BELGIUM: CONSEQUENCES OF THE FEDERALISATION OF THE COUNTRY ON THE PROVISION OF HEALTH DATA

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Belgium: Consequences of the Federalisation of the Country on the Provision of Health Data

History

In Belgium, a number of underlying problems gave reason to drastic institutional reforms. The State Reform was carried out in four stages (in 1970, 1980, 1988 and 1993). Based on language, three linguistic communities (the Flemish Community, the French Community and the German-speaking Community) were established. Furthermore, the territory was divided into three regions (the Flemish Region, the Brussels Capital Region and the Walloon Region).

There are six governments: the Federal government, the Flemish government, the government of the French Community, the government of the German-speaking Community, the government of the Walloon Region and the government of the Brussels Capital Region. All governments have the same level of decision-making power and for each area, only one government is competent. In general, the regional governments have competencies on more economical matters, infrastructure and the environment, whereas the community governments are responsible for matters of the individual, as, for instance, preventive health care. The federal government retained its competence for areas as finances, maintenance of the public order, social security, justice, foreign affairs, national defence, public security and normative aspects of health care and the environment.

The federal model has some specific characteristics. There is for instance the lack of hierarchy between the federal level, the communities and the regions. The collaboration between the different political levels is arranged by "co-operation agreements". Every government is competent for the scientific research on matters of their competencies. There is also an asymmetric evolution: there was a fusion of the Flemish regional and the Flemish community government, whereas in the French-speaking part of the country there is a regional government (of the Walloon Region) and a community government (of the French Community), but several forms of collaborations between both are established. Finally, federal, community as well as regional governments all have international competencies. (1)

Health Policy within the Federal Structure

As a consequence of this reform, the competencies concerning health policy of the federal government were also redistributed over the different governments.

Within the Public Health area, the Federal Ministry of Social Affairs, Public Health and the Environment retained its responsibility for:

- elaboration of the statutory framework of health care institutions
- regulation of the exercise of and the access to medical, nursing and paramedical professions
- health aspects of the food and drug policy

The community governments and, in Brussels and Wallonia, the regional governments, are responsible for:

- health education and preventive care
• social and environmental-hygienic aspects of health
• ambulatory health care
• concrete elaboration and application of the financing rules for exploitation and infrastructure in health care

The latter competencies had to be elaborated at regional/community level by the different governments (according to their own visions and priorities).

**Consequences for the Provision of Health Data**

I. **Lack of a General Health Information System**

Health data are of invaluable use to governments, because they permit to describe the health status of the population, to evaluate health-related policies and interventions and to develop their health policy. In the past, though many health data were available in Belgium, they were not integrated into a real Health Information System. Moreover, there was (and there still is) no political tradition within the parliament to use health data in a systematic way. (2)

II. **Changes Due to the Federalisation**

As a consequence of the redistribution of the competencies within the health care area, the provision of health information also underwent changes. Some data-providing systems were closed down at national level and are now being re-established at another level. Also, health data from the different regions and communities have to be aggregated in order to get national data.

Both the French and Flemish community governments develop their own health targets and their own indicators. Since 1993, a review of Flemish data on health indicators, available at their level, is published. Also, in January '98, the Flemish Community adopted 5 health targets to be attained by the year 2002. The targets are situated within the following fields: smoke prevention, nutrition, breast cancer screening, accidents and prevention of infectious diseases. In the French Community also, specific targets and indicators are being developed. This work is currently in the final state of discussion.
III. Illustration of some Problems

It is not the aim of this document to give a complete review of all problems associated with federalisation. The examples below should therefore only be seen as an illustration.

1. Mortality Data

a) Data Flow

In 1986, mortality data became a competency of the community governments and since then, the medical information on the forms of death certification is encoded at community level. All communities use the same type of death certificate. All deaths are to be reported to the administration of the municipality. All forms are sent to the provincial health inspection, which sends them on to the Administration of Health Care of the government, where the medical information of the forms is encoded. The Flemish government encodes the certificates of the people of the Flemish Region and the Dutch-language forms of the Brussels Region. The certificates of residents of the Walloon Region are encoded by the administration of the government of the French Community. The files of both communities are sent to the Federal Ministry of Social Affairs, Public Health and the Environment. There is a problem for the Brussels Region, where the French-language forms are not processed in a structured manner (or not processed at all!). The files are also sent to the National Institute for Statistics where the information is automated once again, the data are controlled and information on missing data is added, in order to obtain the “definitive data”. (3)

b) Data Management

In general, during the last years, many efforts have been done to process mortality data of high quality, and within a reasonable period of time. Unfortunately, due to the problems with the French-language forms in Brussels, the most recent national mortality data are those of 1993. The National Institute for Statistics, who’s the owner of the national definitive database, provides mortality data on district level.

The Centre of Operational Research of Public Health (CORPH) of the Scientific Institute of Public Health (a federal institution) performs statistical analysis of the yearly national data on death and cause specific death; evaluation of trends in mortality; evaluation of socioeconomic inequities in mortality and development and support of the automation of the analysis.

Within the Flemish Community, measures to improve the system include quality control of the codification, control of linkage errors, collection of additional information from the certifying physicians and electronic exchange of data. (4) Since 1993, the Flemish community government yearly publishes data on health indicators, including these mortality data. The most recent data are those of 1996. (5) The French Community also published the mortality data of 1994 and aims to publish yearly a more extended review of data on health indicators. (6)
2. **Birth Statistics**

a) **Official Data**

♦ **Data Flow**

Like mortality data, all births and deaths of children that are younger than 1 year are to be reported to the administration of the municipality. The data are sent to the same institutions as the mortality data. The Federal Ministry of Social Affairs, Public Health and the Environment encodes the French-language forms of the Brussels Capital Region. (7)

♦ **Data Management**

The National Institute for Statistics is the official owner of the definitive database of national birth data. The Centre of Operational Research of Public Health (CORPH) of the Scientific Institute of Public Health (a federal institution) performs statistical analysis of the yearly national data on birth. The community governments make similar analyses on community or regional level. The Flemish government publishes its birth data since 1993 in the frame of their publication of health indicators and the data of 1996 are the most recent. The CORPH prepares the publication of the national data of 1990-1992. As mentioned above, the French Community government aims to publish yearly a review of health indicators and the publication with data of 1995 (that is currently in preparation), will include these birth data.

b) **Other Birth Data**

♦ **Data Flow**

Besides the official data, there is also the SPE ("Studiecentrum voor Perinatale Epidemiologie"), which is a regional research centre that registers data on hospital births in the Flemish Region. Compared to the information of the birth certificates, the centre collects more medical-technical information on birth and perinatal mortality. Given the fact that all Flemish hospitals participate and that almost all Flemish children are born in a hospital, this medical birth registry includes almost all births occurring in the Flemish Region. The hospital staffs report the anonymous data on a voluntary basis. Because of the timely feedback and the possibility of making anonymous comparisons, the participants are highly motivated. As a consequence, the data are complete and reliable. (8,9) Unfortunately, these data are only available for the Flemish Region.

♦ **Data Management**

The recent and reliable data permit the Flemish government to use these data as an instrument of policy. Thanks to the timely feedback, each participating hospital can base its own policy on its results. The results are also included in the yearly publication of health indicators from the Flemish Community.
3. Notification of Infectious Diseases

a) Data Flow

In Belgium, there is a compulsory notification of certain infectious diseases. The physicians living in the Flemish Region report to the health inspectors of the Flemish government; those living in the Walloon Region to the French Community and physicians living in the Brussels Capital Region to the Common Community Commission.

Thanks to the co-ordination of two institutions (VRGT and FARES) there is a national tuberculosis registry. The Flemish institution VRGT is bound to close down. Its function will be taken over by local health councils. This is an example of a good-working national structure that has to be closed down and then again re-established on another level.

b) Data management

It is difficult to obtain reliable national data on infectious diseases. The lists of diseases of the communities are not quite identical, because the legislation has been revised by the Flemish government, but not by the others authorities. Also, Brussels doctors sometimes report their declarations to the Flemish or French Community instead of the Common Community Commission. Another problem is that the data of the Common Community Commission are not published. Because, except for tuberculosis, there is no federal institution that aggregates and publishes the data, there are no national data available.

4. Vaccination data

a) Data flow

Vaccination coverage is now mainly measured at community level. Unfortunately, the coverage is measured in different ways. Therefore it is difficult to make comparisons between the communities, or to provide national data.

In the Flemish Community, Medical School Centres register the vaccination status of all children who go to a private school (approximately 85% of the children in the Flemish Community). The observed population is thus not representative of the total Flemish population of that age group. Several persons can administer vaccines (general practitioners, paediatricians, and doctors in well baby clinics and school health services), but there is not always exchange of data. As a consequence, because of the amount of missing information, the quality of the provided data on vaccination status is sometimes not very high. Also, there is a considerable delay in the provision of the data. Therefore, only rough estimates of immunisation coverage for Measles, Mumps, Rubella, Diphtheria, Tetanus, Pertussis and Poliomyelitis can be provided for the Flemish Community. (10)

In the French Community, PROVAC (a joint association of the three French Public Health Schools, provides an estimate of vaccine coverage by a cluster sampling study (as recommended by EPI) in the total population of children aged 18 to 24 months. Since 1989, the estimates are made every two years in the Walloon Region and recently also in the Brussels Capital Region.
The coverage is measured for Measles, Mumps, Rubella, Diphtheria, Tetanus, Pertussis, Haemophilus influenzae type b and Poliomyelitis. (11)

Until 1996, the Network of Sentinel General Practitioners provided national data on immunisation coverage for measles and mumps. These were only rough estimates however. A network of approximately a 150 general practitioners, who register the number and some well-defined parameters on certain health problems, as seen in their practice that week registers the data. Weekly, the participating physicians send their collected data on the requested topics to the Scientific Institute of Public Health, where the data are analysed and interpreted. The vaccination coverage for measles and mumps can be calculated by means of the Orenstein formula, based on the proportion of cases vaccinated. (12) However, because of the considerable drop in total number of cases throughout the years, confidence intervals for the calculated value have increased to an unacceptable level. Therefore, the estimates of vaccination coverage are no longer calculated.

b) Data management

The data from the medical school centres in the Flemish Community are sent to the central administration, where they are analysed and published. PROVAC analyses and publishes the vaccination coverage data from the cluster sampling study in the French Community.

Conclusion

The Reform of the State in Belgium has had a considerable influence on the provision of health information and health statistics. Health policy got new impulses, as the different governments elaborated their own health programmes, according to their specific needs and insights. There is a need for co-ordination and agreement between all concerned authorities in order to improve the present situation. A possible solution for Belgium would be the foundation of a Federal Council for Health Statistics, assembling all proper authorities. This Council should co-ordinate all activities concerning health statistics, and special attention should be paid to the development of data-exchange systems, so that timely information can be provided.
**Bibliography**


