

### Sesión Temática/Thematic sessions

La contribución de los registros de Atención  
Primaria para las Redes Centinelas en los Sistemas  
de Información de Salud Pública en Europa

The contribution of primary care based registration  
by sentinel networks to a European public health  
information system

Jueves 2 de Octubre / Thursday 2, October  
15:00:00 a/to 16:30:00

### HEALTH INDICATOR PROFILES: AN INSTRUMENT FOR COMPARATION

Joan G.M. Deckers  
*Netherlands Institute of Health Services Research, The Netherlands.*

As part of the European Commission Health Monitoring Programme, health indicators have been developed which contribute to the establishment of an European health monitoring system. Epidemiological information for this system will be derived from various information sources. To study the appropriateness and comparability of primary care as a source of epidemiological information, the indicators need to be structured into profiles. This will also facilitate international comparisons of the information and thus permit valid comparisons between countries. Primary care networks that monitor diseases on a continuous basis participated in the current study.

**Methods:** Primary care networks from Belgium, England & Wales, France, Germany, the Netherlands, Portugal and Spain delivered epidemiological data on diseases mainly managed in primary care. Specific health indicator profiles (HIPs) were developed for each disease.

**Results:** A total of 9 diseases was selected based upon the feasibility and appropriateness of primary care data for each individual disease. This selection consisted of acute diarrhoea/gastroenteritis, asthma, low back pain, chickenpox, depression, diabetes mellitus, herpes zoster, stroke/TIA and viral exanthemic disease. For each disease nominator and denominator information from at least 3 countries is available. HIPs which were developed include the following categories: health indicator, information on case definition and contextual information per country. HIPs for a selection of diseases will be presented here.

**Conclusions:** Primary care data can be used as a tool for public health monitoring. Background information and a description of the data source is necessary in order to make valid comparisons. Profiles containing information on health indicators can be developed which allow for such comparisons.

### THE CONTRIBUTION OF PRIMARY CARE BASED REGISTRATION BY SENTINEL NETWORKS TO A EUROPEAN PUBLIC HEALTH INFORMATION SYSTEM

A. Tomas Vega Alonso\*, François Schellevis\*\*  
*\*Consejería de Sanidad y Bienestar Social, Junta de Castilla y León, Valladolid, España. Netherlands Institute of Health Services Research, Utrecht, The Netherlands*

Primary care based registrations by Sentinel Networks have been operating for several decades in Europe. Participating general practitioners have provide health data for monitoring the health status and contribute to understand the epidemiological distribution of diseases and other conditions first and/or exclusively seen in primary care. Many collaborative studies have been carried out among different countries and registration networks. Since the "Blood test study" in the late eighties, to the more recent European Influenza Surveillance Scheme (where practices are the providers of data and virological specimens), many efforts has been done to standardise objectives and methods that have permitted a better coordination an co-operation throughout European countries, including increasing international comparability. In recent years, within the framework of the Health Monitoring Program of the EC and with the guidelines of the European Union Public Health Information Network / Health indicators Exchange and Monitoring System (EUPHIN/HIEMS), two research projects have been implemented with the objective to contribute to health indicators from Primary Care. In 2002 the "Health information from Primary Care" project was launched with the participation of sentinel networks of Belgium, England, France, The Netherlands, Germany, Portugal and Spain. Final results are expected in 2004. The proposed symposium's main objective is to show epidemiologists and public health workers the value of data provided by general practitioners and its use to estimate accurate and valid health indicators. Some conferences about the experiences in different European countries will give an overview on this subject.

### SURVEILLANCE OF STROKE BY THE BELGIAN SENTINEL GEN

Viviane Van Casteren  
*Section of Epidemiology, Scientific Institute of Public Health, Belgium.*

Stroke is the world's leading cause of death and handicap in adults, producing incalculable distress and reduction in the quality of life of patients and theirs carers. According to the official death statistics, nearly 10,000 persons die every year of stroke in Belgium. No routine figures on the incidence of stroke are available.

The purposes of this work is to estimate the incidence and mortality rate of stroke in the Belgian population, to compare these figures with those from previous registrations by the SGPs (1984,1989), to study the care provided to stroke patients at various moments after the incident and to follow up the patients during 1 year.

**Methods:** The network of 178 GPs representative of the whole group of GPs according to age and sex and spread all over the country, recorded in 1998 and in 1999 every transient (TIA) or permanent cerebro-vascular event. Information on age, gender, medical history, disability and outcome was collected by weekly forms. One, six and twelve months after the initial recording, the GP was sent a follow-up questionnaire with additional questions on the delivered care and on the outcome of the event.

**Results:** The crude yearly incidence rate of stroke was estimated at 179/100,000 inh. (95% C.I.: 157-203) in males and at 192/100,000 inh. (95% C.I.: 169-216) in females. The total annual number of stroke cases was estimated at 8,928 (95% C.I.: 7,408-10,668) in males and at 9,947 (95% C.I.: 8,346-11,767) in females. The yearly age-standardised attack rate of stroke significantly decreased from 286 per 100,000 in 1984, to 162 per 100,000 in 1999 ( $\chi^2$  for trend,  $P = 0.04$ ) in males and from 297 per 100,000 to 196 per 100,000 ( $P = 0.007$ ) for females. The decrease was restricted to subjects aged over 60 years. Motor deficits were present in 81% of the stroke patients. One month after the stroke, motor deficits were still present in 55% of the cases. 72% of the stroke patients were hospitalised. 47% of the stroke patients died within 12 months. The case fatality rate (CFR) after 24 hours decreased from 11% in 1984 to 6% in 1999. The CFR after 12 months did not decrease.

**Conclusions:** The SGPs are a valuable source of information on the incidence of stroke in Belgium. The network is not only capable of providing incidence figures, but also of following up the patients. The estimated mortality rates from stroke were very comparable with the official death statistics.

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#### THE SPANISH SENTINEL NETWORKS COLLABORATIVE STUDY

A. Tomás Vega Alonso

*Consejería de Sanidad y Bienestar Social. Junta de Castilla y León. España.*

**Introduction:** Sentinel networks appeared in Spain in the early nineties as a result of the necessity to use data from Primary Care as epidemiological data and not only as indices of clinical activity. After more than ten years, many Autonomous Communities have established sentinel networks in their respective Health Information System and also, national and regional regulations look at the sentinel networks as a complementary component of the epidemiological surveillance network. The aim of the Spanish Sentinel Network Collaborative Study is to guide the objectives and methods to develop and manage sentinel networks in Spain and to contribute to the comparability of health indicators and research from Primary Care.

**Methods:** Quantitative methods and analysis of data from different programs and networks define the framework of Primary Care health data in epidemiological and research studies. Qualitative analysis of methods, systems and results contribute to the consensus in a protocol of work and in a model of sentinel network in Spain. In the active networks, 500 physicians carry out specific research studies to prove the validity of the method and other parameters of quality, efficiency and efficacy.

**Results:** Eight Autonomous Communities have developed Sentinel Networks, six of them with similar objectives and methods. Annual or multi-annual programs have contributed to the Spanish health information system with more than 60 different topics, from communicable diseases to chronic health problems and other public health concerns. Several collaborative studies among regional networks have been performed in the last years. Anxiety disorders, frailty in elderly, infant injuries, diabetes mellitus, chickenpox and the large contribution in the influenza surveillance are only a sample of the great expectation of future implementation.

**Conclusions:** Preliminary review of data shows a good basis of introduction of sentinel networks in Spain, some of them with more than ten years of continuous registration. All systems run within the regional health departments but with limited resources that break their expansion. The need for more harmonisation and co-operation among networks, the implementation of a central facility to coordinate the research activities and the establishment of networks in other regions are evident. More laws and formal regulations should be envisaged. Complementary agreements with laboratories, hospital data sources, research institutes and training institutions will increase the horizons of the sentinel networks.