

### **3. Sources of health statistics <sup>1</sup>**

#### **3.1. Demography**

The primary sources of demographic information / statistics are the NSO and the MoI. The NSO is responsible for the population and housing census, which is being carried out, along UN recommendations, every 10 years (see also chapter 3.2). Another important source is the administrative statistics on registered UC members and on SSO members.

#### **3.2. Surveys**

The MoPH carries out, on a regular basis, the Health Resources Survey, which inquires into:

- human resources,
- buildings,
- medical equipment, and
- covers public health care facilities and private hospitals. Its major deficiency is that it excludes information on ambulatory clinics.

The NSO regularly carries out the following censi and surveys, with periodicity varying by programme, some of them only *ad-hoc*:

---

<sup>1</sup> This chapter draws substantial information from Thaworn THESIS. ...

Number	Title / Programme 2004 to 2010
	<b>Censi</b>
1	Population census
2	Agricultural census
3	Trade and services census
4	Industrial census
	<b>Surveys</b>
5	Survey of population change
6	Intercensal agricultural survey
7	Household survey on basic information
8	Household survey on socio-economic characteristics
9	Household survey on energy consumption
10	Labour force survey
11	Migration survey
12	Home work survey
13	Survey on informal labour
14	Survey on seeking work and requirements for the development of competency skills
15	Household survey on information and communication technology
16	Survey on social security needs
17	Survey on time usage
18	Children and youth survey
19	Sports and sports watching behaviour survey
20	Health and welfare survey
21	Survey on smoking cigarettes and dinking alcohol
22	Survey on reading behaviour
23	Survey on the congested areas in the vicinity of BKK
24	Fertility survey
25	Disability survey
26	Elderly survey
27	Mass media survey: newspapers
28	Mass media survey: radio
29	Mass media survey: television
30	Civil servants' living conditions survey
31	Small manufacturing survey
32	Survey on private non-profit organizations
33	Trade and services survey
34	Private hospitals survey
35	Hotels and guest houses survey
36	Fixed-route bus operations survey
37	Construction industry survey
38	Quarterly retail survey
39	Establishment survey on information and communication technology
40	Basic bus transport information survey
41	Pay survey
42	Community level statistics survey
43	Public opinion poll

Source: NSO.

Once structure and procedures of the CFMU are clarified, which will be the case later during the project, censuses and surveys will be checked with respect to the data support they might be able to provide within the INFIMO.

- At first glance the following censuses / surveys seem to be promising candidates for further investigations in these respects:
- Population census
- Industrial census (ISIC Rev. 3, especially D33)
- Survey of population change
- Household survey on socio-economic characteristics
- Labour force survey
- Health and welfare survey
- Survey on smoking cigarettes and drinking alcohol
- Civil servants' living conditions survey
- Quarterly retail survey

The type and structure of information assembled in these programmes is summarized in **table nnn**, below.

At the present stage of the project, information on the following surveys is not yet available; they will be checked with respect to their relevance for the CFMU / INFIMO in due course:

- Fertility survey
- Disability survey
- Elderly survey
- Survey on private non-profit organizations
- Private hospitals survey

**Table nnn. Structure and contents of censi and surveys**

Descriptor	Census		Survey				
	Population	Industry (ISIC Rev. 3)	Population change	Household socio-economic characteristics	Labour force	Health and welfare (H W S)	Smoking and alcohol
First reference year	1909	1964	1964	1957	1963	1974	1976
Periodicity	Decennial		Continuous	Biennial	Monthly	Biennial	Triennial
Reference time	01 April	Previous year	Revolving	Previous 12 months	Survey week	Previous 12 months	
Enumeration period	01 to 30 April	June to July					
Coverage	All persons & housing units	All establishments ISIC Rev.3	All households				
Sample size			82,000 households	70,000 households		26,500 households	
Method	Interview						
Items covered	Age	Type of industry	Age				
	Sex		Sex				
	Relationship to household head		Relationship to household head		Relationship to household head		
	Marital status		Marital status				
		Type of product	Occupation				
	Education level	Economic activities	Education level				
		Legal form	Residency status	Income			Income
	Number of children born	Number of employed	Work status	Expenditure	Fringe benefits	Diseases	Age when began smoking
	Number of children living	Income	Number of children born	Type of dwelling	Search for job	Source of diagnose	Type of cigarettes
	Number of children died	Hours worked	Event of birth:		Unemployed	Type of initial treatment	Number of cigarettes
	Work status	Production cost	Date of birth		Work status	Choice of initial treatment	Expenses on tobacco products
		Expenses	Place of birth		Last occupation	Type of last treatment	Knowledge on dangers of smoking
	Type of dwelling	Revenue	Birth registration		Desired occupationob	Drugs or medicines	Married women smoking
	Occupancy and tenure of dwelling		Baby identification			Choice of medicine	Abstinence from smoking
	Ownership of land	Depreciations	Number of children living	Ownership of land	Industry	Injury / accident	Number of unsuccessful attempts to quit smoking
		Output	Number of children died		Hours worked	Cause of injury / accident	Cause for quitting
		Inventory	Contraceptive method			Hospital admission	
	Durable goods		Duration of pregnancy	Durable goods		Health expenditure	
	Source of drinking water	Fixed assets	Event of death:	Fixed assets		Health insurance	
	Water supply system		Date of death				
			Place of death				
	Religion		Cause of death				
			Death registration				
	Migration		Migration		Migration		
	Literacy		Literacy				
Data presentation	Province, Region, Kingdom						

Source: Own compilation based on information received by the NSO.

The frequency of the HWS, i.e. the survey with most immediate relevance for the envisaged purpose, was recently increased in order to satisfy “increased demand for quality information on the actual number of people with the right to obtain .. health insurance – identified by possession of a ‘golden card’.” (Opanapunt / Porapakkhram 2005)

Most of the addressed additional demand came from the MoPH (and NHSO), which wished to solve a number of uncertainties that had emerged since the onset of the UC scheme. Especially, higher accuracy and actuality of the number of persons eligible under the UC scheme was crucial as it influenced the

calculations with respect to the correct amount of capitation of competing institutions (NHSO, BoB, others). Also, aiming at correct numbers was necessary in order to get a better base to start from for budget projections.

Initially, it was planned to execute the HWS on an annual basis (Opanapunt / Porapakkhram 2005). This would have enabled analysts to create time series of consistently structured data, which is necessary as information base in case of time series based application of budget projections. Meanwhile, however, the HWS is being executed (only) on a biannual basis, leading to and leaving unresolved some of the problems as discussed earlier in this report.

Another problem of using the HWS for budgeting purposes lies within the intrinsic statistical problems of samples, i.e. their design, in general. It is not purpose of this report to review the survey practice of the NSO. It is assumed that the NSO carries out its surveys according to best statistical practice. However, the problems of sample design comprise questions of coverage, sample size, sampling (probability sampling, quota sampling), stratification, response rates, substitution of non-respondents, the questionnaires, checking and weighing of data, treatment of missing data, and the like (EUROSTAT 2003) – which all pose specific problems to be solved in order to guarantee representativeness with respect to the whole population, and accuracy<sup>2</sup>.

Nevertheless, despite those problems, the HWS, and possibly others of the above mentioned surveys, will be element of INFIMO, a blueprint of which will be developed later in the course of this project.

### **3.3. Fiscal statistics - the Government Financial Management Information System**

Thailand's GFMIS<sup>3</sup>, sometimes called *treasury system*, is a networked payment, accounting, and financial management information system to which the MoF, the BoB, the line ministries and spending agencies have access.

The rules of access to, and the content of, GFMIS are defined and supervised by the CG, which implemented the real-time, centralized, integrated on-line computer system, and runs it since 1 October 2004. The system is an application of the SAP commercial package "Enterprise Resource Planning (ERP)". It covers core functions of the government's fiscal process, including budget planning and monitoring, procurement and payment, financial accounting on accrual basis, cost accounting, human resource management, and management reporting.

---

<sup>2</sup> See report *The calculation of capitation fees and the estimation of provider payment in the Thai health system – initial review (Draft report)*. ILO component: Financial Management of the Thai Health Care System (THA/05/01/EEC) Under the Health Care Reform Project between the EU and the Kingdom of Thailand (THA/AIDCO/2002/0411) Draft 1, September 2006

<sup>3</sup> On the following see Potter, Barry H. and Jack Diamond: *Building Treasury Systems*. In: Finance and Development, A quarterly magazine of the IMF. Volume 37, Number 3, 2000. For a fuller treatment see: Potter, Barry H. and Jack Diamond: *Guidelines for Public Expenditure Management*. Washington: International Monetary Fund, 1999.

Every public agency has to use the same chart of accounts, accounting principles and procedures, i.e. all agencies have to record financial activities of identical type under identical codes (accounts). Each account is identified by a unique code. The CG is responsible for the design and maintenance of the accounting framework.

In practice, the CG only controls the “primary account code”, which has 10 digits; an example is shown in **table nnn** (below).

**Table nnn. Account coding system (Chart of Accounts; example)**

Account code						Account name
5	0	00	00	00	00	Expense
5	1	00	00	00	00	Operational expense
5	1	01	00	00	00	Personal expenditure
5	1	01	01	00	00	Wages and salaries
5	1	01	02	00	00	Other expenditure
5	1	01	02	01	06	Social security contributions
5	1	01	02	01	09	Health insurance premia
5	1	01	03	00	00	Compensation for education and health
5	1	01	03	02	05	Outpatient services for beneficiaries except pensioners - public health care facilities
5	1	01	03	02	06	Inpatient services for beneficiaries except pensioners - public health care facilities
5	1	01	03	02	07	Outpatient services for beneficiaries except pensioners - private health care facilities
5	1	01	03	02	08	Inpatient services for beneficiaries except pensioners - private health care facilities
5	1	04	01	00	00	Supplies
5	1	04	01	01	02	Supplies from the private sector
5	1	04	01	01	03	Supplies from the government sector

Source: CG (2005).

The CG has authorized public agencies to create independently ("freely") “secondary account codes”, reflecting those agencies' specific activities in detail.

In due course of the project Thailand's GFMIS will be checked for its relevance for INFIMO, in detail.

### 3.4. Price statistics

**Table nn** contains the structure of the medical CPI, the base data of which are being collected by the MoC. The medical CPI, item number 98 of the CPI, is broken down into the two items no. 99 and no. 111. No. 99 consists of the components 100, 104 and 109. No. 100 is broken down into 101 to 103; no. 104 into 105 to 108; and no. 109 is equivalent to 110. No. 111 is broken down into the two components 112 and 113.

Table nn. Composition of the medical CPI

No.	Description
<b>98</b>	<b>MEDICAL AND PERSONAL CARE</b>
<b>99</b>	<b>MEDICAL CARE</b>
100	DRUGS AND MEDICAL CARE COMMODITIES
101	DRUGS
102	MEDICAL CARE COMMODITIES
103	MEDICAL CARE SERVICES
104	OUT-PATIENT EXPENDITURE
105	EXAMINATION FEES
106	DENTAL FEE
107	EYE CHECKUP FEES
108	OTHERS
109	IN-PATIENT EXPENDITURE
110	EXPENDITURE ON HOSPITAL SERVICES
<b>111</b>	<b>PERSONAL CARE</b>
112	PERSONAL CARE ITEMS
113	PERSONAL CARE SERVICES

Item no. 98 has a weight within the overall CPI of around 6 per cent over the last three “baskets” (2537/1994, 2541/1998, 2545/2002 – Annex, table 2).

Item no. 100 is consistent to a large extent with group 06.1 *Medical Products, Appliances and Equipment* of the COICOP (UN 2004).

Group 06.1 covers medicaments and equipment and other health related products “purchased by individuals or households, either with or without a prescription, usually from dispensing chemists, pharmacists or medical equipment suppliers. They are intended for consumption or use outside a health facility or institution<sup>4</sup>.” (UN 2004, p. 473)

Item

No. 101 is presumably consistent with group 06.1.1 *Non-durable pharmaceutical products* and group 06.1.2 *Non-durable other medical products*;

no. 102 should be consistent with group 06.1.3 *Durable therapeutic appliances and equipment*; and

<sup>4</sup> Products directly supplied to out-patients by practitioners or to in-patients by hospitals and the like are included in out-patient services or hospital services. (UN 2004, p. 473)

no. 103 relates with group *06.2.1 Medical services*, which include services of orthodontic specialists.

Item

no. 104 (containing items no. 105 to 108) should be consistent with *Group 06.2 Outpatient services* which “covers medical, dental and paramedical services delivered to outpatients by medical, dental and paramedical practitioners and auxiliaries. The services may be delivered at home, in individual or group consulting facilities, dispensaries or the outpatient clinics of hospitals and the like. Outpatient services include the medicaments, prostheses, medical appliances and equipment and other health-related products supplied directly to outpatients by medical, dental and paramedical practitioners and auxiliaries.” To which extent consistency exists has still to be clarified.

Item

no. 109, which is identical with item no. 110, is the equivalent to *group 06.3 Hospital services*. They include

Basic services: administration; accomodation; food and dring; ambulance transport; provision of medicines and other pharmaceutical products, etc., and

Medical services: Services of physicians, surgeons, dentists; medical ana-lyses; physiotherapists, speech therapists, etc.

For further details on products included in all mentioned groups see: UN 2004, p. 473.

A complete breakdown of the medical CPI is provided in the following **table nnn**.



Table nnn. CONSUMER PRICE INDEX ( 2002=100) - Medical goods and services ("Medical CPI")

Region	Good / service	2002	2003	2004	2005	2006 (Jan to Sep)
THAILAND	DOCTOR FEE	100.0	102.7	106.0	107.8	111.3
	EXAMINATION FEE (GOV.)	100.0	101.2	102.8	103.1	103.8
	EXAMINATION FEE (PRIV.)	100.0	101.6	106.0	110.6	110.7
	DENTIST FEE	100.0	104.1	107.0	109.1	110.5
	FEET MASSAGE	100.0	102.4	105.0	106.2	104.3
	HOSPITAL CLINIC	100.0	100.3	100.6	101.0	102.0
	HOSPITAL CLINIC (PRIV.)	100.0	100.0	100.3	101.7	102.0
	PLASTER	100.0	100.8	102.1	103.1	103.1
	CARMINATIVE	100.0	100.0	102.3	105.0	109.8
	CONTRACEPTIVES	100.0	100.1	100.3	102.7	104.2
	ANTIFUNGALS	100.0	100.5	101.1	102.0	102.9
	ANTI INFLAMAT	100.0	101.5	103.2	106.1	106.9
	ANTIBIOTICS	100.0	99.8	100.3	101.0	103.2
	ANTACIDS	100.0	101.4	102.1	103.2	105.1
	VITAMIN B-COMPLEX	100.0	100.4	101.0	101.2	101.9
	BALM	100.0	100.1	99.5	99.9	100.2
	BITTER PILL	100.0	100.3	100.0	100.1	100.3
	PAIN RELIEF	100.0	100.6	101.0	101.6	102.5
	ANALGESIC	100.0	100.8	100.6	101.5	104.1
	COUGH MEDICINE	100.0	100.1	99.8	100.0	101.1
BANGKOK METROPOLIS	DOCTOR FEE	100.0	101.8	107.0	107.0	109.5
	EXAMINATION FEE (GOV.)	100.0	101.8	104.1	104.1	105.0
	EXAMINATION FEE (PRIV.)	100.0	101.1	106.0	111.2	111.2
	DENTIST FEE	100.0	103.8	107.0	107.0	107.0
	FEET MASSAGE	100.0	101.6	105.6	107.5	103.0
	HOSPITAL CLINIC	100.0	100.0	100.0	100.0	100.0
	HOSPITAL CLINIC (PRIV.)	100.0	100.0	100.4	102.1	102.5
	CONTRACEPTIVES	100.0	99.7	100.1	103.6	105.3
	ANTIFUNGALS	100.0	100.5	101.9	102.7	104.4
	ANTI INFLAMAT	100.0	101.6	103.0	107.3	108.1
	ANTIBIOTICS	100.0	100.2	101.4	101.9	105.7
	ANTACIDS	100.0	101.4	102.5	103.5	106.0
	VITAMIN B-COMPLEX	100.0	100.3	100.2	100.2	102.0
	BITTER PILL	100.0	100.1	100.2	100.1	100.1
	PAIN RELIEF	100.0	101.0	101.4	102.4	103.6
	ANALGESIC	100.0	101.4	101.2	102.6	106.4
	COUGH MEDICINE	100.0	100.2	99.9	99.7	101.1
CENTRAL	DOCTOR FEE	100.0	104.8	105.7	107.6	108.8
	EXAMINATION FEE (GOV.)	100.0	101.8	103.1	103.1	103.1
	EXAMINATION FEE (PRIV.)	100.0	105.9	107.8	109.3	109.3
	DENTIST FEE	100.0	102.4	104.1	106.5	106.5
	FEET MASSAGE	100.0	104.0	105.4	106.6	106.6
	HOSPITAL CLINIC	100.0	101.8	103.3	103.3	105.2
	HOSPITAL CLINIC (PRIV.)	100.0	100.0	100.0	100.0	100.0
	PLASTER	100.0	100.0	100.0	100.0	100.0
	CONTRACEPTIVES	100.0	102.4	101.5	102.0	103.5
	ANTIFUNGALS	100.0	100.2	100.1	100.8	100.8
	ANTI INFLAMAT	100.0	101.6	104.0	106.0	106.8
	ANTIBIOTICS	100.0	100.0	100.2	101.3	101.3
	ANTACIDS	100.0	101.6	101.1	102.2	102.9
	VITAMIN B-COMPLEX	100.0	100.0	100.0	100.0	100.0
	BALM	100.0	100.3	99.1	99.3	100.1
	BITTER PILL	100.0	100.2	99.8	100.4	101.2
	PAIN RELIEF	100.0	100.1	100.1	100.1	99.9
	ANALGESIC	100.0	99.8	97.8	98.7	100.2

	COUGH MEDICINE	100.0	101.1	101.0	101.6	102.4
Region	Good / service	2002	2003	2004	2005	2006 (Jan to Sep)
NORTHEAST	DOCTOR FEE	100.0	100.0	100.0	101.1	105.1
	EXAMINATION FEE (GOV.)	100.0	100.0	100.0	100.0	100.0
	EXAMINATION FEE (PRIV.)	100.0	100.0	100.0	100.0	100.0
	DENTIST FEE	100.0	104.8	106.8	125.2	135.3
	FEET MASSAGE	100.0	100.2	100.3	100.5	100.5
	HOSPITAL CLINIC	100.0	100.0	100.0	100.0	104.9
	HOSPITAL CLINIC (PRIV.)	100.0	100.0	100.0	100.0	101.7
	CONTRACEPTIVES	100.0	100.6	99.7	99.9	100.2
	ANTIFUNGALS	100.0	100.4	100.6	101.0	101.8
	ANTI INFLAMAT	100.0	100.6	103.5	105.0	105.3
	ANTIBIOTICS	100.0	100.0	98.9	98.9	98.9
	ANTACIDS	100.0	101.1	101.1	102.4	103.5
	VITAMIN B-COMPLEX	100.0	100.6	102.3	102.3	102.3
	BALM	100.0	100.0	100.2	101.1	100.6
	BITTER PILL	100.0	100.0	100.0	100.0	100.0
	PAIN RELIEF	100.0	99.8	99.0	99.2	100.2
	ANALGESIC	100.0	101.5	106.0	105.9	104.9
	COUGH MEDICINE	100.0	99.3	98.1	98.2	98.6
NORTH	DOCTOR FEE	100.0	109.3	113.9	118.0	120.1
	EXAMINATION FEE (GOV.)	100.0	100.0	100.0	100.0	100.0
	EXAMINATION FEE (PRIV.)	100.0	100.7	100.8	100.8	101.1
	DENTIST FEE	100.0	108.4	112.0	112.0	112.0
	FEET MASSAGE	100.0	104.6	106.9	107.8	107.8
	HOSPITAL CLINIC	100.0	100.0	100.4	104.2	104.2
	HOSPITAL CLINIC (PRIV.)	100.0	100.0	100.2	101.9	101.9
	PLASTER	100.0	103.7	103.7	103.7	103.7
	CONTRACEPTIVES	100.0	99.9	99.9	100.4	101.1
	ANTI INFLAMAT	100.0	101.4	102.4	103.1	103.6
	ANTIBIOTICS	100.0	99.0	98.7	97.7	98.7
	ANTACIDS	100.0	101.1	101.3	102.8	103.0
	VITAMIN B-COMPLEX	100.0	101.3	102.1	102.7	103.2
	BALM	100.0	99.6	99.6	99.6	99.8
	BITTER PILL	100.0	101.9	101.4	101.4	101.4
	PAIN RELIEF	100.0	100.4	102.2	102.7	103.0
	ANALGESIC	100.0	100.4	99.6	98.4	100.7
	COUGH MEDICINE	100.0	100.0	100.0	101.3	102.9
SOUTH	DOCTOR FEE	100.0	100.7	104.2	112.8	123.7
	EXAMINATION FEE (GOV.)	100.0	100.0	101.1	105.0	106.6
	EXAMINATION FEE (PRIV.)	100.0	108.0	115.3	118.8	122.1
	DENTIST FEE	100.0	100.0	100.5	107.7	117.2
	FEET MASSAGE	100.0	101.2	103.8	105.1	105.1
	HOSPITAL CLINIC	100.0	100.0	100.0	100.0	100.0
	HOSPITAL CLINIC (PRIV.)	100.0	100.2	100.2	100.2	100.2
	PLASTER	100.0	100.0	106.1	110.5	110.5
	CARMINATIVE	100.0	100.0	102.3	105.0	109.8
	CONTRACEPTIVES	100.0	99.3	100.6	103.0	104.2
	ANTIFUNGALS	100.0	101.9	103.1	105.2	105.9
	ANTI INFLAMAT	100.0	102.3	103.6	104.3	105.9
	ANTIBIOTICS	100.0	97.6	96.3	99.1	99.4
	VITAMIN B-COMPLEX	100.0	100.0	104.0	104.4	104.7
	BITTER PILL	100.0	100.0	98.8	99.2	99.2
	PAIN RELIEF	100.0	100.0	100.1	99.9	100.6
	ANALGESIC	100.0	98.6	98.5	100.6	102.5
	COUGH MEDICINE	100.0	99.8	100.4	100.4	100.1

In summarising, the above medical CPI can be characterized as follows:

It mainly measures a limited, relatively small set of daily drugs and services that can be bought / are being bought over the counter by the private households, as represented in the household survey(s). Although the basket also contains drugs that are accessible to households most probably only together with a doctoral prescription it does not, by nature of its construction, contain high powered (possibly poisonous, fatal, etc) drugs, which are only being accessible within the hospital system.

By construction, the index measures market prices – may these be subsidized or not. It does not measure the development of costs of goods and services within the health provider system (hospitals). It, thus, is not adequate for use as a cost driver of non-labour costs of hospitals (under the annual budget / capitation estimation process).

For the purpose of annual budgeting / capitation further investigation is necessary with respect to an adequate cost driver for the non-labour cost elements of hospital expenses.

Independent of the adequacy of the construction of a medical price index the problem arises as to whether an INFIMO, in order to become a satisfyingly working health policy instrument, must include a substantial observatory of prices of medical products, including implicit cost structures, in a more general way, i.e. going well beyond the list of products included in the medical CPI.

### **3.5. Public and private system administrations**

The MoPH oversees Thailand's health care activities. It is responsible to implement and execute many health laws, e.g. the laws on

- food and drugs,
- medical equipment,
- health care providers, and
- medical professional registration.

Much of the execution of these laws is related to registration and licensing activities, which (meanwhile) are being recorded in electronic format and can, thus, be compiled in the form of health, or health related, statistics.

Most of the data bases maintained in public institutions are, however, not directly compatible with each other. Data base incompatibilities exist to some extent within the administration-based data systems but also, and especially, between administrative data, on the one hand, and surveys, on the other.

For example,

- the MoPH's regular *Health Resources Survey* only covers public health care facilities and private hospitals: it excludes ambulatory clinics;

- the MoPH's regular *Mortality and Morbidity Report*, input to Thailand's annual health statistics (also used for international comparison), uses summary information from the health care providers and combines it with information based on the death certificates compiled by the MoI;
- private health care facilities, before starting their activities, have to register with and be licensed by the MoPH - licenses to be annually renewed. Under current practice, the licensing procedure, however, only demands information (data) with respect to the facilities' standards of medical practice and infrastructure; from the MoPH's point of interest those facilities' financial status is irrelevant for their being licensed.

Private health care institutions follow the policies and guidelines as specified by the ICAAT and must get approval from the DCR. Private hospitals are supervised by the Bureau of Business Supervision (under the DCR), and have to prepare and submit annual financial reports. Small clinics are exempted from these obligations.

Stock-listed private hospitals have to submit financial reports to the SET.

Private insurance firms are supervised by the Department of Insurance of the MoC; they submit annual financial reports and undertake actuarial reviews on a regular basis.

For purposes of fixing the annual income tax all private health care institutions regularly send documents to the Revenue Department of the MoF. Income statements require only limited information in the cases of independent health care professionals and small clinics.

The SSO holds individual records of health service utilization of in- and outpatients, including clinical and financial data.

The Workmen compensation scheme maintains documentation only in manual format.

CSMBS and UC dispose of computerized inpatient utilization data but only of incomplete outpatient data.

Private health insurance and the Traffic Accident Insurance scheme have detailed clients data, to which access is restricted.

### **3.6. Data from other sources**

Data documenting health spending (and financing) of private households, private employers, NPISHs, and the RoW can only be generated by way of surveys (chapter 3.2).