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Providing a solid evidence base for policy makers: ECHI initiative

Marieke Verschuuren, Pieter Kramers and Gudrun Kr Gudfinnsdottir and Arpo Aromaa

Summary: With the aim of providing a solid evidence base for policy making, the European Commission initiated a European public health monitoring policy a decade ago. The European Community Health Indicators (ECHI) projects have played a central role in the development of this policy. ECHI currently is in its fourth phase (Joint Action for ECHIM). Twenty-four EU Member States are engaged in an effort to implement the ECHI shortlist (88 indicators). One of the major challenges will be to find sustainable solutions for public health monitoring, both at Member State and at European level.

Key words: evidence-based policy making, public health monitoring, indicators, European Union.

The need for international public health comparisons

The gap between the Netherlands and the European Union (EU) average is widening for rates of female cancer mortality. The Netherlands has higher than average rates of smoking while relatively few mothers breastfeed their babies. The 30-day in-hospital fatality rate for stroke in the Netherlands is high compared to other European countries. On the other hand, injury-related mortality is very low in the Netherlands, and it is among the best scoring countries when looking at health determinants such as levels of physical activity and overweight.

These are some of the main conclusions of the report *Dare to Compare! Benchmarking Dutch health with the European Community Health Indicators (ECHI)*, written by the Dutch Public Health Institute (RIVM) in 2008.[1] The indicator information presented in the report raises questions; why do so many Dutch people smoke? Are the anti-smoke policies in countries with a lower smoking rate different than the policies applied in the Netherlands? Are there other factors, such as cultural differences, which may explain the different smoking rates in the EU countries? The same kind of questions may be asked of the indicators for which the Netherlands is doing relatively well.

These examples illustrate the usefulness and necessity of international public health monitoring by means of indicators for policy making. Through international benchmarks, authorities may be made aware of good practice examples in other countries. Moreover, this international orientation may draw attention to some of the causes of avoidable health inequalities between European citizens, achievable health gains and the efficient use of

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resources. That such an approach is successful is shown by figures from Finland that reflect a remarkable decline in the rates of many cancers, as well as a large reduction in traffic accidents and cardiovascular deaths, which were among the highest in Europe in the 1970s.

The ECHI initiative

Aiming to meet policy makers' need for comparable international public health information, more than a decade ago the European Commission initiated a European public health monitoring policy, starting with the EU Health Monitoring Programme, which ran from 1997 until 2002. Within this Programme, many projects were involved in indicator development. The ECHI-I project acquired a key role, collecting proposals for indicator definitions from all of these projects. These proposals were arranged systematically in the so-called ECHI long list, comprising at that time more than 200 indicators.[2]

It was clearly not feasible to implement all indicators on the ECHI long list at once. Therefore, DG SANCO and the ECHI experts decided to create a shortlist for priority implementation. Further refinement of the indicator selection was coordinated by the ECHI-II project, and carried out in close cooperation with DG SANCO and its working parties and committees under the Health Information Strand. The next phase, under the Public Health Programme 2003–2008, was coordinated by the ECHIM project (M stands for Monitoring). ECHIM identified national health information experts, and started mapping the availability of data in the EU Member States for calculating the shortlist indicators. Indicator metadata (definitions, calculation methods, preferred data sources etc) was documented in a structured way in ECHI Documentation Sheets.[3]

In 2007 the EU Health Strategy White Paper *Together for Health* was adopted, stating as one of its actions the implementation of a European ECHI system.[4] In 2008 the European Commission therefore called for a Joint Action for ECHIM. This new financing mechanism implies a direct invitation from the Commission to the Member States to present a proposal. Public health institutes from five countries took the lead in preparing the proposal, and twenty-four Member States in total gave a declaration of intent to participate in the Joint Action for ECHIM. It started on 1 January 2009 and has a three year duration.[5] (See Box for an overview of the Joint Action for ECHIM partners and participating countries).

Box: Joint Action for ECHIM: participating countries, Core Group members and project partners

Member States

1	Belgium	(Core group member)
2	Bulgaria	
3	Czech Republic	(Core group member)
4	Cyprus	
5	Denmark	
6	Estonia	(Core group member)
7	Finland	(Core group member and project partner)
8	France	
9	Germany	(Core group member and project partner)
10	Greece	(Core group member)
11	Hungary	
12	Ireland	(Core group member)
13	Italy	(Core group member and project partner)
14	Latvia	
15	Lithuania	(Core group member and project partner)
16	Luxembourg	
17	Malta	
18	Netherlands	(Core group member and project partner)
19	Poland	
20	Portugal	
21	Slovenia	(Core group member)
22	Spain	(Core group member)
23	Sweden	(Core group member)
24	United Kingdom	(Core group member)

Other countries

25	Iceland
26	Norway
27	Moldova

Other Core Group Members

DG SANCO
DG EUROSTAT
WHO-Europe

The ECHI shortlist

The following set of criteria was applied for selecting indicators in the ECHI long and subsequent shortlists:

- The list should cover the entire public health field, following the commonly applied structure of the well known Lalonde model; health status, determinants of health, health interventions/health services, and socioeconomic and demographic factors.[6]
- The indicators should serve user needs, meaning that they should support potential policy action, both at EU and Member State level.
- Existing indicator systems, such as the WHO-Health for All (WHO-HFA) and Organisation for Economic Co-operation and Development (OECD) indicators, should be made use of as much as possible, but there is also room for innovation.
- Adopt viewpoint of the general public health official ('cockpit') as a frame of reference.

– Focus on large public health problems, including health inequalities.
– Focus on the greatest potential for effective policy action.

Applying these criteria resulted in a selection of about 80 indicators. This so-called ECHI shortlist was approved in 2005 by the European Commission and the Network of Competent Authorities of the Health Information Strand under the then Public Health Programme. Under the ECHIM project an update of the shortlist was carried out. The most important change was the addition of seven new indicators which represented emerging policy information needs, such as heat wave related mortality and selected communicable diseases. The current version of the shortlist contains 88 indicators.[7]

The shortlist is divided into an implementation section and a development section. The first section holds the indicators for which detailed definitions and calculation methods have been developed, and for which data are either available in existing international databases or in a reasonable number of EU Members States at national level. The development section holds the indicators covering those areas of public health for which there is a need for data, but for which no common indicator methodologies and data collections exist in most EU Member States. The ECHIM experts and the European Commission are dedicated to facilitating further work on the development section being placed on the political agenda.

Added value and specific features ECHI compared with existing indicator systems

What is the added value of the ECHI initiative? After all, there are several international indicator databases containing public health data, such as WHO-HFA, OECD and Eurostat. Furthermore, there are several European Agencies collecting data for their specific areas of practice, for example, the European Monitoring Centre for Drugs and Drugs Addiction (EMCDDA), the European Centre for Disease Prevention and Control (ECDC) and the European Environmental Agency (EEA).

The ECHI shortlist is a practical public health policy tool for general use. A theoretical framework was applied for the selection of indicators, leading to the ECHI shortlist representing in a very focused yet comprehensive way the public health topics which are most relevant for policy makers. This distinguishes the ECHI shortlist from many other existing data collection initiatives, which may either apply a broader or more limited orientation.

The ECHI shortlist represents a carefully considered selection of available public health data, which was supplemented by a number of indicators covering important public health issues currently not (adequately) described by existing data collections. This explicit attention on health information gaps also distinguishes ECHI from other health data initiatives.

The ECHI shortlist was developed through intense cooperation with a large number of European health information projects and Member State experts, which has resulted in the incorporation of innovative results. This holds especially true in those areas for which currently no comparable data are readily and regularly available. Examples are the attack rates of acute myocardial infarction and stroke, perinatal health and health promotion.

ECHI also focuses on obtaining data from the Member States for the shortlist indicators for relevant subgroups, most importantly subgroups defined by socio-economic status. It is widely acknowledged that there is an urgent need for public health data stratified by socio-economic status. Yet, adequate data to a large extent are still lacking. Several initia tives have started in recent years to overcome this lack of information, one of the most important being the social protection and social inclusion indicators which are being developed through the Open Method of Coordination (OMC).[8] ECHI will build on the work already carried out in this field, in particular the OMC work.

A final characteristic of the ECHI initiative is the strong focus on communication aimed at the dissemination of health information to policy makers - as a first target audience - and other user groups. One aspect of this communication within the current Joint Action will be the dissemination of meta-data, explaining in a structured and clarifying way to what extent the data are valid and comparable. For indicator information to be used as an evidence base for decision making, this kind of information is essential.

Synergy with Eurostat and other Commission activities

As the Statistical Office of the European Communities, Eurostat is the main data provider for ECHI.[7] From the onset of the ECHI initiative, Eurostat has been involved in the developmental work. The main result of this ECHI-Eurostat cooperation is the embedding of the ECHI shortlist in the new Regulation on Community statistics on public health and health and safety at work, which states that its aim is to obtain "…data for structural indicators, sustainable development indicators and European Community Health Indicators (ECHI), as well as for the other sets of indicators which it is necessary to develop for the purpose of monitoring Community actions in the fields of public health and health and safety at work".[9]

The above-mentioned Regulation provides a general framework for the development of several detailed implementing acts. One of the first implementing acts to be realised will be on the European Health Interview Survey (EHIS), which contains many topics from the ECHI shortlist. Currently, comparable Health Interview Survey (HIS) data at European level are scarce due to variations in methodology. Some European surveys, such as the Labour Force Survey (LFS) and the Survey on Income and Living Conditions (SILC) do contain several questions on health or on health related topics. A harmonised European Health Interview Survey therefore will be an important step forward for ECHI and thus for European public health monitoring.

Another important development initiated by the Commission is the European Health Examination Survey (EHES), starting with the FEHES project in 2003, which examined the feasibility of carrying out an EHES in the EU Member States.[10] In 2009 the Commission called for a Joint Action for the implementation of a pilot European Health Examination Survey, and 14 countries responded to this call. In future, when EHES will be fully implemented, this survey will be an important data source for ECHI.

Towards implementation of the ECHI shortlist

During the ECHI-I and ECHI-II projects, the focus was on the development and selection of indicators. The ECHIM project prepared for the process of implementation of the ECHI shortlist, by assessing the availability of data for the ECHI shortlist indicators in the Member States and by establishing a network of national health information experts.[3] With

the Joint Action for ECHIM the work now moves into a new phase; the phase of actual implementation at Member State level.

Implementation of the ECHI shortlist indicators entails putting the indicators into practical use in the Member States by:

- introducing the indicators to national (and possibly regional/local) administrators and decision makers
- modifying existing data sources, applying new calculation methods and creating new data sources in order to improve national data availability and quality
- setting up a sustainable data flow from Member States to a central ECHI database
- setting up a presentation system, integrating the ECHI shortlist with existing national health reporting systems (if existing)
- analysing and interpreting the results for health policy and planning

General guidelines for implementation have been developed by the ECHIM experts to support the national contacts in formulating feasible short- and long-term national implementation plans. A central element in the national implementation plans is the formation of national implementation teams, which should consist of representatives of the major stakeholders in health information. At the time of writing of this paper (September 2010), most of the countries represented in the ECHIM Core Group, as well as some non-Core Group countries, have started forming their national implementation teams and drafting their national implementation plans. The remaining countries participating in the Joint Action for ECHIM will do so in the coming months.

Within the Joint Action a system to facilitate data flow from the Member States to a central ECHI database will be tested. This central database will be hosted by the European Commission and is linked to a European level web-based data presentation system.[11] The ECHIM Core Group members, who are experts in the field of public health statistics and monitoring, are working together with the Commission to ensure that the data presentations will meet basic quality standards for presenting international public health comparisons to a policy maker audience. These basic requirements are reflected in a data presentation pilot, which was developed by the ECHIM experts.[7] The results of this pilot serve as an example for other (inter)national ECHI data presentation initiatives.

Challenges ahead

Successful implementation of the ECHI indicators requires close cooperation between the European Commission, the ECHIM experts and Member States. It is also clear that future development of the ECHI system is dependent on policy support and sustainable financing.

Regarding the cooperation between the different stakeholders, the Directorate General Health and Consumers (DG SANCO) of the European Commission organised an 'extended ECHIM core group' meeting in February 2010, in which representatives from all Member States have had the opportunity to participate. This has been an essential step forward for the implementation process. Furthermore, DG SANCO's Expert Group on Health Information (former Health Information Committee, HIC) can play a key role as the principle advisory committee for the European Commission on health information.

DG SANCO mainly funds activities through projects or tenders. A Joint Action is slightly different as a financing mechanism as it involves a more explicit commitment from Member State authorities. However, it too is a temporary construction. Health information systems are not static; they need to be constantly developed in order to reflect current policy needs and advancing scientific insights. It is therefore important that consideration already be given to possible venues for the continuation of work on the ECHI indicators to ensure sustainability of developmental work as well as in implementation.

National health information systems form the basis of the European ECHI monitoring system. The involvement of Member States therefore is a prerequisite to success. As illustrated at the beginning of this paper, national health information systems producing relevant and comparable indicators are of direct use to Member States. The financial burden of the ECHI monitoring system should therefore not be carried by the European Commission alone. National authorities need to recognise the importance of basic health data collection for a well functioning health system. Working towards a long-term commitment to valid and comparable health monitoring is a challenge for Member States, particularly in these days of financial restrictions.

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