerning diagnosis, we don't have available data by Age Range. So, we have provided data for the requested variables (Number of inpatient discharges, Number of bed days, Mean length of stay) only by diagnosis and gender codes, and year* *Concerning procedures, the age ranges available do not match exactly the required form. The available age ranges are:.* *<29 days + 1-11 months* *1-5* *6-14* *15-19* *20-29* *30-39* *40-49* *50-59* *60-69* *70-79* *80 and over* *Also, concerning procedures, we don't have data about length of stay and the number of bed days*

A.II.3 Metadata Diagnosis

Data Item	Definition	*Diagnoses Data File*
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Our data, comply with the CDS requirements*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*We face problems to estimate day-cases, as for reimbursement reasons the majority of these cases, are recorded as inpatient cases.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Our data, comply with the CDS requirements*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*It is calculated as total discharged bed days divided by total number of discharged inpatients in each group. The calculation is based on both deaths and discharges.*

Data Item	**Definition**	**Diagnoses Data File**
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*We have provided data according the ICD 10 classification concerning external cause. We have provided relative data according Section A.*

10. Metadata for Hungary

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below Yes √ **No** I f, **No**, please specify differences and, if possible, the number of records involved. *In accordance with the reports EUROSTAT Hospital Morbidity Database (HMDB) and WHO Hospital Discharge Data (HDD), data include hospital cases of in-patient and day cases of acute care and rehabilitation services (HC.1 and HC.2) and do not include long-term care (HC.3).* *Data include case number for discharges from hospitals being in contract with the National Health Insurance Fund (OEP), almost 100%.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Hungarian inpatient registration includes records for departments. A hospital case may include nursing in several departments. A major diagnosis is compulsorily assigned to every department record, and a major intervention may - not compulsorily - be assigned to it, too.* *We provided case numbers for hospital discharges, not case numbers for departments.* *If the hospital case involved nursing in several departments, then the hospital case is assigned the major diagnosis of the department case whose DRG classification had the highest weight number.*
Patients' place of residence	National level data only for the pilot exercise.	*We can give estimate of the foreigner patient's number based on nationality, it is approx. 0.7%.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Hungary uses ICD–10. Diagnoses have been grouped according to the ISHMT shortlist.* *We provided case number for hospital discharge, not case number for department.* *If the hospital case involved nursing in several departments, then the hospital case is assigned the major diagnosis of the department case whose DRG classification had the highest weight number.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*This time we provided data for the years 2004-2006, but next year we may eventually provide retrospective data for the years 2002-2003, as well.*
Gender	Male Female	*The gender of the patient is unknown in 7000 hospital cases a year, these are deleted from the HDP2 database.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*The age group of the patient is unknown in about 100 cases a year, these are deleted from the HDP2 database.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with definition.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Day case is considered a hospital case where the date of admission and the date of discharge are identical, and during the hospital stay a medical intervention was performed that appears on the list of allowed day case interventions. Patients who passed away on the day of admission are always counted among inpatient cases.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with definition.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with definition.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*In Hungary "V00-Z99" codes may not be used for main diagnoses. We can only provide case number "Z38 Health newborn babies" by taking into account special Hungarian codification.*

11. Metadata for Ireland

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **No - Ireland has not been able to supply all the data specified by the CDS** If, **No**, please specify differences and, if possible, the number of records involved. *In-patients and day cases receiving curative and rehabilitative care in publicly funded acute general hospitals are included (95.1% of such patients are captured). These patients are recorded on the Hospital In-Patient Enquiry system (HIPE).* *Also in-patients receiving curative and rehabilitative care in public and private psychiatric hospitals are included but not day cases receiving care in psychiatric hospitals.* *In-Patients and Day Cases receiving curative and rehabilitative care in non-psychiatric private hospitals are not covered. There is no official record of activity in these hospitals but it is estimated that 10% of all hospital activity in Ireland is undertaken in these hospitals.* *Healthy liveborn infants are excluded; healthy liveborn infants are not recorded separately in Ireland.* *Outpatients are excluded.* *Palliative care provided in special palliative care centres is excluded.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Irish Data complies with CDS Requirements. Data supplied by Ireland to the HDP common data set is based on discharges from hospitals.*
Patients' place of residence	National level data only for the pilot exercise.	*Between 1999 and 2005, 31,840 cases in HIPE were recorded with a residence outside Ireland (i.e., 0.5% of cases).* *Between 1999 and 2005, 651 cases in NPIRS were recorded with a residence outside Ireland (i.e., 2.6% of cases).*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-9-CM, ICD-10-AM* *ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*For HIPE data: 1999-2004: ICD-9-CM; 2005 onwards: ICD-10-AM.* *For NPIRS Data: ICD-10*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 1999-2005*
Gender	Male Female	*Gender codes in HIPE are* *1 Male* *2 Female* *3 Unknown* *7 cases were recorded as unknown in HIPE between 1999 and 2005 (i.e., 0.0001% of cases).* *Gender Codes in NPIRS are* *1 Male* *2 Female*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Irish Data complies with HDP definition.* *In HIPE and NPRIS age is calculated as Date of Discharge minus Date of Birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*HIPE and NPRIS Data comply with HDP definition.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*HIPE Data complies with HDP definition.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*HIPE and NPIRS Data complies with HDP definition.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Irish Data complies with HDP definition.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*For HIPE data: 1999-2004: ICD-9-CM; 2005 onwards: ICD-10-AM.*

A.II.3 Metadata Diagnosis

Any known or suspected peculiarities related to the national diagnostic and recording practices and to how the main condition is selected.

Data for 1995 to 2004 were classified using ICD-9-CM. All HIPE discharges from 2005 are now coded using ICD-10-AM (The Australian Modification of ICD-10 incorporating the Australian Classification of Health Interventions).

Although we are using the ISHMT, there are still some minor changes in the classification of diagnoses. The HMT shortlist is based on ICD-9 and ICD-10 codes, but we have changed from ICD-9-CM to ICD-10-AM including the Australian Coding Standards. This means that for certain categories comparison with previous years is difficult. For more information on the introduction of ICD-10-AM in Ireland see http://www.esri.ie/health_information/hipe/clinical_coding/icd10am/

The following explain some of the notable increases / decreases between the data for 2004 and 2005 in certain categories:

- The increase in the data for code 0102 [Diarrhoea and gastroenteritis of presumed infectious origin] is due to an Australian Coding Standard that states that

  "If gastroenteritis is not stated as infectious it should be coded as A09 *Diarrhoea and gastroenteritis of presumed infectious origin* in children (15 years and under) and K52.- *Other noninfective gastroenteritis and colitis* in adults. This reflects the probable infectious cause in children and other possible causes (eg drugs, ischaemia and metabolic) in adults."

  This explains the large increase in the data for 2005. Previously the majority of these cases would have been reported in the category 1110 [Other non-infective gastroenteritis and colitis].

- The changes in the data for 0902 [Angina Pectoris] and 0904 [Other Ischaemic Heart Disease] are due to the change in the classification of Unstable Angina. Previously cases with this diagnosis would have been coded as ICD-9-CM 411.1 and would then be reported in 0904. However the ICD-10-AM code for Unstable Angina is I20.0 and so in 2005 these cases are reported in the category 0902.

- The changes in the data for 1002 [Pneumonia], 1003 [Other Acute Lower Respiratory Infections], 1006 [Chronic Obstructive Pulmonary Disease and Bronchiectasis] and 1008 [Other diseases of the Respiratory System" are also due to the new classification system. Overall the number of cases in the category 1000 "Diseases of the Respiratory System" has not changed significantly. Much of the changes in the sub categories can be attributed to the ICD-10-AM code J22 as there is no equivalent code in ICD-9-CM. Cases that in ICD-9-CM would have gone into 1002 [Pneumonia] and 1008 [Other diseases of the respiratory system] are now being assigned to the 1003 category.

A.II.3 Metadata Diagnosis

- The number of cases reported in 2101 [Medical Observation and Evaluation for Suspected Diseases and Conditions] has increased in 2005 as the data include ICD-10-AM Z03.7 'Observation and evaluation of newborn for suspected condition not found'. The equivalent code in ICD-9-CM is V29 which results in these cases being assigned to 2105 [Other factors Influencing Health Status and Contact with Health Services].

- The data for 2104 [Other medical Care] in 2004 includes ICD-9-CM V58.3 (Attention to Surgical Dressings and Sutures) and V58.4 (Other Aftercare following Surgery). The equivalent code in ICD-10-AM is Z48 which results in these cases being assigned to 2105 [Other factors Influencing Health Status and Contact with Health Services] in 2005.

12. Metadata for Italy

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes** √ *CDS data include inpatient and day care in public and private hospitals.* *Specialty hospitals for rehabilitative care are included, except residential centres with prevalent social care functions and those centres for low intensive rehabilitative care.* **No** If, **No**, please specify differences and, if possible, the number of records involved.
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Italy's CDS data meet this requirement.*
Patients' place of residence	National level data only for the pilot exercise.	*The estimated proportion is around 3% of the total hospital discharges*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		ICD-9-CM
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Italy currently uses ICD-9-CM 9th revision.* *Main diagnoses have been grouped according to the CDS shortlist.* *The main diagnosis is identify at the moment of the discharge.* *It must be the main reason for hospital treatment and care. If there were more main diagnoses, it must be indicated as the main one, the diagnosis requiring more resources.* *If a neoplasia is the reason of the admission, it must be indicated as main diagnosis.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*The provided data files are referred to the years 2001-2004.* *Data referred to the years 1999 and 2000 are not any longer on line. However data referred to the calendar 2000 could be provided during the HDP project.* *Processed data referred to the year 2005 have not been published yet and it is not use to sending them out before.*
Gender	Male Female	*Our gender code is* *(1) male* *(2) female* *Usually few records present wrong codes (below 50 records) and no special process is carried out for allocating the "unknowns" to "males" and "females".*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Italy's CDS data comply with this requirement.* *Age is calculated from the date of admission and the date of birth and it is considered right up to 120.* *Undeterminable age cases have not been included.*

A.II.3 Metadata Diagnosis

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with CDS requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Data comply with CDS requirement* *A day case discharge is recorded with a number of presence days, which might be greater than one.* *The length of presence days is not included in the HDP file requested, so in this way the day case activity can be underestimated.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with CDS requirement.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Italy does not use "E" code for external cause. If one of the diagnoses (main diagnosis or secondary diagnoses) falls between 800-999, it should have specified one of these following six codes as "external cause":* *1 accident in the place of work* *2 accident at home* *3 land transport accident* *4 assault* *5 intentional self-harm or attempted suicide* *9 other kind of accident or poisoning* *This information is <u>not</u> considered good enough: there are a lot of missing code as "external cause".* *The External Cause Data file produced contains only the following HDP External Cause Codes: 1, 4, 5, 8 and 9.* *If the main diagnoses fall into 800-999 ICD-9-CM, the following transformation has been carried out:* *HDP External Cause Codes --->Italian "external cause"* *1 ---> 3* *4 ---> 5* *5 ---> 4* *8 ---> 1,2 and 9* *9 ---> all the remainder, including missing and wrong codes.*

13. Metadata for Latvia

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, • Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" Yes or No below* *Yes* *No* √ *If, No, please specify differences and, if possible, the number of records involved.* *All hospitals included (incl. private)* *Data of activities in any organisation other than hospital – excluded.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Latvian CDS data comply with this requirement.*
Patients' place of residence	National level data only for the pilot exercise.	*The estimated proportion is 0,05 % in 2004 and 0,06% in 2005.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Latvia uses ICD–10. Diagnoses have been grouped according to the CDS shortlist.* *CDS data reflect the primary diagnosis recorded for the discharge episode in each hospital stay*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*2004, 2005.*
Gender	Male Female	*CDS data comply with this requirement.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*CDS data comply with this requirement.* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*All patients transferred to another hospital are excluded. Deceased and discharged patients are included only.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*CDS data comply with this requirement.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*CDS data comply with this requirement.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*CDS data comply with this requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Latvia uses ICD–10. Only main diagnoses are coded by doctors (S00-T98). It is impossible to group external causes according to the external cause shortlist yet.*

14. Metadata for Lithuania

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" Yes or No below* ~~**Yes**~~ **No** √ *If, No, please specify differences and, if possible, the number of records involved.* *Data include all inpatients and day cases provided in the hospitals having contracts with Compulsory Health Insurance Fund (coverage about 98%).* *Day cases of rehabilitative care are excluded.* *Healthy newborns are excluded.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*CDS is based on hospital discharge records.*
Patients' place of residence	National level data only for the pilot exercise.	*Data include records of residents of other countries as there is a problem to exclude them.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*ICD-10.* *Diagnosis data is grouped according to diagnosis shortlist.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 2001-2005*
Gender	Male Female	*All records have gender code*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Records with unknown age are excluded.* *Every year the number of record with unknown age is decreasing (2001 – 1.3%, 2002 – 1.2%, 2003 – 0.35%, 2004 – 0.08%, 2005 – 0.028% of total number of discharges)* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Day case is the patient discharged on the same day (not dead).*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Bed days are calculated as discharge date minus admission date. Where an in-patient dies on date of admission on day of admission, length of stay is 1 day.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*The most of external causes is coded as "not known or not reported or missing data" as external code is not recorded in database. But some records have external code (V01-Y98) as primary diagnosis instead of injury code (S00-T98).*

15. Metadata for Luxembourg

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes, for all the data since 2003** **No, for the data before 2003** *Luxembourg counts 1 specialized hospital for rehabilitative care that was excluded from the data collection before 2003.* If, No, please specify differences and, if possible, the number of records involved.
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Data comply with this requirement.*
Patients' place of residence	National level data only for the pilot exercise.	*Max. 3 %*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Luxembourg uses ICD-10. Diagnoses have been grouped according to the CDS shortlist.* *Data reflect the primary diagnosis*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*Data for 2002 – 2005 have been provided. Data before 2002 are archived and not included in our current database*
Gender	Male Female	*There are no other categories than male and female.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Luxembourg's CDS data comply with this requirement.* *Age is calculated with respect to the date of admission to the hospital.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Inpatients are patients who are formally admitted and stay for a minimum of one night.* *It is not possible to differentiate according to intention.* *A patient admitted as inpatient but who does not remain overnight for some reason is recorded as a day case.* *A patient admitted with the intention of discharge on the the same day, but who stays overnight, is recorded as an inpatient.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*A day case is a patient who is formally admitted and discharged on the same day.* *The intention of discharging is not recorded.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Bed days correspond to inpatients. The difference between discharge date and admission date is used for all episodes.* *If an inpatient dies on date of admission or is transferred to another hospital on day of admission, then the patient is reported as a day case.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*External causes are not reported.*

16. Metadata for Netherlands

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** In-patient curative care Day cases curative care In-patient rehabilitative care Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. Psychiatric, maternity and geriatric patients should be included. Palliative care provided in hospitals should be included. **Exclude:** Outpatients and, Palliative care provided in special palliative care centres.	*In-Patients and Day Cases receiving curative and rehabilitative care in public hospitals, are included.* *In-Patients and Day Cases receiving curative and rehabilitative care in psychiatric, maternity and private hospitals are not included.* *Activity in Psychiatric hospitals accounts for 2.1% of activity to be included in the HDP Common Data Set. There is no information on the number of discharges from maternity and private hospitals.* *There are no specialist geriatric hospitals in the Netherlands.* *Outpatients are not included* *Palliative care provided in special palliative care centres are not included*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Data supplied by Netherlands to the HDP common data set is based on discharges from hospitals.*
Patients' place of residence	National level data only for the pilot exercise.	

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-9*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*ICD-9*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*1999-2005 is delivered*
Gender	Male Female	*Dutch Data complies with HDP definition.* *Gender codes in the Netherlands are* *1 Male* *2 Female* *9 Unknown*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Age is defined as date of admission minus date or birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Dutch Data complies with HDP definition.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Dutch Data complies with HDP definition.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Dutch Data complies with HDP definition.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Dutch Data complies with HDP definition.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*ICD-9* *We could provide the data group according to the categories.*

17. Metadata for Poland

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **<u>Include:</u>** In-patient curative care Day cases curative care In-patient rehabilitative care Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. Psychiatric, maternity and geriatric patients should be included. Palliative care provided in hospitals should be included. **<u>Exclude:</u>** Outpatients and, Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" Yes or No below* *Yes* *No - X* *Patients of psychiatric hospitals, psychiatric wards of general hospitals, military hospitals, hospitals of the Ministry of Internal Affairs and of the Ministry of Justice (prisons) are not included* *If, No, please specify differences and, if possible, the number of records involved.* *Number of discharged psychiatric patients was 250760 in 2005* *other numbers are not published*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Yes*
Patients' place of residence	National level data only for the pilot exercise.	*0.24%*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Poland uses ICD–10. Diagnoses have been grouped according to the CDS shortlist.* *For 2003-2005 the primary diagnosis is a main diagnosis stated at the first hospital department where a patient was treated. In 1999 data reflect the primary diagnosis recorded for the discharge.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*Calendar years 1999, 2003-2005*
Gender	Male Female	*Data comply with CDS requirement*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Data comply with CDS requirement with the exception of the last age group which is '85 and over' therefore there are 19 age groups* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Intention not used explicitly in definitions. Otherwise data comply with CDS requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*see above. Day case definition used: patient admitted and discharged on the same day due to completion of diagnostic or treatment procedure, directed for further ambulatory treatment, directed for further long term care*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with CDS requirement*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement*

General comment

The number of hospitalisations for Poland in 2003-2005 has been estimated on the basis of the results from 11 out of 16 regions. This procedure has also been used for the reporting hospitalisation data to the WHO, Eurostat and OECD. As for 1999 the results are based on the 10 percent random sample of all hospitalisations since at that time the sampling procedure was used for collecting detailed hospitalisation data in Poland.

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Data are not provided due to substantial number (more than 30%) of missing external causes*

18. Metadata for Portugal

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** In-patient curative care Day cases curative care In-patient rehabilitative care Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. Psychiatric, maternity and geriatric patients should be included. Palliative care provided in hospitals should be included. **Exclude:** Outpatients and, Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below ~~**Yes**~~ **No** √ If, **No**, please specify differences and, if possible, the number of records involved. *CDS data include inpatient and day care provided in all NHS public hospitals.* *Psychiatric, maternity and geriatric patients are included. Records for healthy babies are included.* *Data for private hospitals cannot be provided, but it is possible to estimate how many discharges.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Portugal collects records for each discharge, and there may be more than discharge for same person.* *CDS data on procedures are based on each record and there are 20 positions to put the procedure. The same record has more than one procedure .*
Patients' place of residence	National level data only for the pilot exercise.	*The estimated proportion is xx* *It is not possible to estimate proportion of residents of other countries treated in our hospitals.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-9-CM*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*ICD–9–CM. Diagnoses have been grouped according to the CDS shortlist. CDS data reflect the primary diagnosis recorded for the discharge episode in each hospital stay.*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*Yes, Portugal is providing data for the calendar year 1999*
Gender	Male Female	*Around 15 discharges each year are coded to 'unspecified' or 'unknown' gender. For CDS data the following transformation is carried out:* • *We don't put this discharge records.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Portugal CDS data comply with this requirement.* *The calculation of age is automatically. With the date of birth day and the date of day admission. There are only very few registries with age about 130 or 140 years we don't use this discharge records.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data don't comply with CDS requirement.*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Data don't comply with CDS requirement.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data don't comply with CDS requirement, because in the case where an in-patient dies on date of admission or is transferred to another hospital on day of admission, length of stay is 0. Also the inpatient who stay only one night has length of stay = 0.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*ICD–9–CM. We have registration not only for chapter on Injury and Poisoning. We have under reporting in this area and the date is not good. Meanwhile, diagnoses have been grouped according to the external cause shortlist.*

19. Metadata for Slovenia

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, Palliative care provided in special palliative care centres.	*Our CDS data **include** and **exclude** the following:* ***Include:*** • *In-patient curative care: **YES*** • *Day cases curative care: **YES (since 2001)*** • *In-patient rehabilitative care: **partly included - only if provided in hospitals (coded as Z50)**** *(*Rehabilitative care in specialised centres - Institute for Rehabilitation and in spas (registered in a separated registration system)- not included)* • *Day cases rehabilitative care: **NO - not included*** • *Psychiatric, maternity and geriatric patients: **YES*** • *Palliative care provided in hospitals : **YES*** ***Exclude:*** • *Outpatients: **YES- excluded*** *and,* *Palliative care provided in special palliative care centres: **YES – excluded*** ***Coverage:*** • *both inpatient and day care: **YES*** • *all hospitals in our country: **YES*** • *activity in any organisations other than hospitals: **NO*** • *records for healthy newborn babies: **YES – since 2003*** • *data for private hospitals are also included.*

A.II.3 Metadata Diagnosis

Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*The hospital discharge records are based on treatment episodes by wards/specialities.* *If the patient has been in several departments during his stay without leaving the hospital, all these episodes have been combined with special computer programme (in IPHRS) into one discharge record (by population identification number and admission date).* *The proportion of multi-episode in-patient cases (in 2005) is 5,5%.* *Day-cases: Some patients need day-care service in the hospital more than once - we use the special term for such sort of care: "long-continued day-care" – LCDC (since 2002) - and all day-care episodes of such treatment are counted as one case of "LCDC treatment"* *(The number of presence days for day case discharges is also recorded in the NHDDB.)* *The proportion of multi-episode day-cases among all day-cases (in 2005) is 11,2%.*
Patients' place of residence	National level data only for the pilot exercise.	*The proportion of residents of other countries treated in our hospitals is 0,5%.* *Since 2006 country code has been introduced for foreigners .*

IPHRS……..INSTITUT OF PUBLIC HEALTH OF THE REPUBLIC OF SLOVENIA

NHDDB……NATIONAL HOSPITAL DATA DATABASE

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Slovenia uses ICD–10. Diagnoses have been grouped according to the CDS shortlist.* *CDS data reflect the primary diagnosis recorded for the first episode in each hospital stay (in a small percentage of cases a different diagnosis will have been recorded in a discharge episode in the same spell—this information is lost in the CDS data)* *(It is defined as that which was responsible for the patient's teatment, or as that which best reflects the main reason for admission, or that which is the main reason for treatment. If there is a multiple-episode case the main diagnosis is taken from the first episode.)*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 1999-2005*
Gender	Male Female	*Only one discharge of the newborn baby (in 2003) was coded as 'unspecified' gender and is assigned 'male' (the rule: 50% male, 50% female).*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Slovenia's CDS data comply with this requirement.* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data comply with CDS requirement*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Data comply with CDS requirement. But we have one additional rule:* *Some patients need day-care service in the hospital more than once - we use the special term for such sort of care: "long-continued day-care" – LCDC (since 2002) - and all day-care episodes of such treatment are counted as one case of "LCDC treatment".* *(The number of presence days for day case discharges is also recorded in the NHDDB.)* *The proportion of multi-episode day-cases among all day-cases in 2005 is 11,2%.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data comply with CDS requirement : Total bed days calculated as discharge date minus admission date, summed for each group, inpatients only.* *(For in-patient care: length of stay 0 is counted as 1 day - according to the WHO definition.)*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data comply with CDS requirement*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Slovenia uses ICD–10. Diagnoses have been grouped according to the external cause shortlist.* *Records of admissions due to injuries or poisonings contain also External Cause code.* *For 2001 data: we have excluded 2 cases with external cause as primary diagnosis.*

20. Metadata for Spain

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** • In-patient curative care • Day cases curative care • In-patient rehabilitative care • Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. • Psychiatric, maternity and geriatric patients should be included. • Palliative care provided in hospitals should be included. **Exclude:** • Outpatients and, Palliative care provided in special palliative care centres.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* **Yes** **No** √ If, **No**, please specify differences and, if possible, the number of records involved *Long Term and Psychiatric hospitals not included* *Public or publicly financed hospitals mainly (75% of the total national discharges). Only 200.000 discharges in 2005 are from private acute hospitals)* o *In patients mainly; Day cases have been registered and included from 2004* *Records for healthy babies are excluded.*
Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* Yes
Patients' place of residence	National level data only for the pilot exercise.	*Only 0,43% of the patients (discharges) have got their residence in other countries*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-9-CM*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes** √ *ICD-9-MC*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*1999-2005*
Gender	Male Female	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below **Yes** √ (*) *(*) Unknowns and other than male and female have beenn randomly allocated (less than 3 out of a thousand cases in 2005)*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Have you been able to meet the requirements? Please "tick" Yes or No below* Yes √

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Have you been able to meet the requirements? Please "tick"* **Yes** or **No** below **Yes** √ (*) *Patients transferred o dead with 0 days of stay remain with 0 as bed days* *(less than 0,4% of the total discharges)*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Have you been able to meet the requirements? Please "tick"* **Yes** or **No** below **Yes** √ (*) *Data (partially covered) from 2004*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Have you been able to meet the requirements? Please "tick"* *Yes or No below* **Yes** √ *(*)* *Patients transferred o dead with 0 days of stay remain with 0 as bed days* *(less than 0,4% of the total discharges)*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Have you been able to meet the requirements? Please "tick"* **Yes** or **No** below **Yes** √

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Have you been able to meet the requirements? Please "tick"* ***Yes*** *or* ***No*** *below* ***NO*** ✓ *Since the external cause is not compulsory we do not provide data for that section as the percentage of coverage is*

21. Metadata for Scotland

Table 1: Coverage

	CDS definition	Diagnosis Data File
Coverage	CDS data should **include** and **exclude** the following: **Include:** In-patient curative care Day cases curative care In-patient rehabilitative care Day cases rehabilitative care; provided in all hospitals and, where applicable, other organisations. Psychiatric, maternity and geriatric patients should be included. Palliative care provided in hospitals should be included. **Exclude:** Outpatients and, Palliative care provided in special palliative care centres.	Have you been able to meet the requirements? Please "tick" **Yes** or **No** below ~~**Yes**~~ **No** √ If, **No**, please specify differences and, if possible, the number of records involved. *CDS data include non-geriatric inpatient and day care provided in all NHS boards.* *Hospital Discharges from non-obstetric and non-psychiatric hospitals are calculated using the Scottish Morbidity Records 01 (SMR01). Discharges from mental illness hospitals and psychiatric units are calculated from SMR04. Maternity discharge information is collected in SMR02 and Geriatric information is collected in the SMR50 dataset.* *Probability matching methods have been used to link together individual hospital records for each patient, thereby creating "linked" patient histories for SMR01 and SMR04. However, continuous stays are calculated independently for each data scheme. Therefore, patients that are transferred between general and psychiatric hospitals within the same spell of treatment will generate a continuous stay record in each data scheme. Therefore, combining the two datasets will result in an element of double counting.* *Maternity records are not linked to any of the other datasets and so generating a continuous inpatient stays between the datasets is not possible. Combining the datasets will result in an element of double counting (see above).* *Information in Geriatric specialties cannot be provided spell based as there are no linkage in individual records.* *Only NHS inpatient and day case information is provided. There are cases where NHS treatment occurs in private hospitals.*

A.II.3 Metadata Diagnosis

Nature of individual record on which Raw Aggregate Data is based	The CDS is based on hospital discharge records including deaths in hospital.	*A Continuous Inpatient Stay (Spell) - Probability matching methods have been used to link together individual acute hospitals episodes for each patient, thereby creating "linked" patient histories.* *Within these patient histories, episodes are grouped according to whether they form part of a continuous spell of treatment (whether or not this involves transfer between hospitals, Health Boards or even specialties).*
Patients' place of residence	National level data only for the pilot exercise.	*The estimated proportion is 0.81% that reside outside of Scotland.*

A.II.3 Metadata Diagnosis

Table 2: Compliance with Data Item Definitions

Data Item	Definition	Diagnoses Data File
Classification System used		*ICD-10*
Primary Diagnosis/Main Diagnosis.	The primary diagnosis recorded should be the 'main condition', as defined in ICD–10, Vol 2, p 96. There should be one primary diagnosis per hospital discharge. Countries should group primary diagnosis data according to the diagnosis shortlist at Section A.	*Scotland uses ICD-10. Diagnosis have been grouped according to the CDS shortlist.* *CDS data reflect the primary diagnosis recorded for the discharge episode in each hospital stay (any different diagnosis recorded in an earlier episode in the same spell will be lost in the CDS data).*
Years for which data is provided	The data set requests that data for the calendar years 1999-2005 is provided	*calendar years 1999-2005*
Gender	Male Female	*Data complies with CDS requirement.* 1. *Male* 2. *Female* *Around 22 acute hospital discharges are coded to 'unspecified' or 'unknown' over the years 1999-2005. This is approximately 0.0003% of all acute hospital discharges.*
Age group	<1, 1-4, 5-9,10-14,15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95 and over.	*Data complies with CDS requirement.* *Age is derived from the date of admission and date of birth.*

A.II.3 Metadata Diagnosis

Data Item	Definition	Diagnoses Data File
Total inpatient discharges and deaths in hospital. (exclude day cases)	An inpatient is a patient who is formally admitted and stays for a minimum of one night. Patients admitted as inpatients but who do not remain overnight for some reason (e.g. death or transfer to another hospital on day of admission) should be recorded as inpatients (and be given a length of stay of 1 day). Patients admitted with the intention of discharge on the same day, but who subsequently stay in hospital over night, should also be recorded as inpatients.	*Data complies with CDS requirement.* *A Continuous Inpatient Stay (Spell) - Probability matching methods have been used to link together individual acute hospitals episodes for each patient, thereby creating "linked" patient histories.* *Within these patient histories, episodes are grouped according to whether they form part of a continuous spell of treatment (whether or not this involves transfer between hospitals, Health Boards or even specialties).*
Total day case discharges	A day case is a patient who is formally admitted with the intention of discharging the patient on the same day, and where the patient is in fact discharged on the same day	*Data complies with CDS requirement.*
Total bed days	Only in-patients contribute to bed days. Total bed days is Calculated as sum of (discharge date minus admission date) days for all deaths and discharges. Where an in-patient dies on date of admission or is transferred to another hospital on day of admission, then they should be assigned a length of stay of 1 day.	*Data complies with CDS requirement.*
Mean length of stay	Calculated as total bed days divided by total number of inpatients in each group. The calculation is based on both deaths and discharges.	*Data complies with CDS requirement.*

Data Item	Definition	Diagnoses Data File
External Cause	Counts are only based on those cases which fall into the ICD chapter on Injury and Poisoning (ICD-10 codes S00 to T98 or ICD-9 codes 800 to 999). Countries should group external cause data according to the external cause shortlist at Section A.	*Scotland uses ICD-10. Diagnosis have been grouped according to the external cause shortlist.*

A.II.4 Healthy newborn babies

d. Newborn per country

A.II.4 Healthy newborn babies

1. Belgium

Name of Country Completing the Table: BELGIUM

(please type in the name of your country in the space provided above)

Name of respondent: **Francis Loosen**

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*See website FPS Health below page 5-7.*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes, newborn babies have a principal diagnosis V30-V39. Babies with disease have a secondary diagnosis.*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*They are included in V30-V39 category (all newborns) but our approach consist in identifying them (healthy newborns) with a specific APR-DRG 640 or a combination of APR-DRG 626 and a Severity of Illness 1 index.*
	If so, with which code (ICD or other) are they registered?	*APR-DRG 640 or a combination of APR-DRG 626 and a Severity of Illness 1 index.*
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	
	Can you separate them by gender?	*Yes*
	Do you have information on hospital beddays for them?	*Yes*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*See annex 1*

See website Federal Public Service Health: Résumé Clinique Minimum –
Manuel de codification pour l'enregistrement des nouveau-nés.
https://portal.health.fgov.be/pls/portal/docs/PAGE/INTERNET_PG/HOMEPAGE_MENU/GEZONDHEID-ZORG1_MENU/ZORGINSTELLINGEN1_MENU/REGISTRATIESYSTEMEN1_MENU/MKGMINIMALEKLINISCHEGEGEVENS1_MENU/RICHTLIJNEN1_HIDE/RICHTLIJNEN1_DOCS/NEONATI%202000%20FR.PDF

A.II. 4 Healthy newborn babies

Newborns (healthy : 1; non healthy : 0)

	YEAR							
	2000		2001		2002		2003	
	length of stay	length of stay	length of stay	length of stay	length of stay	length of stay	length of stay	length of stay
healthy	N	Sum	N	Sum	N	Sum	N	Sum
0	11849	126774	14940	181900	15646	185005	15475	183285
1	87558	441574	98656	490732	95961	470833	97224	467189
total	99407	568348	113596	672632	111607	655838	112699	650474

N : number of stays
Sum : number of hospital days

0 : non healthy newborn
1 : healthy newborn

	2004		2005		2006	
	length of stay	length of stay	length of stay	length of stay	length of stay	length of stay
healthy	N	Sum	N	Sum	N	Sum
0	15367	175764	14944	175659	15626	179415
1	100755	473924	103254	479555	105415	479415
total	116122	649688	118198	655214	121041	658830

A.II.4 Healthy newborn babies

2. Cyprus

Name of Country Completing the Table: Cyprus

(please type in the name of your country in the space provided above)

Name of respondent: **Maria Athanasiadou…email: MAthanasiadou@moh.gov.cy**

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*During the registration we collect data both for newborn babies (weight, APGAR score, gestational age, etc) and for their mothers (age, education, episiotomy, etc)*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*YES*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*NO*
	If so, with which code (ICD or other) are they registered?	–
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*YES from birth register from which we collect a lots of information regarding pregnancy outcomes from all Public Hospital Maternity Units in Cyprus.*
	Can you separate them by gender?	*YES*
	Do you have information on hospital beddays for them?	*YES only for healthy newborn babies.*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*Unfortunately, we do not have any data for the period 1999-2006, since the first systematic and comprehensive data collection occurred in 2007.*

3. Czech Republic

Name of Country Completing the Table: Czech Republic

(please type in the name of your country in the space provided above)

Name of respondent: **Jakub Hrkal**

Request
Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*All newborns are treated as patients and separate hospitalization records are kept for them.*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes*
	If so, with which code (ICD or other) are they registered?	*Code of dg. Z38 (about 81 ths. hospitalized persons in 2005);* *There is also data on hospitalized persons classified as "newborns in hospitals" based on special nomenclature included in hospitalization record (about 96 ths. cases in 2005).* *In total, there were about 102 ths. persons born in the Czech Republic in 2005.*
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	-
	Can you separate them by gender?	*Yes*
	Do you have information on hospital beddays for them?	*Yes*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*Data for dg. Z38 already provided*

4. Finland

Name of Country Completing the Table: Finland

(please type in the name of your country in the space provided above)

Name of respondent: **Mika Gissler, STAKES**

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*Civil registration directly from birth hospital to Central Population Register.* *Additionally, STAKES collects information on all newborns (incl. those born outside hospitals) to its Medical Birth Register*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*All newborns with a diagnosis (Chapter P, Q or other relevant in ICD-10) or a procedure (Nordic Classification of Surgical Procedures)*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*No*
	If so, with which code (ICD or other) are they registered?	-
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*Medical Birth Register*
	Can you separate them by gender?	*Yes*
	Do you have information on hospital beddays for them?	*Yes*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*See tables attached.* *Healthy newborns are those livebirths who are born vaginally (sections excluded) and either received no ICD 10 codes or ICD 10 codes Z00.1 (routine healthy check-up of a child), or Z38.0, Z38.3 or Z38.6 (child born in hospital).* *Bed days* *Total Boys Girls* *1999125 82362 748 63 075* *2000121 37561 39059 985* *2001119 10159 77159 330* *2002115 99458 16057 835* *2003117 92558 47159 455* *2004116 42158 54857 873* *2005115 78457 55658 228* *Total832 423416 644 415 780*

A.II. 4 Healthy newborn babies

Healthy newborns (liveborns only)

		Vaginally born				Healthy newborns		
	Section	Z38/Z00.1	No dg	Any dg	Total	Total	Boys	Girls
1999	9 504	29 935	8 871	9 135	57 445	38 806	19 270	19 536
2000	9 356	31 404	6 852	8 929	56 541	38 256	19 191	19 065
2001	9 623	31 062	7 082	8 019	55 786	38 144	19 025	19 119
2002	9 511	33 293	4 426	8 103	55 333	37 719	18 803	18 916
2003	9 533	32 407	6 109	8 400	56 449	38 516	19 042	19 474
2004	9 855	34 024	4 720	8 970	57 569	38 744	19 335	19 409
2005	9 817	34 284	4 517	9 018	57 636	38 801	19 130	19 671
Total	67 199	226 409	42 577	60 574	396 759	268 986	133 796	135 190

%

		Z38/Z00.1	No dg	Any dg	Total	
1999	16,5 %	52,1 %	15,4 %	15,9 %	100,0 %	67,6 %
2000	16,5 %	55,5 %	12,1 %	15,8 %	100,0 %	67,7 %
2001	17,2 %	55,7 %	12,7 %	14,4 %	100,0 %	68,4 %
2002	17,2 %	60,2 %	8,0 %	14,6 %	100,0 %	68,2 %
2003	16,9 %	57,4 %	10,8 %	14,9 %	100,0 %	68,2 %
2004	17,1 %	59,1 %	8,2 %	15,6 %	100,0 %	67,3 %
2005	17,0 %	59,5 %	7,8 %	15,6 %	100,0 %	67,3 %
Total	16,9 %	57,1 %	10,7 %	15,3 %	100,0 %	67,8 %

	Bed days			Bed days per healthy newborn		
	Total	Boys	Girls	Total	Boys	Girls
1999	125 823	62 748	63 075	3,2	3,3	3,2
2000	121 375	61 390	59 985	3,2	3,2	3,1
2001	119 101	59 771	59 330	3,1	3,1	3,1
2002	115 994	58 160	57 835	3,1	3,1	3,1
2003	117 925	58 471	59 455	3,1	3,1	3,1
2004	116 421	58 548	57 873	3,0	3,0	3,0
2005	115 784	57 556	58 228	3,0	3,0	3,0
Total	832 423	416 644	415 780	3,1	3,1	3,1

5. France

Name of Country Completing the Table: FRANCE

(please type in the name of your country in the space provided above)

Name of respondent: **Philippe Oberlin and Marie-Claude Mouquet**……..

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*Every newborn baby is registered with ICD 10 coding system*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes*
	If so, with which code (ICD or other) are they registered?	*Z 38. Some babies with minor pathologies could stay with their mother, out of any pediatric department or ward. They are usually coded with P codes*
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	
	Can you separate them by gender?	*Yes*
	Do you have information on hospital beddays for them?	*Yes*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn healthy babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*Data are calculated for babies with Z38 primary diagnosis and for France with overseas territories.* *Number of healthy newborn babies (Z38)* — *Bed days* *1999 = 646 831 — 3 320 834* *2000 = 679 744 — 3 402 818* *2001 = 650 067 — 3 268 903* *2002 = 657 468 — 3 196 120* *2003 = 648 833 — 3 085 708* *2004 = 646 265 — 3 017 949* *2005 = 638 926 — 2 923 422* *2006 = 648 114 — 2 879 326*

6. Germany

Name of Country Completing the Table: Germany

(please type in the name of your country in the space provided above)

Name of respondent: **Federal Statistical Office, Division VIIII A - Health**

Request

Member states are asked to answer the following questions:

Newborn babies	
Please, describe in general the registration of newborn babies, born in hospital, in your country.	*Healthy newborn babies and also newborn babies with a health problem are regarded as patients of their own and registered and counted as patients*
Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes*
If so, with which code (ICD or other) are they registered?	*Z38*
If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*--*
Can you separate them by gender?	*Yes*
Do you have information on hospital beddays for them?	*Yes*
Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*We have the data only since 2004* *(number of Z38 : please note the attached table)*

A.II.4 Healthy newborn babies

Inpatients of the hospitals
(including deaths and hour cases)
2004-2006
Z38 Liveborn infants according to place of birth

year	total			male			female		
	number	length of stay	occupancy and billing days	number	length of stay	occupancy and billing days	number	length of stay	occupancy and billing days
2004	444 306	4,1	1.821.134	224 329	4,1	927.021	219 973	4,1	894.113
2005	495 683	4,0	1.995.020	249 831	4,1	1.015.279	245 831	4,0	979.650
2006	480.848	3,9	1.871.452	242 437	3,9	954 509	238.358	3,8	916737

Scource: Federal Office of Statistics (Destatis), Statistic of hospital diagnosises.

7. Greece

Name of Country Completing the Table: GREECE

(please type in the name of your country in the space provided above)

Name of respondent: **PROF. ARIS SISOURAS, PROF. L. LIAROPOULOS, DR. OLGA SISKOU, DAPNHE KAITELIDOU LECTURER**……..

Request
Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*All babies born in hospitals are recorded at the nearest (to the hospital) registry office, regardless of the place of residence of the parents.*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*YES*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*NO*
	If so, with which code (ICD or other) are they registered?	–
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*YES (Registry Office)*
	Can you separate them by gender?	*YES*
	Do you have information on hospital beddays for them?	*NO*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*Data concerns all live newborn babies in Greece. Data is derived from the Registry Offices*

	Total	***Boys***	***Girls***
1999	*100,643*	*51,884*	*48,759*
2000	*103,274*	*53,149*	*50,125*
2001	*102,282*	*53,231*	*49,051*
2002	*103,569*	*53,142*	*50,427*
2003	*103,410*	*53,194*	*50,216*
2004	*105,655*	*54,605*	*51,050*
2005	*107,545*	*55,539*	*52,006*

Source: National Statistical Service of Greece.

8. Hungary

Name of Country Completing the Table: Hungary

(please type in the name of your country in the space provided above)

Name of respondent: **National Institute for Strategic Health Research (ESKI)**

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*Newborn babies are registered in hospital registries at the time of birth like other hospital cases, with the difference that their birth weight is also recorded.*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes*
	If so, with which code (ICD or other) are they registered?	*At their first hospital care all newborn babies – whether they are born healthy or ill – receive a primary diagnosis "P964 - termination of pregnancy, foetus and newborn", and a supplementary diagnosis "Z38 - live-born infants". If the newborn baby's weight is under 2500 gram or the supplementary diagnosis "P07 - short gestation and low birth weight" is also among the diagnoses of the newborn baby, then it is reported not with the ISHMT code "2103 - healthy newborn babies", but with the ISHMT code "1601 - short gestation and low birth weight". If there have been other perinatal abnormalities coded for the newborn baby, then also it is reported not with the ISHMT code "2103 - healthy newborn babies", but with the ISHMT code "1602 - other conditions originating in the perinatal period".*
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*They are included.*
	Can you separate them by gender?	*Yes*
	Do you have information on hospital beddays for them?	*Yes*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*Figures for the years 2004-2006 are included in the report. In Hungary about 95% of newborn babies are born in hospitals. Among those born in hospitals, 75% are healthy newborn babies, 10% have short gestation and low birth weight, and 15% have other conditions originating in the perinatal period.*

9. Ireland

Name of Country Completing the Table: Ireland

(please type in the name of your country in the space provided above)

Name of respondent: …**Gráinne Cosgrove**……..

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*All births (births in public hospitals, private hospitals and home births) are registered and recorded using a Birth Notification Form. A copy of this form is sent to the National Perinatal Reporting System (NPRS) Unit in the Economic and Social Research Institute (ESRI). The forms are then coded, and included in the NPRS dataset. This dataset contains demographic, clinical and administrative data for both the mother and the baby. For more information on NPRS data see http://www.esri.ie/health_information/nprs/*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes, if the birth occurs in a public hospital or if a newborn is admitted to a public hospital. HIPE data does not include private hospitals.*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*No*
	If so, with which code (ICD or other) are they registered?	
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*It may be possible to provide an estimate by looking at both NPRS and HIPE data. However this has not been done before and would need further investigation.*
	Can you separate them by gender?	*Possibly*
	Do you have information on hospital beddays for them?	*Possibly*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*This is not possible at the moment.*

10. Italy

Name of Country Completing the Table: Italy

(please type in the name of your country in the space provided above)

Name of respondent: **Carla Ceccolini**

Request

Member states are asked to answer the following questions:

<table>
<tr><td></td><td>Newborn babies</td><td></td></tr>
<tr><td></td><td>Please, describe in general the registration of newborn babies, born in hospital, in your country.</td><td>All newborn babies, born in hospital, are registered as discharges when they leave the hospital.</td></tr>
<tr><td></td><td>Are all newborn babies with a (disease) diagnosis registered as patients of their own?</td><td>All newborn babies with any disease are of course registered as discharges when they leave the hospital.</td></tr>
<tr><td></td><td>Are healthy newborn babies included in your national patient discharge statistics?</td><td>Healthy newborn babies are included in our national statistics about hospital discharges.</td></tr>
<tr><td></td><td>If so, with which code (ICD or other) are they registered?</td><td>Healthy newborn babies are identified by DRG “391”.
The DRG”391” NORMAL NEWBORN is assigned to discharges having particular principal diagnoses or only secondary diagnoses (The fourteen version DRG’s).</td></tr>
<tr><td></td><td>If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?</td><td></td></tr>
<tr><td></td><td>Can you separate them by gender?</td><td>It is possible to split healthy newborn babies by gender.</td></tr>
<tr><td></td><td>Do you have information on hospital beddays for them?</td><td>It is possible to have information on hospital beddays for healthy newborn babies (the date of birth is taken as date of admission).</td></tr>
<tr><td></td><td>Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn healthy babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).</td><td>
<table>
<tr><td rowspan="2">Year</td><td colspan="2">Healty newborn babies (DRG 391)</td><td colspan="2">Beddays</td></tr>
<tr><td>male</td><td>female</td><td>male</td><td>female</td></tr>
<tr><td>2001</td><td>178.351</td><td>175.858</td><td>653.448</td><td>638.962</td></tr>
<tr><td>2002</td><td>185.941</td><td>183.972</td><td>649.496</td><td>636.668</td></tr>
<tr><td>2003</td><td>190.807</td><td>187.652</td><td>651.667</td><td>637.084</td></tr>
<tr><td>2004</td><td>199.864</td><td>197.391</td><td>671.650</td><td>659.004</td></tr>
</table>
Please note that healthy newborn babies, with assigned DRG 391, may have a principal diagnosis included in the ISHMT Diagnosis codes. So they might be included in the first data collection HDP2 (look at the file attached DRG_391_vers14.pdf)
</td></tr>
</table>

11. Latvia

Name of Country Completing the Table: LATVIA

(please type in the name of your country in the space provided above)

Name of respondent: **Rita Pedane, Health Statistics and Medical Technologies State agency, Latvia**

Request

Member states are asked to answer the following questions:

Newborn babies	
Please, describe in general the registration of newborn babies, born in hospital, in your country.	*Primary document in hospital: Newborn history of development.* *Data from above mentioned document form Card of Newborn (see attachment Card of newborn.doc). Information included in the Card of Newborn form Data Base – Register of Newborns*
Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
Are *healthy* newborn babies included in your national patient discharge statistics?	*No*
If so, with which code (ICD or other) are they registered?	-
If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*Yes, from Register of Newborns*
Can you separate them by gender?	*Yes*
Do you have information on hospital beddays for them?	*No.*
Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*See attachment Healthy newborns 1999-2005.exc*

A.II.4 Healthy newborn babies

Healthy newborns

Sex	Year						
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
male	6708	6764	6325	6571	7116	6804	7448
female	6678	6949	6598	6808	7097	6947	7581
Total	13386	13713	12923	13379	14213	13751	15029

12. Lithuania

Name of Country Completing the Table: LITHUANIA

(please type in the name of your country in the space provided above)

Name of respondent: …**Rita Gaidelyte**……..

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*If the newborn baby is sick he become a hospital patient with separate inpatient record and discharge card. If the baby is healthy only special newborn record is filled inn and kept in the mother's inpatient record (no separate inpatient record and discharge card for).*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*NO (some discharge cards with Z00 or Z38 codes for newborn exist)*
	If so, with which code (ICD or other) are they registered?	
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*We can estimate the number of healthy newborn: all newborn (we have total number of babies born in hospitals) minus newborns with disease. Medical birth register is be used for this estimation as well.*
	Can you separate them by gender?	*Yes*
	Do you have information on hospital beddays for them?	*No*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*See table bellow. Data available from 2001, data for beddays is not available*

A.II.4 Healthy newborn babies

Newborns in Lithuanian hospitals 2001-2005

	Total number of new-borns*	by sex			Sick new-borns**	by sex		Healthy new-borns	by sex	
		Male	Female	Un-known		Male	Female		Male	Female
2001	31045	15902	15141	2	10598	5715	4883	20447	10187	10258
2002	29420	15205	14212	3	9656	5284	4372	19764	9921	9840
2003	29770	15429	14340	1	10107	5612	4495	19663	9817	9845
2004	29479	14997	14476	6	11071	5999	5072	18408	8998	9404
2005	29127	14911	14213	3	11196	6070	5126	17931	8841	9087

* - Medical birth register (data of obstetrics departments)
** - Compulsory Health Insurance Fund Information System

13. Netherlands

Name of Country Completing the Table: Netherlands

(please type in the name of your country in the space provided above)

Name of respondent: **Willem Hoogen Stoevenbeld and Mark Boll**

Request

Member states are asked to answer the following questions:

Newborn babies Please, describe in general the registration of newborn babies, born in hospital, in your country.	*There does not exist a nation wide registration that registrates detailled perinatal data of all newborn babies in the Netherlands. The Netherlands Perinatal Registry (PRN-foundation) does facilitate voluntary based medical registries: the LVR1-registry (midwives), the LVRh-registry (GP's), the LVR2-registry (obstetricians) and the LNR-registry (paediatricians/ neonatologists). The LVR1, LVR2 and LNR registries are linked to one combined PRN-registry.* *In the hospitals data registry only newborn babies with a diagnosis are registrated.*
Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
Are *healthy* newborn babies included in your national patient discharge statistics?	*No, because they are not recorded seperatly in the hospital data registration.*
If so, with which code (ICD or other) are they registered?	
If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*Yes, from the combined PRN-registry*
Can you separate them by gender?	*Yes*
Do you have information on hospital beddays for them?	*No, because healthy newborn babies are not recorded seperatly in the hospital data registration (LMR).*
Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	

14. Poland

Name of Country Completing the Table: POLAND

(please type in the name of your country in the space provided above)

Name of respondent: **Bogdan Wojtyniak..**

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	All hospital newborn babies are included in the hospital registration book.
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	Yes
	Are *healthy* newborn babies included in your national patient discharge statistics?	Yes
	If so, with which code (ICD or other) are they registered?	Z38
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	
	Can you separate them by gender?	Yes
	Do you have information on hospital beddays for them?	Yes
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	**Males** / **Females** **Year** / **Number** / **Beddays** / **Number** / **Beddays** 1999 / 132700 / 631310 / 132240 / 611870 2003 / 96771 / 425404 / 95924 / 450932 2004 / 96744 / 389002 / 95841 / 371264 2005 / 103908 / 431778 / 104050 / 477488 2006 / 118667 / 466574 / 118433 / 440219 **Year** / **Estimated missing data** 1999 / 13% 2003 / 15% 2004 / 12% 2005 / 10% 2006 / 7%

15. Portugal

Name of Country Completing the Table: Portugal

(please type in the name of your country in the space provided above)

Name of respondent: **José Giria**……..

Request

Member states are asked to answer the following questions:

Newborn babies	
Please, describe in general the registration of newborn babies, born in hospital, in your country.	*There are one record for each newborn.*
Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes*
If so, with which code (ICD or other) are they registered?	*ICD 9 CM V30 – V39*
If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*Yes*
Can you separate them by gender?	*Yes*
Do you have information on hospital beddays for them?	*Yes*
Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*1999 1 – 52207 2 - 50257* *2000 1 – 52733 2 - 49973* *2001 1 – 49165 2 - 46539* *2002 1 – 50652 2 - 48305* *2003 1 – 49487 2 - 46863* *2004 1 - 46841 2- 44709* *2005 1 – 45896 2- 43345*

16. Slovenia

Name of Country Completing the Table: Slovenia

(please type in the name of your country in the space provided above)

Name of respondents: …**Nevenka Kelšin, Barbara Mihevc-Ponikvar**….

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*All newborn babies, born in hospital, are registered twice: by Perinatal Information System and by Hospital Statistics Information System.*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes. All newborn babies without any or with a (disease) diagnosis are registered as persons who are admitted to hospital.*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes. Since 2003 we registered separately all newborns, also healthy ones.*
	If so, with which code (ICD or other) are they registered?	*The code is not defined; they might have a diagnosis other than Z38 also if they are not moved and/or treated in another ward .*
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*Untill they were not included we could get the data from perinatal information system (since 1983).* *But we can not estimate the number of healthy ones because of no methodological guidelines.*
	Can you separate them by gender?	*Yes.*
	Do you have information on hospital beddays for them?	*Yes. Since 2003 we have all Hospital Data Set informations.*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*We can give the number* - *of newborn babies, which were not moved and/or treated in another ward (other than neonatal) – e.g. with one episode of treatment, or* - *of newborn babies without any (disease) diagnosis,* *with their beddays since 2003.* *It would be necessary to decide what diagnoses were allowed!*

Table 1: The number of healthy newborn babies by gender and with their beddays, Slovenia, 2003 to 2006

A/ The number of the newborn babies, which were not moved and/or treated in another ward (other than neonatal) or hospital, and their beddays

B/ The number of the newborn babies without any (disease) diagnosis, and their beddays (with principal diagnosis Z30-Z39)

A.II. 4 Healthy newborn babies

Healthy newborn babies

A/ The number of the newborn babies, which were not moved and/or treated in another ward (other than neonatal) or hospital

B/ The number of the newborn babies without any (disease) diagnosis

The newborn babies, Slovenia, 2003-2006

By outcome	All				1 male				2 female				3	
outcome	**2003**	**2004**	**2005**	**2006**	**2003**	**2004**	**2005**	**2006**	**2003**	**2004**	**2005**	**2006**	**2003**	
1 home	**14349**	**11395**	**10902**	**11563**	**7236**	**5664**	**5603**	**5854**	**7112**	**5731**	**5299**	**5709**	**1**	**A**
2 to another hospital	63	81	119	92	40	47	72	54	23	34	47	38		
3 to another ward	1400	3442	6294	6576	803	1735	3282	3485	597	1707	3012	3091		
4 to rehabi-litation	1	4	1	4	1	3	1	2		1		2		
8 death				27				16				11		
9 other	21	23	40	1	12	9	18		9	14	22	1		
Total	**15834**	**14945**	**17356**	**18263**	**8092**	**7458**	**8976**	**9411**	**7741**	**7487**	**8380**	**8852**	**1**	
By principal diagnosis														
Z30Z39	**11974**	**12065**	**12193**	**12576**	**6066**	**5995**	**6178**	**6322**	**5907**	**6070**	**6015**	**6254**	**1**	**B**

The beddays of the newborn babies, Slovenia, 2003-2006

By outcome	All				1 male				2 female				3	
outcome	**2003**	**2004**	**2005**	**2006**	**2003**	**2004**	**2005**	**2006**	**2003**	**2004**	**2005**	**2006**	**2003**	
1 home	**67288**	**51928**	**57099**	**58733**	**34958**	**27054**	**30428**	**30355**	**32326**	**24874**	**26671**	**28378**	**4**	**A**
ALOS	**4,7**	**4,6**	**5,2**	**5,1**	**4,8**	**4,8**	**5,4**	**5,2**	**4,5**	**4,3**	**5,0**	**5,0**	**4,0**	
2 to another hospital	302	280	449	507	197	160	276	263	105	120	173	244		
3 to another ward	5300	4797	9256	9919	2941	2442	4955	5418	2359	2355	4301	4501		
4 to rehabi-litation	6	9	1	4	6	8	1	2		1	0	2		
8 death	0	0	0	273		0	0	238		0	0	35		
9 other	64	56	379	1	24	19	190	0	40	37	189	1		
Total	**72964,7**	**57074,6**	**67189,2**	**69447,2**	**38130,8**	**29687,8**	**35855,4**	**36281,2**	**34834,5**	**27391,3**	**31339**	**33166**	**8**	
ALOS	**4,6**	3,8	**3,9**	**3,8**	**4,7**	4,0	**4,0**	**3,9**	**4,5**	**3,7**	**3,7**	**3,7**	**4**	
By principal diagnosis														
Z30Z39	**51409**	**42899**	**38708**	**39384**	**26569**	**22231**	**20207**	**19852**	**24836**	**20668**	**18501**	**19532**	**4**	**B**
ALOS	4,3	3,6	3,2	3,1	4,4	3,7	3,3	3,1	4,2	3,4	3,1	3,1	4,0	

Source: NIPH - Hospital database - episodes of newborn babies, aggregated by diagnosis

A.II.4 Healthy newborn babies

17. Spain

Name of Country Completing the Table: SPAIN

(please type in the name of your country in the space provided above)

Name of respondent: **Maria Angeles Gogorcena**

Request

Member states are asked to answer the following questions:

	Newborn babies	
	Please, describe in general the registration of newborn babies, born in hospital, in your country.	*They are registered as newborn in Civil registries Source of data for Natality rates and other related statistics*
	Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Apart from specific local practices, as national rule, only newborn babies with a disease or complication are registered as patient and as consequence counted as discharge*
	Are *healthy* newborn babies included in your national patient discharge statistics?	*Not*
	If so, with which code (ICD or other) are they registered?	
	If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	*Yes but we could have difficulties in matching those data (civil registries) with the correspondent hospitals. Possible as big estimates.ç* *Alternatively from secondary mother's diagnosis*
	Can you separate them by gender?	*no*
	Do you have information on hospital beddays for them?	*No / yes if we consider average LOS of deliveries*
	Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	*I tried to make an approximation from the total number of deliveries through the proportion of the outcomes of delivery (v27). This way was successful way to do it as the percentage of deliveries with v27 recorded was very high (>85%).* *According to these criteria, from the total number of deliveries we calculated the total number of healthy newborn babies (see table)* *Year* / *Number of healthy new borns* / *beddays* *1999* 215.035 878.016 *2000* 225.747 898.817 *2001* 234.506 912.626 *2002* 243.157 924.428 *2003* 260.128 959.828 *2004* 273.757 980.608 *2005* 295.911 1.051.055 *2006* 310.945 1.077.512

18. England

Name of Country Completing the Table: NHS England

(please type in the name of your country in the space provided above)

Name of respondent: …**Kathryn Knight**…..

Request

Member states are asked to answer the following questions:

Newborn babies	
Please, describe in general the registration of newborn babies, born in hospital, in your country.	*Office for National Statistics are the official source of this data*
Are all newborn babies with a (disease) diagnosis registered as patients of their own?	*Yes*
Are *healthy* newborn babies included in your national patient discharge statistics?	*Yes*
If so, with which code (ICD or other) are they registered?	*See below for ICD-10/ treatment function code and criteria for well baby flag- all can be used to identify healthy new born babies.*
If healthy newborn babies are not included in your national patient discharge statistics, can you estimate their numbers from other sources?	
Can you separate them by gender?	*Yes*
Do you have information on hospital beddays for them?	*Yes*
Please, give the estimated number of healthy newborn babies (by gender and with their beddays, if possible) for each of the year 1999 to 2005. Note that we try to get at newborn *healthy* babies who are not already included in the HDP2 data set (which they might be if they had a diagnosis or were treated in a paediatric ward).	

Well babies should all have the Treatment Function Code 424 'Well Babies' and if this code is used properly those babies should also meet the following conditions:

Primary Diagnosis Z38* (Liveborn infant - singleton, twin or multiple)
Admission Method 82 or 83 (Baby born in or on way to hospital)
Episode 1
Neonatal Level Of Care 0 (Normal)
Discharge Method Not 4 (Died)

A.II.4 Healthy newborn babies

Count of Hospital Admission Episodes and Associated Bed Days Within the Year for 'Z38 Live-born infants according to place of birth' by Gender NHS Hospitals England and activity performed in the Independent sector in England commissioned by English NHS.

		Female	Male	Unknown Gender or Not Specified	Total
2006-07	Total Episodes	224.255	224.293	4.262	452.810
	Bed days	332.725	341.960	5.982	680.667
2005-06	Total Episodes	217.460	216.237	77	433.774
	Bed days	350.667	356.161	116	706.944
2004-05	Total Episodes	212.622	213.716	75	426.413
	Bed days	354.399	363.214	147	717.760
2003-04	Total Episodes	204.607	204.936	34	409.577
	Bed days	442.565	461.983	411	904.959
2002-03	Total Episodes	195.037	196.518	57	391.612
	Bed days	434.268	457.504	103	891.875
2001-02	Total Episodes	187.297	187.069	935	375.301
	Bed days	433.287	453.885	2.254	889.426
2000-01	Total Episodes	178.383	177.660	272	356.315
	Bed days	405.536	414.150	556	820.242
1999-00	Total Episodes	184.123	183.411	81	367.615
	Bed days	386.231	390.941	159	777.331

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Finished admission episodes

A finished admission episode is the first period of inpatient care under one consultant within one healthcare provider. Finished admission episodes are counted against the year in which the admission episode finishes. Please note that admissions do not represent the number of inpatients, as a person may have more than one admission within the year.

Primary diagnosis

The primary diagnosis is the first of up to 20 (14 from 2002-03 to 2006-07 and 7 prior to 2002-03) diagnosis fields in the Hospital Episode Statistics (HES) data set and provides the main reason why the patient was in hospital.

Assessing growth through time

HES figures are available from 1989-90 onwards. During the years that these records have been collected by the NHS there have been ongoing improvements in quality and coverage. These improvements in information submitted by the NHS have been particularly marked in the earlier years and need to be borne in mind when analysing time series.

Some of the increase in figures for later years (particularly 2006-07 onwards) may be due to the improvement in the coverage of independent sector activity.

A.II. 4 Healthy newborn babies

Changes in NHS practice also need to be borne in mind when analysing time series. For example, a number of procedures may now be undertaken in outpatient settings and may no longer be accounted for in the HES data. This may account for any reductions in activity over time.

Data Quality
Hospital Episode Statistics (HES) are compiled from data sent by more than 300 NHS trusts and primary care trusts (PCTs) in England. Data is also received from a number of independent sector organisations for activity commissioned by the English NHS. The NHS Information Centre for health and social care liaises closely with these organisations to encourage submission of complete and valid data and seeks to minimise inaccuracies and the effect of missing and invalid data via HES processes. While this brings about improvement over time, some shortcomings remain.

Bed days (duration of episode)
Length of stay (LOS) is calculated as the difference in days between the episode start date and the episode end date, where both are given. LOS is based on hospital spells and only applies to ordinary admissions, ie day cases are excluded (unless otherwise stated).

A.II.4 Healthy newborn babies

e. Newborn per topic

Country	Registration	Newborn with a disease	Healthy new born included in discharge statistics	If so Code	Estimation	Separate by gender	Beddays	No. babies +days
Belgium	See website	Yes	Yes	Given		Yes	Yes	Given
Cyprus	During the registration we collect data both for newborn babies and for their mothers	Yes	No	-	Yes, birth register	Yes	Yes	Not available
Czech Republic	All newborns are treated as patients and separate hospitalization records are kept for them	Yes	Yes	Given	-	Yes	Yes	Already provided
Finland	Civil registration directly from birth hospital to Central Population Register.	Yes, those with a diagnosis or procedure	No	-	Yes, medical birth register	Yes	Yes	Given
France	Every newborn baby is registered with ICD 10 coding system	Yes	Yes	Given	-	Yes	Yes	Given

A.II. 4 Healthy new born babies

Country	Registration	Newborn with a disease	Healthy new born included in discharge statistics	If so Code	Estimation	Separate by gender	Beddays	No. babies +days
Germany	Healthy newborn babies and also newborn babies with health problems are regarders as patients of their own and registered and counted as patients	Yes	Yes	Given	-	Yes	Yes	Given, from 2004
Greece	All babies born in hospitals are recorded at the nearest (to the hospital) registry offices	Yes	No	-	Yes, registry office	Yes	No	Given
Hungary	Newborn babies are registered in hospital registries at the time of birth like other hospital cases.	Yes	Yes	Given		Yes	Yes	Given
Ireland	All births are registered in the National Perinatal Reporting System	Yes	No		NPRS	Possibly	Possibly	Not possible at this moment

A.II. 4 Healthy new born babies

Country	Registration	Newborn with a disease	Healthy new born included in discharge statistics	If so Code	Estimation	Separate by gender	Beddays	No. babies +days
Italy	All newborn babies, born in hospital are registered as discharges when they leave the hospital	Yes	Yes	Given		Yes	Yes	Given
Latvia	All births are registered in the Register of Newborns	Yes	No	-	Yes, from Register of Newborn	Yes	No	Given
Lithuania	If the baby is healthy only special newborn record is filled in and kept in the mothers inpatient record. (No separate record)	Yes	No		Yes	Yes	No	Given
Netherlands	Most births are registered in the Netherlands Perinatal Registry	Yes	No		Yes	Yes	No	Not given
Poland	All hospital newborn babies are included in the hospital registration book	Yes	Yes	Given		Yes	Yes	Given

A.II. 4 Healthy new born babies

Country	Registration	Newborn with a disease	Healthy new born included in discharge statistics	If so Code	Estimation	Separate by gender	Beddays	No. babies +days
Portugal	There are one record for each newborn	Yes	Yes	Given	Yes	Yes	Yes	Given
Slovenia	All newborn babies, born in hospital, are registered twice: by Perinatal Information System and by Hospital Statistics Information System	Yes	Yes	Code not defined	Probably from Perinatal Information System	Yes	Yes	Given
Spain	They are registered as newborn in Civil registries Source of data for Natality rates and other related statistics	Yes	No		Yes	No	No / Yes if we consider average LOS of deliveries	Given
England	Office for National Statistics are the official source of this data	Yes	Yes	Given		Yes	Yes	Given

A.II.5 External causes (Metadata)

Nr	Countries	Metadata external causes
1	Austria	*External Cause Data not available.*
2	Belgium	*Belgium uses ICD-9-CM. Diagnoses have been grouped according to the external cause shortlist.*
3	Cyprus	*Not Available*
4	Czech Republic	*External causes are classified according to ICD-10. Diagnoses have been grouped according to the external cause shortlist.*
5	Denmark	*The data has not been grouped according to the given categories, due to the fact that the given chapters of ICD-10 is not used in Denmark. The Nordic Classification Scheme is being used instead. It is however possible to translate the Nordic scheme back to ICD-10 codes for some of the requested data. The data is not based on the primary diagnosis dataset, in this dataset a new type of patient is also included. This new type of patient, is a patient who is not admitted but turns up at an emergency room and whose injury is treated immediately. This type of patient may resemble what in this study is being referred to as a day-care patient, but the definition is not the same as the definition for a day-care patient.*
6	Estonia	
7	Finland	*ICD-10*
8	France	*We do not code external causes*
9	Germany	*Germany uses the ICD-10 to record external causes*
10	Greece	*We have provided data according the ICD 10 classification concerning external cause. We have provided relative data according Section A.*
11	Hungary	*In Hungary "V00-Z99" codes may not be used for main diagnoses. We can only provide case number "Z38 Health newborn babies" by taking into account special Hungarian codification. That is why we cannot provide "External Causes" records.*
12	Ireland	*For HIPE data: 1999-2004: ICD-9-CM; 2005 onwards: ICD-10-AM.*
13	Italy	*Italy does not use "E" code for external cause. If one of the diagnoses (main diagnosis or secondary diagnoses) falls between 800-999, it should have specified one of these following six codes as "external cause":* *6 accident in the place of work* *7 accident at home* *8 land transport accident* *9 assault* *10 intentional self-harm or attempted suicide* *10 other kind of accident or poisoning* *This information is <u>not</u> considered good enough: there are a lot of missing code as "external cause".* *The External Cause Data file produced contains only the following HDP External Cause Codes: 1, 4, 5, 8 and 9.*

A.II.5 External causes (Metadata)

		If the main diagnoses fall into 800-999 ICD-9-CM, the following transformation has been carried out: *HDP External Cause Codes --->Italian "external cause"* *1 ---> 3* *4 ---> 5* *5 ---> 4* *8 ---> 1,2 and 9* *9 ---> all the remainder, including missing and wrong codes.*
14	Latvia	*Latvia uses ICD–10. Only main diagnoses are coded by doctors (S00-T98). It is impossible to group external causes according to the external cause shortlist yet.*
15	Lithuania	*The most of external causes is coded as "not known or not reported or missing data" as external code is not recorded in database. But some records have external code (V01-Y98) as primary diagnosis instead of injury code (S00-T98).*
16	Luxembourg	*External causes are not reported.*
17	Netherlands	*ICD-9. We could provide the data group accornding to the categories*
18	Poland	*Data are not provided due to substantial number (more than 30%) of missing external causes*
19	Portugal	*ICD–9–CM. We have registration not only for chapter on Injury and Poisoning. We have under reporting in this area and the date is not good. Meanwhile, diagnoses have been grouped according to the external cause shortlist.*
20	Slovenia	*Slovenia uses ICD–10. Diagnoses have been grouped according to the external cause shortlist.* *Records of admissions due to injuries or poisonings contain also External Cause code.* *For 2001 data: we have excluded 2 cases with external cause as primary diagnosis.*
21	Spain	*Have you been able to meet the requirements? Please "tick" **Yes** or **No** below* ***NO*** ✓ *Since the external cause is not compulsory we do not provide data for that section as the percentage of coverage is*
22	England	
23	Scotland	*Scotland uses ICD-10. Diagnosis have been grouped according to the external cause shortlist..*
24	Northern Ireland	
25	Wales	

A.II.6 ISHMT

International shortlist for hospital morbidity tabulation (ISHMT) - Eurostat/OECD/WHO

Version 2008-11-10 (Changes are marked with * in the text. For detailed information look at the bottom of the table.)

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
I		**0100**	**Certain infectious and parasitic diseases**	**A00-B99**	**001-033, 0341-0992, 0995-134, 1360, 1362-139, +042-044 or 2795, 2796 for HIV (varies according to country)**
I	**1**	**0101**	Intestinal infectious diseases except diarrhoea	A00-A08	001-008
I	**2**	**0102**	Diarrhoea and gastroenteritis of presumed infectious origin	A09	009
I	**3**	**0103**	Tuberculosis	A15-A19, B90	010-018, 137
I	**4**	**0104**	Septicaemia	A40-A41	038
I	**5**	**0105**	Human immunodeficiency virus [HIV] disease	B20-B24	042-044 or 2795, 2796 (varies according to country)
I	**6**	**0106**	Other infectious and parasitic diseases	remainder of A00-B99	remainder of 001-139, except 0340, 0993, 0994, 135, 1361
II		**0200**	**Neoplasms**	**C00-D48**	**140-239**
II	**7**	**0201**	Malignant neoplasm of colon, rectum and anus	C18-C21	153, 154
II	**8**	**0202**	Malignant neoplasms of trachea, bronchus and lung	C33-C34	162
II	**9**	**0203**	Malignant neoplasms of skin	C43-C44	172, 173
II	**10**	**0204**	Malignant neoplasm of breast	C50	174, 175
II	**11**	**0205**	Malignant neoplasm of uterus	C53-C55	179, 180, 182
II	**12**	**0206**	Malignant neoplasm of ovary	C56	1830
II	**13**	**0207**	Malignant neoplasm of prostate	C61	185
II	**14**	**0208**	Malignant neoplasm of bladder	C67	188
II	**15**	**0209**	Other malignant neoplasms	remainder of C00-C97	remainder of 140-208
II	**16**	**0210**	Carcinoma in situ	D00-D09	230-234
II	**17**	**0211**	Benign neoplasm of colon, rectum and anus	D12	2113, 2114
II	**18**	**0212**	Leiomyoma of uterus	D25	218
II	**19**	**0213**	Other benign neoplasms and neoplasms of uncertain or unknown behaviour	remainder of D00-D48	remainder of 210-239
III		**0300**	**Diseases of the blood and bloodforming organs and certain disorders involving the immune mechanism**	**D50-D89**	**135, 2790-2793, 2798. 2799*, 280-288*, 2890*, 2894-2899***
III	**20**	**0301**	Anaemias	D50-D64	280-285
III	**21**	**0302**	Other diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D65-D89	135, 2790-2793, 2798, 2799*, 286-288*, 2890*, 2894-2899*

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
IV		**0400**	**Endocrine, nutritional and metabolic diseases**	**E00-E90**	**240-278**
IV	**22**	**0401**	Diabetes mellitus	E10-E14	250
IV	**23**	**0402**	Other endocrine, nutritional and metabolic diseases	remainder of E00-E90	remainder of 240-278
V		**0500**	**Mental and behavioural disorders**	**F00-F99**	**290-319**
V	**24**	**0501**	Dementia	F00-F03	2900-2902, 2904-2909, 2941
V	**25**	**0502**	Mental and behavioural disorders due to alcohol	F10	291, 303, 3050
V	**26**	**0503**	Mental and behavioural disorders due to use of other psychoactive subst.	F11-F19	292, 2940, 304, 3051-3059
V	**27**	**0504**	Schizophrenia, schizotypal and delusional disorders	F20-F29	295, 2970-2973, 2978-2979, 2983-2989
V	**28**	**0505**	Mood [affective] disorders	F30-F39	296, 2980, 3004, 3011, 311
V	**29**	**0506**	Other mental and behavioural disorders	remainder of F00-F99	remainder of 290-319
VI		**0600**	**Diseases of the nervous system**	**G00-G99**	**320-359, 435**
VI	**30**	**0601**	Alzheimer's disease	G30	3310
VI	**31**	**0602**	Multiple sclerosis	G35	340
VI	**32**	**0603**	Epilepsy	G40-G41	345
VI	**33**	**0604**	Transient cerebral ischaemic attacks and related syndromes	G45	435
VI	**34**	**0605**	Other diseases of the nervous system	remainder of G00-G99	remainder of 320-359
VII		**0700**	**Diseases of the eye and adnexa**	**H00-H59**	**360-379**
VII	**35**	**0701**	Cataract	H25-H26, H28	366
VII	**36**	**0702**	Other diseases of the eye and adnexa	remainder of H00-H59	remainder of 360-379
VIII	**37**	**0800**	**Diseases of the ear and mastoid process**	**H60-H95**	**380-389**

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
IX		**0900**	**Diseases of the circulatory system**	**I00-I99**	**2891-2893*, 390-459 except 435, 446 and 4590***
IX	**38**	**0901**	Hypertensive diseases	I10-I15	401-405
IX	**39**	**0902**	Angina pectoris	I20	413; ICD-9-CM: 4111*, 413*
IX	**40**	**0903**	Acute myocardial infarction	I21-I22	410
IX	**41**	**0904**	Other ischaemic heart disease	I23-I25	411-412, 414; ICD-9-CM: 4110*, 4118*, 412*, 414*
IX	**42**	**0905**	Pulmonary heart disease & diseases of pulmonary circulation	I26-I28	415-417
IX	**43**	**0906**	Conduction disorders and cardiac arrhythmias	I44-I49	426, 427
IX	**44**	**0907**	Heart failure	I50	428
IX	**45**	**0908**	Cerebrovascular diseases	I60-I69	430-434, 436-438
IX	**46**	**0909**	Atherosclerosis	I70	440
IX	**47**	**0910**	Varicose veins of lower extremities	I83	454
IX	**48**	**0911**	Other diseases of the circulatory system	remainder of I00-I99	2891-2893*, remainder of 390-459 except 435, 446 and 4590*
X		**1000**	**Diseases of the respiratory system**	**J00-J99**	**0340, 460-519**
X	**49**	**1001**	Acute upper respiratory infections and influenza	J00-J11	0340, 460-465, 487; ICD-9-CM: 0340*, 460-465, 487, 488*
X	**50**	**1002**	Pneumonia	J12-J18	480-486
X	**51**	**1003**	Other acute lower respiratory infections	J20-J22	466 (acute lower respiratory infections other than acute bronchitis, acute bronchiolitis and pneumonia were not separated in ICD-9, no J22 equivalent)
X	**52**	**1004**	Chronic diseases of tonsils and adenoids	J35	474
X	**53**	**1005**	Other diseases of upper respiratory tract	J30-J34, J36-J39	470-473, 475-478
X	**54**	**1006**	Chronic obstructive pulmonary disease and bronchiectasis	J40-J44, J47	490-492, 494, 496; ICD-9-CM: 490-492, 4932*, 494, 496
X	**55**	**1007**	Asthma	J45-J46	493; ICD-9-CM: 4930*, 4931*, 4938*, 4939*
X	**56**	**1008**	Other diseases of the respiratory system	J60-J99	remainder of 460-519

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
XI		**1100**	**Diseases of the digestive system**	**K00-K93**	**520-579**
XI	**57**	**1101**	Disorders of teeth and supporting structures	K00-K08	520-525
XI	**58**	**1102**	Other diseases of oral cavity, salivary glands and jaws	K09-K14	526-529
XI	**59**	**1103**	Diseases of oesophagus	K20-K23	530
XI	**60**	**1104**	Peptic ulcer	K25-K28	531-534
XI	**61**	**1105**	Dyspepsia and other diseases of stomach and duodenum	K29-K31	535-537
XI	**62**	**1106**	Diseases of appendix	K35-K38	540-543
XI	**63**	**1107**	Inguinal hernia	K40	550
XI	**64**	**1108**	Other abdominal hernia	K41-K46	551-553
XI	**65**	**1109**	Crohn's disease and ulcerative colitis	K50-K51	555, 556
XI	**66**	**1110**	Other noninfective gastroenteritis and colitis	K52	558
XI	**67**	**1111**	Paralytic ileus and intestinal obstruction without hernia	K56	560
XI	**68**	**1112**	Diverticular disease of intestine	K57	562
XI	**69**	**1113**	Diseases of anus and rectum	K60-K62	565, 566, 5690-5694
XI	**70**	**1114**	Other diseases of intestine	K55, K58-K59, K63	557, 564, 5695, 5698, 5699
XI	**71**	**1115**	Alcoholic liver disease	K70	5710-5713
XI	**72**	**1116**	Other diseases of liver	K71-K77	570, 5714-573
XI	**73**	**1117**	Cholelithiasis	K80	574
XI	**74**	**1118**	Other diseases of gall bladder and biliary tract	K81-K83	575, 576
XI	**75**	**1119**	Diseases of pancreas	K85-K87	577
XI	**76**	**1120**	Other diseases of the digestive system	remainder of K00-K93	remainder of 520-579
XII		**1200**	**Diseases of the skin and subcutaneous tissue**	**L00-L99**	**680-709**
XII	**77**	**1201**	Infections of the skin and subcutaneous tissue	L00-L08	680-686
XII	**78**	**1202**	Dermatitis, eczema and papulosquamous disorders	L20-L45	690-693, 6943, 696-6983, 6988, 6989
XII	**79**	**1203**	Other diseases of the skin and subcutaneous tissue	remainder of L00-L99	remainder of 680-709

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
XIII		**1300**	**Diseases of the musculoskeletal system and connective tissue**	**M00-M99**	**0993, 1361, 2794, 446, 710-739**
XIII	**80**	**1301**	Coxarthrosis [arthrosis of hip]	M16	Not a concept in ICD-9 at four-digit level. Can only be defined by using the optional fifth digit 5 to 715, i.e. 715.15, 715.25, 715.35 and 715.95
XIII	**81**	**1302**	Gonarthrosis [arthrosis of knee]	M17	Not a concept in ICD-9 at four-digit level. Can only be defined by using the optional fifth digit 6 to 715, i.e. 715.16, 715.26, 715.36 and 715.96
XIII	**82**	**1303**	Internal derangement of knee	M23	717
XIII	**83**	**1304**	Other arthropathies	M00-M15, M18-M22, M24-M25	0993, 711-716, 718, 719, 7271*, 7284*
XIII	**84**	**1305**	Systemic connective tissue disorders	M30-M36	1361, 2794, 446, 710, 725, 7285
XIII	**85**	**1306**	Deforming dorsopathies and spondylopathies	M40-M49	720, 721, 7230, 7235*, 7240, 737
XIII	**86**	**1307**	Intervertebral disc disorders	M50-M51	7220-7227*, 7229*
XIII	**87**	**1308**	Dorsalgia	M54	7231, 7234, 7236, 7241-7243, 7245
XIII	**88**	**1309**	Soft tissue disorders	M60-M79	726*, 7270*, 7272-7279*, 7280-7283, 7286-7289, 729
XIII	**89**	**1310**	Other disorders of the musculoskeletal system and connective tissue	M53, M80-M99	remainder of 710-739

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
XIV		**1400**	**Diseases of the genitourinary system**	**N00-N99**	**0994, 580-5996, 5998-629, 7880**
XIV	**90**	**1401**	Glomerular and renal tubulo-interstitial diseases	N00-N16	580-5834, 5838, 5839, 5900-5902, 5908, 5909, 591, 5933-5935, 5937, 5996
XIV	**91**	**1402**	Renal failure	N17-N19	5836, 5837, 584-586
XIV	**92**	**1403**	Urolithiasis	N20-N23	592, 594, 7880
XIV	**93**	**1404**	Other diseases of the urinary system	N25-N39	0994, 587-589, 5903, 5930-5932, 5936, 5938, 5939, 595- 597, 5980, 5981, 5988, 5989, 5990-5995, 5998, 5999, 6256
XIV	**94**	**1405**	Hyperplasia of prostate	N40	600
XIV	**95**	**1406**	Other diseases of male genital organs	N41-N51	601-608
XIV	**96**	**1407**	Disorders of breast	N60-N64	610, 611
XIV	**97**	**1408**	Inflammatory diseases of female pelvic organs	N70-N77	614-616
XIV	**98**	**1409**	Menstrual, menopausal and other female genital conditions	N91-N95	6250-6255, 6258-627
XIV	**99**	**1410**	Other disorders of the genitourinary system	remainder of N00-N99	remainder of 580-629 except 5997*
XV		**1500**	**Pregnancy, childbirth and the puerperium**	**O00-O99**	**630-676 (no exactly equivalent ICD-9 codes for the three phases); ICD-9-CM: 630-677* (no exactly equivalent ICD-9 codes for the three phases)**
XV	**100**	**1501**	Medical abortion	O04	635
XV	**101**	**1502**	Other pregnancy with abortive outcome	O00-O03, O05-O08	630-634, 636-639
XV	**102**	**1503**	Complications of pregnancy predominantly in the antenatal period	O10-O48	640-646, 651-659
XV	**103**	**1504**	Complications of pregnancy predominantly during labour and delivery	O60-O75	660-668, 6690-6694, 6698, 6699
XV	**104**	**1505**	Single spontaneous delivery	O80	650
XV	**105**	**1506**	Other delivery	O81-O84	6695, 6696, 6697
XV	**106**	**1507**	Complications predominantly related to the puerperium	O85-O92	670-676
XV	**107**	**1508**	Other obstetric conditions	O94*, O95-O99	647, 648; ICD-9-CM: 647*, 648*, 677*
XVI		**1600**	**Certain conditions originating in the perinatal period**	**P00-P96**	**760-779**
XVI	**108**	**1601**	Disorders related to short gestation and low birth weight	P07	765
XVI	**109**	**1602**	Other conditions originating in the perinatal period	remainder of P00-P96	remainder of 760-779

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
XVII	**110**	**1700**	**Congenital malformations, deformations and chromosomal abnormalities**	**Q00-Q99**	**740-759**
XVIII		**1800**	**Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified**	**R00-R99**	**780-799 except 7880, but including 4590* and 5997**
XVIII	**111**	**1801**	Pain in throat and chest	R07	7841, 7865
XVIII	**112**	**1802**	Abdominal and pelvic pain	R10	7890
XVIII	**113**	**1803**	Unknown and unspecified causes of morbidity (incl. those without a diagnosis)	R69	7999
XVIII	**114**	**1804**	Other symptoms, signs and abnormal clinical and laboratory findings	remainder of R00-R99	remainder of 780-799 except 7880, but including 4590* and 5997
XIX		**1900**	**Injury, poisoning and certain other consequences of external causes**	**S00-T98**	**800-999**
XIX	**115**	**1901**	Intracranial injury	S06	8001-8004, 8006-8009, 8011-8014, 8016-8019, 8031-8034, 8036-8039, 8041-8044, 8046-8049, 850-854 (Definition includes relevant ICD-9-CM codes.)
XIX	**116**	**1902**	Other injuries to the head	S00-S05, S07-S09	8000, 8005, 8010, 8015, 802, 8030, 8035, 8040, 8045, 830, 870-873, 900, 910, 918, 920, 921, 925, 950*, 951* (Definition includes relevant ICD-9-CM codes.)
XIX	**117**	**1903**	Fracture of forearm	S52	813
XIX	**118**	**1904**	Fracture of femur	S72	820, 821
XIX	**119**	**1905**	Fracture of lower leg, including ankle	S82	823, 824
XIX	**120**	**1906**	Other injuries	S10-S51, S53-S71, S73-S81, S83-T14, T79	805-812, 814-819, 822, 825-829, 831-848, 860-869, 874-897, 901-904, 911-917, 919, 922-924, 926-929*, 952-959*
XIX	**121**	**1907**	Burns and corrosions	T20-T32	940-949
XIX	**122**	**1908**	Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	960-989
XIX	**123**	**1909**	Complications of surgical and medical care, not elsewhere classified	T80-T88	996-999
XIX	**124**	**1910**	Sequelae of injuries, of poisoning and of other consequences of external causes	T90-T98	905-909
XIX	**125**	**1911**	Other and unspecified effects of external causes	remainder of S00-T98	930-939*, 990-995

A.II.6 ISHMT

ICD Chapter	Group	Code	Heading	ICD-10 Code	ICD-9 Code
XXI		**2100**	**Factors influencing health status and contact with health services**	**Z00-Z99**	**V01-V82**
XXI	**126**	**2101**	Medical observation and evaluation for suspected diseases and conditions	Z03	V710-V712*, V717-V719*
XXI	**127**	**2102**	Contraceptive management	Z30	V25
XXI	**128**	**2103**	Liveborn infants according to place of birth ("healthy newborn babies")	Z38	V30-V39
XXI	**129**	**2104**	Other medical care (including radiotherapy and chemotherapy sessions)	Z51	V071, V58
XXI	**130**	**2105**	Other factors influencing health status and contact with health services	remainder of Z00-Z99	remainder of V01-V82
		0000	**All causes**	**A00-Z99 (excluding V, W, X and Y codes)**	**001-V82 (excluding E800-E999)**

A.II.6 ISHMT

*** Track changes**

Date	Group	Column	Codes	Action
2006-11-24	83	ICD-9 code	7271	added to group 83
2006-11-24	88	ICD-9 code	726, 7270, 7272-7279	added to group 88
2006-11-24	83,88	ICD-9 code	7284	added to group 83, removed from group 88
2006-11-24	89	ICD-9 code	726, 727	removed from group 89
2007-11-03	III	ICD-9 code	280-288, 2890, 2894-2899	corrected ICD-9 definition
2007-11-03	21	ICD-9 code	286-288, 2890, 2894-2899	corrected ICD-9 definition
2007-11-03	IX	ICD-9 code	2891-2893, 4590	corrected ICD-9 definition
2007-11-03	39	ICD-9 code	ICD-9-CM: 4111, 413	additional ICD-9-CM definition
2007-11-03	41	ICD-9 code	ICD-9-CM: 4110, 4118, 412, 414	additional ICD-9-CM definition
2007-11-03	48	ICD-9 code	2891-2893, 4590	corrected ICD-9 definition
2007-11-03	99	ICD-9 code	5997	corrected ICD-9 definition
2007-11-03	XV	ICD-9 code	ICD-9-CM: 630-677	additional ICD-9-CM definition
2007-11-03	107	ICD-9 code	ICD-9-CM: 647, 648, 677	additional ICD-9-CM definition
2007-11-03	107	ICD-10 code	O94	new ICD-10 code
2007-11-03	XVIII	ICD-9 code	4590	corrected ICD-9 definition
2007-11-03	114	ICD-9 code	4590	corrected ICD-9 definition
2008-01-19	49	ICD-9 code	ICD-9-CM: 340, 460-465, 487, 488	additional ICD-9-CM definition
2008-01-19	85	ICD-9 code	7235	added to group 85, removed from group 89
2008-01-19	86	ICD-9 code	7220-7227, 7229	corrected ICD-9 definition
2008-01-19	89	ICD-9 code	7228	added to group 89
2008-01-19	126	ICD-9 code	V710-V712, V717-V719	corrected ICD-9 definition
2008-01-19	130	ICD-9 code	V713-V716	added to group 130
2008-05-08	49	ICD-9 code	ICD-9-CM: 0340	correction of printing error
2008-11-10	III	ICD-9 code	ICD-9-CM: 2799	addition of code (printing error)
2008-11-10	21	ICD-9 code	ICD-9-CM: 2799	addition of code (printing error)
2008-11-10	54	ICD-9 code	ICD-9-CM: 490-492, 4932*, 494, 496	additional ICD-9-CM definition

A.II.6 ISHMT

2008-11-10	55	ICD-9 code	ICD-9-CM: 4930*, 4931*, 4938*, 4939*	additional ICD-9-CM definition
2008-11-10	116	ICD-9 code	950, 951	added to ICD-9 definition
2008-11-10	120	ICD-9 code	950, 951, 930-939	deleted from ICD-9 definition
2008-11-10	125	ICD-9 code	930-939	added to ICD-9 definition

A.II.7 Validation diagnosis

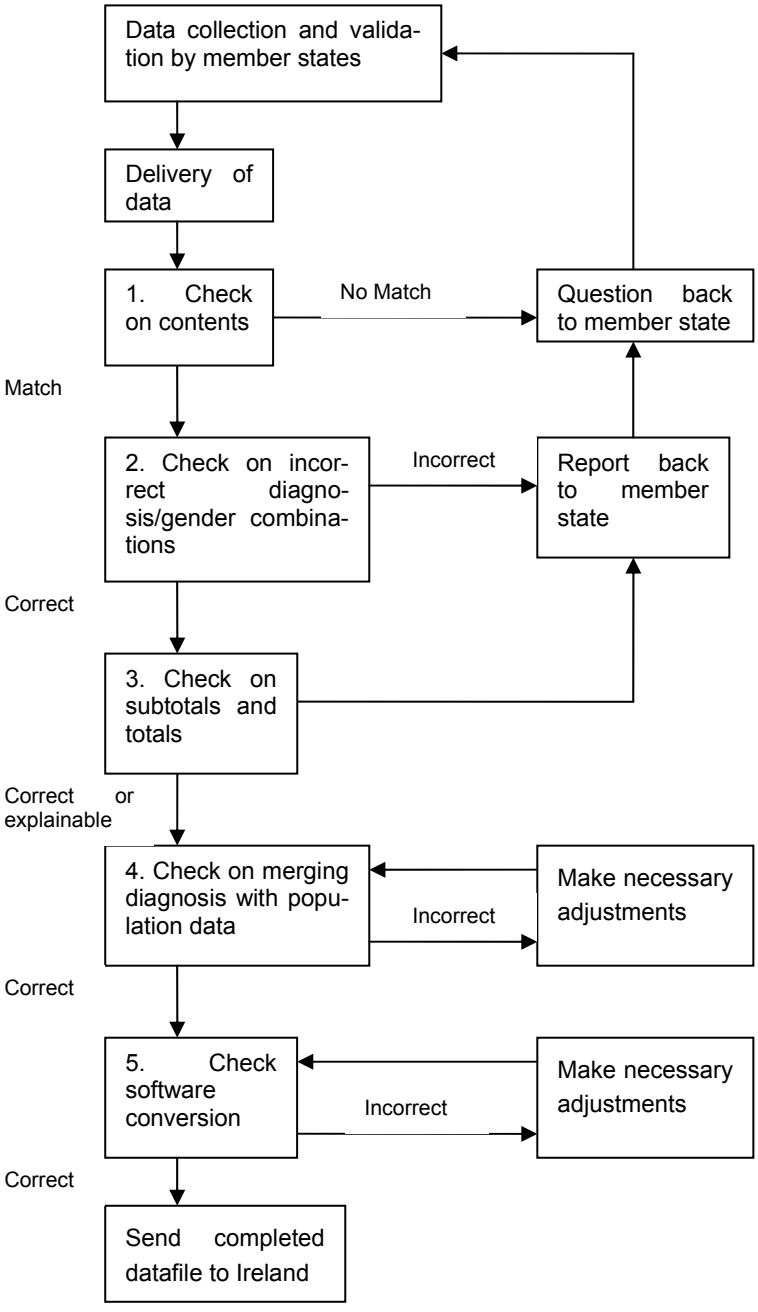
The validation is to be divided into:

- the data collection in the member states concerned
- the collection and processing at Prismant
- the processing in SAS (Ireland)

The first validation is the most important, because at Prismant we only get aggregates. So most emphasis should be close to the source of gathering. But there we should be realistic, the national systems cannot easily be modified and existing validations are not that easily to be built in. Also we should not forget that we are dealing with huge data population, and that statistically it must be possible to accept impurities.

That does mean that where possible we can try to improve the quality of the data.

Therefore we envisage the following steps. See flow diagram below



A.II.7 Validation diagnosis

Validation step 1

The first check is made if the file name corresponds with the contents of the data. This check is done to be sure that the whole file is sent in. Further it gives us information about the kind of data (diagnosis, population or procedures), the country and the concerning years.
In this step the data is also checked on duplicate records.

Validation step 2

Check data for impossible diagnosis/gender combinations, see the table below for the predefined combinations.

Diagnosis Shortlist Code	Gender Code	Description diagnosis
205	1	Uterine cancer
206	1	Ovarian cancer
207	2	Prostate auscer
212	1	Leiomyoma of uterus
1405	2	Hyperplasia of Prostate
1406	2	Diseases of Male Genital Organs
1408	1	Diseases of Female Pelvic Organs
1409	1	Menstrual, Menopausal etc
1500	1	Pregnancy, Childbirth etc.
1501	1	Medical Abortion
1502	1	Pregnancy with Abortive Outcome
1503	1	Antenatal Complications
1504	1	Labour / Delivery Complications
1505	1	Single delivery
1506	1	Other delivery
1507	1	Puerperium Complications
1508	1	Other Obstetric Complications

Validation step 3

Check the subtotals and totals that the member states have added to the data file.
Remark: This step is only if the file already contains subtotals and totals.
Subtotals:

1. If the file contains subtotals (diagnosis code 100, 200, 300, 400, 500 ….) check if they add up by calculating the subtotals with help from SPSS. Use script subtotalcheck.sps.
2. Then cross check if the results match with the data sent in by the country.
3. If this doesn't add up: copy the subtotal records and put them in an Excel file called "diag_controle 'countrycode'.xls" (worksheet name "subtotals mismatch").

Totals:

1. If the file contains totals (diagnosis code 0) check if they add up by calculating the totals with help of SPSS. Use script hulp_totalcheck.sps. Then cross check if the results match with the data sent in by the country.
2. If this doesn't add up: copy the records and put them in an Excel file called "diag_controle 'countrycode'.xls" (worksheet name "Total difference").

Remark: If in step 2 records where extracted then recalculating subtotals and totals is always necessary.

A.II.7 Validation diagnosis

If the differences are large and not caused by excluded categories then the findings are reported to the country.

Otherwise recalculate the subtotals and totals with help from the syntax files subtotal.sps and hulp_total.sps.

Validation step 4

This validation step is done when merging the diagnosis and population file.
First the following aspects are checked to make sure that two comparable data sets are merged:

1. Make sure the same time span is in both files;
2. Sort both files the same to make the merge possible;
3. Make sure that for diagnosis code 0 all the agegroups are present for the sexes;
4. Make sure that in the population file all the agegroups are present for the sexes;

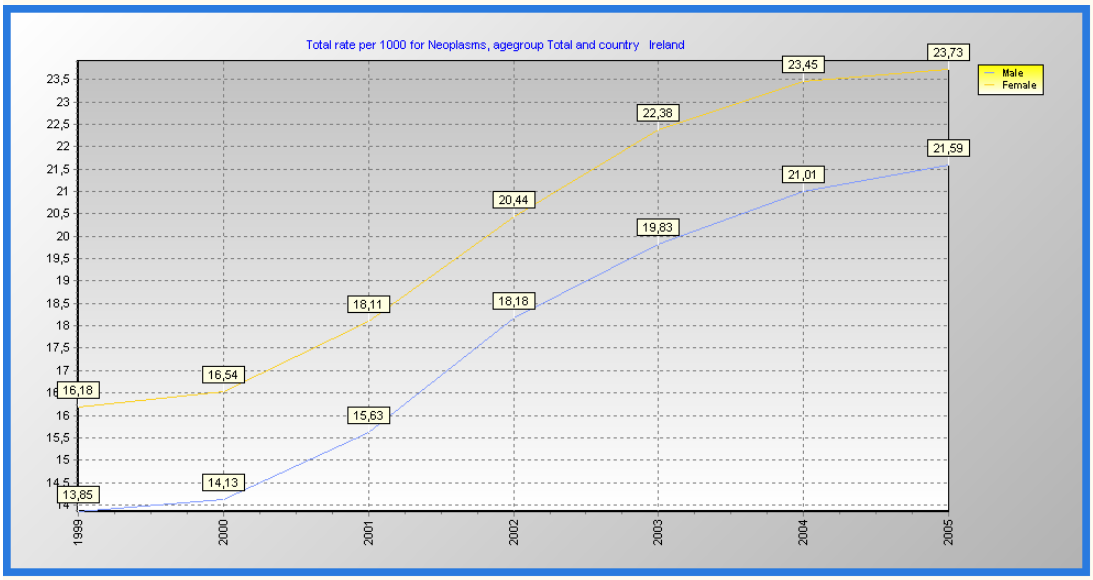
Afterwards there is an extra visual check to control if the records from both population and diagnosis file are aligned correctly.

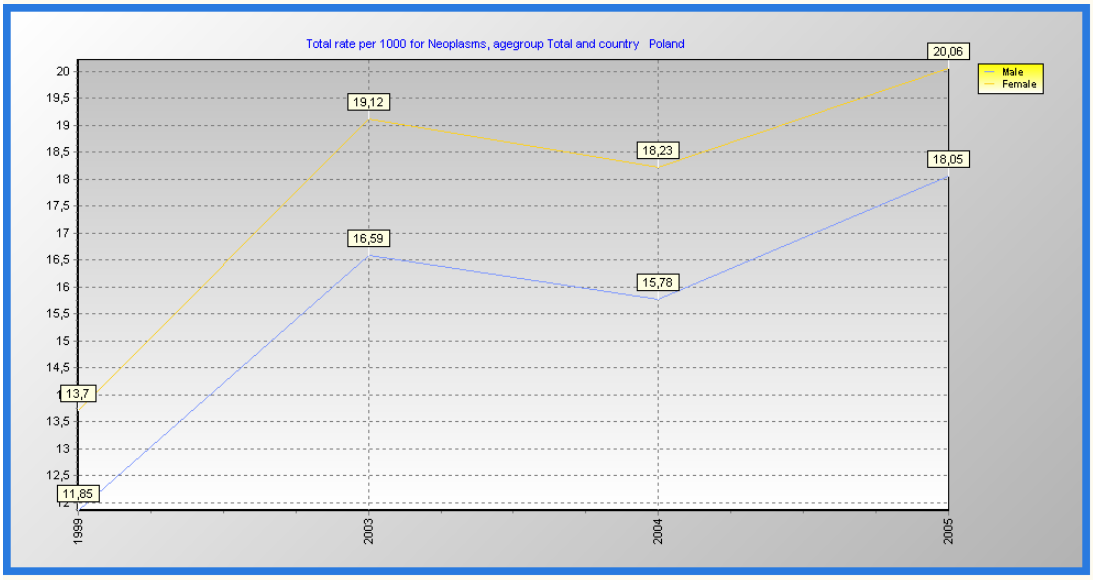
Validation step 5

A standardized script is used to convert the data file to the software format. After this script is run a visual check is made to check if all the columns are filled and adapted right. Made mistakes are corrected.

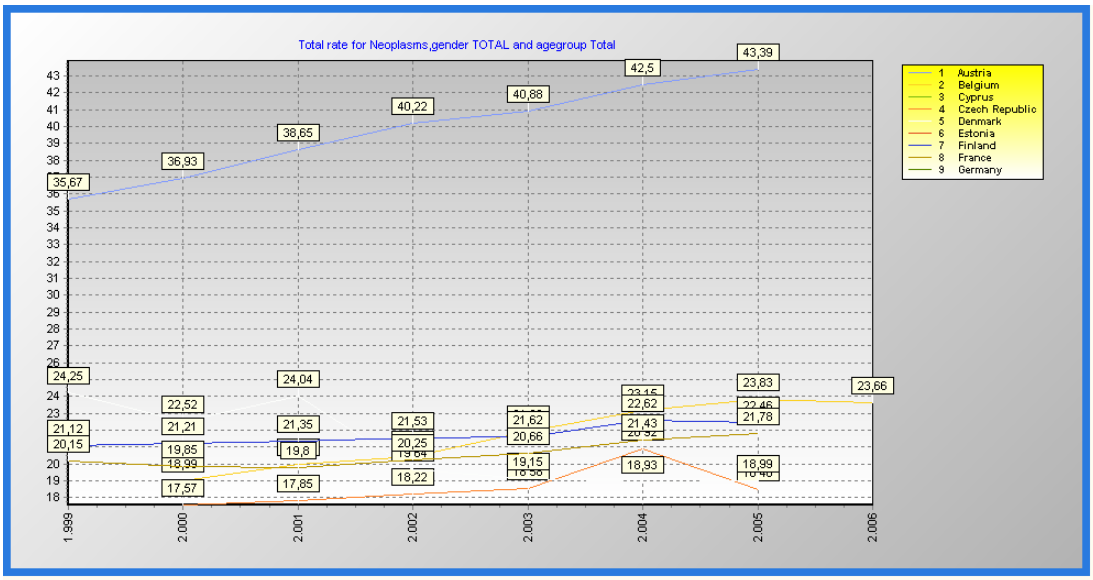
A.II.7 Validation diagnosis

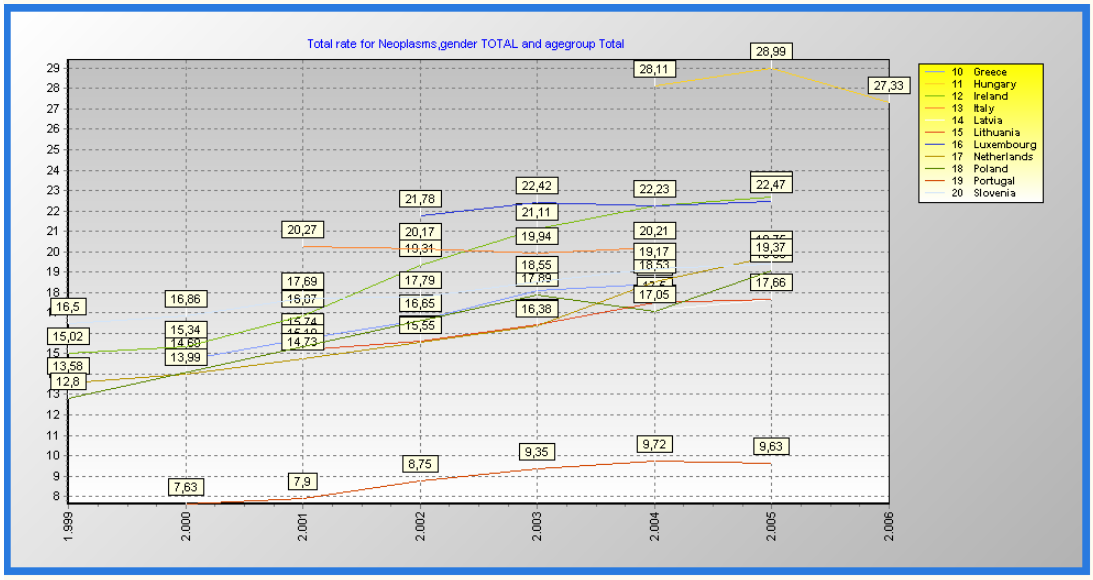
A.II.8 Time series – examples –

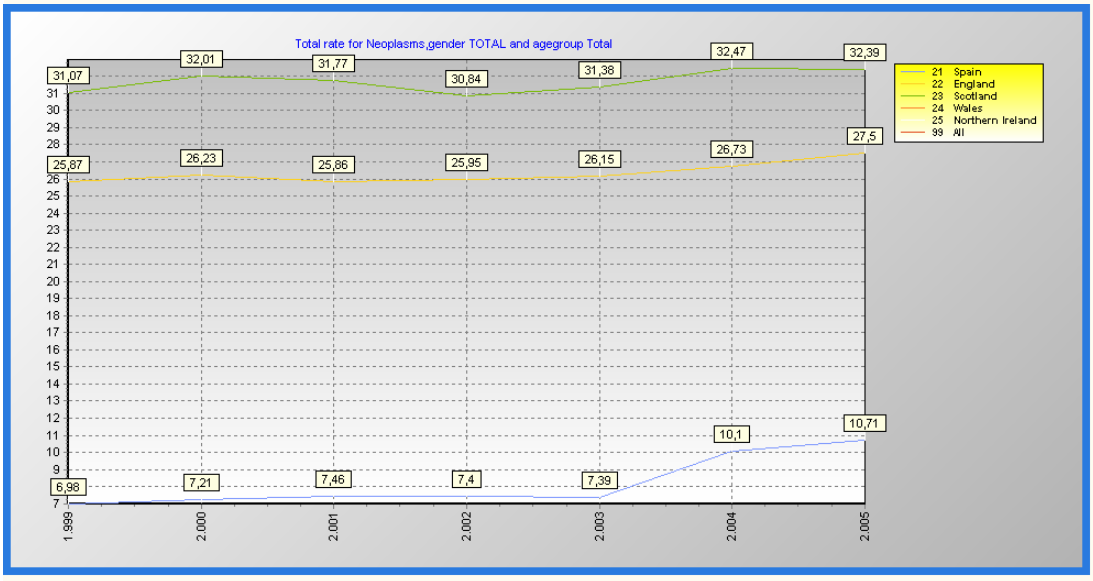




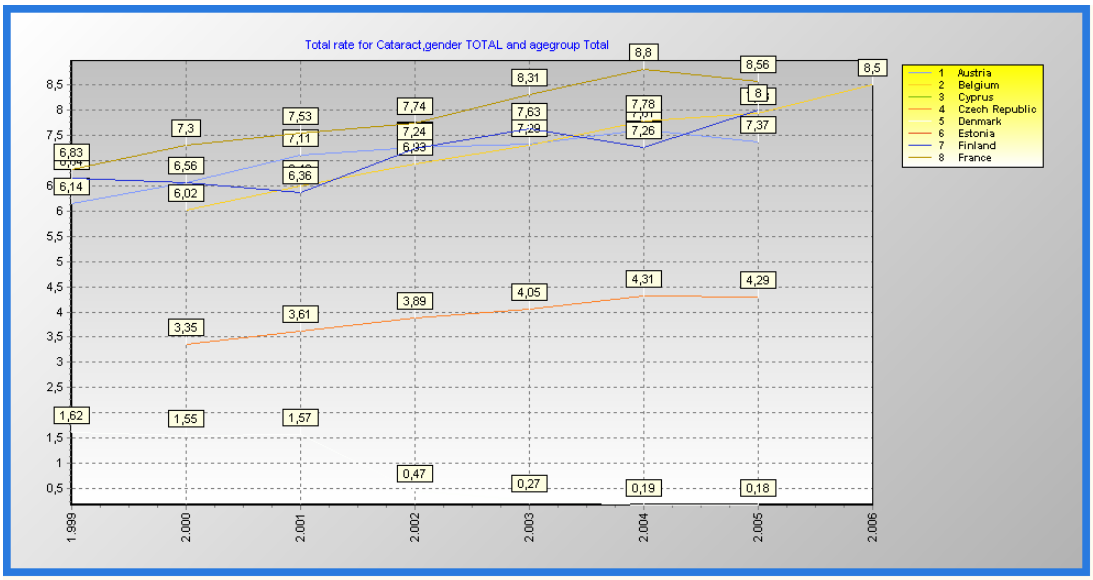
A.II.8 Time series – examples –

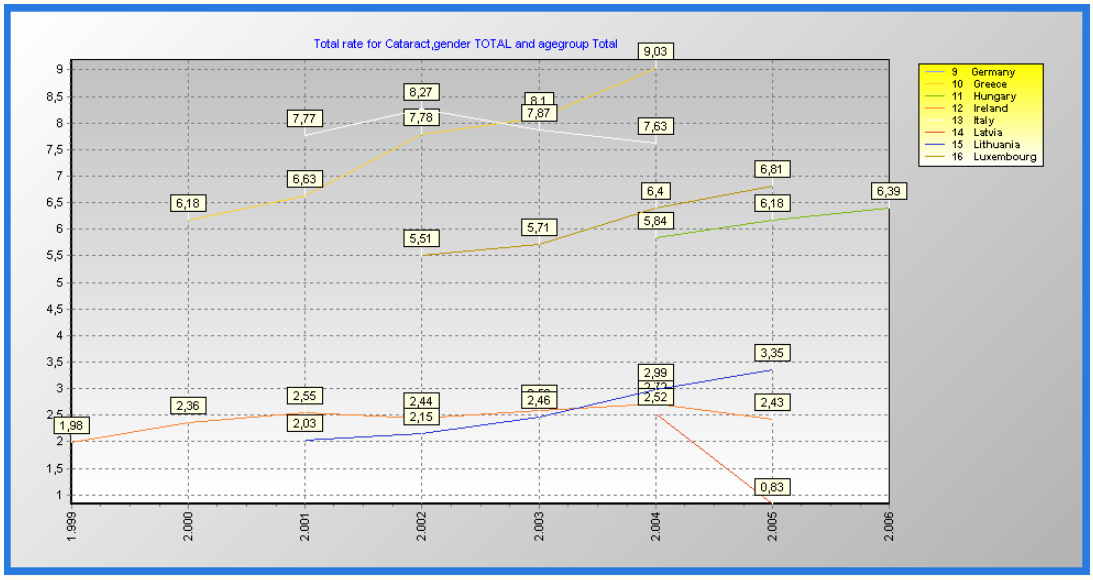




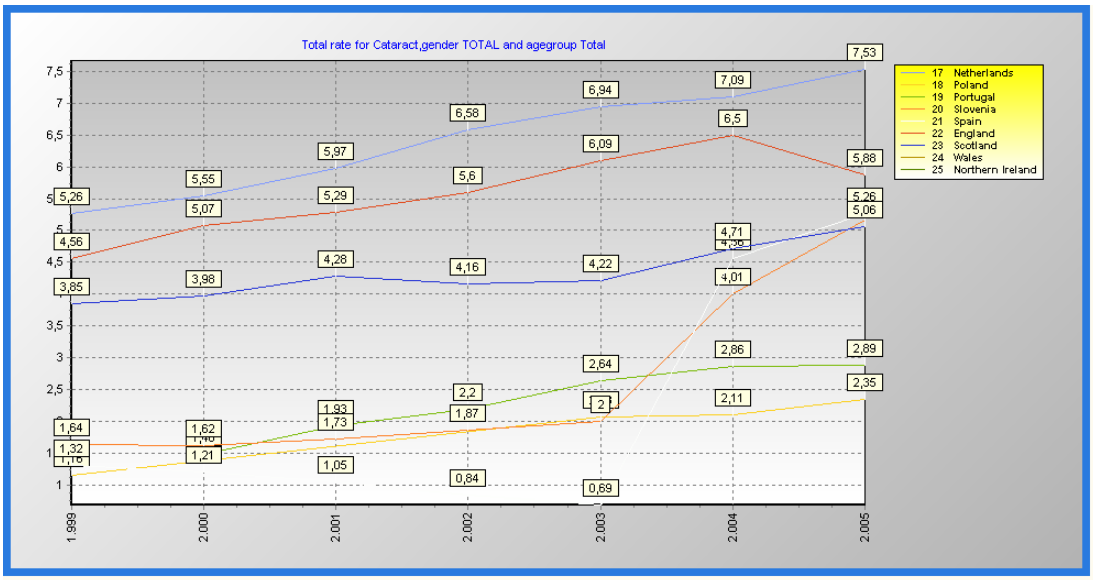


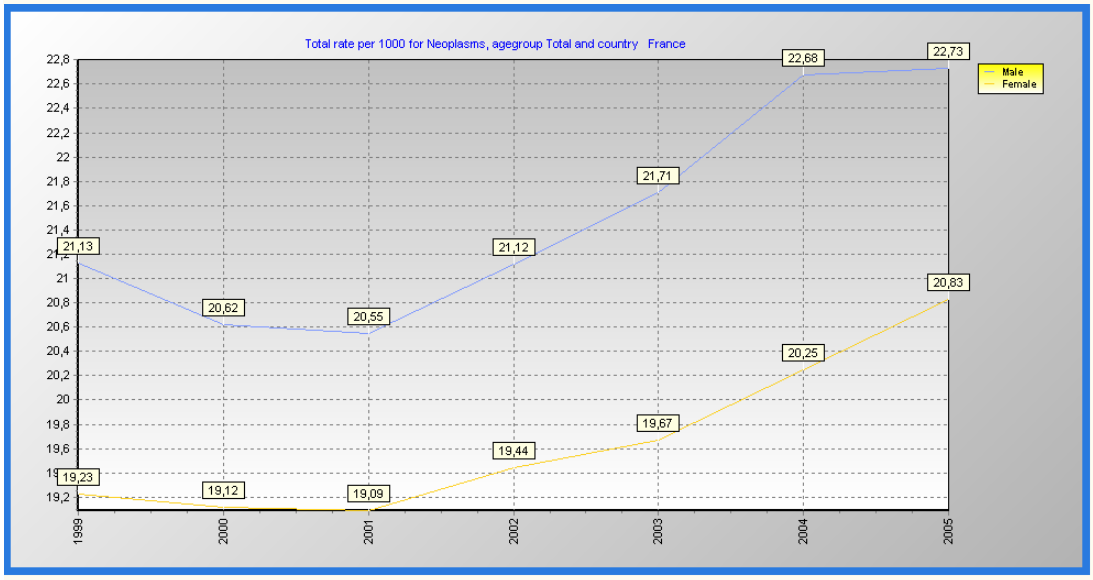
A.II.8 Time series – examples –





A.II.8 Time series – examples –





A.II.9 Comparative analysis Diagnosis

a. Examples of comparitive analysis

A.II.9 Comparative analysis Diagnosis

Dia 1

Diagnosis data of HDP2

Selected results

Based on new CD-ROM of March 2008

Presentation of Björn Smedby for the HDP2 Full Group Meeting in Madrid 27-28 March, 2008

Dia 2

Focus of presentation

- **Differences between countries**
  - in discharge rates (by age and sex)
  - in use of day care
- **Examples chosen so that they illustrate various reasons for country differences**
- **Both inpatients and daypatients are included in the analyses**
- **Year 2004 mainly chosen to get maximum number of countries for comparison**

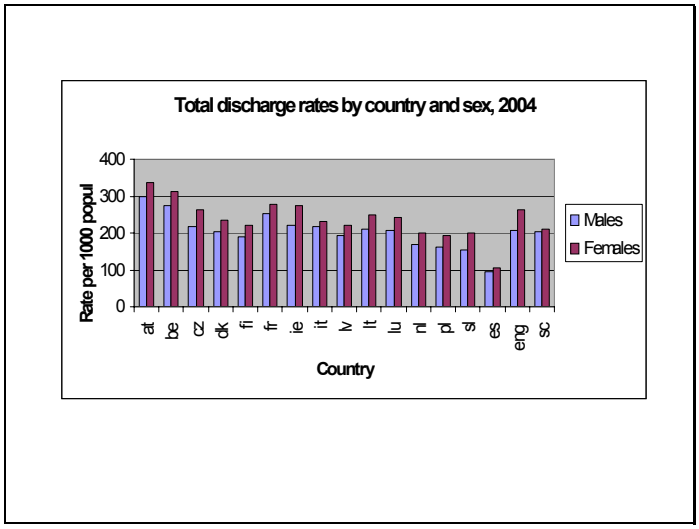
Dia 3

Examples of reasons for differences

- **Real differences in morbidity**
- **Health services organisation**
- **Registration problems (underreporting, daycare vs. outpatients)**
- **Diagnostic criteria and culture**
- **Clinical practice**
- **Coding tradition and practice**

A.II.9 Comparative analysis diagnosis

Dia 4



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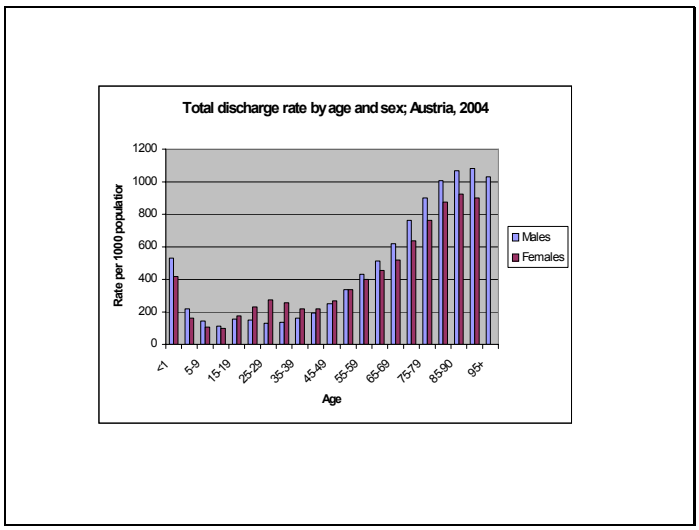
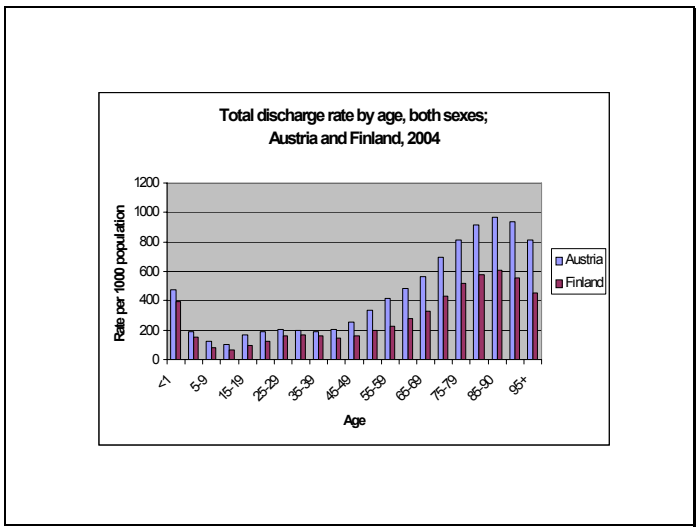
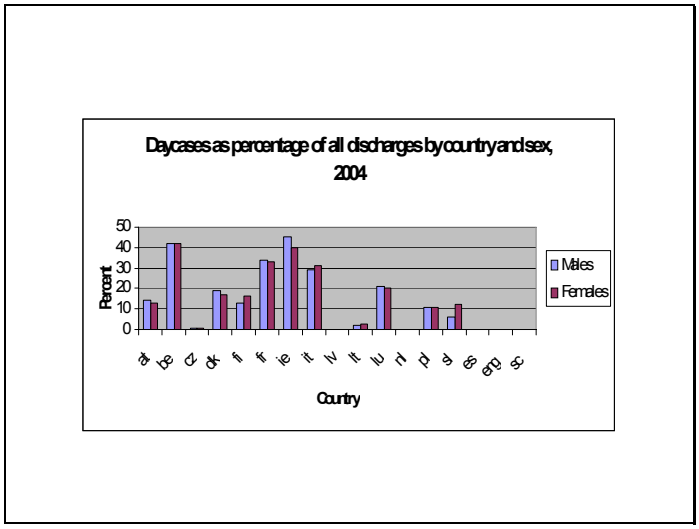


Dia 6



A.II.9 Comparative analysis Diagnosis

Dia 7



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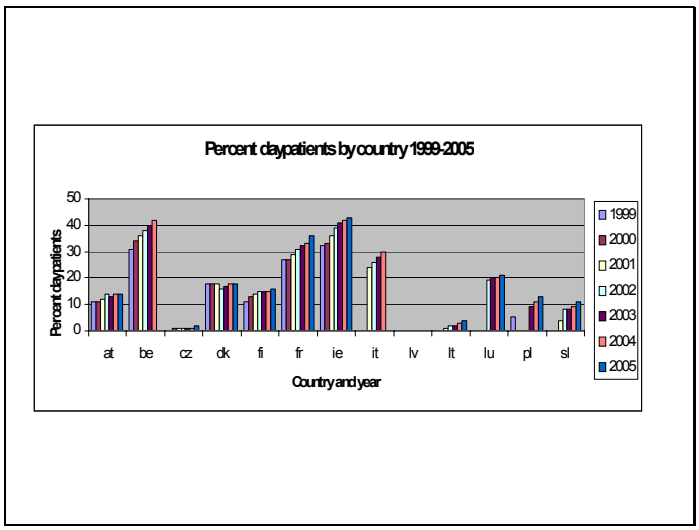

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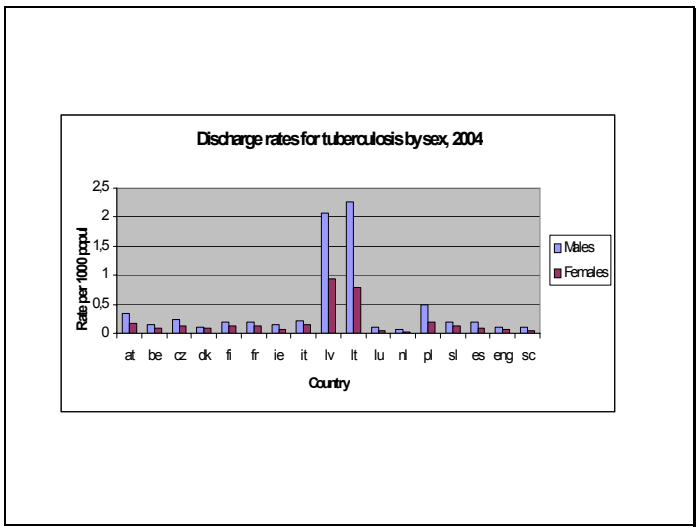
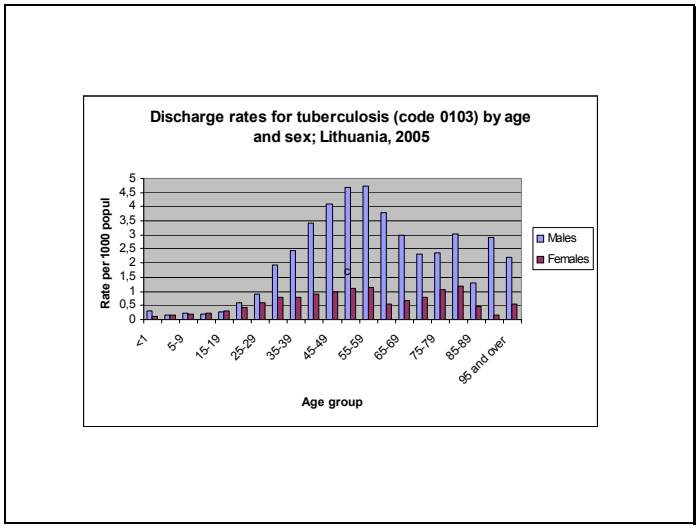


A.II.9 Comparative analysis diagnosis

Dia 10



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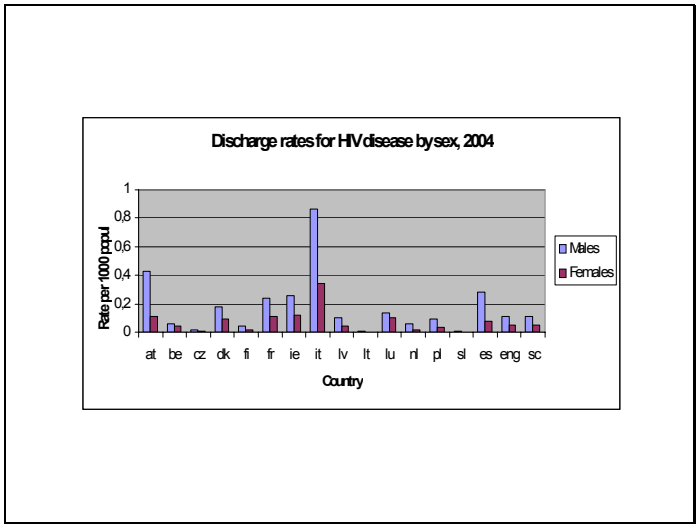

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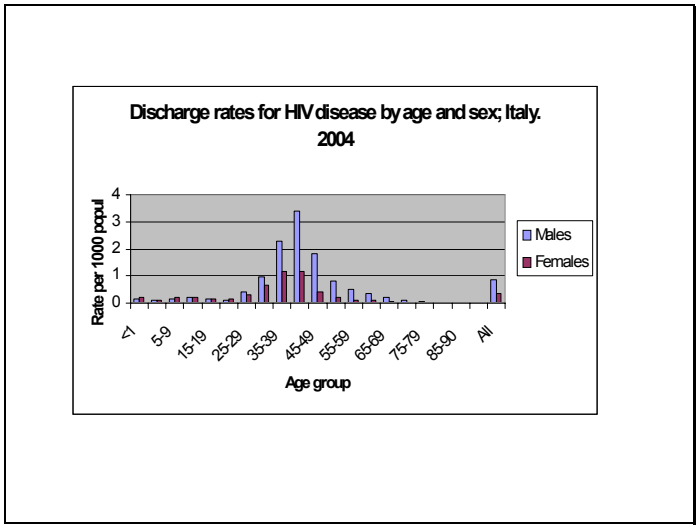
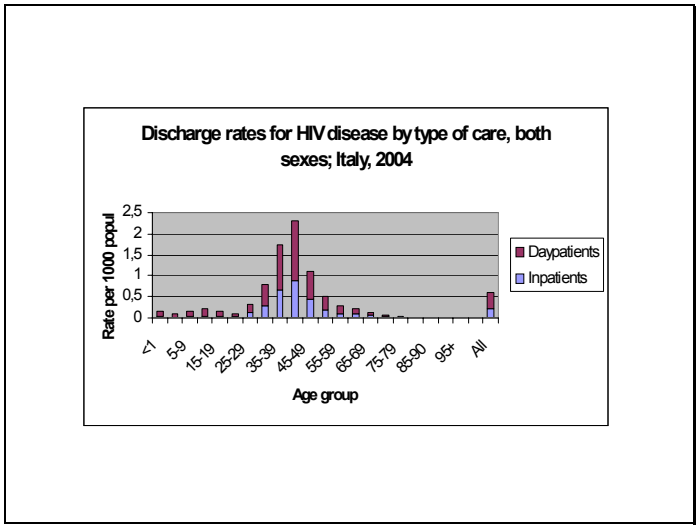


A.II.9 Comparative analysis Diagnosis

Dia 13



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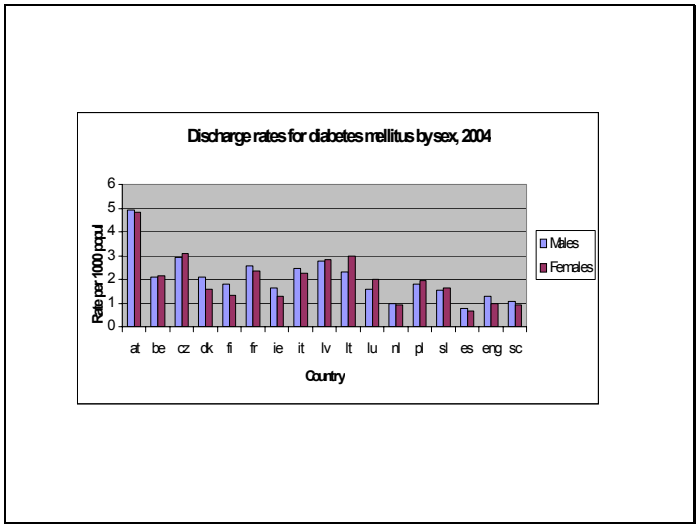

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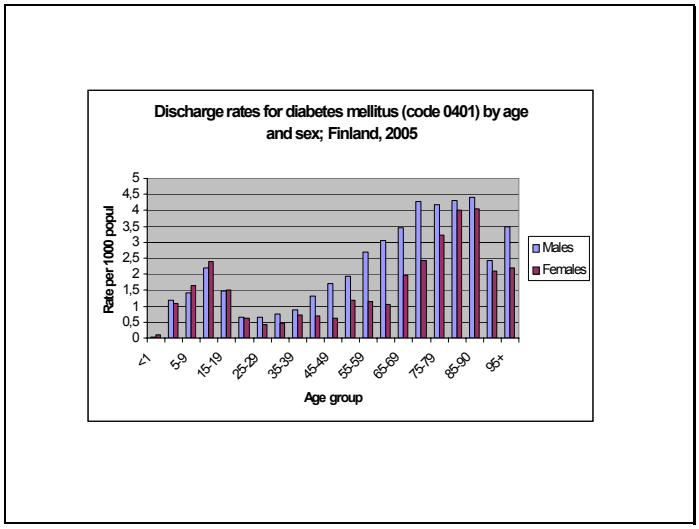
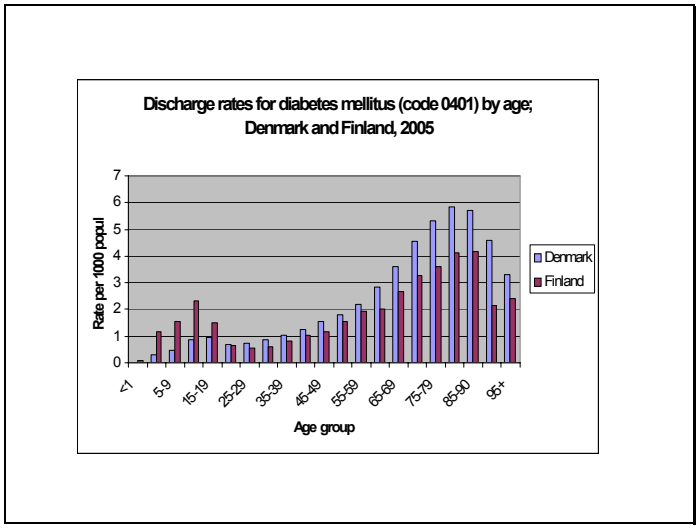


A.II.9 Comparative analysis diagnosis

Dia 16



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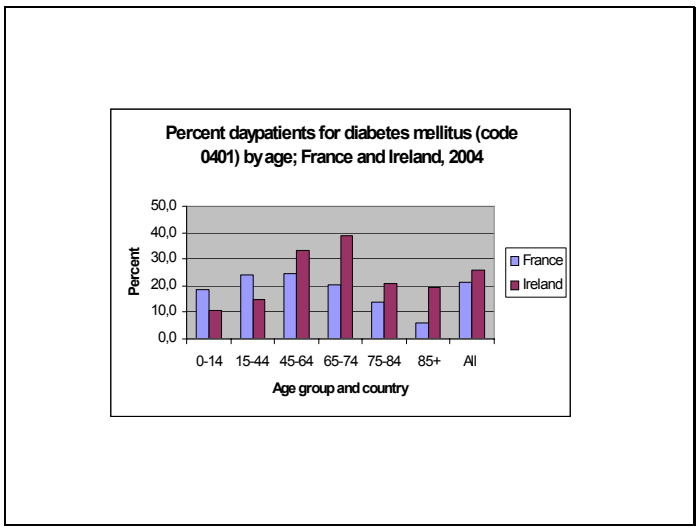

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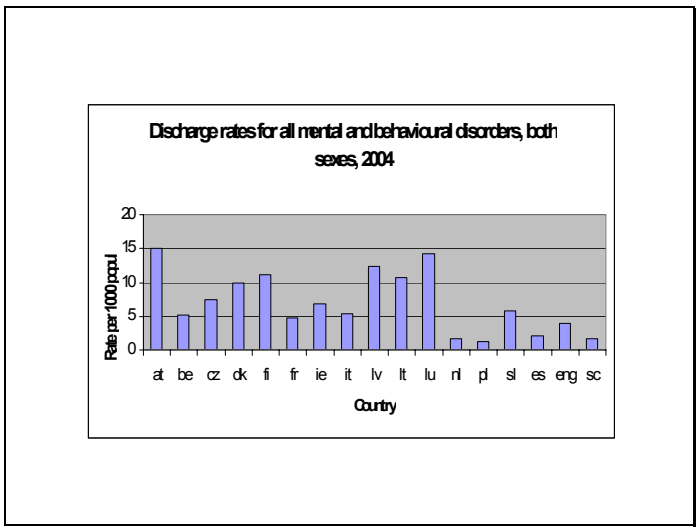
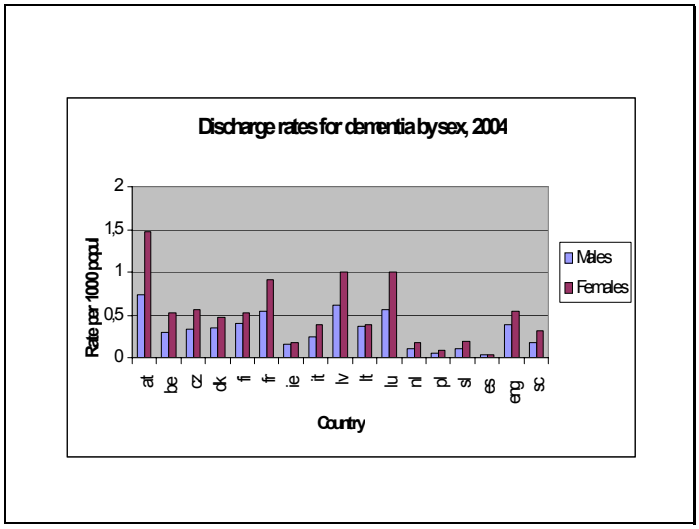


A.II.9 Comparative analysis Diagnosis

Dia 19



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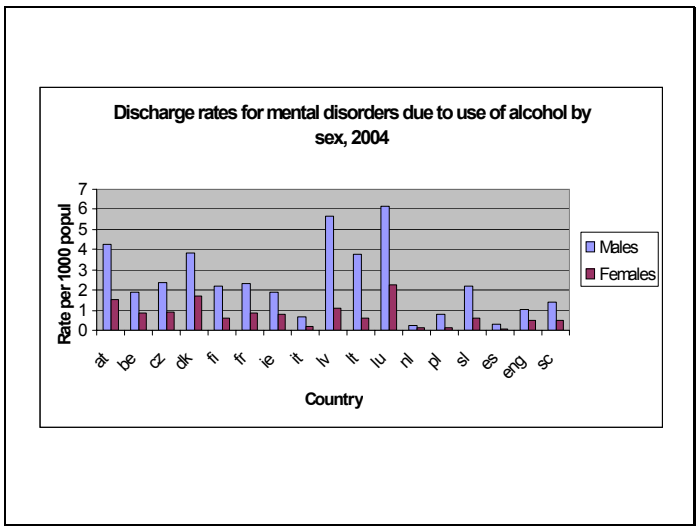

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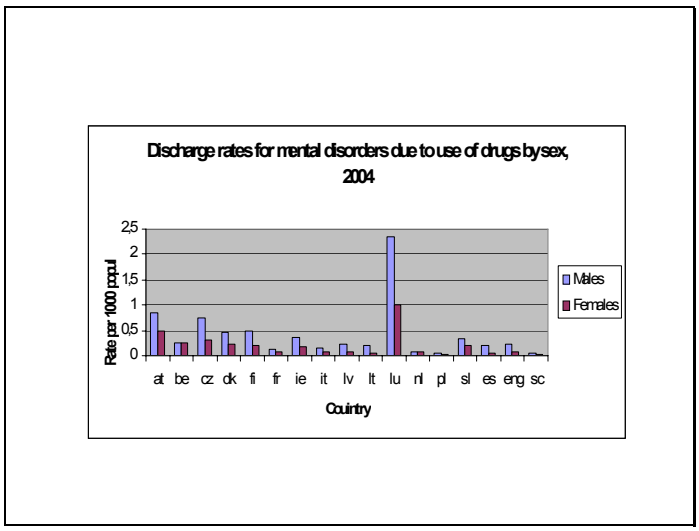
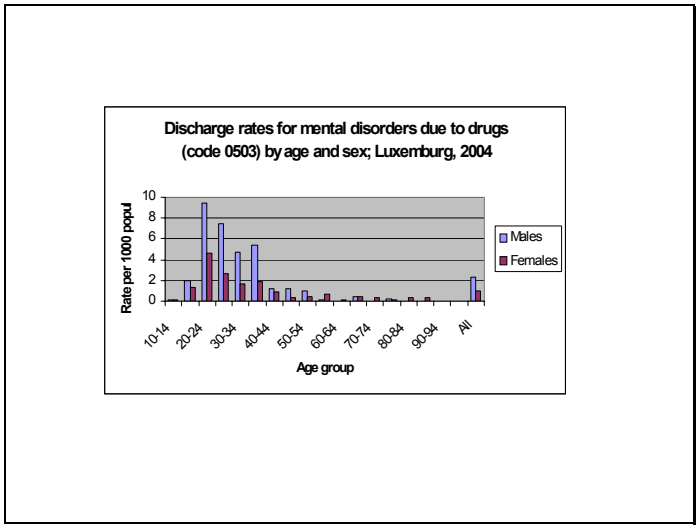


A.II.9 Comparative analysis diagnosis

Dia 22



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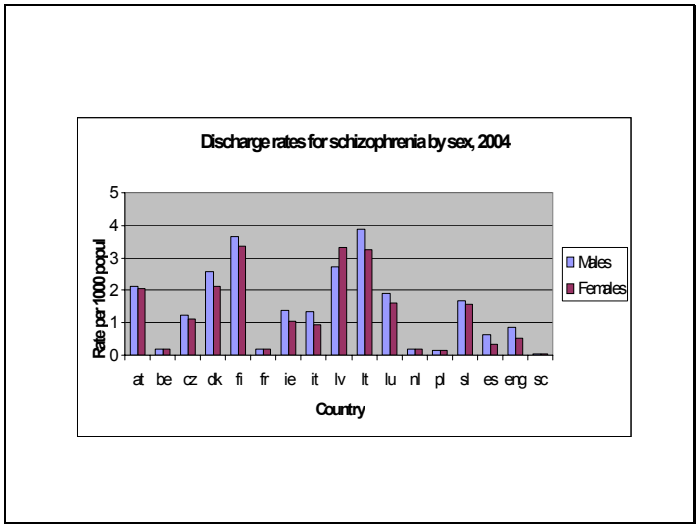

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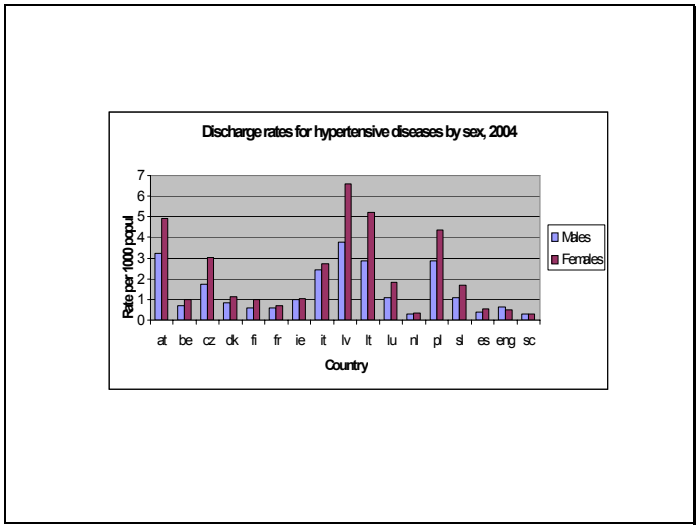
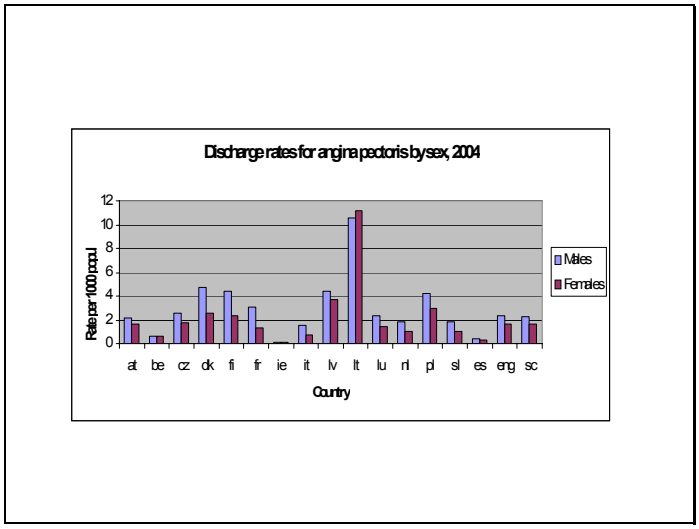


A.II.9 Comparative analysis Diagnosis

Dia 25



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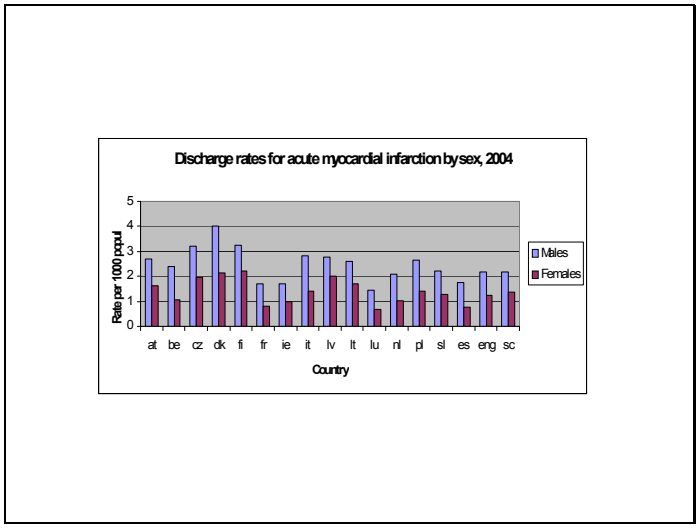

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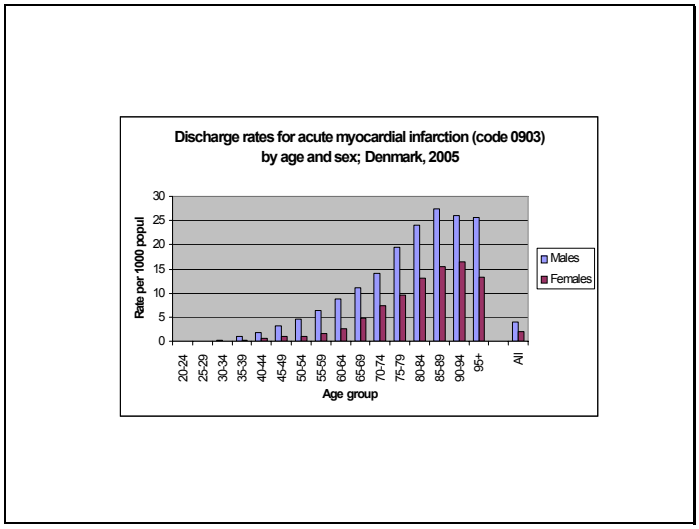
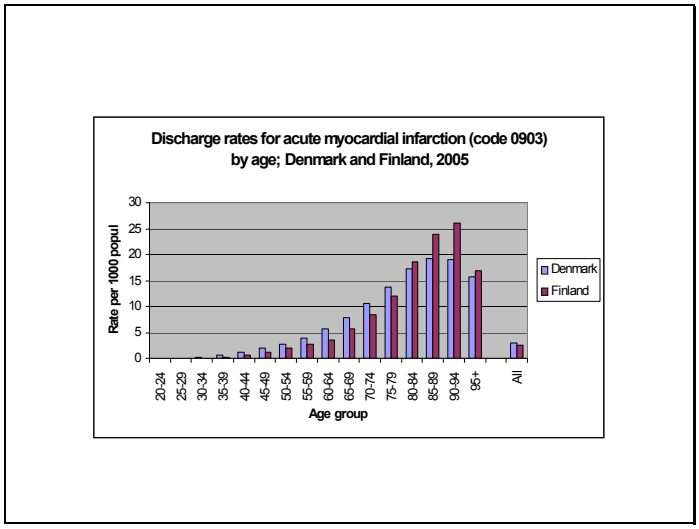


A.II.9 Comparative analysis diagnosis

Dia 28



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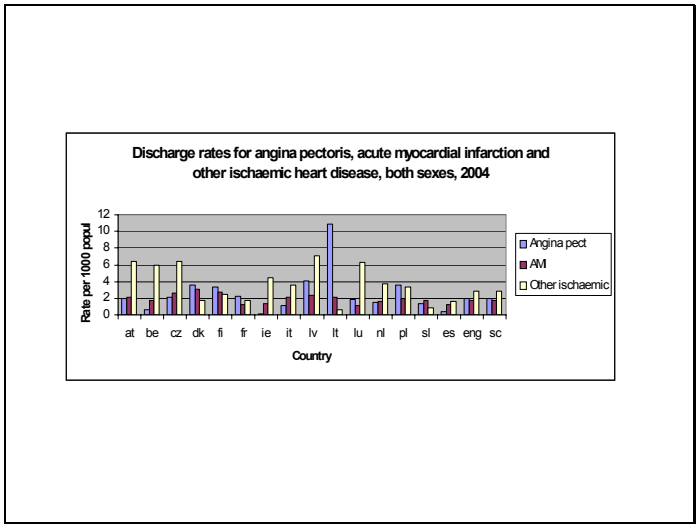

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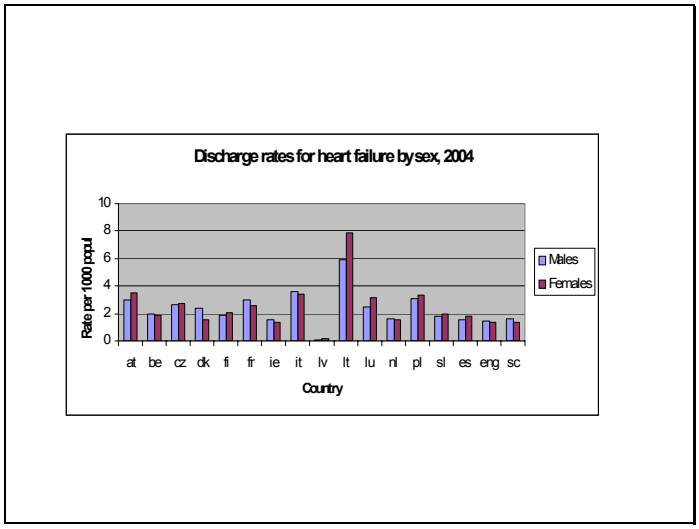
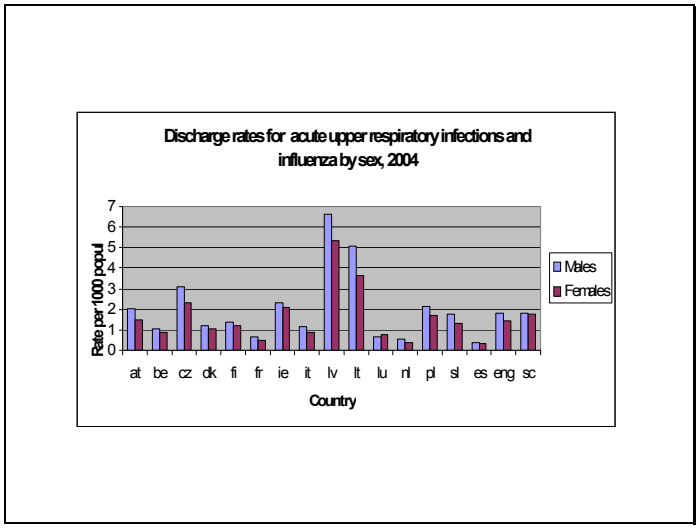


A.II.9 Comparative analysis Diagnosis

Dia 31



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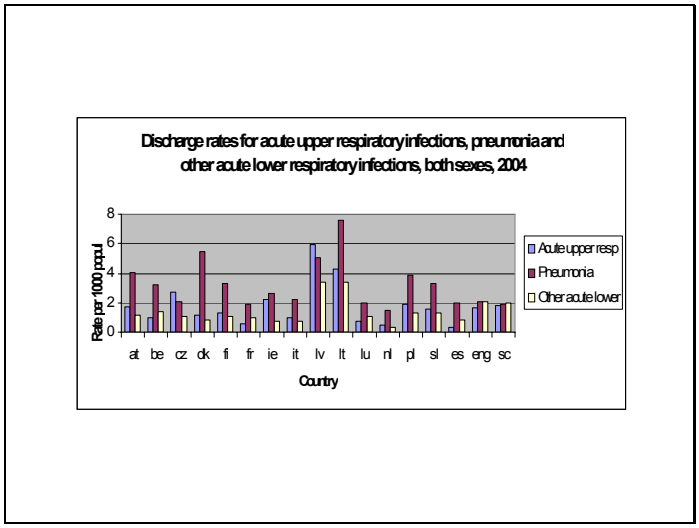

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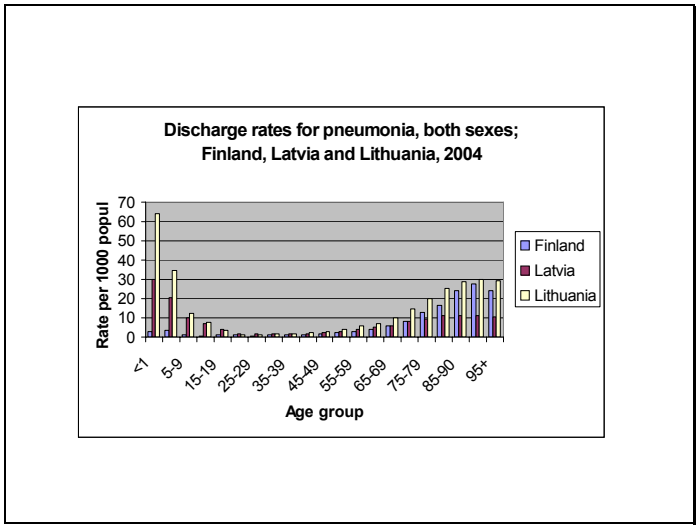
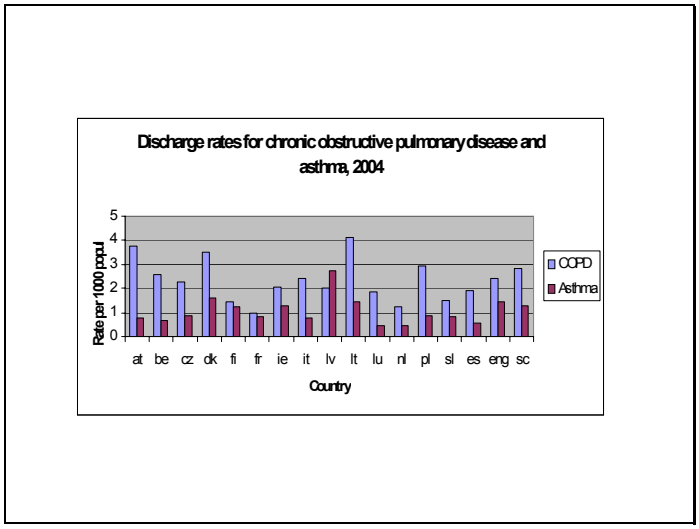


A.II.9 Comparative analysis diagnosis

Dia 34



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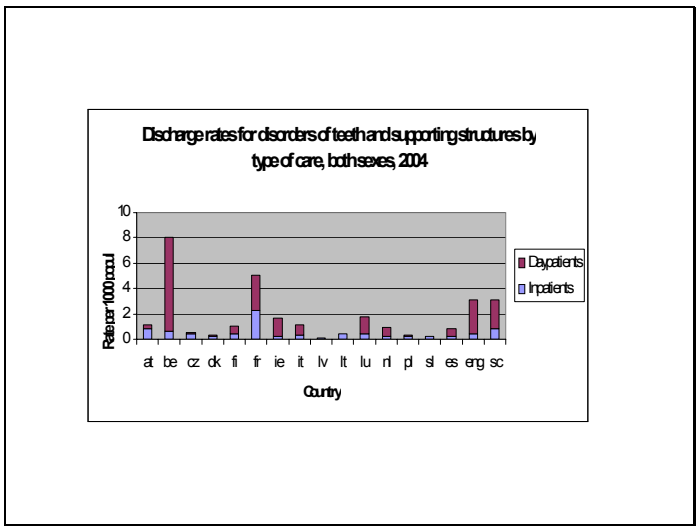

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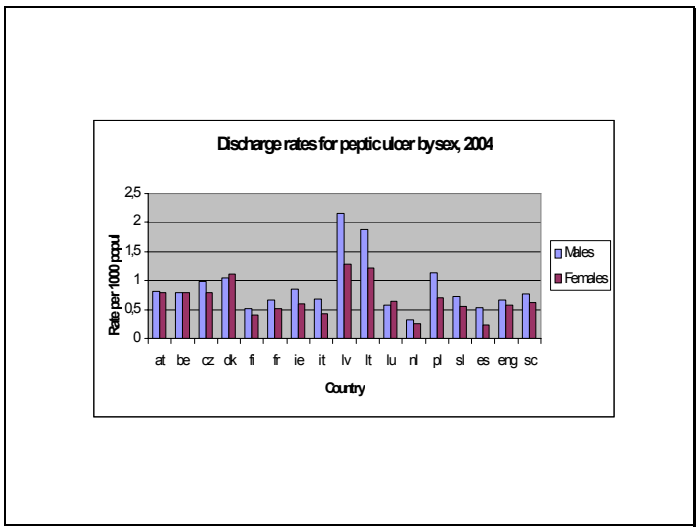
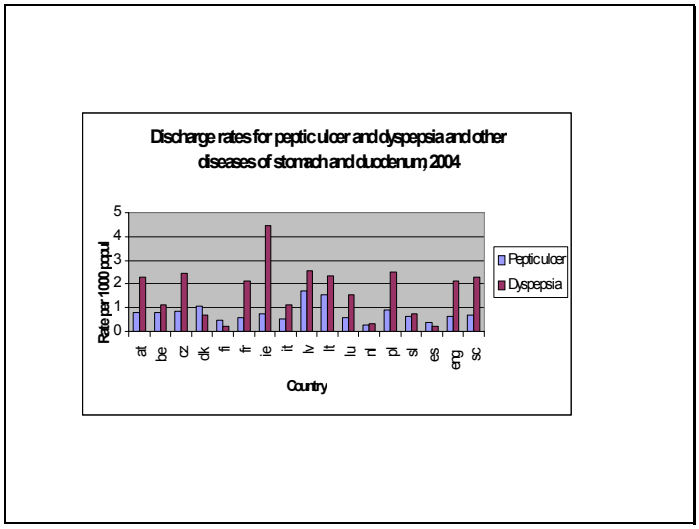


A.II.9 Comparative analysis Diagnosis

Dia 37



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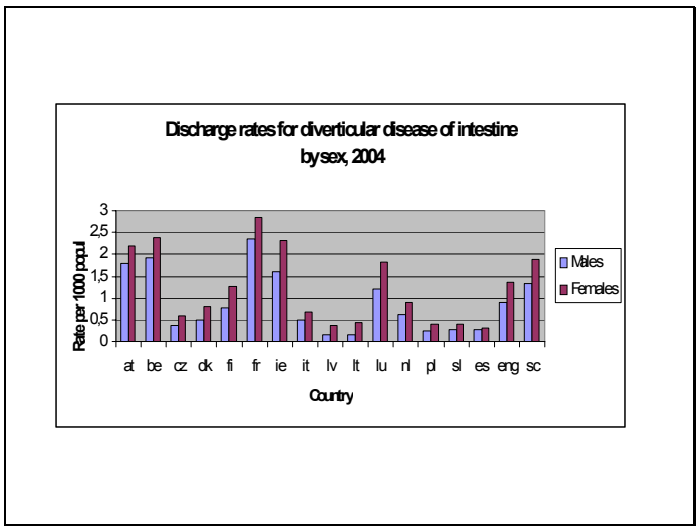

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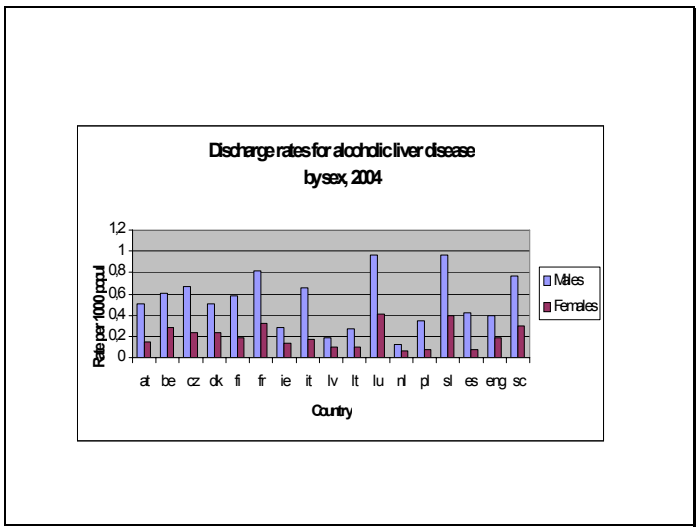
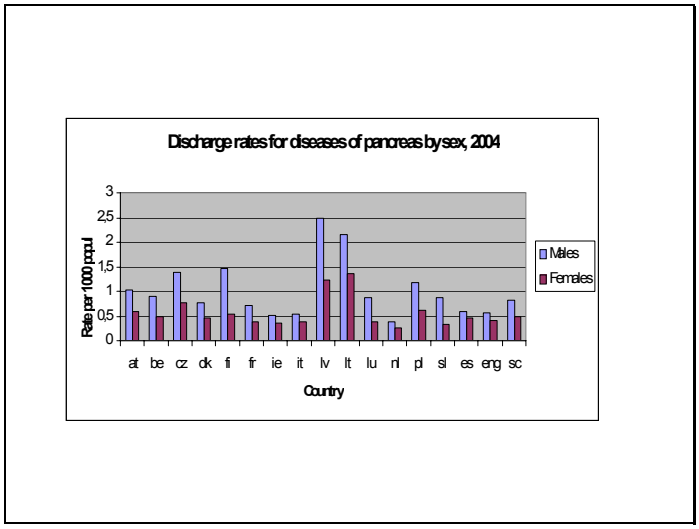


A.II.9 Comparative analysis diagnosis

Dia 40



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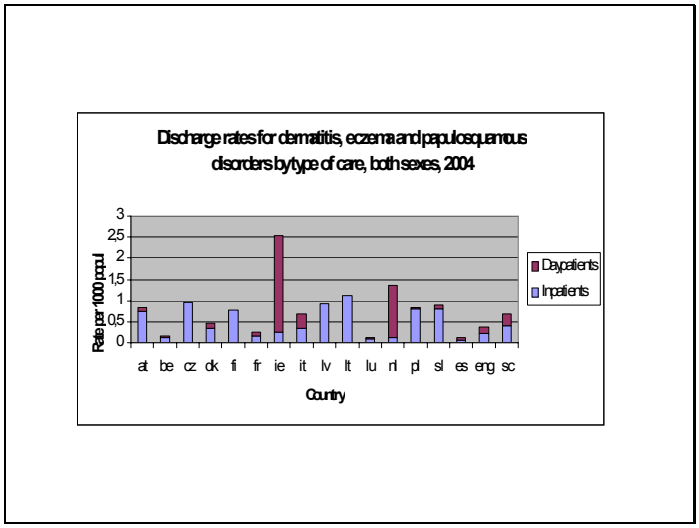

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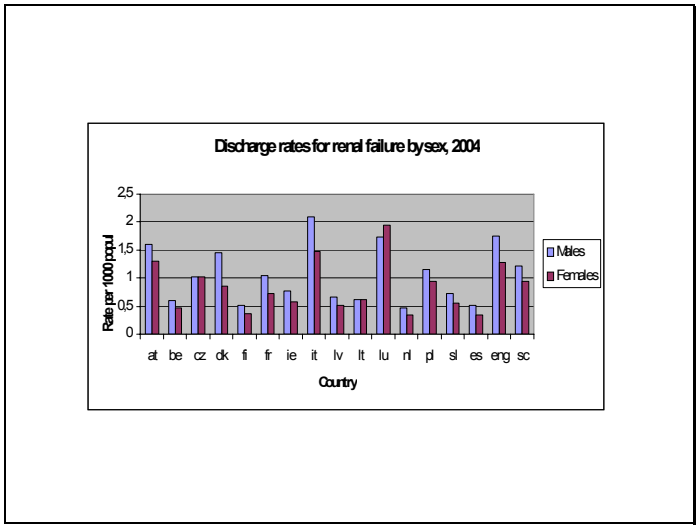
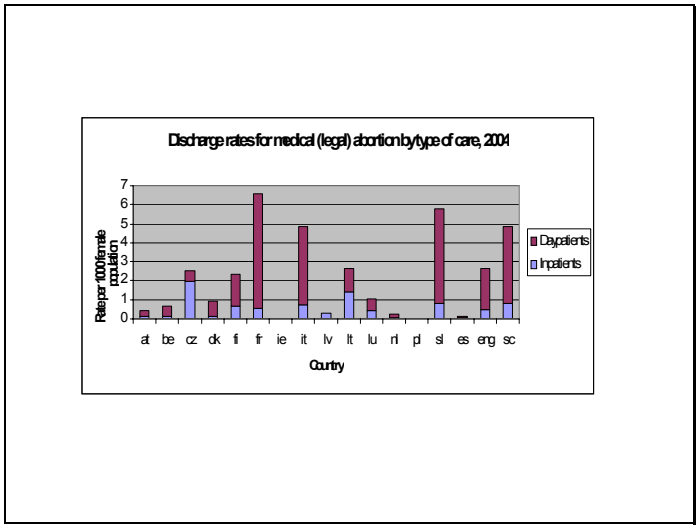
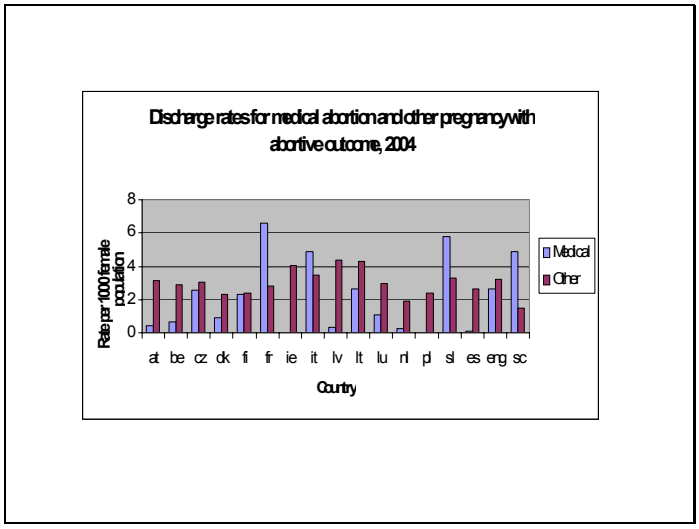


A.II.9 Comparative analysis Diagnosis

Dia 43



Dia 44



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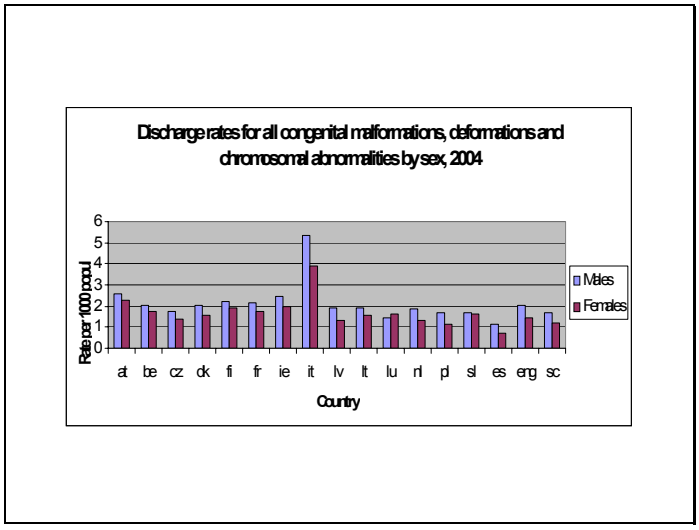
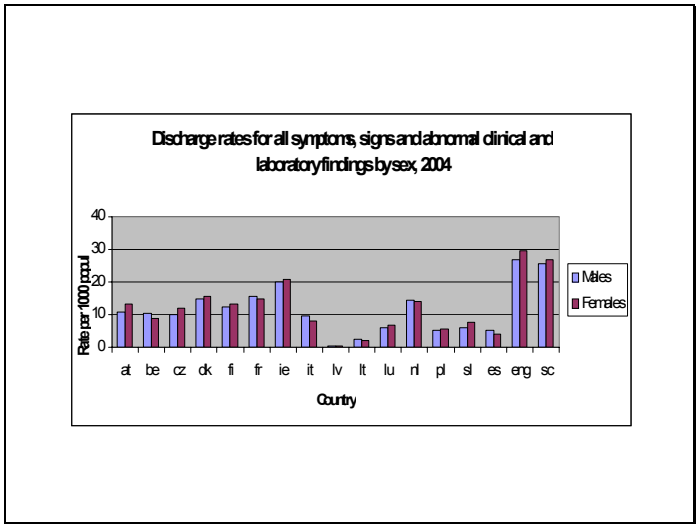


A.II.9 Comparative analysis diagnosis

Dia 46



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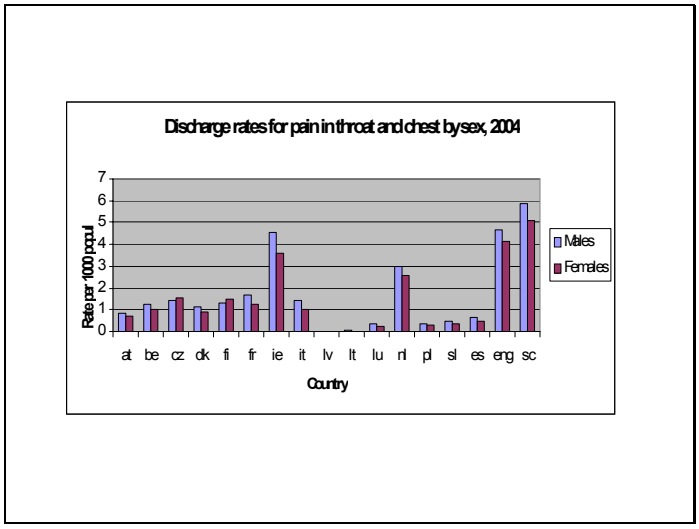

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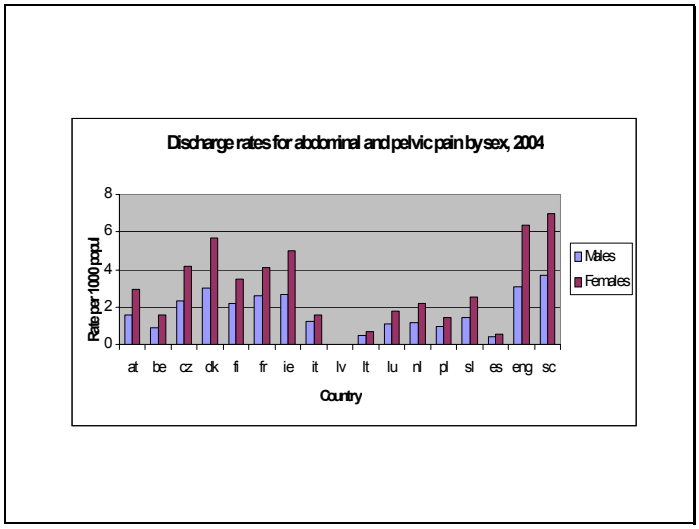
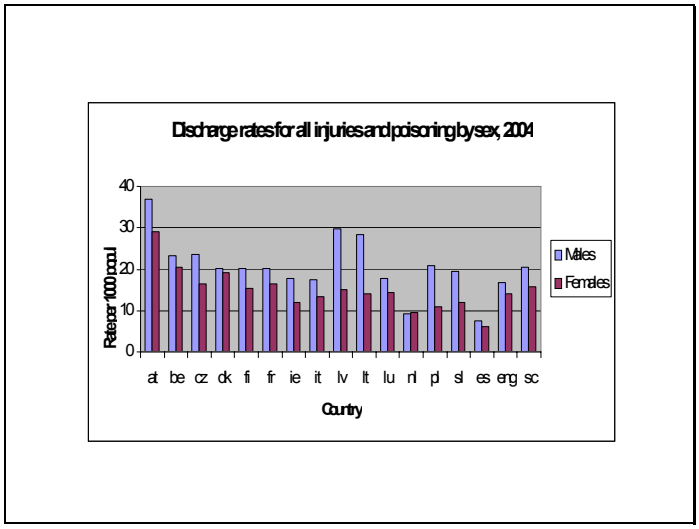


A.II.9 Comparative analysis Diagnosis

Dia 49



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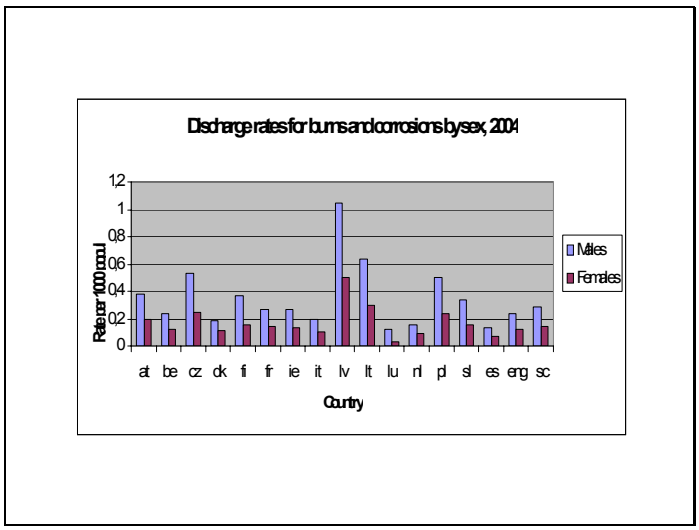

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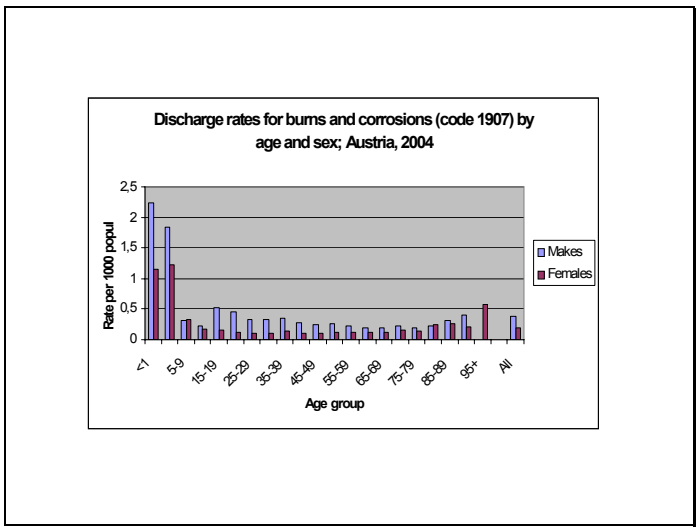
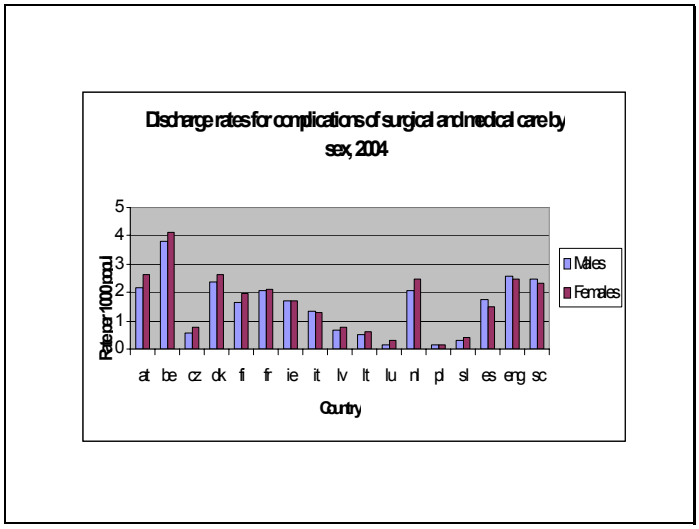


A.II.9 Comparative analysis diagnosis

Dia 52



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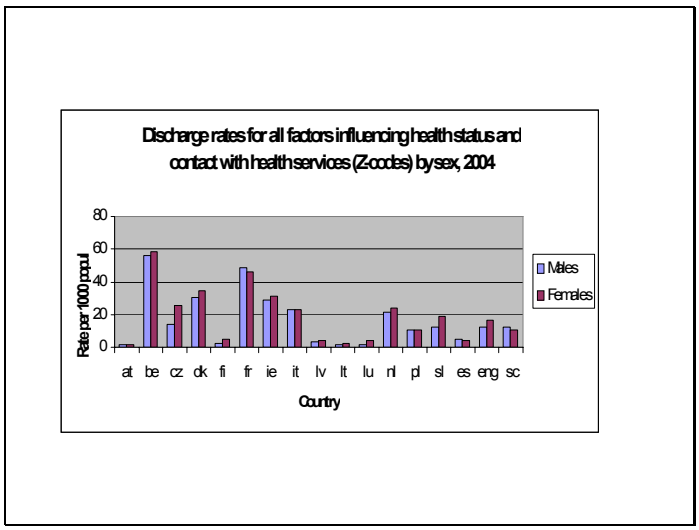

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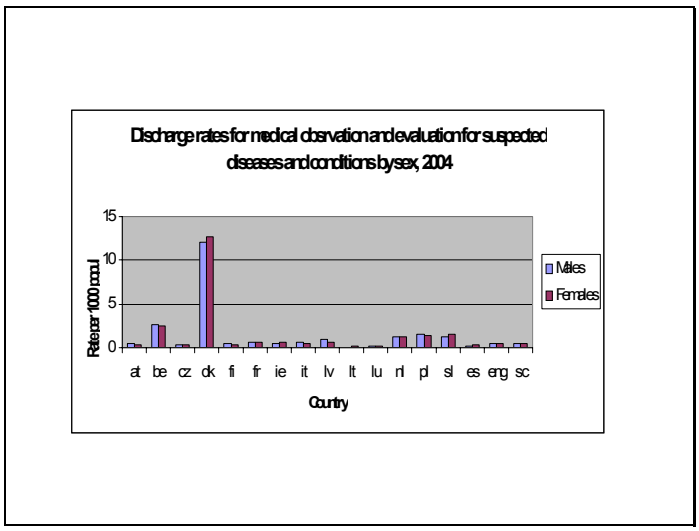
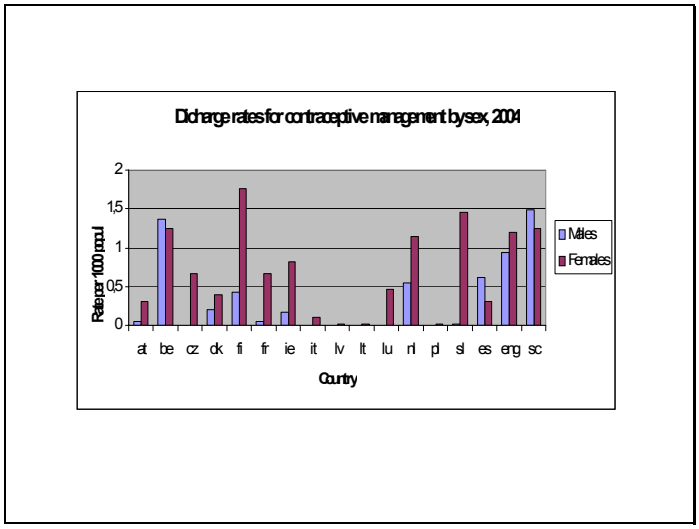


A.II.9 Comparative analysis Diagnosis

Dia 55



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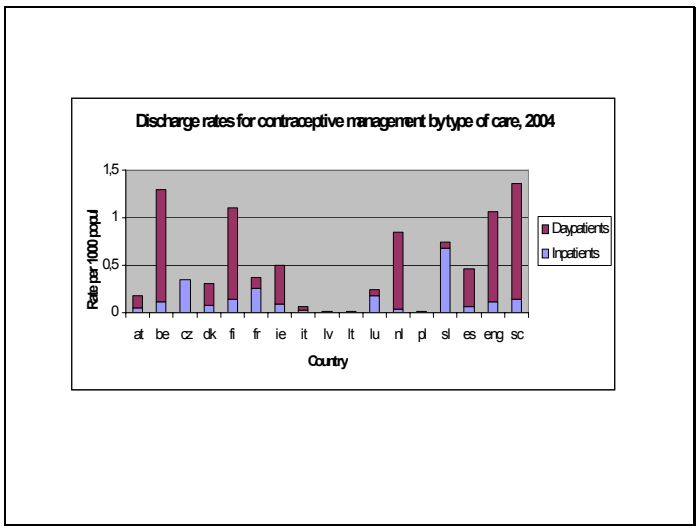

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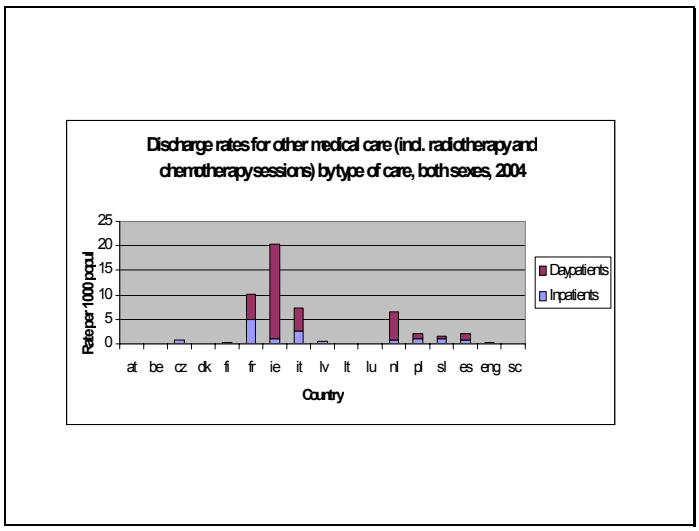


b. Analysis per country

A.II.9 Comparative analysis Diagnosis

1. Austria

1. **Austria** has a higher discharge rate than any other country for the whole group of *malignant neoplasms*. Otherwise these rates are fairly stable among countries (low rates for **Spain** is an exception due to underreporting). Does this reflect more readmissions during investigation and treatment of cancer patients in Austria than in other countries? Morbidity differences seem unlikely.

High discharge rates for the whole group of malignant neoplasms reflect a high rate of readmissions during investigation and treatment. Especially drug therapy is reported as hospital day case.

2. Discharge rates for *diabetes mellitus* is higher in **Austria** than in any other country. Are there known morbidity differences or mainly organizational explanations?

Discharge rates for diabetes mellitus and for hypertensive disease seem to reflect coding diffences to other countries.

3. There are high (female) discharge rates for *hypertensive disease* in **Austria, Latvia, Lithuania** and **Poland**. Hypertension is thus reported as the main reason for hospital investigation and treatment in these cases. Could it be that other countries more often register the resulting complications to hypertension (cardiosclerosis, heart insufficiency, nephropathy etc) as the main reason for hospital care? Thus, could it be a matter of coding difference?

Discharge rates for diabetes mellitus and for hypertensive disease seem to reflect coding diffences to other countries.

4. Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

We have no explanation for the sex differences in discharge rates for intervertebral disc disorders and dorsalgia compared to Latvia and Lithuania and for the the high discharge rates for whole chapter of injuries and poisonings.

2. Belgium

1. The very high rate for *angina pectoris* in **Lithuania** sticks out and may be a matter of coding difference. The very low rates in **Belgium, Ireland** (2004) and **Spain** are mainly due to an omission of ICD-9-CM definitions in the shortlist, but why not in **Poland** that also uses ICD-9-CM?

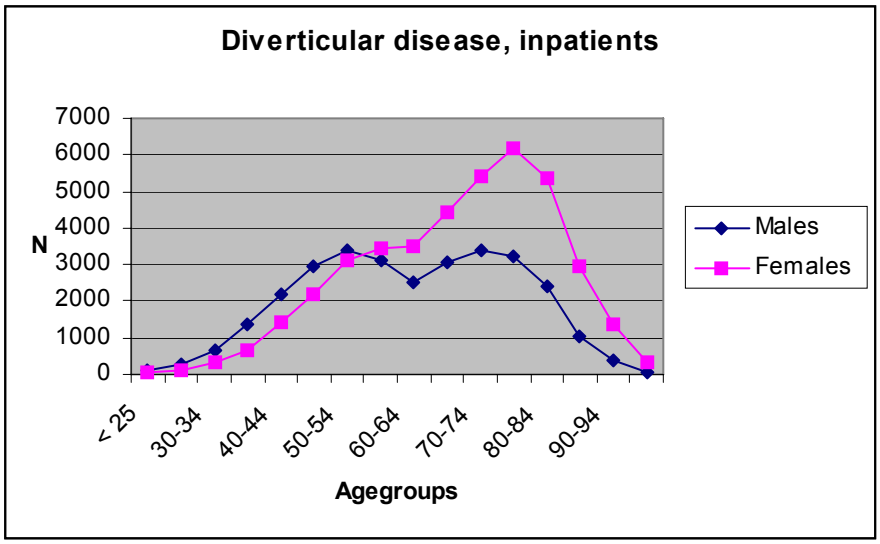
Applying the new definitions regarding ISHMT to the Belgian data (inpatients and day-cases) of the year 2005, the number of cases only slightly increased from 273,850 to 275,446. We think the low Belgian rates are not mainly due to the ICD-9-CM definitions since angina pectoris cases may be treated in an ambulatory setting.

2. High discharge rates (mainly daypatients) for *disorders of teeth* are found for **Belgium, France, England** and **Scotland**. This is contrary to most other countries. Dentistry seems to be more of a hospital task in these countries. Tradition? Health insurance? Legal rules about use of general anaesthesia?

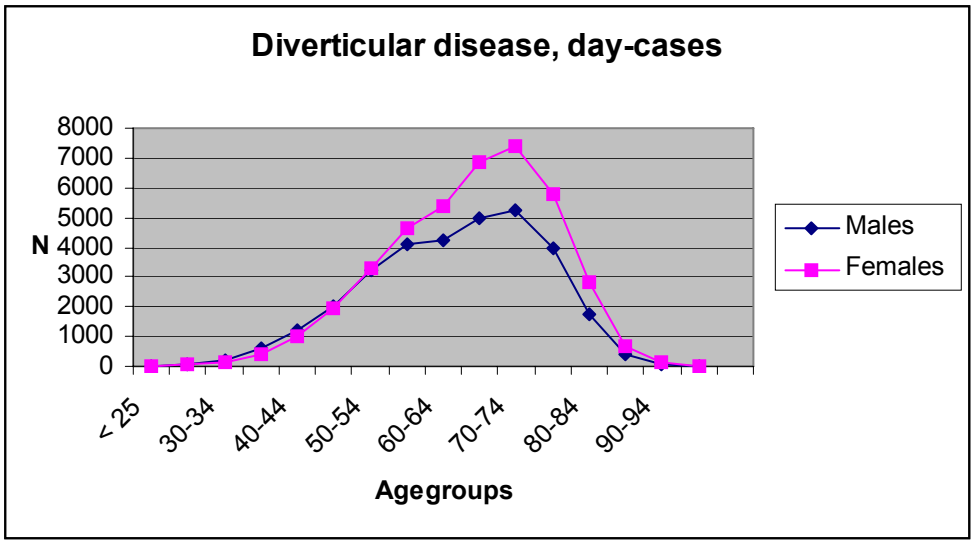
According to a study carried out by the Belgian Health Care Knowledge Centre our rates are in line with those to be expected according to the Index of Orthodontic Need. However we are not sure whether the correct patient group has been treated.
There may be over-use of these procedures in Belgium; there may also be under-use of them in other countries.

3. There are big differences in the rates for *diverticular disease of intestine.* The high rates in **Belgium, France** and **Ireland** may be due to the frequent use of colonoscopy in these countries (shown in the procedure reporting) resulting in detection of (sometimes asymptomatic) diverticulae. Other reasons?

Apart from possible between-countries differences in age and gender distributions and nutritional, we don't have any other reason to explain this high rate.



A.II.9 Comparative analysis Diagnosis



Nutritional factors may play a role as well.

4. There is a great variation in discharge rates for the whole chapter *Factors influencing health status and contact with health service (Z-codes)*. Very high rates fore **Belgium, France** and **Ireland**. In Belgium every fifth discharge has a Z-code, in Denmark and France every sixth and in Ireland every tenth. This fact results in lower rates of other, disease oriented diagnoses. Are there national coding advices for the high use of Z-codes? Which are the main types of patients?

Belgium has an unlimited number of secondary diagnoses and procedures, which may facilitate the use of Z-codes.
Healthy newborns are coded using a Z-code. Also we are working on admissions not on individuals. It may that an individual has several sessions of chemotherapy in a day-case or inpatient setting leading to several Z-codes.

In table 1the Z-codes have been split up into the ISHMT subcategories. Herein the "Live born infants" category constitutes > ½ of the inpatient stays whereas the "Other medical care" category is responsible for 1/6 of the inpatient stays and ¾ of the day-cases.
Comparing our HDP2 data (admissions) with the data we sent to the WHO (individuals) for the years 2003-5 we got 41,537 discharges in the WHO data ⇔ 102,895 HDP2 data and for day-cases these numbers amount respectively to 146,004 ⇔ 884,149. Notice that the WHO data are those of the V58 whereas HDP2 includes code V07.1 as well.
For the same period our V07.x data sent to WHO amounted to 861 inpatients and 1558 day-cases.
Remark: the conversion between ICD-10 and ICD-9 codes as given in the diagnosis table does not seem to be complete: palliative care for instance is coded V66.7.

A.II.9 Comparative analysis diagnosis

Table 1: Z-codes in Belgian discharge abstracts, 2000-6.

	Inpatients		*Day-cases*	
	Frequency	Percent	Frequency	Percent
Factors influencing health status and contact with health services	1427713	11,50	2464419	30,24
From which:				
Liveborn infants according to place of birth healthy newborn babies	789362	55,29	3308	0,13
Other factors influencing health status and contact With health services	253575	17,76	435722	17,68
Other medical care (including radiotherapy and chemotherapy sessions)	231846	16,24	1899807	77,09
Medical observation and evaluation for suspected diseases and conditions	141484	9,91	43524	1,77
Contraceptive management	11446	0,80	82058	3,33

5. There is great variation in discharge rates for *contraceptive management (Z30)* with astonishing differences in the sex pattern. High male rates in **Belgium, England** and **Scotland.** Any explanations?

Vasectomy is a procedure that may be performed in ambulant practice. However in Belgium reimbursement regulations as well as insurance constraints make that one is inclined to expect that this procedure hardly ever is carried out in an ambulant setting. If these regulations/ constraints differ over the countries it might explain part of those between-countries differences.

3. Czech Republic

1. Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

It seems that the organization of health care systems (relicts of Austria-Hungarian Empire versus Soviet system) determines the huge differences in the number of hospitalized persons for dg. M54. In the CR and Austria there is no problem to be hospitalized for these "less serious" conditions where as it might be problem in Latvia and Lithuania where doctors might hesitate to send people with such conditions to hospitals.
Age profiles of the hospitalized persons and general working conditions and structure of jobs (manual/non-manual) could play a role.

4. Finland

1. **Finland** shows higher discharge rates for children with *diabetes mellitus* than nearby **Denmark.** Discharge rates for elderly males are much higher in **Denmark,** however. Are these morbidity differences or policy divergences?

side1: It is thrue, that Finland has higher disharge rates for children with diabetes mellitus than nearby Denmark.

2. Hospital care for *acute upper respiratory infections* is most common in **Latvia** and **Lithuania** and also for *pneumonia,* especially in **Lithuania**. Most of these cases are in the age group under one year. There are marked differences to nearby **Finland** in these respects. Does this reflect different treatment traditions?

Infections and pneumonia: 2) side2: These problems are handled in Finland in open care health centres. I think that Latvia and Lithuania has the old one system where the care is mainly done in hospitals.

5. France

1. Discharge rates for *mental and behavioural disorders* vary among countries, mainly reflecting differences in coverage (mental hospitals not included in some countries). For similar reasons discharge rates for dementia vary. **France** and **Netherlands** both have a high proportion of day care among dementia patients. Is this social care more than medical care?

Low discharge in mental and behavioural disorders are clearly explained in France by the fact specialized psychiatric hospitals are not included in the national data basis presently.
Concerning dementia, day cases are not social care, because that kind of care are made in specialized departments taking care during the day of the demented patients. But diagnosis of Alzheimer disease and check-up for dementia are very often made in acute day care departments.

2. There are high (female) discharge rates for *hypertensive disease* in **Austria, Latvia, Lithuania** and **Poland**. Hypertension is thus reported as the main reason for hospital investigation and treatment in these cases. Could it be that other countries more often register the resulting complications to hypertension (cardiosclerosis, heart insufficiency, nephropathy etc) as the main reason for hospital care? Thus, could it be a matter of coding difference?

Yes, we believe that, at least in France, but may be in other countries, hospitalization of hypertensive patients are coded with the diagnosis of the complication. Check-ups for hypertension are made in outpatients departments in our country.

3. High discharge rates (mainly day patients) for *disorders of teeth* are found for **Belgium, France, England** and **Scotland**. This is contrary to most other countries. Dentistry seems to be more of a hospital task in these countries. Tradition? Health insurance? Legal rules about use of general anaesthesia?

In France, it is very common for teenagers to have excision of the wisdom teeth. It is not very common to make that in the dentist's office (it is not very well paid), but more commonly in a hospital under general anesthesia. Health insurance will cover that procedure.

4. There are big differences in the rates for *diverticular disease of intestine.* The high rates in **Belgium, France** and **Ireland** may be due to the frequent use of colonoscopy in these countries (shown in the procedure reporting) resulting in detection of (sometimes asymptomatic) diverticulae. Other reasons?

There is a problem for coding: when the colonoscopy is normal; except diverticulae, is it justified to have diverticular disease as a primary diagnosis?

5. The variation in discharge rates for *medical (legal) abortion* reflects differences in the law (non-existing in **Ireland** and **Poland**). Are the high rates (mainly as day care) in **France, Italy, Slovenia** and **Scotland** due to different abortion methods with readmission of patients treated with non-surgical methods?

There are more than 200 000 medical abortions in France with 44 % of non-surgical. We estimate that less than 5 % of non-surgical abortions need readmission for failure or complications. High rates of discharge reflect, for us, the high rate of total abortions

6. There is a great variation in discharge rates for the whole chapter *Factors influencing health status and contact with health service (Z-codes)*. Very high rates fore **Belgium, France** and **Ireland**. In Belgium every fifth discharge has a Z-code, in Denmark and France every sixth and in

A.II.9 Comparative analysis diagnosis

Ireland every tenth. This fact results in lower rates of other, disease oriented diagnoses. Are there national coding advices for the high use of Z-codes? Which are the main types of patients?

French national coding advices increase the percentage of these patients, with the principal groups :

FR - Year 2006	Codes	Number of in-patient cases	Number of day cases	Hospital days for in-patient cases
Medical observation and evaluation for suspected diseases and conditions	Z03	8 891 (39.8)	13 436 (60.2)	26 394 (100)
Contraceptive management	Z30	14 544 (51.2)	13 863 (48.8)	27 636 (100)
Liveborn infants according to place of birth ("healthy newborn babies")	Z38	662 463 (99.8)	1 273 (0.2)	2 928 169 (100)
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	354 207 (46.7)	404 303 (53.3)	2 229 749 (100)
Other factors influencing health status and contact with health services	remainder of Z00-Z99	429 047 (25.2)	1 270 646 (74.8)	1 622 554 (100)
Total		1 469 152 (46.3)	1 703 521 (53.7)	3 172 673 (100)

7. In **France** the discharge rate (mainly daypatients) is high for *other factors influencing health status and contact with health service* (the remainder group within the Z-chapter). This group accounts for half of all French Z-codes. Which patients are coded here? Follow up and control visits? Others?

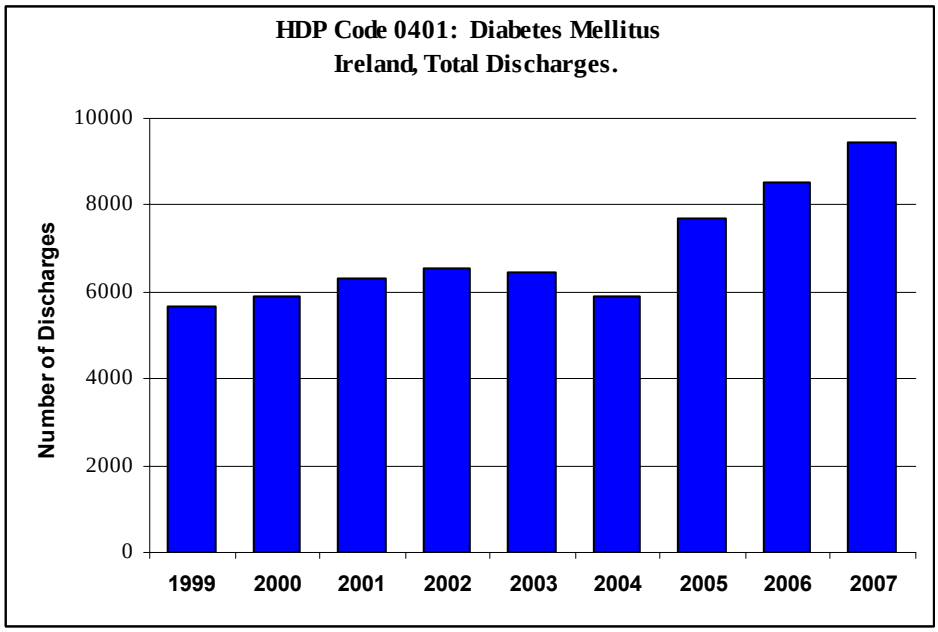
In this group, there are hospitalizations for control of non malignant diseases (included AIDS, education for diabetes or asthma) (20 %), control after treatment of malignant diseases (10 %), or taking care of permanent vascular accesses (7 %).

6. Ireland

1. France and **Ireland** both have a high proportion of daypatients for *diabetes mellitus.* However, day care is more common in young patients in France but more common among the elderly in Ireland. Does this reflect different ways of caring for diabetes?

HDP Code 0401 [Diabetes Mellitus]:

There does not appear to be any particular reason for the increase in discharges in 2005. However when all diagnoses are examined, the number of discharges does not change significantly in 2005 compared to 2004. This suggests that more discharges have diabetes coded as a principal diagnosis in 2005 due to the increased list of complications and manifestations in ICD-10-AM.



2. The very high rate for *angina pectoris* in **Lithuania** sticks out and may be a matter of coding difference. The very low rates in **Belgium, Ireland** (2004) and **Spain** are mainly due to an omission of ICD-9-CM definitions in the shortlist, but why not in **Poland** that also uses ICD-9-CM?

HDP Code 0902 [Angina Pectoris]:

This was an issue with a previous version of the ISHMT, which we first discovered in May 2007 when the OECD queried Ireland's data on Angina Pectoris and Other Ischaemic Heart Disease. We responded to the OECD advising that cases of Unstable Angina are coded as ICD-9-CM 411.1 and so would be included in the 0904 category. However the ICD-10-AM equivalent code for Unstable Angina is I20.0 and so these cases would be included in the 0902 Angina Pectoris category. We also notified Bjorn Smedby of this issue, and asked for clarification.

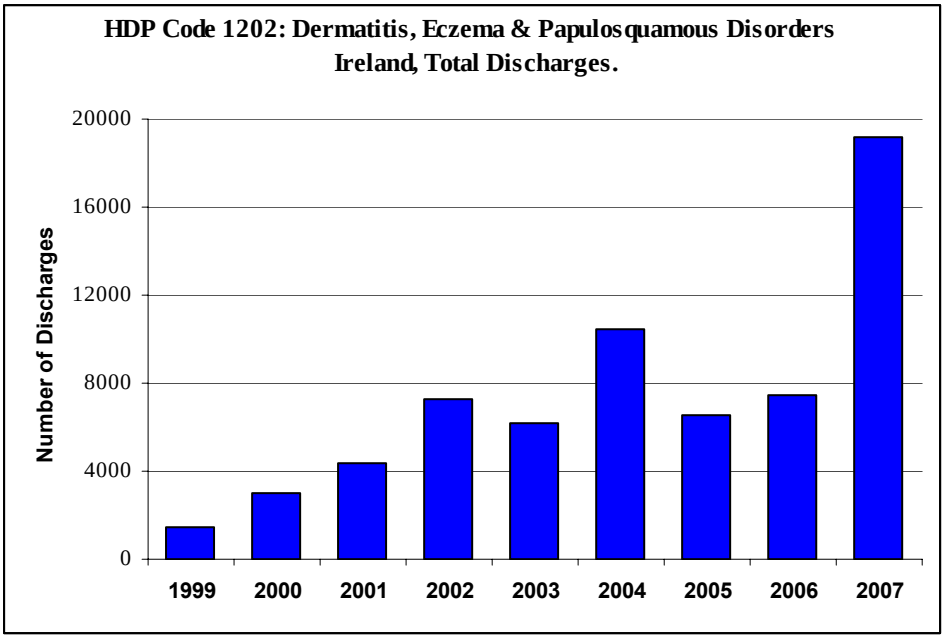
The shortlist was corrected in the November 2007 version of the ISHMT

3. The discharge rate for *dermatitis, eczema and papulosquamous disorders* is very high in **Ireland** and rather high in the **Netherlands,** in both countries with a high proportion of day care. Is this due to morbidity differences or special treatment options calling for many repeat visits?

HDP Code 1202 [Dermatitis, Eczema & Papulosquamous Disorders]:

A.II.9 Comparative analysis diagnosis

The inpatient rate is showing a slightly decreasing trend year on year, but the daycase rate varies significantly between years, with 2004 being particularly high. Examination of the 2004 daycases shows that they are mainly cases with a principal diagnosis of Psoriasis and with a principal procedure of Ultra Violet Light Therapy. Examination of the data also shows significant numbers multiple admissions among patients in this category.



4. The variation in discharge rates for *medical (legal) abortion* reflects differences in the law (non-existing in **Ireland** and **Poland**). Are the high rates (mainly as day care) in **France, Italy, Slovenia** and **Scotland** due to different abortion methods with readmission of patients treated with non-surgical methods?

HDP Code 1501 [Medical Abortion]:

Note that in Ireland, codes from ISHMT category 1501 (Medical Abortions) are only assigned for patients admitted to hospital with a complication following a legal abortion in another state.

5. There is a great variation in discharge rates for the whole chapter *Factors influencing health status and contact with health service (Z-codes)*. Very high rates fore **Belgium, France** and **Ireland**. In Belgium every fifth discharge has a Z-code, in Denmark and France every sixth and in Ireland every tenth. This fact results in lower rates of other, disease oriented diagnoses. Are there national coding advices for the high use of Z-codes? Which are the main types of patients?

HDP Code 2100 [Factors Influencing Health Status & Contact with Health Services]:

Note that Ireland includes admissions for chemotherapy and radiotherapy in this category. From 1st January 2006, HIPE has been including data on day patients admitted for dialysis in dedicated dialysis daycases units. Previously this activity was excluded from HIPE. This has resulted in a significant increase in the numbers of discharges in categories 2100 and 2105 in 2006 and 2007.

Diagnosis Shortlist:

HIPE data for Ireland from 1999 to 2004 were coded using ICD-9-CM. From 1st January 2005, all discharges have been coded using ICD-10-AM, the Australian modification of ICD-10 incorporating the Australian Classification of Health Interventions (ACHI). We have also adopted the Aus-

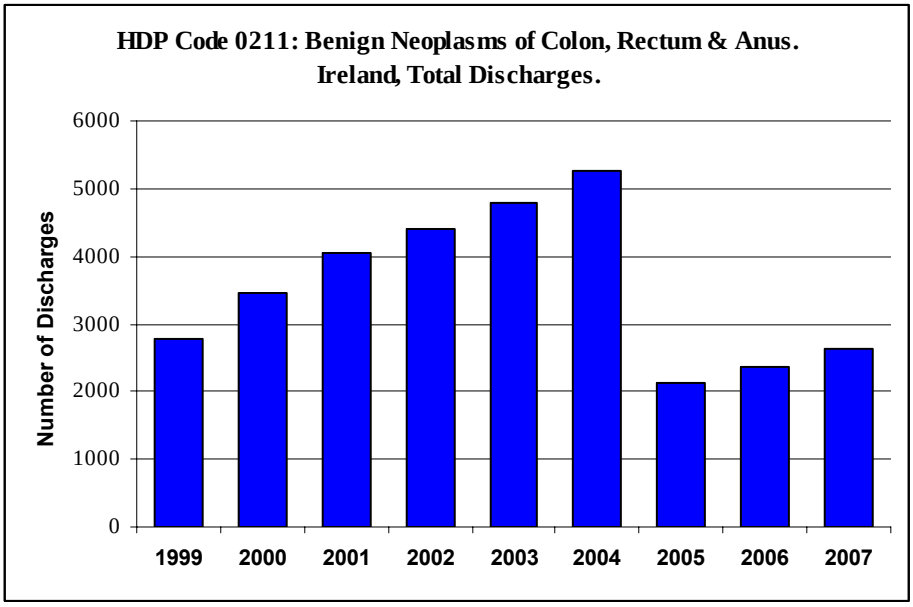
A.II.9 Comparative analysis Diagnosis

tralian Coding Standards (produced by the National Centre for Classification in Health (NCCH) (Sydney) The University of Sydney). There are also additional Irish Coding Standards.

We have been supplying data to Eurostat, WHO and the Hospital Data Project for a number of years using the ISHMT. Through extensive analysis of the shortlist, particularly across the ICD-9-CM and ICD-10 classifications, we discovered a number of problems with the shortlist.

- **HDP Code 0211 [Benign Neoplasms of Colon, Rectum & Anus]**
  The decrease in discharges in this category for 2005 is due to the ICD-9 and ICD-10 codes specified in the ISHMT. In category 0211 [Benign neoplasm of colon, rectum and anus], the ICD-9-CM codes specified include a diagnosis of Polyp of Colon [ICD-9-CM 211.3]. The ICD-10 code D12 excludes Polyp of Colon. The ICD-10 code for Polyp of Colon is K63.5 which is included in the ISHMT category 1114 [Other diseases of intestine].

We sent an email to the WHO and Eurostat in June 2008 to advise them of this problem.

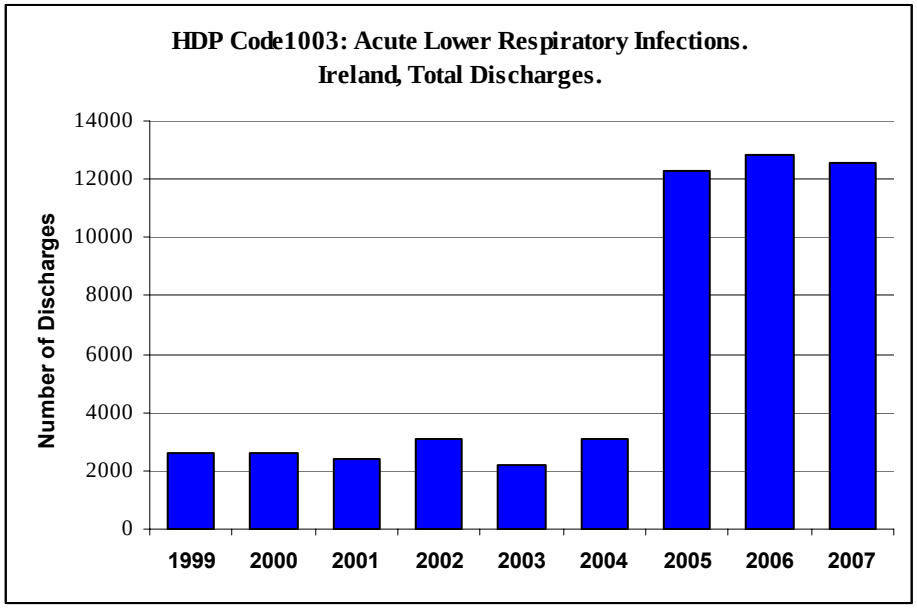


- **HDP Code 0300 [Diseases of the blood and bloodforming organs and certain disorders involving the immune mechanism]:**
  The ICD-9-CM code 279.9 (Unspecified disorder of immune mechanism) has been removed from the latest version of the shortlist. It has also been removed from the remainder category (ISHMT category 0302).
  In previous versions of the shortlist this code was included. If it is excluded from the shortlist, then it should also be excluded from the All Causes category as otherwise the sum of the major categories will not agree with the All Causes data. We have excluded this code from our HDP2 data.
  We advised Eurostat and the WHO of this problem in June 2008.

- **HDP Code 1003 [Acute Lower Respiratory Infections]:**
  The increase in discharges in 2005 is due to the classification change, in particular the ICD-10 code J22 'Unspecified Acute Lower Respiratory Infection' for which there is no equivalent code in ICD-9-CM. Therefore cases with this diagnosis in ICD-9-CM would be included in the 1008 category and in the 1003 category in ICD-10-AM.

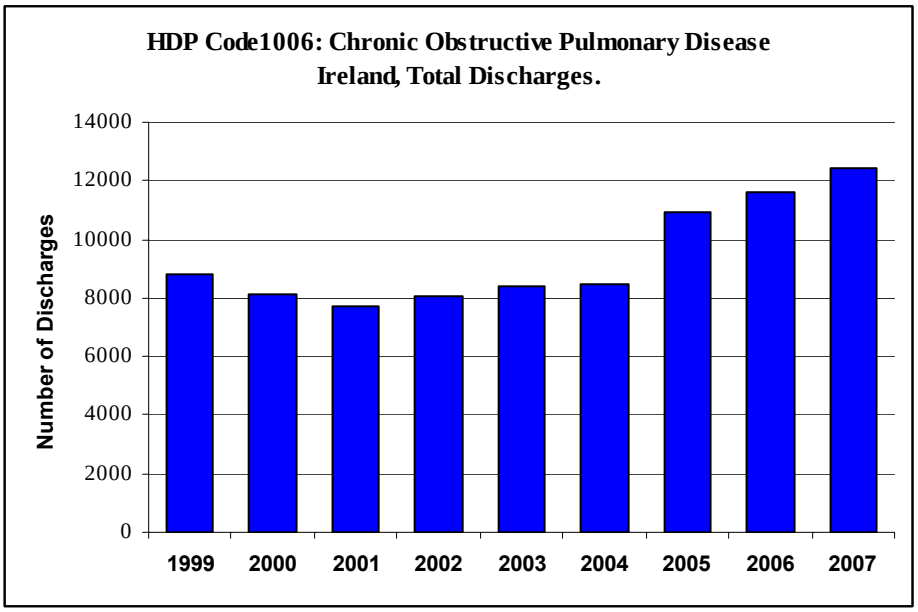
A.II.9 Comparative analysis diagnosis

(Notes on this category were included in the document 'Additional Metadata Info – Ireland' sent to HDP2.)

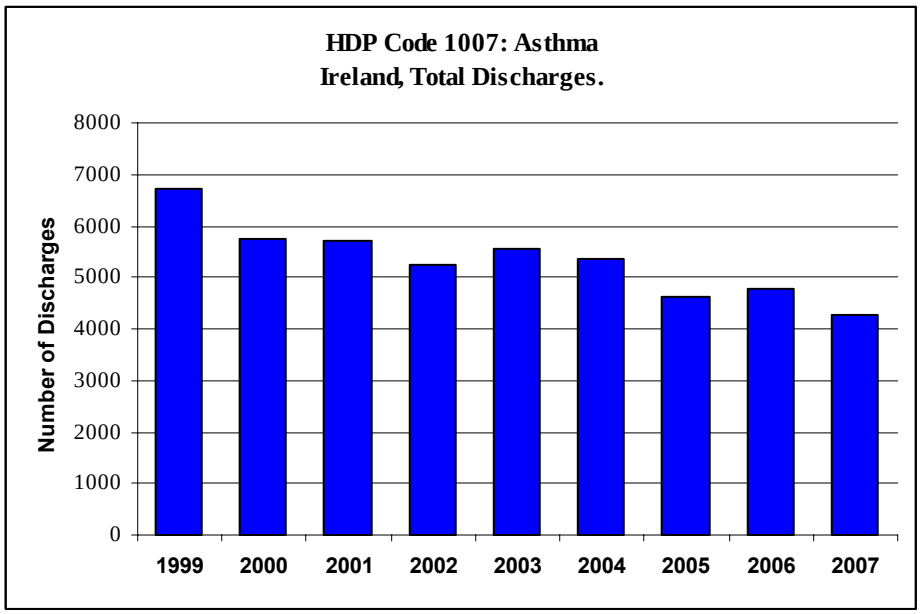


A.II.9 Comparative analysis Diagnosis

- **HDP Code 1006 [COPD]:**
  The increase in COPD rates in 2005 is a result of the classification change. In ICD-10-AM Chronic Obstructive Asthma is coded as J44 and so is included in the COPD category. In ICD-9-CM it is coded as 493.2, and so would be included in the 1008 [Asthma] category. We sent an email to the WHO and Eurostat in June 2008 to advise them of this problem.

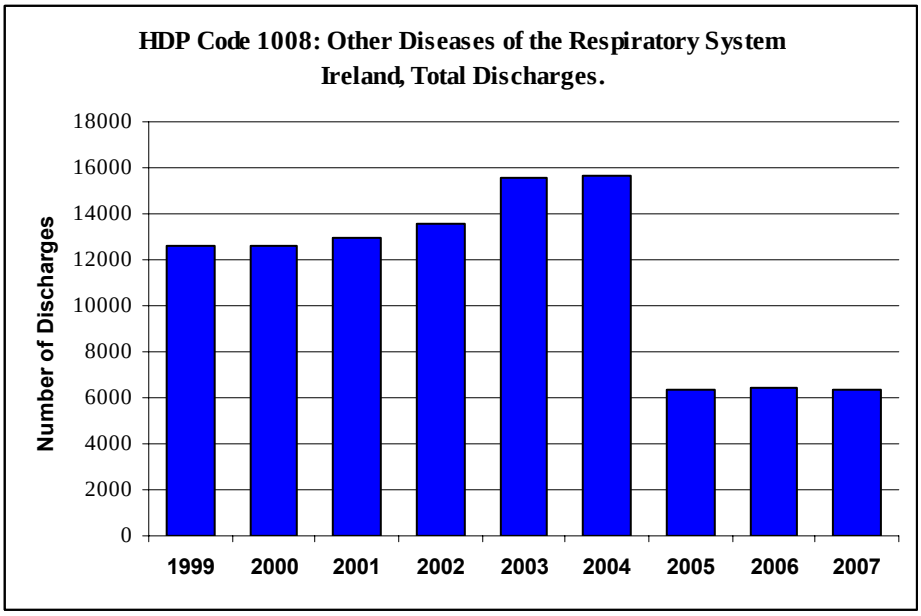


- **HDP Code 1007 [Asthma]:**
  The decrease in Asthma rates in 2005 is a result of the ISHMT. See note on COPD above.

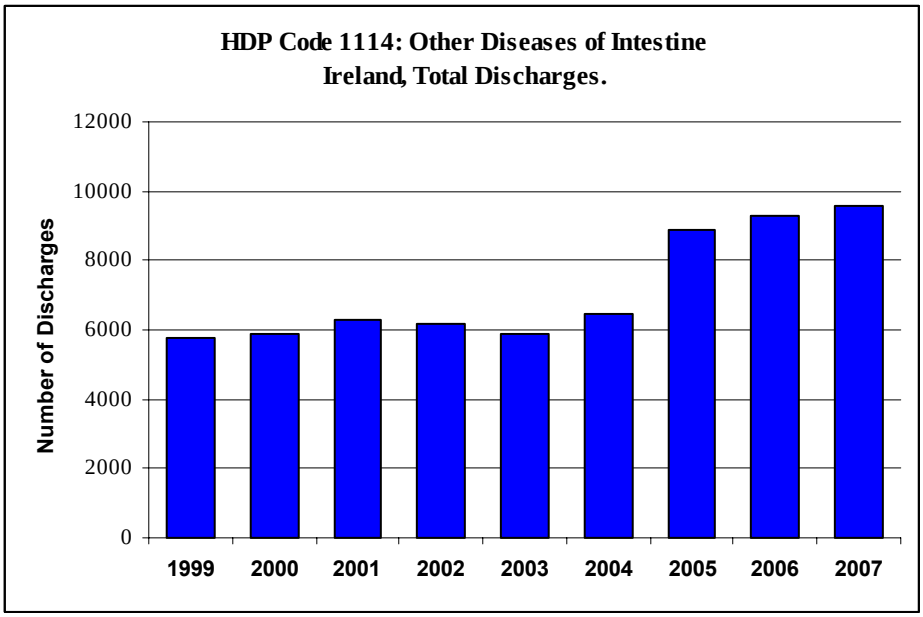


A.II.9 Comparative analysis diagnosis

- **HDP Code 1008 [Other Diseases of Respiratory System]:**
  The decrease in discharges in 2005 for this category is related to HDP Code 1003. See note above.



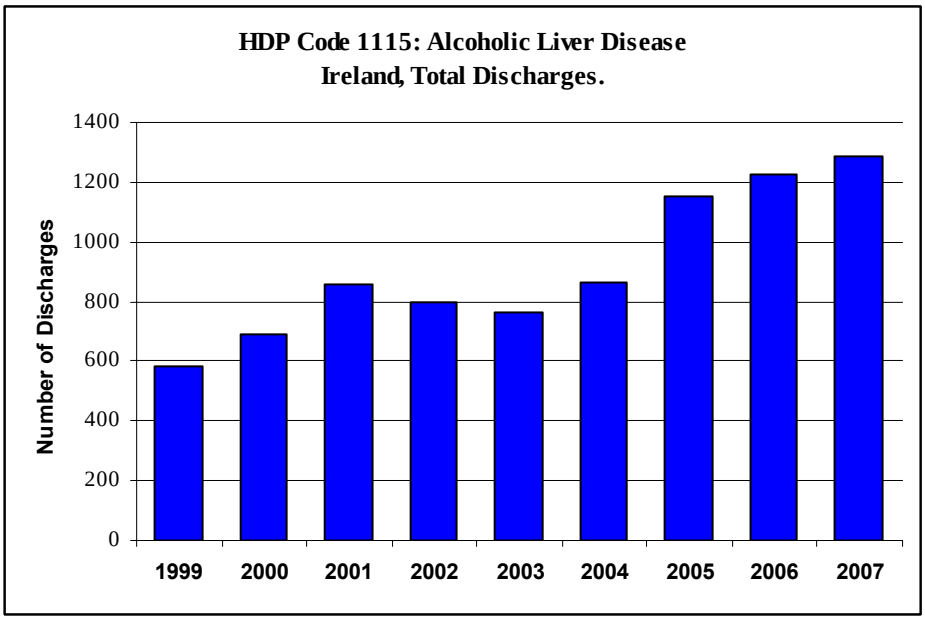
- **HDP Code 1114 [Other Diseases of Intestine]:**
  The increase in discharges in this category in 2005 is due to the ISHMT. Specifically, the ICD-10 codes include K63.5 'Polyp of Colon' of which there were approx 2500 cases in 2005. The ICD-9 codes specified in the shortlist do not included polyp of colon. See corresponding note on HDP Code 0211 [Benign Neoplasm of Colon].



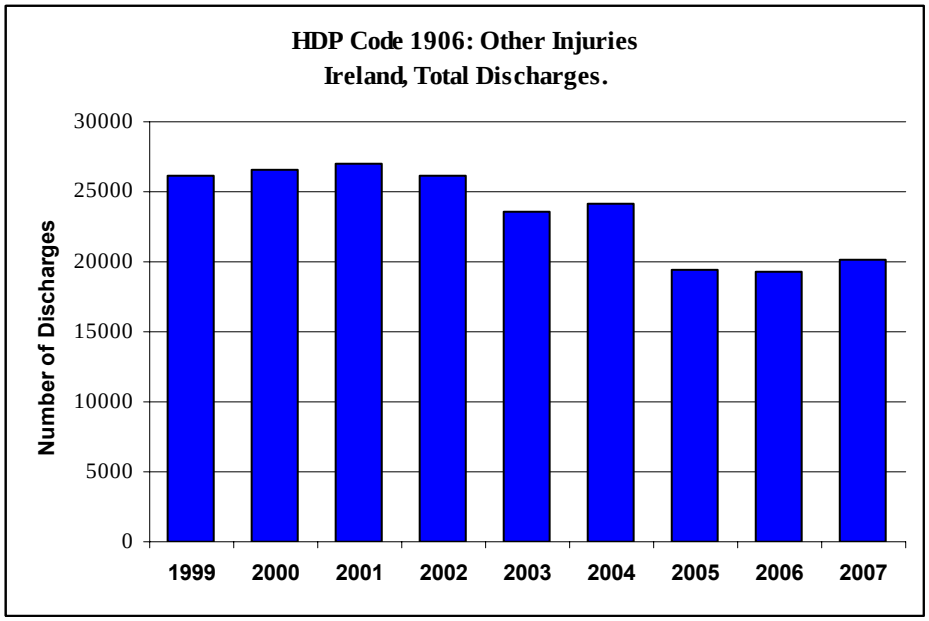
- **HDP Code 1115 [Alcoholic Liver Disease]:**

A.II.9 Comparative analysis Diagnosis

The inclusion of the ICD-10-AM code K70.4 'Alcoholic Hepatic Failure' appears to account for much of the increase in this category in 2005, as there is no equivalent code in ICD-9-CM.

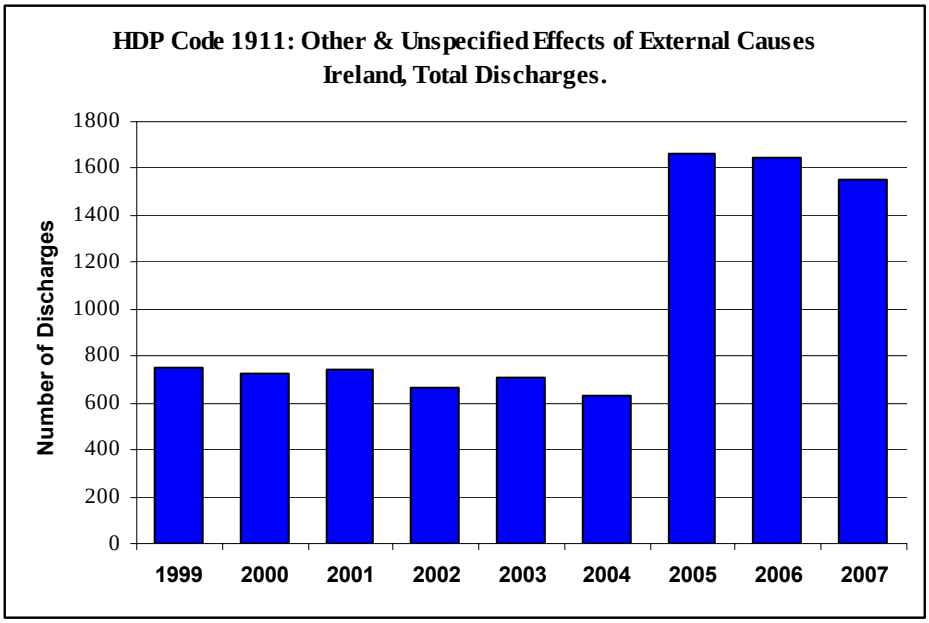


- **HDP Code 1906 [Other Injuries]:**
  There is an issue with the ISHMT for this category. The ICD-9-CM codes specified include Effects of Foreign Bodies Entering Through Natural Orifice 930 - 939. However the ICD-10 codes specified for this category do not include the corresponding codes for Foreign Bodies T15 - T19. We notified the WHO and Eurostat of this problem in June 2008.



- **HDP Code 1911 [Other & Unspecified Effects of External Causes]:**
  There is an issue with the ISHMT for this category, as a consequence of the omission of ICD-10 codes T15 -T19 from category 1906. See note above.

A.II.9 Comparative analysis diagnosis



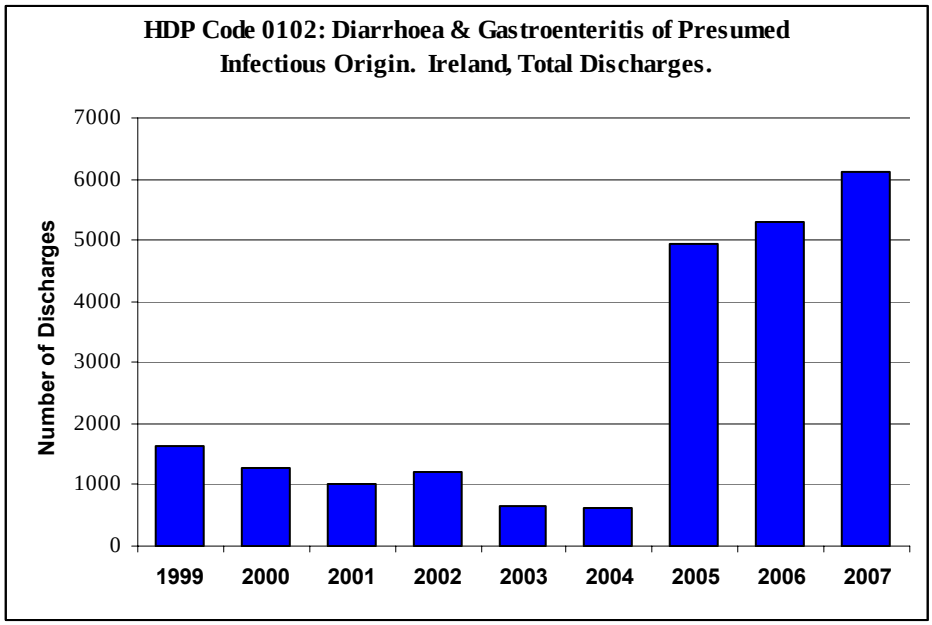
Other Comments on Irish Diagnosis Data:

- **HDP Code 0102 [Diarrhoea and gastroenteritis of presumed infectious origin]:**
  The increase in the data for code 0102 is due to an Australian Coding Standard that states that

  "If gastroenteritis is not stated as infectious it should be coded as A09 Diarrhoea and gastroenteritis of presumed infectious origin in children (15 years and under) and K52.- Other noninfective gastroenteritis and colitis in adults. This reflects the probable infectious cause in children and other possible causes (eg drugs, ischaemia and metabolic) in adults."

  This explains the large increase in the data for 2005. Previously the majority of these cases would have been reported in the category 1110 [Other non-infective gastroenteritis and colitis].

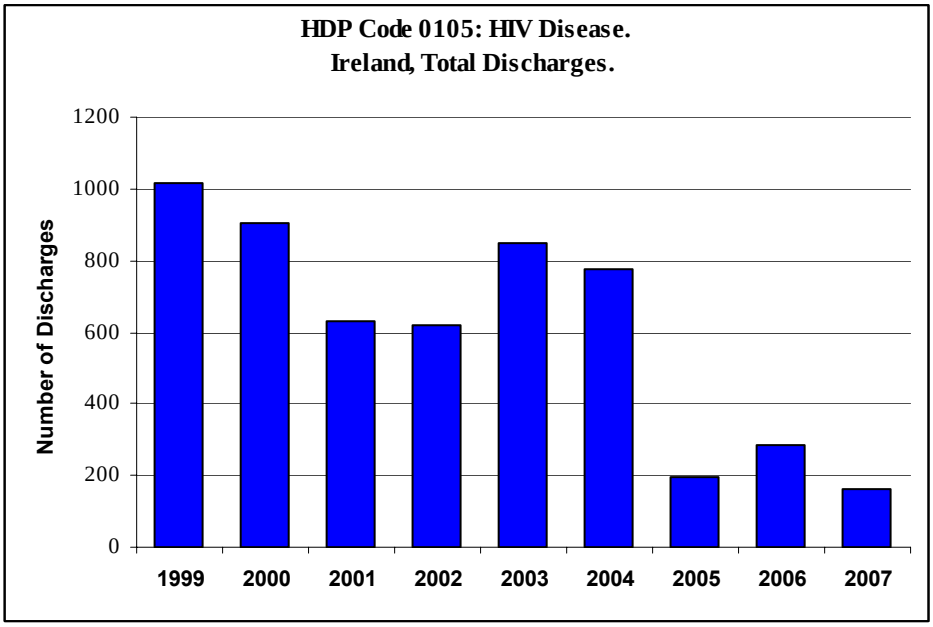
A.II.9 Comparative analysis Diagnosis



- **HDP Code 0105 [HIV Disease]:**
  It is possible that the decrease in this category in 2005 could be due to the Australian Coding Standard on HIV/AIDS. This standard states that

  "If the condition chiefly responsible for occasioning the patient's episode of care was the HIV, use the appropriate code from B20–B24. If the condition chiefly responsible for occasioning the patient's episode of care was a manifestation of HIV, code the manifestation as the principal diagnosis."

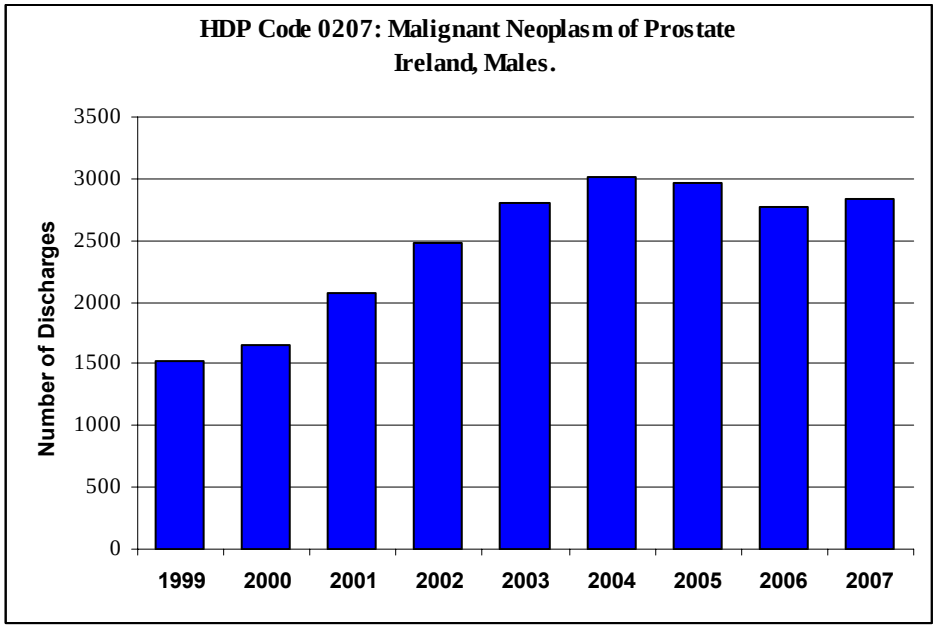
  When **all** diagnoses are examined for HIV related codes, the number of cases in 2005 shows a slight increase in the number in 2004.



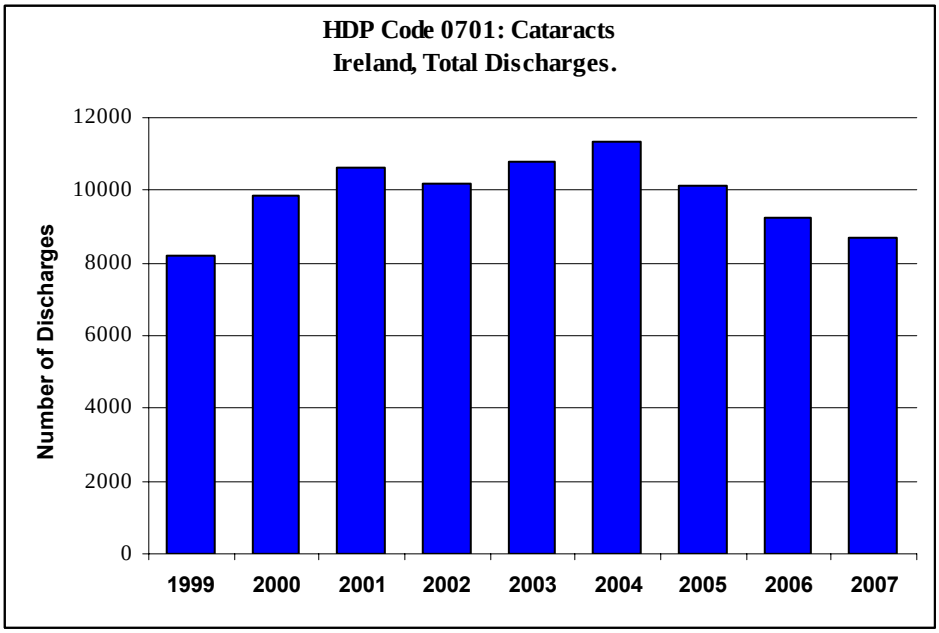
- **HDP Code 0207 [Malignant Neoplasm of Prostate]:**

A.II.9 Comparative analysis diagnosis

Data from the National Cancer Registry shows that the number of new cases of prostate cancer in Ireland decreased in 2005 compared to 2004. Therefore it is likely that the slight decrease in 2005 is not an effect of the classification shift, and is due to a lower number of newly diagnosed cases.

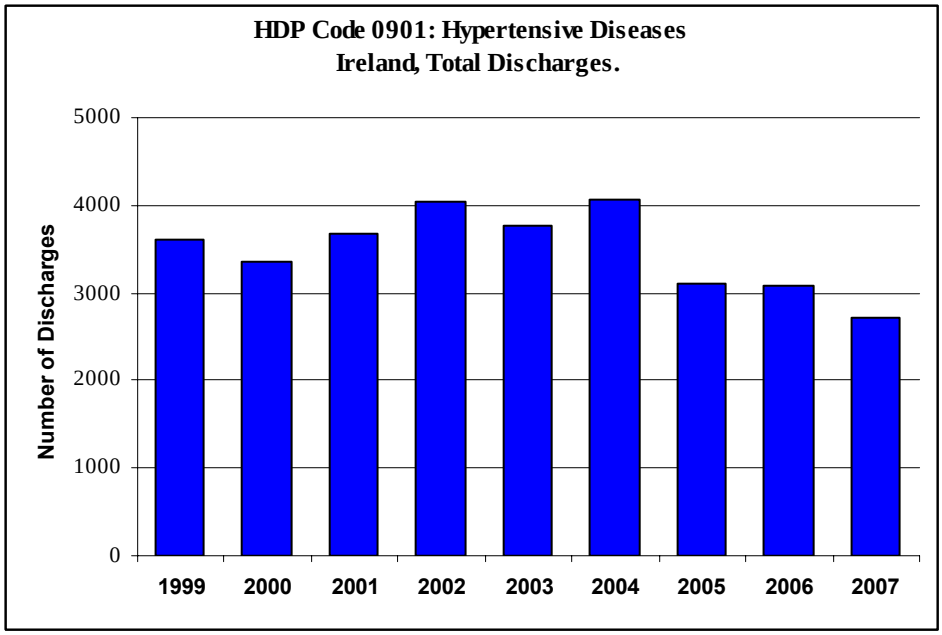


- **HDP Code 0701 [Cataract]:**
  There is no apparent coding or classification reason for the decrease in this category in 2005. The number of discharges decreases further in 2006 and 2007, which suggests that there is a decreasing trend which is not a result of the classification change.

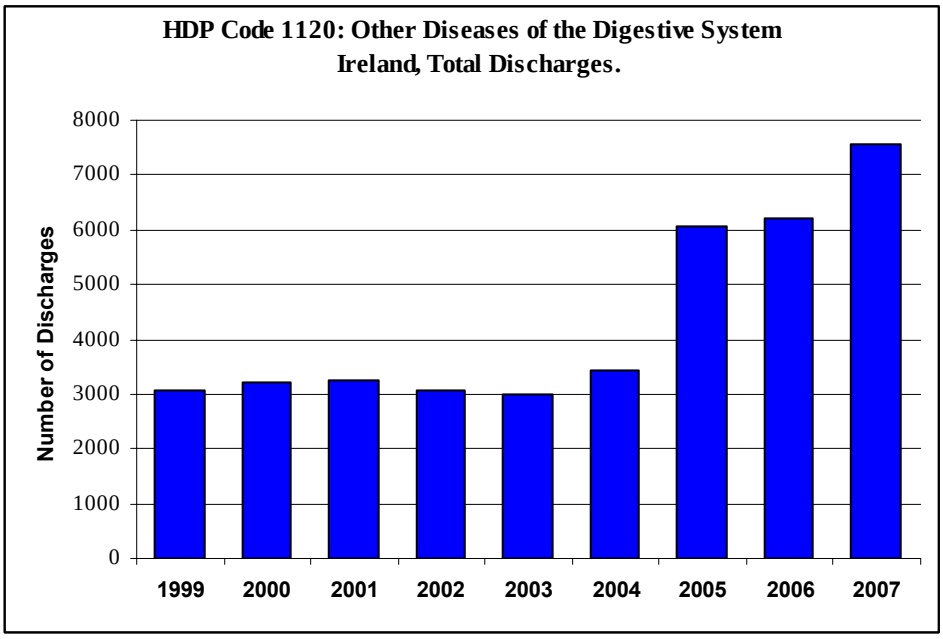


- **HDP Code 0901 [Hypertensive Diseases]:**
  There is no apparent reason for the decrease in this category in 2005. The number of discharges decreases further in 2006 and 2007.

A.II.9 Comparative analysis Diagnosis



- **HDP Code 1120 [Other Diseases of the Digestive System]:**
  The increase in cases in 2005 appears to be due to the classification change. Specifically the coding guidelines on Gastrointestinal Haemorrhage and Per-rectal Bleeding NOS have resulted in cases that would in ICD-9-CM have been included in other categories now being included in the 1120 category.



- **HDP Code 1500 [Pregnancy, Childbirth & Puerperium]:**
  Ireland has a higher birth rate than many other European countries and so it would follow that we would have higher discharge rates in this category. The very small proportion of daycases in this category is due to the statistical definition of daycases used in Ireland,

which ensures that admissions for delivery are always inpatients, even if the mother is discharged on the same day.

7. Italy

1. High rates for *HIV disease* in **Italy**. Highest rates for males in the 35-44 age group. Does this reflect epidemiological facts (a known HIV epidemic among this group?) or treatment policy or are there organizational explanations? More than half of the cases are daypatients.

In 2004 the hospital discharges affected by HIV were 34.286 and the more represented group of age was 35-44 on either sex.
Many of these cases concern the same people, more times hospitalised during the year. Analyzing the personal code it is possible to count about 19.000 people discharged at least once in the year 2004.
I suppose that the high rates observed are due to a particular treatment policy rather than an epidemiological reason. People suffering from HIV undergo a pharmacological therapy ordered by hospital doctors and they are followed up by hospital staff.
It is estimate that in 2007 the prevalence cases in Italy of HIV was about 23.072 people and about 20.625 people in 2004 (http://www.ministerosalute.it/hiv/paginaInternaHiv.jsp?id=198&menu=strumentieservizi). I don't know if there are countries with higher prevalence.

2. The variation in discharge rates for *medical (legal) abortion* reflects differences in the law (non-existing in **Ireland** and **Poland**). Are the high rates (mainly as day care) in **France, Italy, Slovenia** and **Scotland** due to different abortion methods with readmission of patients treated with non-surgical methods?

In Italy the legal abortion is mainly performed as day care: the procedure code associated with is the ICD-9-CM code "69.51".
There are cases of readmission, but they represent about 10% of all discharges for legal abortion.

3. **France, Ireland, Italy** and the **Netherlands** have the highest rates for *other medical care (incl. radiotherapy and chemotherapy sessions)(Z51).* For **Ireland** this corresponds to four-fifth of all Z-codes and about as many discharges as for the whole group of malignant neoplasms (for which radiotherapy and chemotherapy are most often provided).

The Italian high rates may be explained with the high number of readmission: about 53% has been discharged more than once. The higher frequency of diagnosis is chemotherapy (about 87% of all discharges for "other medical care").

8. Latvia

1. High discharge rates for *tuberculosis* in **Latvia** and **Lithuania** reflects known morbidity differences. Inpatients are mainly middle-aged and elderly men. Is there a policy to keep these patients as inpatients to secure rational drug therapy?

Specialists of State agency of tuberculosis and lung diseases can't explain this situation.

2. *Mental disorders due to alcohol* show high rates for males in **Latvia** and **Luxembourg.**

The main reason is using surrogate alcohol by low social status people.

3. There are high (female) discharge rates for *hypertensive disease* in **Austria, Latvia, Lithuania** and **Poland**. Hypertension is thus reported as the main reason for hospital investigation and treatment in these cases. Could it be that other countries more often register the resulting complications to hypertension (cardiosclerosis, heart insufficiency, nephropathy etc) as the main reason for hospital care? Thus, could it be a matter of coding difference?

No comments.

4. Hospital care for *acute upper respiratory infections* is most common in **Latvia** and **Lithuania** and also for *pneumonia,* especially in **Lithuania**. Most of these cases are in the age group under one year. There are marked differences to nearby **Finland** in these respects. Does this reflect different treatment traditions?

It is common treatment tradition – to hospitalize infants who suffer from serious bronchitis and pneumonia.

5. **Latvia and Lithuania** have high rates for *peptic ulcer* but very low rates for *Crohn's disease and ulcerative colitis.* Are there any explanations for these differences? Morbidity?

Specialists from Centre of gastroenterology: There are two hypothetical main reasons:

a) inpatients with peptic ulcer are mostly hospitalized due to complications *(bleedings, perforations – the main reasons: elderly patients, multiple pathologies, uncontrolled using of ulcerogenic drugs without covering by proton-pump inhibitors, low social status patients, rarely – cumbersome accessibility of primary health care);*
b) the morbidity of Crohn's disease and ulcerative colitis is low in Latvia (in Baltic states too). There is low proportion of high activity and complications. But Centre of Gastroenterology can to prove by facts that this situation has bad tendency to decline.

6. Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

No comments.

7. Discharge rates for the whole chapter *symptoms, signs and abnormal clinical and laboratory findings* are very low in **Latvia and Lithuania** and relatively high in **England and Scotland.** There are similar differences for specific symptoms such as *pain in throat and chest* and *abdominal and pelvic pain*. Is there a known policy not to use or to use this type of diagnoses? Are the low rates regarded as quality indicators? Reimbursement reasons? Are high rates just clinical tradition?

There is a known policy not to use this type of diagnoses.

A.II.9 Comparative analysis Diagnosis

8. There are high discharge rates for the whole chapter of *injuries and poisonings* for **Austria** (both sexes) and for **Latvia and Lithuania** (males). There are also high rates for *burns and corrosion*s, mainly among small children and elderly. Any explanations?

No comments.

9. Lithuania

1. High discharge rates for *tuberculosis* in **Latvia** and **Lithuania** reflects known morbidity differences. Inpatients are mainly middle-aged and elderly men. Is there a policy to keep these patients as inpatients to secure rational drug therapy?

High rate of morbidity and mortality, high rate of smear positive tuberculosis.
Tradition of hospital treatment.
Patients with social problems: alcoholics, homeless, lonely (especially in older ages), as well as undisciplined patients which should be treated in hospital.

2. There are high (female) discharge rates for *hypertensive disease* in **Austria, Latvia, Lithuania** and **Poland**. Hypertension is thus reported as the main reason for hospital investigation and treatment in these cases. Could it be that other countries more often register the resulting complications to hypertension (cardiosclerosis, heart insufficiency, nephropathy etc) as the main reason for hospital care? Thus, could it be a matter of coding difference?

Tradition of hospital treatment.
Overdiagnosis due to admission requirements and reimbursement of medicine (after hospital treatment).

3. The very high rate for *angina pectoris* in **Lithuania** sticks out and may be a matter of coding difference. The very low rates in **Belgium, Ireland** (2004) and **Spain** are mainly due to an omission of ICD-9-CM definitions in the shortlist, but why not in **Poland** that also uses ICD-9-CM?

Tradition of hospital treatment.
Low level of R-codes (chest pain)
Overdiagnosis due to admission requirements (acute disease vs. chronic) and reimbursement system

4. The high rate for *heart failure* in **Lithuania** sticks out. To report this as the main diagnosis might be due to coding differences.

Tradition of hospital treatment.
Mostly age >65.
I23-I25 (very low rate) could be substituted with I50.
Overdiagnosis due to admission requirements (acute disease vs. chronic) and reimbursement system

5. Hospital care for *acute upper respiratory infections* is most common in **Latvia** and **Lithuania** and also for *pneumonia,* especially in **Lithuania**. Most of these cases are in the age group under one year. There are marked differences to nearby **Finland** in these respects. Does this reflect different treatment traditions?

Tradition of hospital treatment especially of children. Policy to admit children to the hospital even in case the problem is not very serious.

A.II.9 Comparative analysis Diagnosis

6. Hospital care for *acute upper respiratory infections* is most common in **Latvia** and **Lithuania** and also for *pneumonia,* especially in **Lithuania**. Most of these cases are in the age group under one year. There are marked differences to nearby **Finland** in these respects. Does this reflect different treatment traditions?

Tradition of hospital treatment especially of children. Policy to admit children to the hospital even in case the problem is not very serious.
Overdiagnosis due to admission requirements and reimbursement system

7. **Latvia and Lithuania** have high rates for *peptic ulcer* but very low rates for *Crohn's disease and ulcerative colitis.* Are there any explanations for these differences? Morbidity?

Tradition of hospital treatment.
Low level of R-codes (abdominal and pelvic pain).
Unhealthy life stile: smoking, nutrition, stress, etc.

8. Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

M54 could be substituted with M50-M51.
Higher reimbursement.

9. Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

Admission requirements (not very "serious" diseases). M54 could be substituted with M50-M51.
Low reimbursement.

10. Discharge rates for the whole chapter *symptoms, signs and abnormal clinical and laboratory findings* are very low in **Latvia and Lithuania** and relatively high in **England and Scotland.** There are similar differences for specific symptoms such as *pain in throat and chest* and *abdominal and pelvic pain*. Is there a known policy not to use or to use this type of diagnoses? Are the low rates regarded as quality indicators? Reimbursement reasons? Are high rates just clinical tradition?

Traditions of coding: "normal" diagnosis should be established.
Reimbursement system (lower payment for R-codes).

11. There are high discharge rates for the whole chapter of *injuries and poisonings* for **Austria** (both sexes) and for **Latvia and Lithuania** (males). There are also high rates for *burns and corrosion*s, mainly among small children and elderly. Any explanations?

High rate of morbidity and mortality, serious injuries.

12. There are high discharge rates for the whole chapter of *injuries and poisonings* for **Austria** (both sexes) and for **Latvia and Lithuania** (males). There are also high rates for *burns and corrosion*s, mainly among small children and elderly. Any explanations?

Mostly children <5. Policy to admit children to the hospital even in case the problem is not very serious.

A.II.9 Comparative analysis diagnosis

13. There is a great variation in discharge rates for the whole chapter *Factors influencing health status and contact with health service (Z-codes)*. Very high rates fore **Belgium, France** and **Ireland**. In Belgium every fifth discharge has a Z-code, in Denmark and France every sixth and in Ireland every tenth. This fact results in lower rates of other, disease oriented diagnoses. Are there national coding advices for the high use of Z-codes? Which are the main types of patients?

Traditions of coding. E. g. radiotherapy and chemotherapy sessions are coded by disease (cancer) codes.
Reimbursement system (lower payment for Z-codes).

10. Netherlands

1. Discharge rates for *mental and behavioural disorders* vary among countries, mainly reflecting differences in coverage (mental hospitals not included in some countries). For similar reasons discharge rates for dementia vary. **France** and **Netherlands** both have a high proportion of day care among dementia patients. Is this social care more than medical care?

Probably this is more a combination of medical and social care.

2. The discharge rate for *dermatitis, eczema and papulosquamous disorders* is very high in **Ireland** and rather high in the **Netherlands,** in both countries with a high proportion of day care. Is this due to morbidity differences or special treatment options calling for many repeat visits?

This is because of special treatments options calling for many repeat visits. Special treatments could be light therapy.

3. **France, Ireland, Italy** and the **Netherlands** have the highest rates for *other medical care (incl. radiotherapy and chemotherapy sessions)(Z51).* For **Ireland** this corresponds to four-fifth of all Z-codes and about as many discharges as for the whole group of malignant neoplasms (for which radiotherapy and chemotherapy are most often provided).

Netherlands have a high rate because of many repeat visits.

11. Poland

1. The variation in discharge rates for *medical (legal) abortion* reflects differences in the law (non-existing in **Ireland** and **Poland**). Are the high rates (mainly as day care) in **France, Italy, Slovenia** and **Scotland** due to different abortion methods with readmission of patients treated with non-surgical methods?

Regarding questions on diagnosis data I find nothing related to Poland that I can comment except the variation in the rates for medical abortion. It is not correct to write that our law does not permit abortion. Actually there are three situations when abortion is allowed - rape or another criminal origin, life threat to mother, critical malformation or health problem of a foetus.

12. Slovenia

1. **Austria** has a higher discharge rate than any other country for the whole group of *malignant neoplasms*. Otherwise these rates are fairly stable among countries (low rates for **Spain** is an exception due to underreporting). Does this reflect more readmissions during investigation and treatment of cancer patients in Austria than in other countries? Morbidity differences seem unlikely.

D*ischarge rate for the whole group of malignant neoplasms: the data for Slovenia include in-patient and day-care cases, but* no out-patient *cases (but in Slovenia* chemotherapy is registered as out-patient case*).*

Day-care cases*: even if one person had* **more than once day-care** *treatment due to one principal diagnosis, there has been registered only as* **one** *day-care case.*

2. The variation in discharge rates for *medical (legal) abortion* reflects differences in the law (non-existing in **Ireland** and **Poland**). Are the high rates (mainly as day care) in **France, Italy, Slovenia** and **Scotland** due to different abortion methods with readmission of patients treated with non-surgical methods?

Reasons for high rates (mainly as day care):
- *in Slovenia there is* a **register** *for foetal deaths*
- *there is a relatively* small number of out-patient *cases*
- *also there is a relatively* small number of patients treated with non-surgical *methods.*

By:
Nevenka Kelšin (1/)
Barbara Mihevc-Ponikvar (2/)

13. Spain

1. High rates for *HIV disease* in **Italy**. Highest rates for males in the 35-44 age group. Does this reflect epidemiological facts (a known HIV epidemic among this group?) or treatment policy or are there organizational explanations? More than half of the cases are *daypatients.*

In Spain, now a days, most of the HIV patients are attended as out patients as most of them require oral medication and it is provided by pharmacy services in an outpatient area. They used to be attended in hospital days but since the therapy was changed the system also was changed.

2. **Austria** has a higher discharge rate than any other country for the whole group of *malignant neoplasms*. Otherwise these rates are fairly stable among countries (low rates for **Spain** is an exception due to underreporting Does this reflect more readmissions during investigation and treatment of cancer patients in Austria than in other countries? Morbidity differences seem unlikely.

Again low coverage of medical day cases (services of day hospital) where mainly chemotherapy but also other medical cases are treated, explains low rates for neoplasm.

- We would suggest differentiate rates for in-patients than day cases.

3. Discharge rates for *mental and behavioural disorders* vary among countries, mainly reflecting differences in *coverage (mental hospitals not included in some countries).* For similar reasons discharge rates for dementia vary. **France** and **Netherlands** both have a high proportion of day care among dementia patients. Is this social care more than medical care?

Metadata would let very clear the type of hospitals included in the National Dataset. On the other hand, it different organizational schemas can be used to attend mental disorders but we would not classify as social care but community or primary health care.

4. The very high rate for *angina pectoris* in **Lithuania** sticks out and may be a matter of coding difference. *The very low rates in* **Belgium, Ireland** *(2004) and* **Spain** are mainly due to an omission of ICD-9-CM definitions in the shortlist, but why not in **Poland** that also uses ICD-9-CM?

We agree with the explanation. We are now checking and updating figures after the new ICD9CM version.

5. High discharge rates (mainly daypatients) for *disorders of teeth* are found for **Belgium, France, England** and **Scotland**. This is contrary to most other countries. Dentistry seems to be more of a hospital task in these countries. Tradition? Health insurance? Legal rules about use of general anaesthesia?

Again coverage and type of patients attended could produce differences in rate as this kind of operations are differently included. should it be clarified in what extent minor surgical operations can or not be included?

The only problem again is the comparability, but as long as this is mentioned at the metadata it would not be a problem.

6. There are big differences in the rates for *diverticular disease of intestine.* The high rates in **Belgium, France** and **Ireland** may be due to the frequent use of colonoscopy in these countries (shown in the procedure reporting) resulting in detection of (sometimes asymptomatic) diverticulae. Other reasons?

A.II.9 Comparative analysis Diagnosis

The fact that every contact (for diagnosis purposes) is included could give as a result higher rates of certain presumption diagnosis - or already known being controlled – attended just for the diagnosis procedures (colonoscopy – bronchoscopy) in some countries whereas in others – as is the cases of Spain, where those cases are not included as day cases the rates remain lower.

7.
Denmark sticks out with a very high discharge rate for *medical observation and evaluation for suspected diseases and conditions (Z03).* Is there a national policy for this type of coding?
Which type of patients? –

There is great variation in discharge rates for *contraceptive management (Z30)* with astonishing differences in the sex pattern. High male rates in **Belgium, England** and **Scotland.** Any explanations?

France, Ireland, Italy and the ***Netherlands*** have the highest rates for *other medical care (incl. radiotherapy and chemotherapy sessions)(Z51).* For ***Ireland*** this corresponds to four-fifth of all Z-codes and about as many discharges as for the whole group of malignant neoplasms (for which radiotherapy and chemotherapy are most often provided).

In **France** the discharge rate (mainly daypatients) is high for *other factors influencing health status and contact with health service* (the remainder group within the Z-chapter). This group accounts for half of all French Z-codes. Which patients are coded here? Follow up and control visits? Others?

Apart from the reasons aforementioned, different local coding practices (these four last paragraphs seem to reflect that) are also a limitation for using administrative data for comparisons. Even when national rules for coding exist we find quite often such differences between regions when calculating morbidity and quality indicators.

However administrative data remains as one of the most useful sources of health data due to its availability, completeness and reasonable quality. So we should keep working on them trying to improve the information we get.

A.II.9 Comparative analysis diagnosis

A.II.9 Comparative analysis Diagnosis

c. Analysis per topic

Background

Questions and comments to the results of the HDP2 reporting of diagnoses

The following questions and comments are based on the analysis of data on diagnoses from seventeen countries that was presented at the HDP2 Full Group Meeting in Madrid. The comments are ordered according to the Power Point presentation at the meeting. The PP-slides were distributed to the participants after the meeting in an e-mail from HDP2 dated 2008-03-31 (file: Short Selected results dx Madrid 2008-03-27—28.ppt). The basic data are also available on the CD-ROM distributed at the meeting.

The analyses are mainly concerned with differences in discharge rates among countries, differences in type of care provided (inpatient care versus daypatients) and – to a certain extent – gender and age distribution among patients. Average length of stay, which is another variable of interest for comparisons, has not been commented on here.

The idea is to learn about the differences revealed by the study. Some of these may be due to methodological problems that should be noted and result in additions to the Metadata on diagnoses. Other differences may reflect differences in the organisation of health services and in clinical policy. Comments on any such differences would be useful for the final report of the project.

In the comments below names of the countries referred to have been highlighted in bold types for easy reference. Diagnosis groups concerned are highlighted in *Italics*.

A.II.9 Comparative analysis diagnosis

1. Topic: Tuberculosis

Tuberculosis: Shortlist code 0103

Question:

High discharge rates for *tuberculosis* in **Latvia** and **Lithuania** reflects known morbidity differences. Inpatients are mainly middle-aged and elderly men. Is there a policy to keep these patients as inpatients to secure rational drug therapy?

Answers:

Latvia

Specialists of State agency of tuberculosis and lung diseases can't explain this situation.

Lithuania

High rate of morbidity and mortality, high rate of smear positive tuberculosis.
Tradition of hospital treatment.
Patients with social problems: alcoholics, homeless, lonely (especially in older ages), as well as undisciplined patients which should be treated in hospital.

2. Topic: HIV disease

HIV disease: Shortlist code 0105

Question:

High rates for *HIV disease* in **Italy**. Highest rates for males in the 35-44 age group. Does this reflect epidemiological facts (a known HIV epidemic among this group?) or treatment policy or are there organizational explanations? More than half of the cases are daypatients.

Answers:

Italy

In 2004 the hospital discharges affected by HIV were 34.286 and the more represented group of age was 35-44 on either sex.
Many of these cases concern the same people, more times hospitalised during the year. Analyzing the personal code it is possible to count about 19.000 people discharged at least once in the year 2004.
I suppose that the high rates observed are due to a particular treatment policy rather than an epidemiological reason. People suffering from HIV undergo a pharmacological therapy ordered by hospital doctors and they are followed up by hospital staff.
It is estimate that in 2007 the prevalence cases in Italy of HIV was about 23.072 people and about 20.625 people in 2004
(http://www.ministerosalute.it/hiv/paginaInternaHiv.jsp?id=198&menu=strumentieservizi). I don't know if there are countries with higher prevalence.

Spain

In Spain, now a days, most of the HIV patients are attended as out patients as most of them require oral medication and it is provided by pharmacy services in an outpatient area. They used to be attended in hospital days but since the therapy was changed the system also was changed.

3. Topic: Malignant neoplasms

Malignant neoplasms: Shortlist code 0200

Question:

Austria has a higher discharge rate than any other country for the whole group of *malignant neoplasms*. Otherwise these rates are fairly stable among countries (low rates for **Spain** is an exception due to underreporting). Does this reflect more readmissions during investigation and treatment of cancer patients in Austria than in other countries? Morbidity differences seem unlikely.

Answers:

Austria

High discharge rates for the whole group of malignant neoplasms reflect a high rate of readmissions during investigation and treatment. Especially drug therapy is reported as hospital day case.

Slovenia

Discharge rate for the whole group of malignant neoplasms: the data for Slovenia include in-patient and day-care cases, but no out-patient cases (but in Slovenia chemotherapy is registered as out-patient case).

Day-care cases: even if one person had more than once day-care treatment due to one principal diagnosis, there has been registered only as one day-care case.

Spain

Again low coverage of medical day cases (services of day hospital) where mainly chemotherapy but also other medical cases are treated, explains low rates for neoplasm.

- *We would suggest differentiate rates for in-patients than day cases.*

4. Topic: Diabetes mellitus (discharge rate)

Diabetes mellitus: Shortlist code 0401

Question:

Discharge rates for *diabetes mellitus* is higher in **Austria** than in any other country. Are there known morbidity differences or mainly organizational explanations?

Answers:

Austria

Discharge rates for diabetes mellitus and for hypertensive disease seem to reflect coding diffences to other countries.

5. Topic: Diabetes mellitus (discharge rate 2)

Diabetes mellitus: Shortlist code 0401

Question:

Finland shows higher discharge rates for children with *diabetes mellitus* than nearby **Denmark.** Discharge rates for elderly males are much higher in **Denmark,** however. Are these morbidity differences or policy divergences?

Answers:

Finland

It is thrue, that Finland has higher disharge rates for children with diabetes mellitus than nearby Denmark.

6. Topic: Diabetes mellitus (daypatients)

Diabetes mellitus: Shortlist code 0401

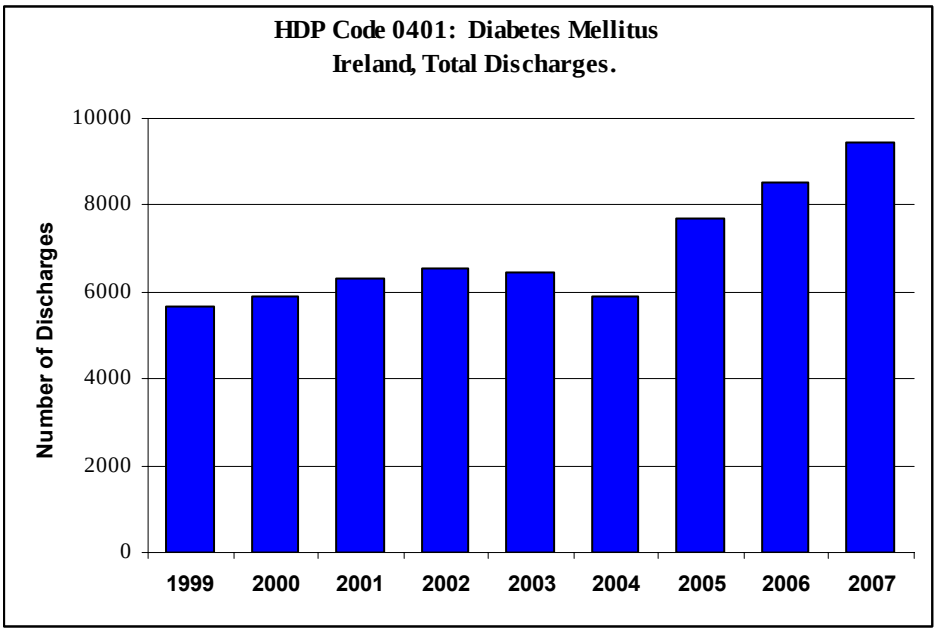
Question:

France and **Ireland** both have a high proportion of daypatients for *diabetes mellitus.* However, day care is more common in young patients in France but more common among the elderly in Ireland. Does this reflect different ways of caring for diabetes?

Answers:

Ireland

There does not appear to be any particular reason for the increase in discharges in 2005. However when all diagnoses are examined, the number of discharges does not change significantly in 2005 compared to 2004. This suggests that more discharges have diabetes coded as a principal diagnosis in 2005 due to the increased list of complications and manifestations in ICD-10-AM.



7. Topic: Mental and behavioural disorders

Mental and behavioural disorders: Shortlist code 0500

Question:

Discharge rates for *mental and behavioural disorders* vary among countries, mainly reflecting differences in coverage (mental hospitals not included in some countries). For similar reasons discharge rates for dementia vary. **France** and **Netherlands** both have a high proportion of day care among dementia patients. Is this social care more than medical care?

Answers:

France

Low discharge in mental and behavioural disorders are clearly explained in France by the fact specialized psychiatric hospitals are not included in the national data basis presently.
Concerning dementia, day cases are not social care, because that kind of care are made in specialized departments taking care during the day of the demented patients. But diagnosis of Alzheimer disease and check-up for dementia are very often made in acute day care departments.

Netherlands

Probably this is more a combination of medical and social care.

Spain

Metadata would let very clear the type of hospitals included in the National Dataset. On the other hand, it different organizational schemas can be used to attend mental disorders but we would not classify as social care but community or primary health care.

8. Topic: Mental disorders due to alcohol

Mental disorders due to alcohol: Shortlist code 0502

Question:

Mental disorders due to alcohol show high rates for males in **Latvia** and **Luxembourg.** Luxembourg also has a very high rate for *mental disorders due to use of drugs*, mainly among young persons (20-29 years). Why is hospital care for drug use so common in **Luxembourg**?
Is the main reason high morbidity or an emphasis on medical treatment?

Answers:

Latvia

The main reason is using surrogate alcohol by low social status people.

9. Topic: Mental disorders due to use of drugs

Mental disorders due to use of drugs: Shortlist code 0503

Question:

Mental disorders due to alcohol show high rates for males in **Latvia** and **Luxembourg.** Luxembourg also has a very high rate for *mental disorders due to use of drugs*, mainly among young persons (20-29 years). Why is hospital care for drug use so common in **Luxembourg**?
Is the main reason high morbidity or an emphasis on medical treatment?

Answers:

10. Topic: Hypertensive disease

Hypertensive disease: Shortlist code 0901

Question:

There are high (female) discharge rates for *hypertensive disease* in **Austria, Latvia, Lithuania** and **Poland**. Hypertension is thus reported as the main reason for hospital investigation and treatment in these cases. Could it be that other countries more often register the resulting complications to hypertension (cardiosclerosis, heart insufficiency, nephropathy etc) as the main reason for hospital care? Thus, could it be a matter of coding difference?

Answers:

Austria

Discharge rates for diabetes mellitus and for hypertensive disease seem to reflect coding diffences to other countries.

France

Yes, we believe that, at least in France, but may be in other countries, hospitalization of hypertensive patients are coded with the diagnosis of the complication. Check-ups for hypertension are made in outpatients departments in our country.

Latvia

No comments.

Lithuania

Tradition of hospital treatment.
Overdiagnosis due to admission requirements and reimbursement of medicine (after hospital treatment).

11. Topic: Angina pectoris

Angina pectoris: Shortlist code 0902

Question:

The very high rate for *angina pectoris* in **Lithuania** sticks out and may be a matter of coding difference. The very low rates in **Belgium, Ireland** (2004) and **Spain** are mainly due to an omission of ICD-9-CM definitions in the shortlist, but why not in **Poland** that also uses ICD-9-CM?

Answers:

Belgium

Applying the new definitions regarding ISHMT to the Belgian data (inpatients and day-cases) of the year 2005, the number of cases only slightly increased from 273,850 to 275,446. We think the low Belgian rates are not mainly due to the ICD-9-CM definitions since angina pectoris cases may be treated in an ambulatory setting.

Ireland

This was an issue with a previous version of the ISHMT, which we first discovered in May 2007 when the OECD queried Ireland's data on Angina Pectoris and Other Ischaemic Heart Disease. We responded to the OECD advising that cases of Unstable Angina are coded as ICD-9-CM 411.1 and so would be included in the 0904 category. However the ICD-10-AM equivalent code for Unstable Angina is I20.0 and so these cases would be included in the 0902 Angina Pectoris category. We also notified Bjorn Smedby of this issue, and asked for clarification.

The shortlist was corrected in the November 2007 version of the ISHMT

Lithuania

Tradition of hospital treatment.
Low level of R-codes (chest pain)
Overdiagnosis due to admission requirements (acute disease vs. chronic) and reimbursement system

Spain

We agree with the explanation. We are now checking and updating figures after the new ICD9CM version.

12. Topic: Heart failure

Heart failure: Shortlist code 0907

Question:

The high rate for *heart failure* in **Lithuania** sticks out. To report this as the main diagnosis might be due to coding differences.

Answers:

Lithuania

Tradition of hospital treatment.
Mostly age >65.
I23-I25 (very low rate) could be substituted with I50.
Overdiagnosis due to admission requirements (acute disease vs. chronic) and reimbursement system

13. Topic: Acute upper respiratory infections

Acute upper respiratory infections: Shortlist code 1001

Question:

Hospital care for *acute upper respiratory infections* is most common in **Latvia** and **Lithuania** and also for *pneumonia,* especially in **Lithuania**. Most of these cases are in the age group under one year. There are marked differences to nearby **Finland** in these respects. Does this reflect different treatment traditions?

Answers:

Finland

These problems are handled in Finland in open care health centres. I think that Latvia and Lithuania has the old one system where the care is mainly done in hospitals.

Latvia

It is common treatment tradition – to hospitalize infants who suffer from serious bronchitis and pneumonia.

Lithuania

Tradition of hospital treatment especially of children. Policy to admit children to the hospital even in case the problem is not very serious.

14. Topic: Pneumonia

Pneumonia: Shortlist code 1002

Question:

Hospital care for *acute upper respiratory infections* is most common in **Latvia** and **Lithuania** and also for *pneumonia,* especially in **Lithuania**. Most of these cases are in the age group under one year. There are marked differences to nearby **Finland** in these respects. Does this reflect different treatment traditions?

Answers:

Finland

These problems are handled in Finland in open care health centres. I think that Latvia and Lithuania has the old one system where the care is mainly done in hospitals.

Latvia

It is common treatment tradition – to hospitalize infants who suffer from serious bronchitis and pneumonia.

Lithuania

Tradition of hospital treatment especially of children. Policy to admit children to the hospital even in case the problem is not very serious.
Overdiagnosis due to admission requirements and reimbursement system

15. Topic: Disorders of teeth

Disorders of teeth: Shortlist code 1101

Question:

High discharge rates (mainly daypatients) for *disorders of teeth* are found for **Belgium, France, England** and **Scotland**. This is contrary to most other countries. Dentistry seems to be more of a hospital task in these countries. Tradition? Health insurance? Legal rules about use of general anaesthesia?

Answers:

Belgium

According to a study carried out by the Belgian Health Care Knowledge Centre our rates are in line with those to be expected according to the Index of Orthodontic Need. However we are not sure whether the correct patient group has been treated.
There may be over-use of these procedures in Belgium; there may also be under-use of them in other countries.

France

In France, it is very common for teenagers to have excision of the wisdom teeth. It is not very common to make that in the dentist's office (it is not very well paid), but more commonly in a hospital under general anesthesia. Health insurance will cover that procedure.

Spain

Again coverage and type of patients attended could produce differences in rate as this kind of operations are differently included. should it be clarified in what extent minor surgical operations can or not be included?

The only problem again is the comparability, but as long as this is mentioned at the metadata it would not be a problem.

16. Topic: Peptic ulcer

Peptic ulcer: Shortlist code 1104

Question:

Latvia and Lithuania have high rates for *peptic ulcer* but very low rates for *Crohn's disease and ulcerative colitis.* Are there any explanations for these differences? Morbidity?

Answers:

Latvia

Specialists from Centre of gastroenterology: There are two hypothetical main reasons:

c) inpatients with peptic ulcer are mostly hospitalized due to complications *(bleedings, perforations – the main reasons: elderly patients, multiple pathologies, uncontrolled using of ulcerogenic drugs without covering by proton-pump inhibitors, low social status patients, rarely – cumbersome accessibility of primary health care);*

d) the morbidity of Crohn's disease and ulcerative colitis is low in Latvia (in Baltic states too). There is low proportion of high activity and complications. But Centre of Gastroenterology can to prove by facts that this situation has bad tendency to decline.

Lithuania

Tradition of hospital treatment.
Low level of R-codes (abdominal and pelvic pain).
Unhealthy life stile: smoking, nutrition, stress, etc.

17. Topic: Diverticular disease of intestine

Diverticular diseas of intestine: Shortlist code 1112

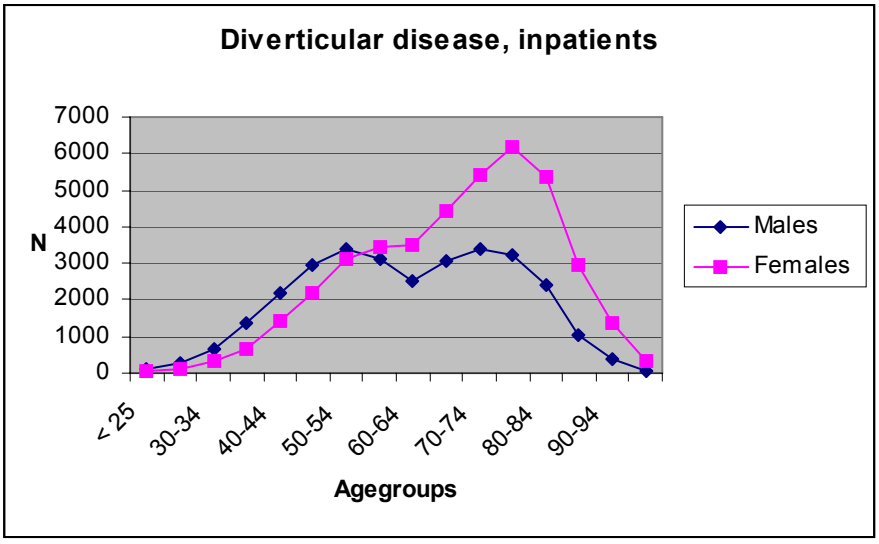
Question:

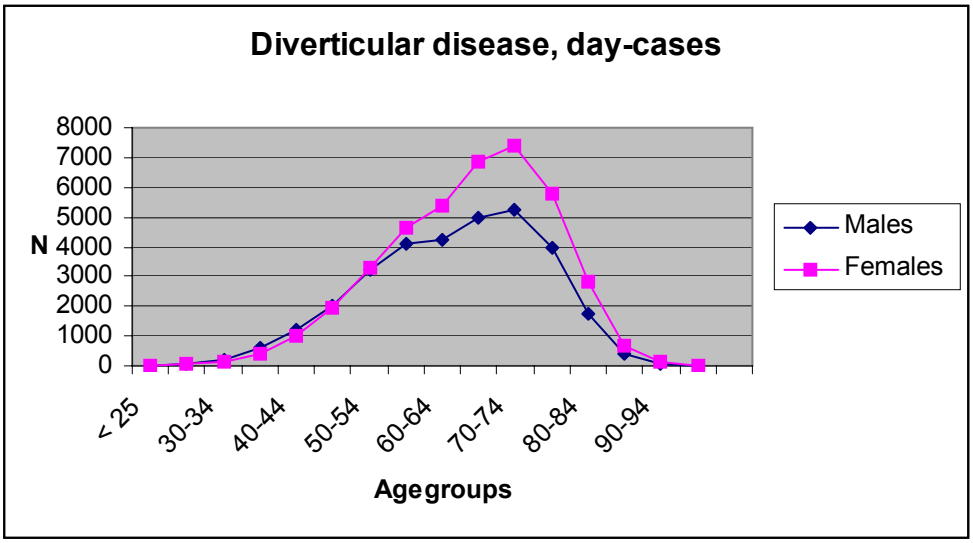
There are big differences in the rates for *diverticular disease of intestine.* The high rates in **Belgium, France** and **Ireland** may be due to the frequent use of colonoscopy in these countries (shown in the procedure reporting) resulting in detection of (sometimes asymptomatic) diverticulae. Other reasons?

Answers:

Belgium

Apart from possible between-countries differences in age and gender distributions and nutritional, we don't have any other reason to explain this high rate.





Nutritional factors may play a role as well.

A.II.9 Comparative analysis Diagnosis

France

There is a problem for coding: when the colonoscopy is normal; except diverticulae, is it justified to have diverticular disease as a primary diagnosis?

Spain

The fact that every contact (for diagnosis purposes) is included could give as a result higher rates of certain presumption diagnosis - or already known being controlled – attended just for the diagnosis procedures (colonoscopy – bronchoscopy) in some countries whereas in others – as is the cases of Spain, where those cases are not included as day cases the rates remain lower.

18. Topic: Dermatitis, eczema and papulosquamous

Dermatitis, eczema and papulosquamous: Shortlist code 1202

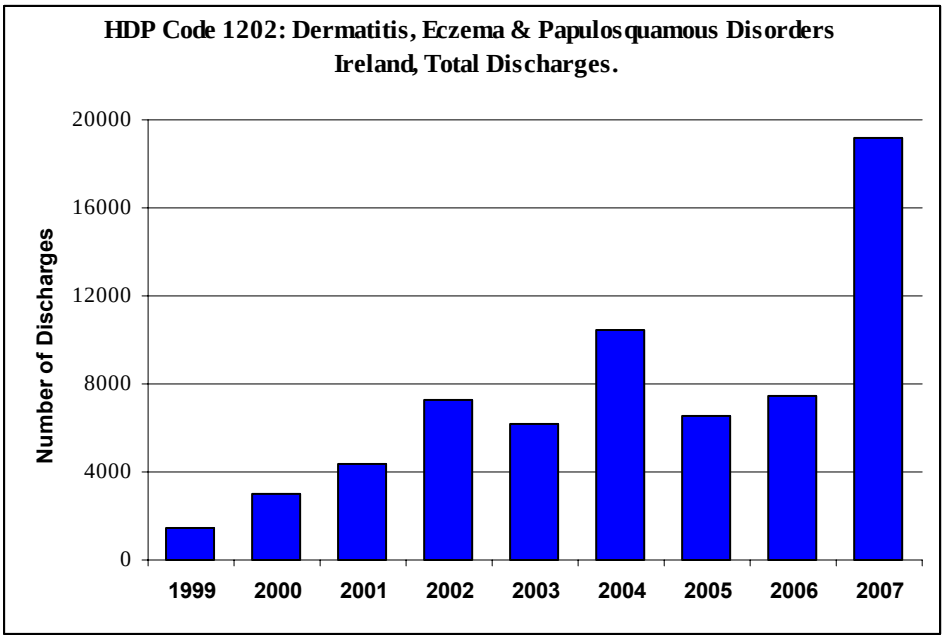
Question:

The discharge rate for *dermatitis, eczema and papulosquamous disorders* is very high in **Ireland** and rather high in the **Netherlands,** in both countries with a high proportion of day care. Is this due to morbidity differences or special treatment options calling for many repeat visits?

Answers:

Ireland

The inpatient rate is showing a slightly decreasing trend year on year, but the daycase rate varies significantly between years, with 2004 being particularly high. Examination of the 2004 daycases shows that they are mainly cases with a principal diagnosis of Psoriasis and with a principal procedure of Ultra Violet Light Therapy. Examination of the data also shows significant numbers multiple admissions among patients in this category.



Netherlands

This is because of special treatments options calling for many repeat visits. Special treatments could be light therapy.

19. Topic: Intervertebral disc disorders

Intervertebral disc disorders: Shortlist code 1307

Question:

Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

Answers:

Austria

We have no explanation for the sex differences in discharge rates for intervertebral disc disorders and dorsalgia compared to Latvia and Lithuania and for the the high discharge rates for whole chapter of injuries and poisonings.

Czech Republic

It seems that the organization of health care systems (relicts of Austria-Hungarian Empire versus Soviet system) determines the huge differences in the number of hospitalized persons for dg. M54. In the CR and Austria there is no problem to be hospitalized for these "less serious" conditions where as it might be problem in Latvia and Lithuania where doctors might hesitate to send people with such conditions to hospitals.
Age profiles of the hospitalized persons and general working conditions and structure of jobs (manual/non-manual) could play a role.

Latvia

No comments.

Lithuania

M54 could be substituted with M50-M51.
Higher reimbursement.

20. Topic: Dorsalgia

Dorsalgia: Shortlist code 1308

Question:

Discharge rates for *intervertebral disc disorders* and *dorsalgia* seem to substitute for each other to a certain extent. There are interesting sex differences in this respect comparing **Austria** and **Czech Republic** with **Latvia** and **Lithuania**.

Answers:

Austria

We have no explanation for the sex differences in discharge rates for intervertebral disc disorders and dorsalgia compared to Latvia and Lithuania and for the the high discharge rates for whole chapter of injuries and poisonings.

Czech Republic

It seems that the organization of health care systems (relicts of Austria-Hungarian Empire versus Soviet system) determines the huge differences in the number of hospitalized persons for dg. M54. In the CR and Austria there is no problem to be hospitalized for these "less serious" conditions where as it might be problem in Latvia and Lithuania where doctors might hesitate to send people with such conditions to hospitals.
Age profiles of the hospitalized persons and general working conditions and structure of jobs (manual/non-manual) could play a role.

Latvia

No comments.

Lithuania

Admission requirements (not very “serious” diseases). M54 could be substituted with M50-M51. Low reimbursement.

21. Topic: Medical (legal) abortion

Medical (legal) abortion: Shortlist code 1501

Question:

The variation in discharge rates for *medical (legal) abortion* reflects differences in the law (non-existing in **Ireland** and **Poland**). Are the high rates (mainly as day care) in **France, Italy, Slovenia** and **Scotland** due to different abortion methods with readmission of patients treated with non-surgical methods?

Answers:

France

There are more than 200 000 medical abortions in France with 44 % of non-surgical. We estimate that less than 5 % of non-surgical abortions need readmission for failure or complications. High rates of discharge reflect, for us, the high rate of total abortions

Ireland

Note that in Ireland, codes from ISHMT category 1501 (Medical Abortions) are only assigned for patients admitted to hospital with a complication following a legal abortion in another state.

Italy

In Italy the legal abortion is mainly performed as day care: the procedure code associated with is the ICD-9-CM code "69.51".
There are cases of readmission, but they represent about 10% of all discharges for legal abortion.

Poland

Regarding questions on diagnosis data I find nothing related to Poland that I can comment except the variation in the rates for medical abortion. It is not correct to write that our law does not permit abortion. Actually there are three situations when abortion is allowed - rape or another criminal origin, life threat to mother, critical malformation or health problem of a foetus.

Slovenia

Reasons for high rates (mainly as day care):
- *in Slovenia there is a register for foetal deaths*
- *there is a relatively small number of out-patient cases*
- *also there is a relatively small number of patients treated with non-surgical methods.*

22. Topic: Congenital malformations

Congenital malformations: Shortlist code 1700

Question:

Italy sticks out with high rates for *congenital malformations etc* (mainly registered among children under one year of age). Is there an explanation for this? Morbidity differences are unlikely.

Answers:

23. Topic: Symptoms, signs and abnormal clinical and laboratory findings

Symptoms, signs and abnormal clinical and laboratory findings: Shortlist code 1800

Question:

Discharge rates for the whole chapter *symptoms, signs and abnormal clinical and laboratory findings* are very low in **Latvia and Lithuania** and relatively high in **England and Scotland.** There are similar differences for specific symptoms such as *pain in throat and chest* and *abdominal and pelvic pain*. Is there a known policy not to use or to use this type of diagnoses? Are the low rates regarded as quality indicators? Reimbursement reasons? Are high rates just clinical tradition?

Answers:

Latvia

There is a known policy not to use this type of diagnoses.

Lithuania

Traditions of coding: "normal" diagnosis should be established.
Reimbursement system (lower payment for R-codes).

24. Topic: Pain in throat and chest

Pain in throat and chest: Shortlist code 1801

Question:

Discharge rates for the whole chapter *symptoms, signs and abnormal clinical and laboratory findings* are very low in **Latvia and Lithuania** and relatively high in **England and Scotland.** There are similar differences for specific symptoms such as *pain in throat and chest* and *abdominal and pelvic pain*. Is there a known policy not to use or to use this type of diagnoses? Are the low rates regarded as quality indicators? Reimbursement reasons? Are high rates just clinical tradition?

Answers:

25. Topic: Abdominal and pelvic pain

Abdominal and pelvic pain: Shortlist code 1802

Question:

Discharge rates for the whole chapter *symptoms, signs and abnormal clinical and laboratory findings* are very low in **Latvia and Lithuania** and relatively high in **England and Scotland.** There are similar differences for specific symptoms such as *pain in throat and chest* and *abdominal and pelvic pain*. Is there a known policy not to use or to use this type of diagnoses? Are the low rates regarded as quality indicators? Reimbursement reasons? Are high rates just clinical tradition?

Answers:

26. Topic: Injuries and poisonings

Injuries and poisoning (code 1900)

Question:

There are high discharge rates for the whole chapter of *injuries and poisonings* for **Austria** (both sexes) and for **Latvia and Lithuania** (males). There are also high rates for *burns and corrosion*s, mainly among small children and elderly. Any explanations?

Answers:

Latvia

No comments.

Lithuania

High rate of morbidity and mortality, serious injuries.

27. Topic: Burns and corrosions

Burns and corrosion: Shortlist code 1907

Question:

There are high discharge rates for the whole chapter of *injuries and poisonings* for **Austria** (both sexes) and for **Latvia and Lithuania** (males). There are also high rates for *burns and corrosion*s, mainly among small children and elderly. Any explanations?

Answers:

Latvia

No comments.

Lithuania

Mostly children <5. Policy to admit children to the hospital even in case the problem is not very serious.

28. Topic: Factors influencing health status and contact with health service

Factors influencing health status and contacts with health services: Shortlist code 2100

Question:

There is a great variation in discharge rates for the whole chapter *Factors influencing health status and contact with health service (Z-codes)*. Very high rates fore **Belgium, France** and **Ireland**. In Belgium every fifth discharge has a Z-code, in Denmark and France every sixth and in Ireland every tenth. This fact results in lower rates of other, disease oriented diagnoses. Are there national coding advices for the high use of Z-codes? Which are the main types of patients?

Answers:

Belgium

Belgium has an unlimited number of secondary diagnoses and procedures, which may facilitate the use of Z-codes.
Healthy newborns are coded using a Z-code. Also we are working on admissions not on individuals. It may that an individual has several sessions of chemotherapy in a day-case or inpatient setting leading to several Z-codes.

In table 1the Z-codes have been split up into the ISHMT subcategories. Herein the "Live born infants" category constitutes > ½ of the inpatient stays whereas the "Other medical care" category is responsible for 1/6 of the inpatient stays and ¾ of the day-cases.
Comparing our HDP2 data (admissions) with the data we sent to the WHO (individuals) for the years 2003-5 we got 41,537 discharges in the WHO data ⇔ 102,895 HDP2 data and for day-cases these numbers amount respectively to 146,004 ⇔ 884,149. Notice that the WHO data are those of the V58 whereas HDP2 includes code V07.1 as well.
For the same period our V07.x data sent to WHO amounted to 861 inpatients and 1558 day-cases.
Remark: the conversion between ICD-10 and ICD-9 codes as given in the diagnosis table does not seem to be complete: palliative care for instance is coded V66.7.

Table 1: Z-codes in Belgian discharge abstracts, 2000-6.

	Inpatients		*Day-cases*	
	Frequency	Percent	Frequency	Percent
Factors influencing health status and contact with health services	1427713	11,50	2464419	30,24
From which:				
Liveborn infants according to place of birth healthy newborn babies	789362	55,29	3308	0,13
Other factors influencing health status and contact With health services	253575	17,76	435722	17,68
Other medical care (including radiotherapy and chemotherapy sessions)	231846	16,24	1899807	77,09
Medical observation and evaluation for suspected diseases and conditions	141484	9,91	43524	1,77
Contraceptive management	11446	0,80	82058	3,33

A.II.9 Comparative analysis Diagnosis

France

French national coding advices increase the percentage of these patients, with the principal groups :

FR - Year 2006	Codes	Number of in-patient cases	Number of day cases	Hospital days for in-patient cases
Medical observation and evaluation for suspected diseases and conditions	Z03	8 891 (39.8)	13 436 (60.2)	26 394 (100)
Contraceptive management	Z30	14 544 (51.2)	13 863 (48.8)	27 636 (100)
Liveborn infants according to place of birth ("healthy newborn babies")	Z38	662 463 (99.8)	1 273 (0.2)	2 928 169 (100)
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	354 207 (46.7)	404 303 (53.3)	2 229 749 (100)
Other factors influencing health status and contact with health services	remainder of Z00-Z99	429 047 (25.2)	1 270 646 (74.8)	1 622 554 (100)
Total		1 469 152 (46.3)	1 703 521 (53.7)	3 172 673 (100)

Ireland

Note that Ireland includes admissions for chemotherapy and radiotherapy in this category. From 1st January 2006, HIPE has been including data on day patients admitted for dialysis in dedicated dialysis daycases units. Previously this activity was excluded from HIPE. This has resulted in a significant increase in the numbers of discharges in categories 2100 and 2105 in 2006 and 2007.

Lithuania

Traditions of coding. E. g. radiotherapy and chemotherapy sessions are coded by disease (cancer) codes.
Reimbursement system (lower payment for Z-codes).

29. Topic: Medical observation and evaluation for suspected diseases and conditions

Medical observation and evaluation for suspected diseases and conditions: Shortlist code 2101

Question:

Denmark sticks out with a very high discharge rate for *medical observation and evaluation for suspected diseases and conditions (Z03).* Is there a national policy for this type of coding?
Which type of patients?

Answers:

30. Topic: Contraceptive management

Contraceptive management: Shortlist code 2102

Question:

There is great variation in discharge rates for *contraceptive management (Z30)* with astonishing differences in the sex pattern. High male rates in **Belgium, England** and **Scotland.** Any explanations?

Answers:

Belgium

Vasectomy is a procedure that may be performed in ambulant practice. However in Belgium reimbursement regulations as well as insurance constraints make that one is inclined to expect that this procedure hardly ever is carried out in an ambulant setting. If these regulations/ constraints differ over the countries it might explain part of those between-countries differences.

31. Topic: Other medical care

Other medical care: Shortlist code 2104

Question:

France, Ireland, Italy and the **Netherlands** have the highest rates for *other medical care (incl. radiotherapy and chemotherapy sessions)(Z51).* For **Ireland** this corresponds to four-fifth of all Z-codes and about as many discharges as for the whole group of malignant neoplasms (for which radiotherapy and chemotherapy are most often provided).

Answers:

Italy

The Italian high rates may be explained with the high number of readmission: about 53% has been discharged more than once. The higher frequency of diagnosis is chemotherapy (about 87% of all discharges for "other medical care").

Netherlands

Netherlands have a high rate because of many repeat visits.

32. Topic: Other factors influencing health status and contact with health service

Other factors influencing health status and contact with health service: Shortlist code 2105

Question:

In **France** the discharge rate (mainly daypatients) is high for *other factors influencing health status and contact with health service* (the remainder group within the Z-chapter). This group accounts for half of all French Z-codes. Which patients are coded here? Follow up and control visits? Others?

Answers:

France

In this group, there are hospitalizations for control of non malignant diseases (included AIDS, education for diabetes or asthma) (20 %), control after treatment of malignant diseases (10 %), or taking care of permanent vascular accesses (7 %).

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