



Cardiovascular Indicators
Surveillance Set

EXECUTIVE SUMMARY
OF THE FINAL REPORT

Agreement n. S12.292277 (2000CVG3-508)

Summary

Although CVDs have been identified as one of the leading contributors to the global disease burden, the number of indicators that are considered reliable for monitoring CVD and for which data are available on a comparable bases across EU countries is currently limited.

The aims of the EUROCISS project were therefore to define indicators for monitoring cardiovascular diseases (CVD) and to recommend standardised methods for future data collection in the European Union (EU). The achievement of these aims will facilitate cross-country comparisons and will assist efforts to improve the prevention and control of CVDs.

Specific project objectives included:

1. identifying which CVDs are of importance in public health;
2. identifying specific indicators for assessing morbidity;
3. developing recommendations for collection and harmonisation of data that can be easily applied within member countries to obtain reliable and significant data for the periodic monitoring of CVD.

Objective 1 - Identifying which CVDs are of importance in public health

In identifying the CVDs of greatest interest, two criteria have been used: high prevalence of disease, in terms of mortality, morbidity and disability; and the possibility of prevention, in terms of modifiable risk factors.

Using these criteria, the most important CVDs are acute myocardial infarction and ischemic heart diseases; heart failure; and cerebrovascular accidents.

Objective 2 - Identifying specific indicators for assessing morbidity

Acute myocardial infarction

Recommended indicators include mortality, hospital discharge rates, incidence/attack rates and case fatality. Of these indicators, mortality and hospital discharge diagnoses are available for all countries. Information about incidence/attack rate and case fatality are available in some countries through population-based registries, usually at regional level. These registries have adopted simplified procedures and methods derived from the MONICA Project, based on record linkage of mortality and hospital discharge diagnoses, and employ some validation procedures.

Prevalence of ischaemic heart diseases is assessed by surveys, but information on important clinical measures is often lacking. Recently, sensitive serologic biomarkers have become available for the identification of very small myocardial infarctions that would not have been detected earlier. The

application of new, more sensitive biomarkers criteria will potentially cause a rise in the myocardial infarction incidence and a fall in the case fatality rate.

Heart failure

Heart failure is a frequent complication of myocardial infarction and hypertensive disease. Hospitalisation rates are not sufficient to evaluate the frequency of the disease, because heart failure does not necessarily require routine hospitalisation. For this reason, the EUROCISS working group suggests review of GP medical records, health examination surveys or CVD surveys and the adoption of standardised criteria. If hospital discharge records are used, validation studies are recommended because heart failure can be found under other diagnoses.

Other indicators can be used as a proxy to measure the burden of the disease if integrated with other sources of information, e.g. national consumption of drugs used to treat heart failure and its complications. Among the recommended indicators, functional disability and quality of life are suggested in patients with HF.

Cerebrovascular accidents

Recommended indicators of cerebrovascular accidents include mortality, hospital discharge rate, incidence/attack rate, case fatality, and prevalence. Of these indicators, mortality and hospital discharge diagnoses are available for all countries. Information about incidence/attack rate and case fatality of stroke is available in some countries through registries; prevalence is assessed by CVD surveys, health interview surveys and health examination survey. Special surveys at 1 year follow-up of stroke patients are recommended to evaluate the functional disability and the quality of life.

Objective 3 - Developing recommendation for data collection

The list of the new recommended indicators is based on available data and can be generated over a relatively short period of time: these we have called *short-term implementation indicators*. Others, called *long-term implementation indicators*, need a longer period of time to be implemented, and require, for each country, the training of a dedicated team of population epidemiologists to support their development.

Following the experience of many North European countries, we also recommend that all medical and death records across Europe adopt a personal identification number, which would allow an easier and more accurate record linkage among the different sources of information.

The application of the recommended indicators, validated through standard methodology in all countries will result in the availability of reliable, valid and therefore comparable data on CVD morbidity at the European level.

This report was produced by a contractor for Health & Consumer Protection Directorate General and represents the views of the contractor or author. These views have not been adopted or in any way approved by the Commission and do not necessarily represent the view of the Commission or the Directorate General for Health and Consumer Protection. The European Commission does not guarantee the accuracy of the data included in this study, nor does it accept responsibility for any use made thereof.