Strengthening of health information systems

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 the 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 When data are available, they are often out of date, rendering trend assessment particularly difficult.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. 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.

4. 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, and demands 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.
5. 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.

6. The production and dissemination of health statistics for health action at country, regional and global levels are core WHO activities. Statistics provided by WHO carry great weight in national and international resource allocation, policy-making and programming, because of the Organization’s reputation for unbiased technical competence and its worldwide remit and responsibility. WHO’s multiple roles, including advocacy, the monitoring and evaluation of health programmes and the provision of technical support to Member States, require close cooperation with countries and partners in order to produce health statistics of the greatest possible accuracy.

7. The Eleventh General Programme of Work 2006–2015, based on an analysis of the global health situation, WHO’s strengths, core functions and the main challenges it faces, sets the global health agenda and the Organization’s priorities, for which strategic objectives have been defined in the draft Medium-term strategic plan 2008–2013. The General Programme of Work identifies six core functions for WHO, including monitoring the health situation and assessing health needs, a function that relies heavily on health statistics produced by the Secretariat in close collaboration with Member States.

8. The background of health statistics is changing, in the light of the monitoring of progress towards achievement of the Millennium Development Goals, the activities of global health partnerships and the Health Metrics Network, and the debate about the need for independence of those data. In this context the Secretariat reviewed its internal practices. In order to ensure the high quality of estimates and data on, for example, disease burden, risk factors and coverage of interventions, a quality assurance framework has been set in place at headquarters, comprising a high-quality publicly accessible database, an independent review group, published methods of estimation, and internal clearance processes.

9. Country consultation is the final step before the public release of country-level estimates. This interactive process between Member States and WHO’s country and regional offices and headquarters serves to obtain approval from Member States, provide feedback on the quality of data collection and reporting by countries, and strengthen countries’ capacity to produce, reproduce and use estimates. Standardized tools and methods should be available to Member States but in practice, the country capacity-building component is still weak for many estimates.

THE HEALTH METRICS NETWORK

10. 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. 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.
11. 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: (1) to strengthen its framework by defining a set of standards for the various components of health information systems; (2) to mobilize technical and financial support that will catalyse the creation and strengthening of health information systems at country level; and (3) to improve access to, and use of, information by local, regional and global constituencies by providing support to Member States in formulating policies and incentives.

12. The Network provides technical and financial support, especially to low-and middle-income countries, for implementing the practical steps proposed in the framework. During the first two years of operation (2005–2006), grants were allocated to 65 Member States in order to enable them to assess their current health information systems in line with the Network’s guidance and to elaborate comprehensive strategic plans in which partners can invest.

13. The framework sets out ways of avoiding or rectifying the fragmentation and duplication that characterize many countries’ health information systems as a result of poorly coordinated, disease-focused monitoring and evaluation. By bringing together stakeholders in health and statistics and promoting collaboration across sectors, the framework serves to focus country investment and technical assistance on building coherent health information systems. The evolution of the framework has been guided by inputs from many partners including “pathfinder countries” (Ghana, Mexico and Thailand) where the concepts and methods have been developed and tested. WHO regional offices facilitated intercountry consultations in all WHO regions during 2005 and 2006 in order to introduce the framework to countries and partners.¹

14. 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.

ROLE OF WHO

15. 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. At all levels, WHO’s Secretariat is providing support to countries in order to strengthen their health information systems, building on earlier work towards Health for All. WHO has actively promoted the framework. For example, in resolution SEA/RC59/R10 the Regional Committee for South-East Asia urges Member States “to consider using the Health Metrics Framework as a tool for health information systems assessment and in enhancing harmonization of country efforts related to the strengthening of health information systems…”. 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.

16. 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.

STRATEGIC APPROACHES

17. 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. Technical and development partners should work together on a coherent and coordinated, country-led, strategic plan for strengthening health information systems that is fully integrated in the mainstream of national health programmes and plans and well aligned with the national statistical system.

18. 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 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. In order to do that planners and managers at various levels of the health system need to be better able to collect, analyse, synthesize, disseminate and use health information for evidence-based decision-making and for raising public awareness.

19. Health information is produced from various data sources, which may be the responsibility of different institutions and needs 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, equity and other indicators. This analytical and synthetic work is the role of the health information system.

20. In order to provide support to Member States in strengthening health information systems and to improve access to information and evidence, the Secretariat proposes to increase its activities in health statistics, working with the Health Metrics Network on bringing together health and statistical constituencies in countries and formulating a comprehensive plan within the Network’s framework, thereby enhancing countries’ capacities to produce estimates with state-of-the-art methods and tools.
21. Published health statistics must meet the highest possible standards, and the Secretariat will work closely with Member States during the preparation of estimates that should be transparent and comprehensible and satisfy the criteria for publication of estimates. Investment should be increased for the development, and support for implementation, of means and methods of estimation in countries.

22. The Executive Board considered the matter in the context of health information systems in support of the Millennium Development Goals at its 118th session in May 2006, and adopted resolution EB118.R4.\(^1\)

**ACTION BY THE HEALTH ASSEMBLY**

23. The Health Assembly is invited to consider the draft resolution contained in resolution EB118.R4.

\(^1\) Document EBSS–EB118/2006/REC/1, summary record of the fourth meeting of the 118th session, section 3.