

## **Health information systems in support of the Millennium Development Goals**

### **Report by the Secretariat**

1. The Millennium Development Goals, derived from the United Nations Millennium Declaration which was adopted by the United Nations General Assembly in 2000, set ambitious, quantifiable targets against which to measure progress in health and other dimensions of development. The focus on tracking progress has drawn attention to the underlying weaknesses of countries' health information systems; even though reliable and timely health information is an essential foundation of public health action, few systems in developing countries are effective. Despite increases in knowledge during the 1990s, there remains a gap between what public health policy-makers know and what they need to know to improve health and reach international development goals.

#### **ISSUES**

2. Data are not available often in those countries that have the greatest need, owing to underinvestment in the systems for their collection, analysis, dissemination and use. Decision-makers do not have information to identify problems and needs, formulate evidence-based policies and programmes, and allocate scarce resources optimally. When data are available, they are often out of date, rendering trend assessment particularly difficult. It is not because countries have insufficient resources that they should forgo good health information; indeed, they can least afford to be without it.

3. The difficulties encountered are not only the result of financial constraints. In this field, measuring is conceptually and technically complex, requiring solid data on health outcomes (e.g. disease and mortality), health system inputs (e.g. human resources, infrastructure and finances) and health determinants (e.g. behavioural and environmental risk factors). Statistical, public health and biomedical knowledge and expertise are required. Accurate measurement depends on the availability of disease-specific biometric tests, clinical diagnoses, and the feasibility of measuring at the level of the population and the health services.

4. Health information goes beyond the responsibility of any single government entity; it is both produced and used by various institutions, such as health ministries, national statistics offices, ministries for labour, social welfare, planning and finance, the private sector, civil society, donors and development assistance agencies. Health information systems have evolved in a haphazard way following administrative, economic, legal or donor pressures and have been fragmented by the demands of disease-focused programmes and the diversity of donor requirements and international initiatives. The capacity of country systems may easily be overwhelmed by these multiple parallel demands for information. Data are often collected without being analysed critically or turned into

information for day-to-day management or longer-term planning. Meanwhile, health workers are overburdened by excessive, poorly coordinated reporting demands.

5. Health information is a core component of a functioning health system. There is a growing consensus that strengthening health systems – from human resources, medicines and diagnostics to infrastructure, financing, and stewardship – is essential for achieving the Millennium Development Goals. In the context of health-sector reform and decentralization, health systems are managed close to the level of service delivery. The shift in functions from central to peripheral levels generates new needs for information, demands and a profound restructuring of information systems, with changing requirements for data collection, processing, analysis and dissemination. Health-sector reforms magnify the need for standardization and quality of information.

6. Epidemiological data are generally aimed at specialists with insufficient effort to make the information understandable to policy-makers, civil society, or non-health specialists. Thus, health information is perceived as obscure, unclear and sometimes contradictory. At the same time, demand by policy-makers and the public for accountability and evidence-based decision-making is increasing. The involvement of multiple donors and the existence of global health initiatives in the public health sector have led to a greater awareness of the need for good data in order to avoid the launching of misguided interventions and the resulting waste of efforts and resources, and loss of credibility.

## **SOLUTIONS**

7. The objective of a health information system is to produce relevant and good-quality information in support of health action. International organizations, countries and statisticians need to pool their knowledge and experience in this technically demanding area. Consensus-building across all sectors is crucial, as much of the information needed by the health sector is generated by other sectors, and the resources required for strengthening health information systems come from constrained national budgets. Although the contributions of external partners and donors are important to catalyse action, countries themselves need to sustain the necessary investments. Health information systems should respond to the needs and requirements of all stakeholders within one comprehensive plan for strengthening health and statistical systems.

8. An essential step in strengthening a health information system is to bring data producers together with data users – those people delivering care as well as those responsible for policy-making, management, planning and financing of health programmes, within a country (health and finance ministries) and outside (donors, development banks and technical support agencies). Decision-making also involves the wider community, including civil society. All users need different levels of detail and technical specificity. A good health information system should be able to present and disseminate data in formats that are appropriate for all these various users and that allow data to be translated into knowledge for action. Sound health information is a public good and as such needs the support of the media and the public to ensure a continued investment of resources.

9. Health information is produced from various data sources, which may be the responsibility of different institutions and need to be managed in an integrated way in order to maximize effectiveness and efficiency. It also needs to be linked to information generated through research. Data from population-based sources such as censuses, civil registration and population-based surveys should be used with those from health service records, disease surveillance and administrative records. For any given quantity of interest, different sources are needed in order to build up a complete picture, in terms of data on disease incidence, prevalence, mortality, morbidity, risk factors, distribution and other variables. This analytical and synthetic work is the role of the health information system.

10. Efforts to strengthen health information should start from demand in a country, with realistic objectives in terms of available resources and capabilities. There should be a comprehensive vision for health information that links health research and knowledge management and overcomes institutional and organizational constraints.

### **THE HEALTH METRICS NETWORK**

11. WHO is a founding member of the Health Metrics Network, launched during the Fifty-eighth World Health Assembly in May 2005, with the aim of helping countries and partners to generate and use better data for evidence-based decision-making. It is one of the few global health partnerships with a health systems rather than a categorical, disease-focused approach. The Network is funded with an initial grant of US\$ 50 million from the Bill and Melinda Gates Foundation and contributions from other donors. Other partners include users and producers of health information including health ministries, national statistics offices, organizations of the United Nations system, development banks, global health partnerships, bilateral donors and technical experts.

12. The Network's goal is to increase the availability, quality, value and use of timely and accurate health information by catalysing the joint funding and development of core country health information systems. In order to achieve this, the Network has three key objectives:

- to create a framework and standards for health information systems;
- to strengthen health information systems in developing countries through provision of technical and financial support for adaptation and application of the framework;
- to improve access to, and quality, value and use of health information through incentives for dissemination and application of information at global, regional, country and local levels.

13. The framework defines the vision, standards and processes required of health information systems. At country level, it serves to focus investment and technical assistance for the development of health information systems, and, at both country and global levels, it guides access to and use of better health information. The Network provides technical and financial support especially to low-and middle-income countries for implementing the framework. During its first year of operation, grants were allocated to 41 countries to enable them to conduct assessments of their current health information systems using the Network's tools and to elaborate comprehensive strategic plans in which all partners can invest. Further calls for proposals will be made during 2006.

14. The framework emphasizes the need to strengthen under-resourced components of the health information system such as vital statistics – counting of births and deaths and their causes, broken down by age and sex – which are currently inadequate in most developing countries. Innovative approaches such as sample registration and verbal autopsy and enhanced use of demographic surveillance sites will enable countries to take critical steps towards the universal aim of comprehensive vital statistics. WHO is contributing to the Network's efforts to improve the measurement of how well health systems function, particularly in key areas such as availability and distribution of resources for health, including human, physical and financial resources for health.

15. The development of the framework has been guided by inputs from many partners including “pathfinder countries”<sup>1</sup> where the concepts and tools have been developed and tested. WHO regional offices facilitated intercountry consultations in all WHO regions during 2005<sup>2</sup> in order to introduce the framework to countries and partners. Further workshops will enable countries to share experiences and lessons learnt and permit further refinement of the framework as country health information systems mature.

16. Although the framework is primarily technical, its adoption as the global standard for health information requires strong political endorsement and consensus-building, through for instance the Health Assembly and the United Nations Statistical Commission. The target has been set that, by 2011, the framework will be the universally accepted standard for guiding the collection, reporting and use of health information.

17. The Network has an unmatched potential to accelerate change in health information systems thanks to the synergy resulting from the collaboration of diverse partners, none of whom would be able to undertake the task alone. Only a strong global network can stimulate the coordination and alignment of partners within a framework for country health information systems.

## **ROLE OF WHO**

18. WHO is in a unique position to foster and support collaboration among stakeholders involved in health system strengthening and in the production and use of health information and its commitment is manifest in its hosting of the Health Metrics Network secretariat. At all levels, WHO’s Secretariat is providing support to countries to strengthen their health information systems, building on earlier work towards Health for All. Each Region has developed strategic frameworks for further strengthening health information systems at country level, seizing new technical and financial opportunities opened up by the Network and contributing to better global reporting, for example, of progress towards attaining the Millennium Development Goals.

19. WHO’s advantages compared to other organizations include its strong normative role in setting and monitoring standards for health systems including health information; knowledge and expertise of health systems at global, regional and country levels, and technical preeminence in aspects of health information such as surveillance, public health mapping and classifications. WHO has taken a leadership role on information sharing and in efforts to translate data into new knowledge and disseminate that to those in a position to make a difference to the health and lives of populations, especially the poor.

## **ACTION BY THE EXECUTIVE BOARD**

20. The Board is invited to take note of the report.

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<sup>1</sup> Ghana, Mexico and Thailand.

<sup>2</sup> In August 2005: Bangkok, Cairo, Nairobi; in September 2005: Almaty (Kazakhstan); in November 2005: Buenos Aires, Dakar, Maputo; in December 2005: Chiang Mai (Thailand).