# Compulsory Health Insurance Databases

Janez Svoljšak, Irma Dovžan Health Insurance Institute of Slovenia

Abstract. The compulsory health insurance databases represent fundamental infrastructure to the implementation of the Health Insurance Institute of Slovenia (HIIS) operations, i.e. for its effective performance in all the fields of its business. This paper presents the legal bases of the database management, the logocal database structure, the supply of data from various data sources, and the role of databases as the primary source of supply for the data collections kept by other institutions in Slovenia

## 1. The health insurance institute of Slovenia (HIIS) primary business

The HIIS primary business activity is compulsory health insurance, which provides to the persons affiliated and fulfilling all the obligatory conditions, with social security in the events of disease, injury, birth giving or death.

To this end, the HIIS is, by statute, the manager of compulsory health insurance databases, which keep data on insured persons affiliated in compulsory health insurance, and data on their employers, who are, by statute, authorised and responsible for the registering of persons into insurance and of settling the insurance contributions. The databases' purposes are:

- They enable, at any moment, the examination whether a particular insured person fulfils
  the obligatory conditions to be entitled particular rights deriving from compulsory health
  insurance.
- They facilitate the preparation of statistical data serving as the basis for the formulation and implementation of the health care and health insurance policies in Slovenia.

#### 1.1 Insured Persons

The HIIS keeps the following data on insured persons:

General personal details: family name and first name, date of birth, nationality, citizenship status in Slovenia, address of permanent or temporary residence as appropriate, validity of residence visa for foreigners

Data on the dates, forms and conditions of affiliation in compulsory health insurance: date of commencement or termination of insurance, insurance status, validity of temporary working permit in the cases of foreigners, validity of certificate of school attendance, ...

 Data on the obligor for the registering into insurance and for the settling of compulsory health insurance contribution

Insured persons fall into two categories:

#### Insurees

This category comprises those insured persons that are actual holders of compulsory health insurance. They are affiliated in health insurance on the bases of applicable

conditions (status of employee in R Slovenia, carrying out individual economic or professional activity in Slovenia, receiving various financial compensations or allowances in Slovenia, ...).

For the duration of affiliation of an insured person of this category in insurance, the respective contribution obligor is paying insurance contribution for the person; such contributions make the compulsory health insurance funds.

## Family members

This category comprises those insured persons who are affiliated in insurance through their holders of compulsory health insurance (insurees), subject to conditions provided in the law. Entitlement to such a status covers spouses, children, step children, grand children etc. For the duration of affiliation of an insured person of this category in insurance, no specific compulsory health insurance contribution is paid.

# 1.2 Obligors

The contribution obligors can be either physical persons or legal entities.

Their role is dual:

- Submission of applications for the registering of insured persons into and out of compulsory health insurance, and applications for any modifications during the affiliation in insurance.
- Settling of compulsory health insurance contributions during the insured persons (insurees) affiliation in insurance.

The HIIS keeps the following data on obligors:

General details of legal entities: type of organisation, title, activity according to SKD classification, date of entry into and erasure from the court register, business address, ... or, general details of physical persons: family name, first name, date of birth, date of death, citizenship, address of permanent or temporary residence, validity of residence visa in the cases of foreigners, ...

Specific data on obligors: date of commencement and expiration of the obligation of the payment of compulsory health insurance contribution, date of registering out of insurance, obligor's tax number, ...

## 2. Compulsory health insurance (CHI) register logical scheme

#### 2.1 Breakdown of Insured Persons

An insured person may enter compulsory health insurance either as an insuree or as a family member of an insuree, who, in such a case, is called the insurance holder.

Basically, the compulsory health insurance is a relation between the insured person and the contribution obligor,

or between the family member and the insuree covered by a valid compulsory health insurance.

Based on this relation, an insured person enters compulsory health insurance.

The particularity of this rule lies in the fact that a family member enjoys valid compulsory health insurance subject to the validity of compulsory health insurance of his/her insurance holder (insuree).

## In a schematic form:

Insured person	n = insuree		
has M	/	belongs 1	
compulsory in	surance = r	elation between i	nsuree and contribution obligor
belongs 1	/	has M	
contribution o	bligor		
Insured person	n = family n	ıember	
has I	/	belongs 1	
family relation	1		
belongs I	/	has M	
insuree			
has M	/	belongs 1	
compulsory in	surance = r	elation between i	nsuree and contribution obligor
belongs 1	/	has M	
contribution o	bligor		

## 2.2 Breakdown of Contribution Obligors

Pursuant the Law on Health Care and Health Insurance, the contribution obligors may be physical persons

or business enterprises

In view of data to be kept on a contribution obligor (= title of the obligor) by the HIIS, the obligors are categorised in the following manner:

- the data of either a person or an organisation (i.e. any type of entity other than person).
- the specific obligor data regardless of the obligor type.

A person or organisation may turn up in several instances as a contribution obligor. Thus, a borough may be a contribution obligor for:

- the employees in borough administration, and
- the persons without any personal income.

## 3. Implementation of the CHI registers

Based on the logical scheme and on the accessibility of data from official registers, we defined the CHI relational database:

Data collection – table	Role in the logical scheme	Official register	Role in the implementation
PERSONS	Insured persons (insurees + family members), Obligors (persons)	CRP	Infrastructure
ORGANISATIONS	Obligors (persons)	PRS	Infrastructure
ADDRESSES	Addresses of persons + addresses of organisations	CRP, PRS, RTE	Infrastructure
OBLIGORS	Obligors	HIIS	СНІ
COMPULSORY HEALTH INSURANCE	Relation between the insured person and the obligor	HUS	СНІ
FAMILY MEMBERS	Relation between the insuree and the family member	HIIS	CHI

Every person or organisation has at least one address.

If an organisation appears in CHI, it can only appear as a contribution obligor.

Contribution obligor may be either a person or an organisation.

In CHI, a person may appear as a contribution obligor and/or insured person.

If appearing as an insured person, it may be either an insuree or a family member.

## 4. Supply of data to compulsory health insurance databases

## 4.1 Data Capture in HIIS

The compulsory health insurance databases are primarily kept by the officers in the registering service in the HIIS regional units and branch offices, by entering of data from the statutorily prescribed forms and public documents applied by the obligors' in regulating the insured persons' insurance. After being successfully verified, any such modification becomes accessible to all other information technology supported HIIS business sectors that utilise the integrally interlinked compulsory health insurance databases.

The major information technology supported procedures carried out by the registering service officers in day-to-day maintenance of compulsory health insurance databases:

- Maintenance of data on business entities
- Maintenance of data on physical persons
- Maintenance of data on contribution obligors
- Maintenance of data on insurees
- Maintenance of data on family members

## 4.2 Supply of Databases from Other Official National Registers

HIIS also updates its compulsory health insurance databases, on the basis of statutorily provided legal bases, from several other official national registers.

Central register of population: The collection of data on persons having permanent residence in R Slovenia. This database is kept by the Ministry of Internal Affairs. Reported on a monthly basis.

**Business register of RS:** The collection of data on all business entities having their business seat in R Slovenia. Its manager is SURS. Reported on a monthly basis.

**Register of territorial units:** The collection of data on all territorial units of R Slovenia (boroughs, towns, villages, streets). Its manager is SURS. Reported on a monthly basis.

# 5. Reporting of data to external institutions

Under the auspices of the Ministry of Work, Family and Social Affairs, a project of rationalisation of reporting and gathering of identical data for the purposes of keeping and maintaining of data collections on insured persons and employees has been under way for several years. This project enrols:

the Health Insurance Institute of Slovenia:

the Pension and Invalidity Insurance Institute of Slovenia;

the Employment Institute of Slovenia, and

The Office of Statistics of Slovenia (SURS).

Multipurpose application of identical data gathered and captured only in one instance, implies rationalisation for the data providers (insurance contribution obligors, employers) in their carrying out of obligations, as well as rationalisation on the part of data collection managers, who require such data in their operation:

- The entry of data on registering in / registering out / modifications of insured persons and employees is carried out applying *common M forms*.
- In the formulation of the contents of the M forms, *unified methodological principles* and standards have been agreed, with due consideration of all specific requirements of individual data collection management institutions.
- Common methodological bases have been published, providing instructions for the completion of forms, unified statistical standards and the list of mandatory data in registering into insurance and registering of employment.
- Data capture from the M forms under information technology support is carried out in the HIIS.
- The data so captured are reported, under corresponding agreements and contracts, to the following institutions:
  - ⇒ Office of Statistics of RS: Pursuant to the Law on National Statistics, this office is the statutory manager of the Statistical Register of all occupationally active population. It gathers data for the purposes of statistical research in the field of work, monitors the status of employment from the viewpoint of demographic research by fields.
  - ⇒ The Pension and Invalidity Insurance Institute of Slovenia: Pursuant to the Law on Central Registers, this Institute is the statutory manager of the Central Register of persons affiliated in pension and invalidity insurance. It gathers data on pension and invalidity insurees and on the contribution obligors, for the purposes of procedures of implementing the rights derived from pension and invalidity insurance.
  - ⇒ The Employment Institute of Slovenia: Pursuant to the Law on Employment and Insurance for the Case of Unemployment, this Institute is the statutory manager of the data collection for the purposes of monitoring the evolution of employment and unemployed persons by sectors.
  - ⇒ Tax Administration of Slovenia: In accordance with the Law on Tax Service, this Administration is the statutory manager of the tax obligor database. It gathers data for the purposes of supervision of accounting, settling and recovery of compulsory health insurance contributions and of other statutorily provided contributions and duties.

# 6. The primary chi registers - its role as the HIIS infrastructure

Under the primary CHI registers, the following data collections are assigned infrastructural character:

- ORGANISATIONS
- PERSONS
- ADDRESSES.

The primary CHI register serves as the basis for: a) the insured persons' implementation of rights derived from CHI:

- accounting and disbursement of compensations and allowances;
- approval and registering of technical aids;
- processing by medical boards;
- absence from work

b) register of the partnerial service provider segment under the health insurance and health care system and of related business sectors:

- health care service providers
- physicians
- c) CHI register and register of the service providers together provide the complete data infrastructure for IHIS's primary business activity.

#### 7. Conclusion

The HIIS primary mission is the provision of compulsory health insurance in the sense of providing the population the basic social security in the events of disease, injury, or birth giving. In information technology support to implementing this mission, a major role is assigned to the compulsory health insurance registers including their infrastructure.

This support has been implemented by the HIIS so as to ensure equal availability, applicability, currency and uniqueness of these data to all business sectors within HIIS.

The above facts demonstrate the CHI database as the primary and indispensable data basis for the entirety of the HIIS operations.

#### References

- [1] Zakon o zdravstvenem varstvu in zavarovanju (Law on Health Care and Health Insurance), 3/96
- [2] Metodolo (ko gradivo I (Methodologic bases I), 1/87, reprint with amendments, 11/98
- [3] Reporting of data for the purposes of establishing and keeping of the central register of the pension and invalidity insurance, of the central register of health insurance, and of the record of entering employment status (M-1, M-2, M-1A, M-3, M-3A, M-D^)
- [4] ZZZS, Pravila obveznega zdravstvenega zavarovanja s pojasnili in izvedbenimi navodili (Regulations on compulsory health insurance, complete with clarifications and instructions on implementation), 9/95
- ZZZS, Informacijski model, a'urna verzija repozitorija CASE orodja (Information model, current version of the CASE tool repository)