

**HIGH-LEVEL FORUM ON
THE HEALTH MILLENNIUM DEVELOPMENT GOALS**

MONITORING THE HEALTH MDGS

ISSUES FOR DISCUSSION: SESSION 3

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ISSUES FOR DISCUSSION

Health information is the foundation of public health. The “evidence-based” medicine revolution of the last 30 years has had some spill-over into public health, as the disciplines of epidemiology, demography and economics have gained prominence. Yet many health systems remain woefully inadequate on critical health information fronts.

We still cannot count the dead in the vast majority of the world’s poorest countries – paradoxically these are countries where the disease burden is greatest. In sub-Saharan Africa fewer than ten countries have vital registration systems that produce usable data. We still have very limited measures of health systems performance. The considerable investments in measuring health outcomes, often to monitor the effectiveness of donor-driven programs or address emergencies such as the AIDS epidemic, too often do not add to or strengthen national health information systems. Little investment has been made to date in a definitive solution to meeting the demand for better health information - by strengthening systems that meet the local and national, as well global, needs for evidence to inform decision making.

Monitoring of policies and actions, and building country capacity in health information systems, are two initiatives for addressing the gap between the demand for health information and the information available. There are, however, many unresolved issues:

- What needs to be done to change the behaviour of donors and countries to local, national and global information needs? How can the *Health Metrics Network* contribute most effectively to improving the availability and use of sound health information? How can the High Level Forum play a continuing role in improving MDG monitoring in the context of the Health Metrics Network?
- Which specific government *policies* are most important for monitoring, and what are the best ways to collect the information?
- What specific leading indicators should be monitored as *determinants* of long-term goals? What indicators and which kinds of packaging of information are most appropriate to raise awareness and mobilize resources from constituencies beyond health?

1. **Increased Demand for Better Monitoring of Results in Health**

The Millennium Development Goals, adopted unanimously by the members of the United Nations in 2000, set specific targets for improving income poverty, education, the status of women, health, the environment, and global development cooperation. Now widely accepted as a framework for measuring development progress, the goals focus the efforts of the world community on achieving significant, measurable improvements in people's lives. They establish yardsticks for measuring results – not just for developing countries, but also for high income countries that help to fund development agencies and for the multilateral institutions that help countries implement these programs.

Health is prominently represented in the MDGs, with four of the goals calling for monitoring of progress towards improving the health and survival of mothers and children, and reduced prevalence and mortality from leading communicable diseases. The health MDGs represent long-term goals, to be achieved over a 25 year period. Annual changes in the outcomes will necessarily be small, and will be difficult to monitor given the weakness of current health information systems. At present, donors, international agencies, and countries can expect only occasional, incomplete, and usually imprecise snapshots of country progress towards the goals, with much of the progress assessment heavily dependent on modelling rather than on empirical evidence.

Increasingly, international assistance in health, such as IDA credits, is linked to effective use of available resources. Performance-based monitoring involves reporting on intended results and progress towards achieving intended results. It requires that clear, achievable objectives, that are within the control of a program or ministry, are set and agreed on by all stakeholders, with sufficient resources available to deliver the results. It also requires the selection of indicators to monitor performance, and an agreed plan for when, how and by whom the indicators will be generated and used. Performance-based monitoring cannot be based on outcome or impact indicators because of the long-term nature of such changes and the measurement challenges.

Performance-based monitoring can only be achieved if programs routinely and accurately track policies, inputs, actions, and outputs related to the interventions. This inevitably entails increasing resources devoted to monitoring.

The importance of health outcomes in the MDGs, and the increasing attention paid to performance have created a growing demand for high quality health information. Linking performance with donor assistance will require that country health information systems are able to use standardized definitions of health indicators and to ensure the consistent application of methodologies. There is currently, however, a remarkable disconnect between the demand for high quality health information and the ability of country systems to respond to the demand. To address this challenge, two initiatives to improve the availability, quality and use of health information are under way.

- Monitoring of the policies and actions of developing and developed countries for achieving the MDGs is a key element of an overall monitoring framework. The **Global Monitoring report** to the Development Committee is planned as an annual update of trends in policies and actions that contribute to development outcomes, including health. As part of this, monitoring and projection of trends in leading indicators needs to be expanded beyond the list of indicators included in the current MDG framework, to include availability, access and utilization rates of interventions for which there is widespread agreement about their effectiveness;
- To improve the capacity of countries in the area of health statistics, an alliance of countries and international partners has been formed. The **Health Metrics Network** aims to bring together countries, donors and international agencies to pool resources and address the paucity of information collectively. With the assistance of the Network, countries will develop national plans for improving health information, mobilize resources from partners, invest in health information systems, build national capacity and improve the utilization of health information.

2. **Building health information systems: the Health Metrics Network**

The increased demand for health information calls for an investment in building sustainable country health information systems. A health information system refers to the integrated effort to collect, process, and report health information to influence policy making, interventions, and research. Health information systems include several subsystems:

- disease and risk factor surveillance and outbreak notification
- population and facility-based surveys
- registration of vital events, including causes of death
- data collected from patient and service records
- administrative data on budget, human resources, supplies, etc.
- modeling and estimates.

Improvement in health information systems is needed at local, national and international levels, and more integration between these levels is required to deal with global health threats, such as the AIDS epidemic, and to make the best use of the growth of knowledge in health. Innovative approaches are now becoming available that will permit better measurement of health status through technology development, better recording of vital events, through sentinel sites, and better data availability at sub-national levels through a district data initiative; these and other innovations have the potential to improve the information situation rapidly if applied in coherent ways by all stakeholders.

Reforms of health information systems need to be based on a national plan with a policy framework, core indicators, and data collection, analysis and dissemination strategies. Such nationally developed strategic plans should be specific about how the different tools and methods will be applied and complement each other, how health information needs are met at the sub-national, national and global

levels, and what kind of investments are needed. The latter include human resources, infrastructure (technology, laboratories, etc.), and operational budgets for health data collection efforts. National bodies with participation of stakeholders of different levels of users and technical experts need to guide and oversee the implementation of the national plans. International investors in health information should buy in to and support the country strategies.

In July 2003, a group of national and global health and development partners – countries, international agencies, bilateral and multilateral donors, foundations and technical experts – came together and agreed on a simple proposition: meeting the health challenges of the 21st century requires much better health information than is currently available. In response, the foundations were put in place for the Health Metrics Network, a partnership under development that involves a wide range of stakeholders in health information. Guided by an interim steering committee co-chaired by the Bill and Melinda Gates Foundation and WHO, it is based on the premise that the complexity of the health information field – multiple actors, types, sources, users and uses of information – requires a collaborative and inclusive response. A partnership or network would permit the involvement of different actors according to their needs and capacities, at the same time providing overall coherence and links across levels and among partners.

As part of the Health Metrics Network, a Task Force and several technical issues groups were constituted consisting of country experts, the Gates Foundation, USAID, DFID, technical experts and the WHO secretariat. The Task Force was set up to ensure involvement of all relevant stakeholders during the developmental phase of the Network and to maintain close links with other initiatives working to build statistical and information capacities in countries, including PARIS 21. The activities of the Task Force and the various issues groups have already produced a wealth of information on the current status of health information systems around the world. Following the planned launch of the Network in early 2004, partners will be collaborating to assist countries with technical resources, national consensus building and coordination, and development and initial implementation of a national plan and monitoring and evaluation of progress.

3. Monitoring of Policies and Actions for Achieving the MDGs

At its April 2003 meeting, the Development Committee reaffirmed its commitment to regular monitoring of the policies and actions of developing and developed countries and development agencies for achieving the Millennium Development Goals and related outcomes. It did so on the basis of the paper prepared jointly by the World Bank and the IMF on “Achieving the MDGs and Related Outcomes: A Framework for Monitoring Policies and Actions.”¹ For developing countries, it highlighted three key areas for attention: strengthening the rule of law and infrastructure to improve the environment for private sector activity; improving the quality of governance and strengthening capacity in the public sector; and increasing the effectiveness of the delivery of human development and related services to

¹ See *Achieving the MDGs and Related Development Outcomes: A Framework for Monitoring Policies and Actions*, DC2003-0003, March 26, 2003, and the related *Background Paper*, DC2003-0003/Add. 1, March 28, 2003.

poor people. For developed countries, the paper emphasized two priority areas for action: increased market access for developing country exports, including the reduction of domestic subsidies in agriculture, and more and better aid, including adequate support for global programs on education, HIV/AIDS, and water, and implementation of harmonized and related good-practice approaches to development assistance.

Monitoring of government policies and actions will require timely and robust indicators. And while full objectivity will be unlikely to be achieved, a high degree of transparency in how policies and actions are assessed, is essential. Efforts to strengthen the World Bank's Country Policy and Institutional Assessment (CPIA) methodology and its application, including the use of more transparent indicators and more extensive discussion of country ratings with governments, are already underway. The system is being prepared for a significant increase in public disclosure of the ratings, and the CPIA methodology is already posted on the web. Increased robustness, transparency, and disclosure of the CPIA ratings would enhance the usefulness of these key policy metrics for global monitoring carried out by the Bank and its partners.

With good policies and institutions, increasing the share of GDP devoted to health could make a difference between making enough progress to meet the MDGs or missing the targets. But aggregate public health expenditure indicators by themselves provide little information regarding the particular expenditure patterns, such as geographic allocation, specific targeting and specific public expenditure management practices, that are important for such expenditures to have an impact on outcomes. A priority for improving monitoring of policies related to health spending consists of implementing national health accounts (NHA), as an important tool for assessing the adequacy and quality of health expenditures, including their overall level, composition, and management. NHA will also identify the sources of financial flows, including from central governments to sub-national units, and from donors to recipient countries. When fully implemented, NHA will enable policy-relevant tabulations of the distribution of health expenditures among population sub-groups and by intervention. New tools are available to assist countries to implement and sustain NHA.

More efforts are needed to develop an agreed set of reliable and transparent indicators of the performance of health systems. While the CPIA includes an assessment of overall public sector management and institutions, as well as policies for social inclusion and equity (including some information on access to and quality of health services), there is a need to develop additional health-sector specific governance indicators. Such indicators would provide information on how efficiently health systems use resources to improve health, identify key constraints to improved performance, and how equitable systems operate.

4. Monitoring Intermediate Indicators

Measurement of health indicators has improved substantially over the past decade; many countries have conducted health and demographic household surveys and surveillance of HIV/AIDS through

antenatal testing is carried out in virtually all severely affected countries. Compared with 1990, there are now significantly more countries for which we can more confidently report on levels and trends in childhood mortality or malnutrition. By contrast, in other areas, such as maternal and reproductive health or surveillance of most communicable diseases, data are much less available and frequently of poor quality. Overall, a much greater international effort is needed to address the monitoring and evaluation challenges presented by the MDGs, Poverty Reduction Strategy Papers, or the Global Fund against AIDS, TB and Malaria. Sound health information is not only needed to report on these international initiatives, but is essential for sound program development and implementation as well. But international initiatives, such as the MDGs and programs targeting specific diseases, tend to focus on data for disease-specific indicators and do not necessarily translate into building information systems that meet country and international needs in both the short and long run. All too frequently, the demand for health information is accompanied by the implementation of population-based surveys which bring major benefits in terms of data but remain resource intensive, have long intervals between surveys, and are not appropriate for supplying all information needs which may be better met using other approaches such as vital registers or routine service statistics. Moreover, surveys often produce national level data of limited use for informing program implementation.

Furthermore, the health MDGs are reported as national averages and do not provide information on whether progress has been made in reducing inequity in health within countries. Many countries are unable to report MDGs or other development indicators by key dimensions of equity, such as poverty, gender, geographic residence and ethnicity. Much more needs to be done to incorporate equity measures in health information systems, which should lead into much greater ability to monitor the equity dimension of MDGs.

Strengthening country health information systems will take time, and more accurate and detailed information will not be available in the early stages of the reform. MDG health targets are longer-term outcomes that can only show minimal improvements on a yearly basis, and can lead to the mistaken conclusion that there is minimal return on investment. The need for timely information to monitor progress on global initiatives requires that additional attention be paid to "upstream" or "leading" indicators of future trends in MDGs and other outcomes. What is needed is a set of easily understandable and verifiable near-term performance metrics that can inspire increased attention and be used as a basis for decisions on resource allocation. Indicators of government policies and actions are by themselves not sufficient to show whether interventions are effectively reaching households that need them.

Intermediate – or proxy - indicators measure changes in coverage or use of interventions known to have an impact on health outcomes. Table 1 shows available preventive and treatment interventions for the health-related MDGs. Such interventions can then be transformed into indicators of coverage and utilization by measuring the number of people who are in need of the intervention, and those who actually receive them. Such indicators include immunization coverage, use of child and maternal health services, and individual or household behaviors. Given the range of health issues that affect countries in different regions and at different stages of the health transition, it is essential that a set of indicators be

used to capture such variation. Single indicators, or indices constructed from a set of indicators, cannot be relevant globally, and do not give information on where or how to intervene. At a consultation of development partners at the World Bank in 2001, a first attempt was made to identify a limited set of indicators as the most appropriate proxies for short-term monitoring of the MDGs (Table 2). These proxy indicators are generally more amenable to measurement through regular surveys or routine data collection systems than long-term goals. They are sensitive to change and affected by implementing effective policies, and measures developed for them can show change in the short to medium term. Most importantly, they provide information that is relevant for the management of health programs. The Health Metrics Network can provide a platform to reach consensus around a core set of proxy indicators for tracking progress in relation to key health goals and targets.

Table 1: Effective interventions for reducing illness, deaths and malnutrition

MDG indicator	Preventive interventions ²	Treatment interventions
Child mortality	Breastfeeding. Hand-washing, safe disposal of stool, latrine use and safe preparation of weaning foods. Use of insecticide-treated nets. Complementary feeding. <u>Immunization</u> . Micronutrient supplementation (zinc and vitamin A). Antenatal care, including steroids & tetanus toxoid. Antimalarial intermittent preventive treatment in pregnancy. Newborn temperature management; Nevirapine and replacement feeding; Antibiotics for premature rupture of membranes; Clean and safe delivery including management of pregnancy-related complications such as eclampsia and obstructed labour.	Case management with: <u>Oral rehydration therapy for diarrhea</u> ; <u>antibiotics for pneumonia</u> , dysentery and sepsis; and, antimalarials for malaria. Newborn resuscitation and management of hypothermia. Breastfeeding, complementary feeding during illness, and micronutrient supplementation (zinc and vitamin A).
Maternal mortality	Family planning: <u>contraceptives</u> . Maternal nutrition and micronutrient supplementation. Prevention and treatment of STI and HIV. <u>Prevention and treatment of malaria and other infections</u> . <u>Antenatal care</u> .	<u>Safe delivery with skilled birth attendance</u> ; Essential/Emergency obstetric care; Post partum and post abortion care.
Nutrition	<u>Exclusive breastfeeding</u> -6 months. Appropriate complementary child feeding 6-24 months. Iron and folic acid supplementation of children. Improved hygiene and sanitation. Dietary intake- pregnant and lactating women. <u>Micronutrient supplementation for prevention of vitamin A deficiency</u> & anemia in mothers and children. Anthelmintic treatment in school aged children	Appropriate feeding of sick child and ORT. Control and timely treatment of infectious & parasitic diseases. Treatment and monitoring of severely malnourished children. High dose treatment of clinical signs of vitamin A deficiency
HIV/AIDS	<u>Safe sex, including condom use</u> Unused needles by drug users, <u>Treatment of STIs</u> . Safe, screened blood supplies. Universal precautions including safe injections. <u>Antiretrovirals in pregnancy</u> to prevent maternal to child transmission and after occupational exposure.	Treatment of opportunistic infections. Cotrimoxazole prophylaxis. Highly active anti-retroviral therapy. Palliative care.
TB	Directly observed treatment of infectious cases to prevent transmission and emergence of drug resistant strains & treatment of contacts. BCG immunization.	<u>Directly observed treatment to cure, including early identification of TB symptomatic cases</u> .
Malaria	<u>Use of insecticide-treated nets</u> . Indoor residual spraying (in epidemic-prone areas). <u>Intermittent presumptive treatment of pregnant women</u> .	<u>Rapid detection and early treatment of uncomplicated cases</u> . Treatment of complicated cases (e.g., cerebral malaria and severe anemia).

² The underlined interventions have corresponding indicators for use in the monitoring of MDGs

Table 2: Examples of intermediate or proxy indicators

<i>Millennium Development Health and Nutrition Targets</i>	<i>Recommended options: Examples of intermediate or “proxy” indicators</i>
Target: Halve, between 1990 and 2015 the proportion of people who suffer from hunger	<ul style="list-style-type: none"> • Prevalence of underweight children under five • Proportion of infants under six months who are exclusively breastfed • Proportion of children 6 – 59 months who received one dose of vitamin A in the past six months
Target: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	<ul style="list-style-type: none"> • Proportion of 1 year old children immunized against measles • Proportion of children with diarrhea in the past two weeks who received ORT • Proportion of children with fast or difficult breathing in the past two weeks who received an appropriate antibiotic
Target: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	<ul style="list-style-type: none"> • Percentage of pregnant women with any antenatal care • Percentage of births with skilled birth attendant and/or institutional delivery • Contraceptive prevalence rate
Target: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS	<ul style="list-style-type: none"> • Percent of persons using a condom at last higher risk sex • Percent of sexually transmitted infection clients who are appropriately diagnosed and treated • Percent of HIV-positive women receiving antiretroviral treatment during pregnancy
Target: Have halted by 2015, and begun to reverse the incidence of malaria and other major diseases	<ul style="list-style-type: none"> • Percent of patients with uncomplicated malaria who received treatment within 24 hours of onset of symptoms • Percent of children/ pregnant women sleeping under insecticide treated nets • Proportion of women receiving antenatal care who receive at least two or three intermittent preventive malaria treatments during pregnancy • Percent of registered new smear positive TB cases in a cohort that were successfully treated • Percent of estimated new smear positive TB cases that were registered under DOTS approach
For a complete list of recommended core intermediate and optional indicators, see report <i>Health, Nutrition, and Population Development Goals. Measuring Progress Using the Poverty Reduction Strategy Framework</i> , November 2001	