

Monitoring Performance and Evaluating Progress towards the Health MDGs

Ten Strategic Goals at Global and Country Level

Prepared by the focal points for health information/statistics of the H8
agencies at the request of the H8

Introduction

Continuing efforts to achieve the health-related Millennium Development Goals of the United Nations (MDGs) increasingly indicate that success will now require a significant “scaling-up” in the levels of national and international funding for health. The calls for such unprecedented increases have been accompanied by greater demands for statistics to monitor performance, evaluate progress and ensure accountability. This rapid escalation of demand has exposed major deficiencies in the supply and use of health information in developing countries. It is now clear that new ways of working, new and more-efficient investments in data collection and analysis, and improved harmonization are all urgently needed to monitor performance and to evaluate the progress and impact of the scaling-up of health in achieving the MDGs and other international goals.

Public health decision-making and programme management are both critically dependent upon the timely availability of accurate and complete health information based upon sound data. In most developing countries the limited availability and poor quality of health data and statistics highlight the urgent need for investment and the scaling-up of health-information activities. This can only be achieved through a joint effort by international partners and countries, building on the considerable investments already made by global health initiatives and other partners. These efforts will need to be expanded and streamlined to rapidly strengthen country health information systems based on an efficient and effective mix of standardized methods and tools for data collection and analysis that meet country and international needs.

Annex A summarizes the current key contributions of the H8¹ and its partners to the MDG monitoring process. These include data generation and collection in countries (mainly MICS and DHS surveys, and clinical data on tuberculosis and ARV therapy); the global compilation of country data (with many databases increasingly coordinated); and analyses to produce comparable statistics (involving a large number of expert groups) and assess progress. The potential contributions of the H8 and other agencies in improving accountability, monitoring and evaluation are designed to align with the four global goals outlined in this paper, namely to:

- support the development of a common data architecture;
- increase levels and efficiency of international investments;
- enhance sharing of (and access to) data and statistics; and
- strengthen performance monitoring and evaluation practices – in accordance with the principles of the IHP+ proposed common framework.²

These four global goals are intended to underpin the following six specific country goals in improving data availability, quality and use:

- strengthen health surveys;

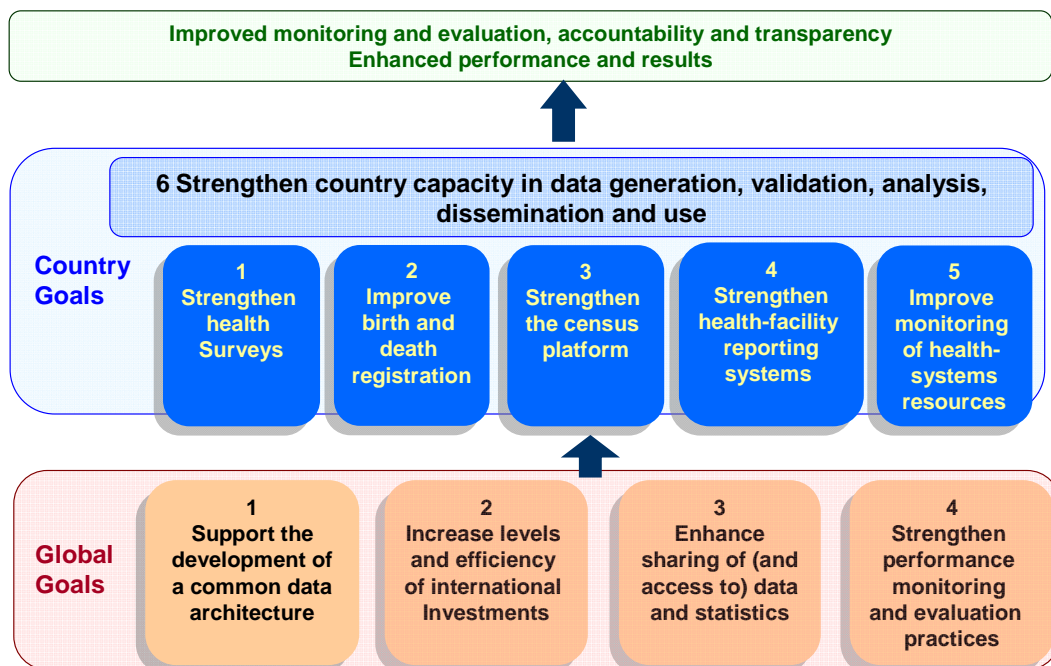
¹ The H8 is a representative group of the agencies most active in health – The Bill and Melinda Gates Foundation, GAVI, GFATM, UNAIDS, UNFPA, UNICEF, WHO and the World Bank.

² WHO (2009). *Monitoring Performance and Evaluating Progress in the Scale-up for Better Health. A Proposed Common Framework*. Prepared by the Monitoring and Evaluation Working Group of the International Health Partnership and related initiatives (IHP+) led by WHO and the World Bank. Geneva, World Health Organization.

- improve birth and death registration;
- strengthen the census platform;
- strengthen health-facility reporting systems;
- improve monitoring of health-system resources; and
- strengthen country capacity in data generation, validation, analysis, dissemination and use.

Taken together these ten goals (FIGURE 1) represent a strategic approach to improving the monitoring and evaluation of the scaling-up for better health focusing on the MDGs, with special attention given to the role of H8 and other global agencies. For each of the country goals, a set of specific targets to be achieved by 2015 has been proposed, with an emphasis placed upon improving the availability, quality and use of health data in line with the Health Metrics Network (HMN) framework for health information systems.³

Figure 1 - Strategic health information goals at global and country level



A regular mechanism will be required to objectively monitor the progress made in attaining the goals and targets outlined below. The mechanism should involve all the major investors, producers and users of health information in reviewing both global and country activities. At present, there is a lack of an accountability mechanism to identify gaps in achieving health information goals in countries, and to measure progress at global and country level. The key components of such a mechanism should include a biannual assessment of country progress against clearly defined

³ HMN (2008). *Framework and Standards for Country Health Information Systems*. Second Edition. Geneva, World Health Organization. Also see: <http://www.healthmetricsnetwork.org>

health information products (as proposed for the six country goals below) and a global review of progress towards global and country goals. It is expected that the information obtained would be provided to countries as part of Joint Annual Reviews or similar agreed coordination processes.

Global goal 1

Support the development of a common data architecture

Situation	<p>Technological innovations are changing the scope of data collection and the ways in which collection, transmission, storage, sharing and analysis are conducted. New opportunities are also being provided by an increasing number of actors in the health-information field. Data sources in health are diverse – personal and administrative medical records are aggregated by district, provincial, regional and national health services; the clinical and household research industry collects terabytes of data; and a large number of intergovernmental and nongovernmental agencies maintain and disseminate data on specific aspects of population health.</p> <p>The lack of a common architecture is hampering the efficient generation and use of this data. Although many disease programmes do have an architecture it is often poorly specified, and there is an urgent need to enhance the interoperability of the different systems and disease programmes by providing common standards on data and indicators; data-collection methods; data exchange; data publishing; and analytical methods. An explicitly defined common data architecture (describing how data are collected, stored, managed and used, and by whom and for what purposes) is needed to ensure that the increasing diversity of actors and resources contributes evenly and sustainably to resolving the information gaps at country and global level.</p> <p>The range of data sources underpinning such a data architecture should be aligned with defined standards for health records, indicators, measurement methods, classification and terminology, and technology platforms. A standards-based approach is also needed for data management, covering databases, data and metadata transmission and exchange, and data access. Standards are also essential in the use of data for analysis, and in data synthesis, correction for bias, imputation for missing values, and dissemination. United Nations agencies (especially WHO) play a major role in developing standards for data collection and management. For information technology, the development of standards would also require the major engagement of the private sector. The research community should also contribute to setting standards for imputation, to the development of analytical methods for estimation and evaluation.</p>
Required actions	<ul style="list-style-type: none">• Invest in developing norms and standards for a common data architecture, which includes the involvement of normative United Nations agencies, academia and the private sector.• Develop a global indicator registry with specified standards (for example on data, indicators, metadata and analytical methods) building upon existing work in disease programmes, HMN and the private sector.• Develop and promote interoperability standards.
Measures of progress	<ul style="list-style-type: none">• Existence and use of common data definitions, and the interoperability of databases.

Global goal 2

Increase levels and efficiency of international investments

Situation	<p>There are major gaps in health information that hamper the monitoring of health-systems performance, and the evaluating of scaling-up efforts and the progress made towards achieving the MDGs. Sound information is lacking to monitor trends in mortality, causes of death, morbidity, coverage of interventions, risk factors, health systems, and equity. The main data sources are censuses, civil registration, population surveys, individual records, service records and administrative records. Each source presents specific challenges that need to be addressed.</p> <p>International partners tend to focus upon indicator development and reporting requirements but efforts are now needed to step up the strengthening of country health information systems, including the enhancement of data generation to address the major information gaps. There have been several positive developments, such as increasing investments in household surveys – though there remains an urgent need to harmonize data-collection methods and survey timing in countries to enhance efficiency. Progress in strengthening other data sources (such as civil registration and clinic-based reporting systems) has been limited and this will only improve through well-coordinated efforts by the relevant partners.</p>
Required actions	<ul style="list-style-type: none"> ● Enhance investment in country data sources through special initiatives and as part of ongoing funding mechanisms, for example through: <ul style="list-style-type: none"> ○ systematically incorporating the strengthening of information systems in global health partnerships funding; ○ global initiatives to strengthen country health systems surveillance;⁴ and ○ the Global Health Metrics Challenge as proposed by the G8. ● Improve the efficiency of health information investments through closer collaboration between partners, and by strengthening and supporting country planning processes in line with the IHP+ proposed common framework (see Introduction). ● Support HMN in assisting countries in improving the legal and policy environment of health information systems.
Measures of progress	<ul style="list-style-type: none"> ● Regular high-level accountability mechanisms to monitor global investments and collaboration in health information. ● Country progress towards health information goals (see country goals).

⁴ For example: WHO (2009). *Monitoring Country Health Systems and their Performance. An Outline Plan of Action*. Outcome of a Technical Meeting held at the Rockefeller Centre, Bellagio, Italy, 28–30 October 2008. Geneva, World Health Organization.

Global goal 3

Enhance sharing of (and access to) data and statistics

Situation	<p>Primary data on many health indicators are available from household surveys (such as DHS and MICS) but more needs to be done to support the archiving of all international and national surveys and censuses. The International Household Survey Network, supported by the World Bank, is investing in the development and application of country archiving of data through its accelerated data programme. Improved access to the statistics generated by health services and administrative systems (including metadata, and population-based research) is also needed.</p> <p>Most analyses of country health data to produce estimates and syntheses are conducted by the United Nations system, notably WHO, UNICEF, UNAIDS, UN-DESA and the World Bank. The Institute for Health Metrics and Evaluation (IHME) is also aiming to develop databases and produce estimates. There are now many international databases,⁵ with some overlap. The interoperability of these databases requires improvement as part of a general need to improve the access to, sharing and exchange of data.</p>
Required actions	<ul style="list-style-type: none"> • Enhance access to data (with appropriate security and confidentiality measures in place) and the interoperability of existing databases. • Develop a “code of conduct” for sharing data (including research microdata, large-scale survey results and public health statistics) following broad consultation between data producers, researchers, funders, government representatives and other stakeholders. • Develop a global web-based repository of country health information documents to facilitate global and country access to all published statistics and metadata.
Measures of progress	<ul style="list-style-type: none"> • Qualitative assessment of progress in enabling free access to data and statistics. • Existence of up-to-date country data archives. • Global access to health information documents on the web. • Development of (and adherence to) a code of conduct for data sharing and exchange.

⁵ For example: **UN-DESA**: MDG indicators, annual release and web-based database (UNSD) & Population trends and projections (UNPD); **UNICEF**: Neonatal, child and maternal health interventions, child nutrition; child mortality, immunization, & water and sanitation (all jointly with WHO); **UNAIDS**: HIV estimates, coverage of preventive and multi-sectoral interventions; **WHO**: compiled in World Health Statistics (WHOSIS databases) and including data from a wide range of databases in the organization such as causes of death, mortality and life tables, coverage of HIV/AIDS treatment interventions, NCD risk factors, coverage of child and maternal health interventions, child nutrition, health financing, & human resources; **World Bank**: published as World Indicators, compilation of health indicators from all sources; **USAID**: HIV (Bureau of the Census), Health Systems 2020 (Abt), survey data on StatCompiler (DHS/MACRO), HIV risk behaviours (MACRO); **IHME**: child mortality and many other indicators (under development).

Global goal 4

Strengthen performance monitoring and evaluation practices

Situation	<p>There is increasing demand for better monitoring and evaluation as part of the scaling-up for better health. The IHP+ proposed common framework⁶ was developed to help to address both country and global requirements in line with the Paris Declaration on Aid Effectiveness.⁷ The general principles of the framework are collective action; alignment with country processes (i.e., planning and reporting cycles); balance between country ownership and independence; harmonized approaches to evaluation and performance assessment; capacity building and health information systems strengthening; and provision of adequate funding.</p> <p>There are many reporting requirements for international initiatives in the context of the MDGs. Although harmonization of these does occur through United Nations coordination (WHO and UNICEF) and through expert groups, more could be done to reduce the burden on countries. As shown in Annex B, efforts in this area are supported by a large number of expert groups (generally involving independent scientists and United Nations technical experts) that provide methodological inputs, review practices and contribute to the work of monitoring and estimation. For some statistics (such as HIV prevalence) country tools and training programmes are available that allow countries to produce (and reproduce) national estimates using standardized international methodologies.</p> <p>It is not uncommon to have multiple estimates for the same statistics. All estimates should be made on the basis of the best possible data with the best possible methods in a comprehensible and transparent manner that allows for reproduction of the results at global and national level. Scientific debate should also be conducted in a manner that minimizes any confusion among health planners and programmers caused by the production of multiple conflicting estimates.</p>
Required actions	<ul style="list-style-type: none"> • Global and country-level coordination of evaluation work in countries, in line with the principles of the IHP+ common framework. • Increased and timely investment in evaluation, in line with the IHP+ common framework, while ensuring independence and rigor. • Minimize the reporting burden on countries by improving coordination between and within agencies, and investing in capacity strengthening alongside evaluation • Minimize scientific methodological disagreements (for example, through existing United Nations expert group mechanisms) without stifling innovation and improvements. • Ensure that methods and data for estimates are transparently shared and reviewed. • Improve the development of tools, software and training programmes to support country capacity building for analysis and synthesis.

⁶ WHO (2009). *Monitoring Performance and Evaluating Progress in the Scale-up for Better Health. A Proposed Common Framework*. Prepared by the Monitoring and Evaluation Working Group of the International Health Partnership and related initiatives (IHP+) led by WHO and the World Bank. Geneva, World Health Organization.

⁷ http://www.oecd.org/document/18/0,2340,en_2649_3236398_35401554_1_1_1_1,00.html

Measuring progress	<ul style="list-style-type: none">• Implementation of monitoring and evaluation in line with the principles of the IHP+ common framework.• Reduction of uncoordinated requests to countries by international agencies and by specific initiatives for data and reports.• Availability of improved and user-friendly tools and methods to countries to allow the replication and production of estimates using international standards.
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Country Goal 1

Strengthen health surveys

Situation	<p>In most low-income countries, household health surveys are the main source of data for monitoring progress towards MDGs (and beyond) through the collection of information on health outcomes, risk factors, coverage, consequences and equity. The main providers of financial and technical support for such surveys are international agencies such as USAID (DHS), UNICEF (MICS) and, to a lesser extent, WHO (World Health Survey, STEPS), World Bank (LSMS, CWIQ) and CDC. More recently, disease-specific initiatives have provided support to single-topic surveys, such as those covering malaria, tobacco use and tuberculosis.</p> <p>National surveys are generally conducted once every 3–5 years with their timing largely driven by funding agencies. This level of frequency is often too low to allow for the close monitoring of progress in several MDG indicators, and major country health data needs are not addressed.</p>
Required actions	Promote the development and implementation of country health-survey plans with at least two surveys every 5 years, using a modular approach for specific indicators designed to achieve maximum sensitivity and efficiency.
Indicators & targets	<ul style="list-style-type: none"> • Country has a 10-year costed <i>survey plan</i> that covers all priority health topics and takes into account other data sources. • Two or more data points for <i>child mortality</i> in the last 5 years. • Two or more population-based data points for <i>maternal mortality</i> in the last 10 years, including 1 in the last 5 years. • Two or more data points for <i>coverage</i> of key health interventions in the last 5 years. • One or more data points on <i>smoking and adult nutritional status</i> in the last 5 years.

Country Goal 2

Improve birth and death registration

Situation	<p>In recent decades there has been virtually no progress made in improving birth and death registration globally. Only a small minority of developing countries have a functioning system for obtaining data on births, deaths (by age and sex) and causes of death. Recent efforts to increase birth registration (UNICEF, Plan International) have been largely driven from a human-rights perspective but have not sufficiently addressed the potential value of registration systems in generating vital statistics on a continuous basis. HMN has led international advocacy efforts on the importance of reliable birth and death registration, while WHO and the United Nations Statistical Division have focused on the development of tools to support country efforts. Several foundations and research funders have also supported demographic surveillance studies to help catalyze the development of registration systems.</p> <p>Ultimately, a sound and robust registration system is the best way to obtain accurate data on trends in mortality (by age, sex and cause of death) including maternal mortality.</p>
Required actions	Stepping up of efforts to improve birth and death registration (including cause of death) in countries through increased coordination, technical support and funding by relevant country and global stakeholders.
Indicators & targets	<ul style="list-style-type: none">• Birth registration for at least 90% of all births (intermediate goal 50%).• Death registration for at least 90% of all deaths (intermediate goal 50%).• ICD-10 used for certifying deaths in district hospitals, and for national reporting of mortality by cause.

Country Goal 3

Strengthen the census platform

Situation	Most countries are planning to conduct a census in the 2010 round, but the availability and quality of the results and projections are likely to be variable. UNFPA, UN-DESA, the Bureau of the Census and bilateral donors are the main providers of technical and financial support. Evidence from a number of countries indicates that whereas support for conducting the census is generally forthcoming, there remain major gaps in technical support for subsequent data cleaning, analysis, projections and dissemination.
Required actions	Promote and provide support to the 2010 census round, including ongoing support for data analysis, projections and dissemination.
Indicators & targets	<ul style="list-style-type: none">• Census has been completed within the last 10 years.• Well-documented population projections for the next 10 years are available in print and electronically for districts and smaller administrative areas.

Country Goal 4

Strengthen health-facility reporting systems

Situation	<p>Despite many years of investment by bilateral donors and the United Nations, routine health management information systems in most developing countries continue to perform poorly in terms of data quality, timeliness and use in decision-making. There are exceptions, and several disease-specific information systems have benefited from intensive technical quality control and financial inputs, including those for outbreak disease surveillance, eradication programmes (for example against polio), tuberculosis, HIV/AIDS and immunization coverage.</p> <p>Information technology solutions have also been introduced in a piecemeal manner resulting in multiple incompatible systems in countries, and the establishment of parallel databases that are not interoperable.</p>
Required actions	<p>Identify the core information needs and appropriate incentives for the improved reporting of results at local, national and global level, and for improved data quality and timeliness, supported by the introduction of information technology.</p>
Indicators & targets	<ul style="list-style-type: none"> • Number of institutional deliveries – available by district, and published within 12 months. • HIV prevalence for relevant surveillance populations published within 12 months. • Country web site for health statistics with latest reports and data available to the general public. • Extent to which the reporting of notifiable diseases makes use of modern communications technology, and degree of web-based reporting of statistics from district to national level. • At least 90% of districts submit timely, complete and accurate reports to national level. • Data-quality assessments conducted and published within the last 3 years. • Adherence to the revised International Health Regulations (2005).

Country Goal 5

Improve monitoring of health-system resources

Situation	Multiple actors are involved in improving the monitoring of different aspects of health-system resources, such as health financing (for example, the World Bank and WHO), human resources, infrastructure, access to drugs and service delivery (for example, WHO, USAID and JICA). However, investments have been limited and sporadic with the result that few countries are able to monitor basic information on the inputs and outputs of their health system.
Required actions	Promote regular National Health Accounts (NHAs) with improved systems to monitor country expenditure. There is also a need to develop comprehensive, district-based monitoring systems for facilities, health workers, access to medicines and the provision of key health interventions.
Indicators & targets	<ul style="list-style-type: none"> • At least one NHA completed in the last 5 years. • National database of public and private sector health facilities (with geocoding) updated within the last 3 years. • National database of health workers (by district and main cadres) updated within the last 2 years. • Annual data on the availability of tracer medicines and commodities in health facilities.

Country Goal 6

Strengthen country capacity in data generation, validation, analysis, dissemination and use

Situation	Capacity building and strengthening is essential in improving the generation, validation, analysis, dissemination and use of health data. Capacity building is supported through the development of tools, norms and standards; the training of individuals; curriculum development; technical assistance; and institutional support. Although there are numerous initiatives under way these are often driven by the needs of single-disease programmes. As a result, current efforts are fragmented, do not address the overall capacity for health-statistics analyses, and rarely take an institutional-based approach.
Required actions	Promote the establishment and strengthening of an institutionalized country mechanism charged with the analysis, synthesis and quality assessment of data derived from population, clinical and administrative sources. Such a mechanism should be quasi autonomous (or even independent) but should work closely with the Ministry of Health and National Statistical Office, and should adhere to the fundamental principles of official statistics, ⁸ thus guaranteeing accountability, transparency and adherence to quality standards.
Indicators & targets	<ul style="list-style-type: none"> • A designated and functioning institutional approach charged with health-statistics analyses, synthesis and validation using population-based and clinical data sources. • Use of a national set of indicators (with targets and annual reporting for most indicators) to inform annual health-sector reviews and other major planning cycles. • A national microdata archive (for health surveys) and an established and operational census. • Survey data used to assess and adjust service reports on vaccination, and published within 12 months of reporting year. • A burden-of-disease study conducted within the last 5 years with a strong national contribution. • A health-system performance assessment conducted within the last 5 years with a strong national contribution.

⁸ United Nations (1994). *Fundamental principles of official statistics*. New York, United Nations Statistics Division. Available at: <http://unstat.un.org/unsd/dnss/gp/fundprinciples.aspx>

Annex A: Current contribution of H8 to MDG monitoring through data generation, compilation and analysis

Agency	Data generation	Compilation	Analysis	Collaboration
Bill and Melinda Gates Foundation	Small: mostly research	IHME: Building global database	IHME: child mortality, coverage	
GAVI	Small: data-quality control; Vaccination data	-	-	Use of WHO/UNICEF estimates to report on progress
GFATM	Small: 5-year evaluation study; Some M&E investments	-	-	Use of UNAIDS/WHO/UNICEF data to report on progress
UNAIDS	Small	Country CRIS; Global UNGASS database; HIV-estimates database	Estimation HIV; UNGASS	Joint work with WHO on estimates
UNFPA	Support to census 2010 round	RH indicators (with other United Nations agencies); Tracking resource flows	Estimation of commodity requirements	Joint work on maternal mortality; OECD, UNAIDS
UNICEF	MICS survey programme (50+ countries)	Child mortality; MCH indicator databases (childinfo)	Child mortality; Coverage of interventions	WHO Collaboration on databases and estimates for MCH
WHO	Clinic reports (TB, ARV); Vital registration (mortality); Standard setting	TB; ARV; MCH indicators; Child mortality	Child mortality; Coverage of interventions	UNICEF and UNAIDS collaboration on databases and estimates for MCH and AIDS
World Bank	Small: economic surveys with some health questions	World Development Indicators database; Household survey network (microdata)	For World Development Report	Mostly use of WHO/UNICEF estimates for MDGs
Other key players – non H8	USAID – Demographic and Health Surveys	UNDESA – overall MDG indicators	UNDESA – population projections	
Summary	DHS and MICS are key suppliers of data for low-income countries (except on TB and ARVs)	Many databases, with scope for improved exchange of data	Many expert groups seeking academic inputs; scope for improvement of methods and processes; IHME contribution important	
Potential for action to improve MDG monitoring	Invest in data collection to raise intensity of efforts	Harmonize reporting requirements	Collaboration and harmonization of estimation work	

	and address gaps Harmonization of data-collection investments	Open access and data exchange	to fill major data gaps	
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Annex B: Overview of interagency expert groups with monitoring and estimation functions – purpose and membership

Subject area	Expert groups	Purpose	Membership
Child health	Interagency Coordination Group on Child Mortality Estimation (IGME) with Technical Advisory Group (TAG)	<ul style="list-style-type: none"> Develop joint estimates for under-five, infant and neonatal mortality 	IGME: International organizations (UNICEF, WHO, World Bank and United Nations Population Division); academia and other institutions; TAG: Harvard, LSHTM and others
	Child Health Epidemiology Reference Group (CHERG)	<ul style="list-style-type: none"> Develop cause-specific mortality estimates Review evidence of the impact of interventions on child survival 	International organizations (UNICEF, WHO, CDC and others); academia and other institutions (JHU, LSHTM and others)
	Child Survival Countdown – Technical Working Groups	<ul style="list-style-type: none"> Report on progress in child survival intervention coverage indicators Review technical issues related to key child-survival indicators 	International organizations (UNICEF, WHO, UNFPA and others); academia and other institutions (various)
	Interagency group for immunization estimation	<ul style="list-style-type: none"> Develop joint immunization estimates 	International organizations (UNICEF, WHO)
	Quantitative Immunization and Vaccine related Research (QUIVER)	<ul style="list-style-type: none"> Oversee the development and improvement of methods and data to evaluate the burden of vaccine-preventable diseases Standards for economic evaluation Tools for country decision-making 	WHO and 12 members from academia and other institutions
	Postnatal and newborn indicators working group	<ul style="list-style-type: none"> Technical guidance on indicators for monitoring coverage of interventions Support revisions to DHS and MICS for comparable antenatal, childbirth and postnatal care module Test and validate new indicators 	SNL, UNICEF, WHO (RHR), Macro, USAID and others (in process)
	United Nations Stillbirths and Preterm Birth Expert Group	<ul style="list-style-type: none"> Develop estimates and methodological work on stillbirth and preterm rates and causes 	WHO, UNICEF, SNL, CHERG Neonatal Group and others
	Infant and Young Child Feeding Working Group	<ul style="list-style-type: none"> Methodological work and technical guidance on indicators related to infant and young child feeding practices 	WHO, UNICEF, IFPRI, Bill and Melinda Gates Foundation, PATH, UNC, Academy for Educational Development, UC Davis, Measure DHS
	Vitamin and Mineral Deficiencies Working Group on Data	<ul style="list-style-type: none"> Provide guidance on technical issues related to monitoring zinc coverage and other micronutrients 	UNICEF, WHO, MI and others
	Global Alliance for Vitamin A	<ul style="list-style-type: none"> Provide guidance on technical issues related to monitoring Vitamin A supplementation coverage 	UNICEF, WHO, USAID, MI, HKI and JHU
Maternal mortality	Interagency group for maternal mortality estimation and trend analysis	<ul style="list-style-type: none"> Develop joint maternal mortality estimates and new methodology for trend analysis Prepare regional workshops to explain methodology and promote 	International organizations (UNICEF, WHO, UNFPA, World Bank and United Nations Population Division); academia and other institutions (Harvard and others)

		data analysis and use	
	Maternal health working group	<ul style="list-style-type: none"> Develop technical guidance on indicators and relevant methodological work related to monitoring maternal health and well-being; produce joint estimates 	UNICEF, WHO, UNFPA and others (in process)
Subject area	Expert Groups	Purpose	Membership
Malaria	<p>Roll Back Malaria – Malaria Monitoring and Evaluation Reference Group (MERG)</p> <p>WHO Strategic and Technical Advisory Group for Malaria (STAG)</p>	<ul style="list-style-type: none"> Develop standard indicators, methodologies and monitoring tools Develop joint malaria coverage and burden estimates Produce joint biennial reports (e.g., World Malaria Report) Prepare regional workshops to promote data analysis and use RBM work based on activities of 6 task forces 	International organizations (UNICEF, WHO, USAID, World Bank, GFATM and MACEPA); academia and other institutions (CDC, LSHTM, ORC Macro, Harvard and others)
ARI	Global Action Plan on Pneumonia	<ul style="list-style-type: none"> Develop consensus on technical interventions for the prevention and control of pneumonia; proposed to undertake methodological work on pneumonia intervention coverage and burden estimates 	International organizations (WHO and UNICEF); academia and other institutions (Hib Initiative, PneumoADIP, LSHTM and others)
Neglected Tropical Diseases	Scientific and Technical Advisory Group (NTD-STAG)	<ul style="list-style-type: none"> To estimate the burden of disease 	International organizations; academia and other institutions, including advocacy elements
	Leptospirosis Epidemiology Reference Group (LERG)	<ul style="list-style-type: none"> Develop estimates of burden of leptospirosis 	Technical experts in disease modelling, zoonotic diseases and burden estimation
AIDS	UNAIDS Reference Group on Estimates, Epidemiology and Modelling	<ul style="list-style-type: none"> Develop methods and tools to estimate prevalence, incidence and mortality Review UNAIDS and WHO estimates Facilitate country capacity building in surveillance data quality assessment, analysis and estimation work 	International organizations (UNAIDS, WHO and UNICEF); academia and other institutions (Secretariat: Imperial College London, East West Centre, LSHTM, CDC, Futures and others)
	HIV/AIDS Monitoring and Evaluation Reference Group (MERG)	<ul style="list-style-type: none"> Develop standard indicators, methodologies and monitoring tools Approval of new indicators and guides Evaluation of programmes 	International organizations (UNAIDS, UNICEF, WHO and others); academia and other institutions (various)
Risk factors	Joint Monitoring Program (JMP) for Water Supply and Sanitation and Technical Advisory Group	<ul style="list-style-type: none"> Develop joint water/sanitation estimates and methodology for trend analysis Technical Advisory Group advises on development of new methodologies, indicators and monitoring tools Prepare regional workshops to explain methodology and to support data analysis and use 	International organizations (UNICEF, WHO, World Bank and USAID); academia and other institutions (LSHTM and others)
	Food-borne disease	<ul style="list-style-type: none"> Estimate the global burden due to 	International organizations;

	epidemiology reference group (FERG)	food-borne diseases	academia and other institutions
MDG	Interagency Group on MDG indicators	<ul style="list-style-type: none"> Reach consensus on indicators, data, metadata and reporting 	United Nations agencies led by the United Nations Statistical Division