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# EXPERIENCES ON A POLICY-DRIVEN SELECTION OF HEALTH INDICATORS

Should the measurement tools be developed after agreeing on common outputs (indicators) or should indicators be developed considering the feasibility and availability of measures?

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### ABSTRACT

**Background**: In 2003 the Hungarian Ministry of Health, Social and Family Affairs launched a project with the objective of developing a national health reporting system capable to collect evidences on the population's health status to provide information for the Ministry's decision making processes. A working party was set up, grouping the representatives of the key institutions in the national health information arena. The National Center for Epidemiology (NCE) played the role of coordinator for the working party.

**Process**: First a workshop was organized for the members of the working party and the experts commissioned to manage the individual topics (or chapters) of the health report. The topic experts were selected by way of a nationwide, open competition. Guest speakers - international experts with extensive experience in the field health reporting - and the representatives of the

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Ministry were also invited to the workshop. Following the presentations of and the consultations with the guest speakers and the Ministry's representatives, the working party produced a document setting out the aims and the content outline of the health report. Based on this conceptual framework, the topic experts set up an agenda for developing the report. In a next phase, the topic experts assembled a list of national health indicators, derived from the stated requirements of the Ministry, and using the recommendations developed by EU and WHO bodies. When completed, the indicator list was circulated among the members of the working party and was given approval after extensive discussion. Data collection (from secondary sources such as the Central Statistical Office) and analysis was carried out by the NCE. Finally the individual chapters of the report were written and discussed by the topic experts, and sent for review to institutes with widely recognized field competence (university departments, social research centers). After several revisions the report is sent to two international experts and to the Epidemiology Committee of the Hungarian Academy of Science for a final review. The resulting final version of the report is edited and an executive summary is prepared for the decision makers.

**Outcome**: The expected products of the project include the creation of a group of professionals trained and experienced in health reporting, a National Core List of Health Indicators, an Annual National Public Health Report edited in two versions corresponding to the two main target groups - decision makers and public health professionals -, and finally, a National Public Health Data Bank that receives and stores the data used for the Reports, including the development of a standardized procedure for processing and channeling data to the Report's topic experts.

#### **PAPER**

#### Why is there need for health indicators?

Health policy decisions rely on statements - describing the population's health status, identifying necessary interventions and programs, and assessing and evaluating the efficacy of ongoing programs. The facts used to formulate these statements can be sorted in two categories: first, the scientific evidences produced by medical and public health research (e.g.: screening the entire population for a disease is more efficient, than screening high risk populations only). The second category being the health indicators - the embodiments of available health information and statistics (e.g.: the prevalence of high blood pressure within the population, or the participation rate of breast cancer screening programs).

Producing information for the health indicators requires extensive data collection and processing activities, which may tie down considerable amounts of resources. Referring to the previous example, it took a nationwide health survey and the collection and analysis of data from all breast cancer screening facilities in the country. Obviously, it is not an easy task to find balance in producing the right number of health indicators to cover the emerging information needs of a country.

Health data collected on a national scale can be divided into three broad categories: 1) data used for satisfying international reporting obligations; 2) data used for the purposes of the National Public Health Report; and 3) other data routinely collected and used by the Health System, for research projects, or not collected at all (see Figure 1). In this paper we deal only with the second category of data: the one used for reporting public health.

Figure 1. Classification of data sets according to their use



## The difficulties of selecting the right health indicators

The current demand for health information does not, as a rule, originate from policy makers only - it is common that health development professionals, health care providers, and even lay individuals require such information for resolving a problem they have, or to make a decision. However, a list of indicators capable to provide for all these various needs would count several hundred items, and would represent a hopeless task if we take into account the reality of available resources. Yet the possibility of shortening the list seems to be unreachable due to uncompromising interests between the professional fields involved. Furthermore, the experts working on compiling indicator list often face the problem that a certain indicator they want to use cannot be produced using the available data collection sources. In these cases, one has to decide either to drop it or to start the enduring task of introducing a new data collection. The decade long history of the ECHI (European Community Health Indicators) project is a fine example of such struggles.

## The Hungarian approach

Based on the experience available in international public health work, we decided to start working our national health indicator list from the end of the process: we decided to use the anticipated needs of the decision-makers as a starting point. This is why we call our indicator selection method a policy-driven approach. It was obvious, that such a list would fail to satisfy a number of needs, but it promised success in terms of feasibility and utilization. It was also supposed that the list will be expanded at a later time, following a careful evaluation of current information needs.

First, a review of international health reporting experience was carried out to define what kind of information is most likely to be needed by our policy planners. The review included the project reports of the EU PHP and the health reporting procedures of various countries. Beyond the objective of developing a health indicator list for the policy planners, it was foreseen that the development of a national list based on a general consensus among all players involved in Hungary would in the end produce a common database to cover all national and international health information needs.

The resulting concept is to develop a National Public Health Report to provide for the information needs of health policy planners. The topics intended to be covered in the report define the list of required health indicators, which in turn sets out what data and information is needed (see Figure 2).

Figure 2. Hungarian approach to define National Core List of Health Indicators



## **Implementation**

The Hungarian Ministry of Health, Social and Family Affairs initiated the implementation of the project by setting up a working party from the members of the Health and Social Information Committee, a body clustering the representatives of all institutions involved in the creation and utilization of health information. Here are a few of the organizations that took part in the Committee's work, apart from the Ministry itself: the Central Statistics Office, the National Health Insurance and Social Security Fund, the data collection center of health care providers, the national medical information center, professionally reputed specialist institutes, the Hospital Association, various associations representing health care professionals and patients, the representatives of the medical Universities.

The tasks of the working party included the conceptual development of a health reporting system, the definition of a national health in dicator list, and the establishment of a National Public Health Data Bank, where all the data used for producing the indicators (and thus used for the report) will be stored. The Ministry delegated the task of heading the working party to the National Center for Epidemiology (NCE).

The working party started its activities by defining the main characteristics of its strategy i.e. what topics should be covered in the reports and with what frequency and in what form the reports should be issued. As a first product of the process of developing health reporting system, it was decided that an Annual National Public Health Report will be published. This was followed by the selection of topic experts from various institutions by way of a nationwide open competition. The topic experts were contracted to manage and take responsibility for the production of the individual chapters in the report, which task included the selection of the health indicators needed for the corresponding topics. The working party monitored continuously the progress of the topic experts - the completion of the project's various stages was subject to the working party's approval.

As an initial step, the topic experts and the members of the working party took part in a workshop, where the representatives of the Ministry formulated the Ministry's expectations relating to the reporting system. As part of the workshop, participants had the opportunity to exchange experiences with guest field specialists from the U.K. and the Netherlands. Following this series of lectures, and on basis of the topical definitions provided by the working party, the topic experts discussed and defined the content and formal specifications of the report, including

the list of the report's chapters, the internal structure of the chapters, and the requirements relating to text length and style. As part of the workshop, the topic experts prepared the content drafts of the individual chapters, and compiled the list of health indicators needed for the report. Indicators were defined using a form, which asked for all essential specifications regarding the indicator, including the sources of data and computation methods to be used. The resulting list of indicators was then discussed separately by the group of topic experts and the working party, and was finalized after making the proposed modifications.

Using the finalized indicator list, the NCE contacted the data providers, and requested the necessary data from them. The NCE carried out the necessary data checks, and computed the indicator values. As part of this step, the collected data are entered into the first version of the National Public Health Data Bank, created using the presentation software provided by the WHO. The software and the database will be available for download from the NCE's website. Further development of the National Public Health Data Bank is ongoing, and the now available data will soon be transferred into a new form of the databank which will provide online Internet access to the data (this is still in an experimental stage).

Using the data gathered and processed by the NCE, the topic experts started work on the individual chapters of the report. These documents were first submitted for review to national specialized institutions selected according to their field of research activities. Comments and recommendations were in part submitted in the form of written documents, and were in part formulated during the Question and Answer sessions dedicated to the exchange of ideas between the topic experts and the representatives of the reviewing institutes. Following this first round, the topic experts prepared a second version of the report chapters, which were in turn sent for review to two foreign experts and the Committee of the Hungarian Academy of Sciences. The findings of this second round of review are used to prepare the final version of the report, called the Expert Edition.

The Expert Edition is used to create an Executive Edition. This version takes into account the special needs of the target group (policy planners and decision makers), and contains short, straightforward messages and rich illustrations, which may hopefully contribute to evidence-based decisions that will impact the health status of the entire population.

Both the Expert and the Executive Editions of the report will get published. Creative design for the reports was already created when the reports themselves were being written, because the NCE staff decided in the meantime to compile a document called the Public Health Update - a snapshot of the population's health status in Hungary -, and the creative design of the Update was used for the two editions of the health report.

The finalization of the reports is followed by an extensive evaluation procedure, aimed at gathering and summarizing the various experiences relating to the reports. This evaluation will collect opinions from all participants of the project and from the end users themselves, meaning health policy decision-makers and public health experts. This will be achieved by means of individual interviews and dedicated forums. Based on the evaluation of this input, the working party will prepare a proposal for the updating of the indicator list, including recommendations regarding the improvement of the data collection procedures - or the introduction of such procedures wherever needed - and of course regarding the further development of the reporting system.

#### Conclusions

## The difficulty to change perspectives

We have registered a difficulty on behalf of our expert participants in placing themselves into the mindsets of the policy planners/decision-makers, which resulted in the selection of an unnecessarily high number of indicators. This resulted in huge amounts of work and overload for

the data collectors and the people carrying out the data processing. Furthermore, the experts will be forced to leave out part of the indicators for the Executive Edition.

## The difficulty of creating a common approach among the topic experts

Despite numerous meetings, trainings and discussion groups, it proved difficult to forge the participating topic experts into a team - it was difficult to bring them to think along the same lines of thought, to get them to tackle the problems with a unified approach. We found great difficulty in managing certain issues that touched on several topical chapters, in getting the authors to use these issues to link the individual chapters into a broader context of interpretation and analysis.

## The policy-driven approach of compiling the list of indicators proved to be a success

The health report provided a unified framework for the selection of the indicators. It took a very short time to assemble a list that was utilized for the health reports prepared for the health policy decision-makers. The list items that are not feasible due to the absence of data collection are identified, and a proposal is formulated for the introduction of these data collection procedures.

## Harmonized development can bring a surplus in utility

The project represented the parallel and harmonized development of three separate products: the Annual National Public Health Report, the National Core List of Health Indicators, and the National Public Health Data Bank. Through harmonization of and cooperation between these developments, the same experts were able to participate in the implementation of the various products, which lead in part to products reflecting a unified approach, and also to an economy of the resources used.

## Compound organization structure contributed to success

By involving the main players of the national health statistics arena into the work of a joint working party, it became possible to keep in view the interests and motives of the data providers and end users throughout the project. This helped considerably in the management of the data collection activities.

Forming groups of independent experts (the topic experts) did not only contribute to attaining a higher professional standard, but the extended, multi-player professional review procedure also resulted in a better professional acceptance of the report.