

## Annex A

### Initiatives, resources and databases for monitoring progress towards the health-related Millennium Development Goals, with a special focus on maternal, newborn and child survival

This list is not comprehensive but includes important resources, reports and databases related to monitoring progress towards the Millennium Development Goals for women, newborns and children.

#### Reports

The State of the World's Children is UNICEF's flagship publication. Each year the report focuses on a key issue affecting children and provides a set of detailed statistical tables that include individual country and regional estimates on a range of key indicators for monitoring the situation of women and children in the world. The report's focus in 2008 is child survival (<http://www.unicef.org/sowc/>). This publication is the primary source for the coverage estimates used in the *Countdown*.

Progress for Children (PFC) is a UNICEF flagship publication reporting on progress towards the Millennium Development Goals. The World Fit for Children (WFFC) Statistical Review was a special issue of PFC to report on progress towards the WFFC goals and targets included in the May 2002 Special Session of the United Nations General Assembly outcome document. Heads of state and government committed themselves to targets in vital areas of children's well-being and development to be achieved by 2010, and UNICEF was specifically called upon to prepare a mid-decade progress report ([http://www.unicef.org/publications/files/Progress\\_for\\_Children\\_No\\_6.pdf](http://www.unicef.org/publications/files/Progress_for_Children_No_6.pdf)).

State of the World's Mothers has been published by Save the Children each year since 1999, as a complement to UNICEF's The State of the World's Children report. This document brings together information on the world's mothers and newborns, with the aim of bringing attention to the urgent need to reduce maternal and infant mortality around the world. The report also identifies countries that are succeeding in improving the health and saving the lives of women and babies and shows that effective solutions to this challenge are affordable – even in the world's poorest countries. ([http://www.savethechildren.org/publications/mothers/2006/SOWM\\_2006\\_final.pdf](http://www.savethechildren.org/publications/mothers/2006/SOWM_2006_final.pdf))

The World Health Report is published annually by the World Health Organization (World Health Organization) (<http://www.who.int/whr/>). Each year the report combines an expert assessment of global health, including statistics relating to all countries, with a focus on a specific subject (in 2008, primary health care). Some of the data and benchmarks presented here on health policy and health systems, including human resources and financial flows, were taken from previous reports.

World Health Statistics Report (<http://www.who.int/whosis/>): "This annual report presents comprehensive health data on all of the 193 World Health Organization Member States. The data, selected on the basis of quality and availability, relevance to global health, and comparability across member nations, cover over 50 core health indicators, which are organized into six major areas: mortality and burden of disease, health service coverage, risk factors, health system inputs, differentials in health outcome and coverage, as well as basic sociodemographic statistics."

The World Development Report, published by the World Bank, aims to provide a "guide to the economic, social and environmental state of the world today" (<http://go.worldbank.org/LOTTGBE9I0>, accessed 2 February 2008). Each year the WDR provides in-depth analysis of a specific aspect of development. Past reports have considered such topics as youth, equity, public services delivery, the role of the state, transition economies, labour, infrastructure, health, the environment and poverty. The most recent report examines the role of agriculture in development.

The Global Millennium Development Goal Monitoring Report is published annually by the World Bank (<http://go.worldbank.org/XE4070LV80m>). This publication focuses on the responsibilities and accountability of donor countries, developing countries and the international financial institutions to support achievement of the Millennium Development Goals and monitors progress towards the Millennium Development Goal targets. The 2007 report focuses on gender equality and the empowerment of women.

State of the World Population Report is the United Nations Populations Fund flagship publication (<http://www.unfpa.org/swp/2007/english/>)

introduction.html). Each year the report focuses on a key issue addressing population, reproductive and maternal health and development concerns and provides statistical tables on a range of key demographic, health and socioeconomic indicators. Past reports have addressed such topics as urbanization, adolescent health, poverty, the environment, international migration, gender equality and changing population age structures. The relation of the thematic focus to maternal and reproductive health is a feature of every report.

#### Resources and monitoring activities

Millennium Development Goal monitoring occurs within the United Nations system. The UN Statistics Division (UNSD) coordinates the preparation of the UN Secretary General's report on progress towards the Millennium Development Goals and is responsible for maintaining the Millennium Development Goals database. The UN Statistics Division also coordinates the Inter-Agency and Experts Group on Millennium Development Goal reporting (IAEG), which is responsible for the preparation of data and analysis to monitor progress towards the Millennium Development Goals. The Group also reviews and defines methodologies and technical issues in relation to the indicators, produces guidelines and helps define priorities and strategies to support countries in data collection, analysis and reporting on Millennium Development Goals.

Lead agencies have been assigned to report on progress towards specific goals and targets. UNICEF and World Health Organization are the lead agencies for reporting on the health-related Millennium Development Goals. United Nations Population Fund is also involved in reporting on Millennium Development Goal 5. UNDP is responsible for providing support to countries in the preparation of country reports on progress towards the Millennium Development Goals.

The Child Health Epidemiology Reference Group (CHERG) was established in 2001 and has worked since that time to improve the quality of global estimates on maternal and child mortality and morbidity, intervention coverage and the potential effects of health services and interventions. The coverage estimates reported through the *Countdown* process are reviewed by the Child Health Epidemiology Reference Group for consistency with mortality estimates.

The Country Profiles on Maternal and Newborn Health produced in 2008 by the World Health Organization Department of Making Pregnancy Safer (MPS) complements the *Countdown* with country-specific reports focusing specifically on maternal and newborn health indicators, including subnational distributions and disaggregated reporting by measures of equity and location. In 2007 the Department initiated creation of a maternal and neonatal health epidemiology reference group (MNHREG) of global experts to catalyze improved capacity and use of country-level data to guide implementation and decisionmaking.

The Partnership for Maternal, Newborn and Child Health has collaborated closely with the *Countdown* in its efforts to monitor progress and to promote the use of the monitoring results for political advocacy related to maternal, newborn and child health.

#### Publicly accessible databases

UNICEF maintains a series of publicly accessible databases for tracking the situation of children and women globally. These databases contain both the current (presented in The State of the World's Children) and trend data for tracking progress on the situation of women and children. UNICEF's global databases include only statistically sound and nationally representative data from household surveys and other sources. These databases are updated annually through a process that draws on the wealth of data maintained by UNICEF's wide network of 140 field offices and other sources. All these data have undergone a rigorous data quality review based on a series of objective criteria. UNICEF includes survey data in global estimates after reviewing them for quality based on the following criteria:

- The survey is based on a nationally representative sampling frame.
- Standard protocols for collecting and analyzing data for the *Countdown* indicators were used in the survey.
- To the extent determinable, the survey was carried out using procedures to ensure data quality in the recruitment, training and supervision of data collection teams and in the transfer and management of the survey data.

One of the databases maintained by UNICEF is DevInfo, a technical platform designed for use in monitoring progress towards the Millennium Development Goals. Nationally, 103 countries are now using DevInfo to develop national socioeconomic databases for Millennium Development

Goal monitoring. (More information is available at <http://www.devinfo.org/>.)

The World Development Indicators Online (WDI) provide direct access to more than 700 development indicators, with time series for 208 countries and 18 country groups from 1960 to 2006, where data are available for interactive queries and can be downloaded by users (<http://go.worldbank.org/6HAYAHG8H0>).

The website for the Millennium Development Goals Indicators is maintained by the United Nations Statistics Division. The home page states that the site presents the official data, definitions, methodologies and sources for the 48 indicators to measure progress towards the Millennium Development Goals. The data and analyses are the product of the work of the Inter-agency and Expert Group (IAEG) on Millennium Development Goal Indicators, coordinated by the United Nations Statistics Division (<http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm>).

#### Household survey protocols

The Multiple Indicator Cluster Survey (MICS) is a household survey programme developed by UNICEF to assist countries in filling data gaps to monitor the situation of children and women. It is capable of producing statistically sound data that are internationally comparable. The Multiple Indicator Cluster Survey was developed after the World Summit for Children to measure progress towards an internationally agreed-upon set of mid-decade goals. The first round of Multiple Indicator Cluster Surveys was conducted around 1995 in more than 60 countries. A second round of about 65 surveys was conducted in 2000. The 2005–06 round of Multiple Indicator Cluster Surveys was planned to provide a monitoring tool for the Millennium Development Goals and other major international commitments including the publication of A World Fit for Children, the UN General Assembly Special Session on HIV/AIDS, and the Abuja targets for malaria. Multiple Indicator Cluster Surveys are usually carried out by government organisations, with the support and assistance of UNICEF and other partners. Results from the different rounds of surveys, as well as related technical background materials, are available at [www.childinfo.org](http://www.childinfo.org).

The USAID-supported Demographic and Health Surveys (DHS) have been conducted in many countries over the last 20 years. They provide national and subnational data on family planning, maternal and child health, child survival, HIV/AIDS and sexually transmitted infections, infectious diseases and reproductive health and nutrition. More information is available at [www.measuredhs.com](http://www.measuredhs.com). The MICS and DHS programmes have coordinated efforts both in terms of standardizing survey questions and methods for data analysis, as well as data collection on the ground. Coordinating both the countries surveyed and the questions included in the questionnaire modules ensures maximum coverage of countries and provides comparability across surveys.

## Annex B

### Indicators and data sources

Indicators	Data Source	Global Database
<b>DEMOGRAPHICS</b>		
Demographics	Total population	United Nations Population Division
	Total under-five population	United Nations Population Division
	Total births	United Nations Population Division
	Birth registration	Multiple Indicator Cluster Survey, Demographic and Health Surveys
Child Mortality	Under-five mortality rate	United Nations Children's Fund
	Infant mortality rate	United Nations Children's Fund/World Health Organization/World Bank/United Nations Population Division
	Neonatal mortality rate	World Health Organization
	Total children under five deaths	United Nations Children's Fund/World Health Organization/World Bank/United Nations Population Division
	Cause of death of children under five	Child Health Epidemiology Reference Group
Maternal Mortality	Maternal mortality ratio	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Health Organization
	Lifetime risk of maternal death	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Health Organization
	Total maternal deaths	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Health Organization
	Maternal deaths by cause (regional)	World Health Organization
<b>NUTRITION</b>		
Anthropometric	Underweight prevalence	Demographic and Health Surveys, Multiple Indicator Cluster Survey, National Survey
	Stunting prevalence	Demographic and Health Surveys, Multiple Indicator Cluster Survey, National Survey
	Wasting prevalence	Demographic and Health Surveys, Multiple Indicator Cluster Survey, National Survey
Infant feeding	Exclusive breast-feeding rate (<6 months)	Demographic and Health Surveys, Multiple Indicator Cluster Survey, National Survey
	Complementary feeding rate (6-9 months)	Demographic and Health Surveys, Multiple Indicator Cluster Survey, National Survey
Low birth weight	Low birth weight incidence	Demographic and Health Surveys, Multiple Indicator Cluster Survey, National Survey

Micronutrient supplementation	Vitamin A supplementation (at least 1 dose & 2 doses)	National Immunisation Days, Demographic and Health Surveys, Multiple Indicator Cluster Survey	United Nations Children's Fund
<b>CHILD HEALTH</b>			
Immunisation	Measles immunisation coverage	Routine, Multiple Indicator Cluster Survey, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
	DPT3 immunisation coverage	Routine, Multiple Indicator Cluster Survey, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
	Hib3 immunisation coverage	Routine, Multiple Indicator Cluster Survey, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
Malaria	Under-fives sleeping under ITNs	Demographic and Health Surveys, Multiple Indicator Cluster Survey,	United Nations Children's Fund
	Antimalarial treatment (under-fives)	Demographic and Health Surveys, Multiple Indicator Cluster Survey,	United Nations Children's Fund
Pneumonia	Careseeking for pneumonia	Demographic and Health Surveys, Multiple Indicator Cluster Survey	United Nations Children's Fund
	Antibiotic treatment for pneumonia	Demographic and Health Surveys, Multiple Indicator Cluster Survey	United Nations Children's Fund
Diarrhoeal diseases	Oral rehydration and continued feeding	Demographic and Health Surveys, Multiple Indicator Cluster Survey	United Nations Children's Fund
AIDS	HIV+ pregnant women receiving ARVs for PMTCT	MOH, Joint United Nations Programme on HIV/AIDS	United Nations Children's Fund
<b>MATERNAL AND NEWBORN HEALTH</b>			
Antenatal care	Antenatal care (at least one visit)	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	United Nations Children's Fund
	Antenatal care (4 or more visits)	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	United Nations Children's Fund/World Health Organization
IPTp for malaria	Intermittent preventive treatment for pregnant women	Demographic and Health Surveys, Multiple Indicator Cluster Surveys	United Nations Children's Fund
Neonatal tetanus protection	Neonatal tetanus protection	Demographic and Health Surveys, Multiple Indicator Cluster Survey	United Nations Children's Fund/World Health Organization
Delivery care	Skilled attendant at birth	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	United Nations Children's Fund
C-section	C-section rate	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	United Nations Children's Fund
Postnatal visit	Postnatal visit for mother	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	Special data analysis by SNL
	Postnatal visit for baby	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	Special data analysis by SNL

Breast-feeding	Early initiation of breast-feeding	Demographic and Health Surveys, Multiple Indicator Cluster Survey, NS	United Nations Children's Fund
Contraceptive prevalence	Contraceptive prevalence rate	Demographic and Health Surveys, Multiple Indicator Cluster Survey, Reproductive Health Survey, Family Health Survey	United Nations Children's Fund
Unmet need	Unmet need for family planning	Demographic and Health Surveys, National Survey	United Nations Population Fund
<b>MATERNAL AND NEWBORN HEALTH</b>			
Water	Use of improved drinking water sources	United Nations Children's Fund/ World Health Organization	United Nations Children's Fund/ World Health Organization
Sanitation	Use of improved sanitation facilities	United Nations Children's Fund/ World Health Organization	United Nations Children's Fund/ World Health Organization
<b>POLICIES, SYSTEMS AND EQUITY</b>			
Policies	International code of marketing of breast milk substitutes	United Nations Children's Fund/ World Health Organization	Special data compilation by World Health Organization
	New ORS formula and zinc for management of diarrhoea	World Health Organization/ United Nations Children's Fund/ Zinc task force	Special data compilation by World Health Organization
	Community treatment of pneumonia with antibiotics	United Nations Children's Fund/ World Health Organization	Special data compilation by World Health Organization
	IMCI adapted to cover newborns 0-1 week of age	World Health Organization	Special data compilation by World Health Organization
	Costed implementation plan for MNCH available	World Health Organization	Special data compilation by World Health Organization
	Midwives authorised to administer a core set of life saving interventions	World Health Organization	Special data compilation by World Health Organization
	Maternity protection in accordance with ILO convention 183	ILOLEX	International Labor Organization
	Specific notification of maternal deaths	World Health Organization	Special data compilation by WHO
Systems	Per capita total expenditure on health	World Health Stat 2007	World Health Organization
	General government expenditure on health as % of total government expenditure	World Health Stat 2007	World Health Organization
	Out-of-pocket expenditure as % of total expenditure on health	World Health Stat 2007	World Health Organization
	Density of health workers per 1000 population	Global Atlas on Human Resources	World Health Organization
	Official development assistance to child health per child	Development Assistance Committee	London School of Health and Tropical Medicine
	Official development assistance to maternal and neonatal health per live birth	Development Assistance Committee	London School of Health and Tropical Medicine
	Availability of emergency obstetric care services	EMOC Assessments, Health Information System	Averting maternal death and disability/United Nations Children's Fund
Equity	Coverage gap by wealth quintile	Multiple Indicator Cluster Survey/Demographic and Health Surveys	Special data analysis by World Health Organization
	Coverage gap (%)	Multiple Indicator Cluster Survey/Demographic and Health Surveys	Special data analysis by World Health Organization
	Ratio poorest/wealthiest	Multiple Indicator Cluster Survey/Demographic and Health Surveys	Special data analysis by World Health Organization
	Difference poorest - wealthiest (%)	Multiple Indicator Cluster Survey/Demographic and Health Surveys	Special data analysis by World Health Organization

## Annex C

### Defining current Countdown indicators

NO.	INDICATOR NAME	INDICATOR DEFINITION	NUMERATOR	DENOMINATOR
<b>NUTRITION</b>				
1	Exclusive breast-feeding (<6 months)	Percentage of infants aged 0-5 months who are exclusively breastfed	Number of infants aged 0-5 months who are exclusively breastfed	Total number of infants aged 0-5 months surveyed
2	Breast-feeding plus complementary food (6-9 months)	Percentage of infants aged 6-9 months who are breastfed and receive complementary food	Number of infants aged 6-9 months who are breastfed and receive complementary food	Total number of infants aged 6-9 months surveyed
3	Vitamin A supplementation coverage	Percentage of children aged 6-59 months who received at least one high dose vitamin A supplement in the last six months (and at least two doses in the last 12 months).	Number of children aged 6-59 months receiving at least one high dose vitamin A supplement in the 6 months prior to the survey (and at least two doses in the last 12 months).	Total number of children aged 6-59 months
<b>CHILD HEALTH</b>				
4	Measles immunisation coverage	Percentage of children aged 12-23 months who are immunized against measles	Number of children aged 12-23 months who are immunized against measles	Total number of children aged 12-23 months surveyed
5	DPT3 immunisation coverage	Percentage of children aged 12-23 months who received 3 doses of DPT vaccine	Number of children aged 12-23 months receiving 3 doses of DPT vaccine	Total number of children aged 12-23 months surveyed
6	HiB3 immunisation coverage	Percentage of children aged 12-23 months who received 3 doses of HiB vaccine.	Number of children aged 12-23 months receiving 3 doses of Haemophilus influenzae type B (HiB) vaccine	Total number of children aged 12-23 months surveyed
7	Oral rehydration and continued feeding	Percentage of children aged 0-59 months with diarrhoea receiving oral rehydration and continued feeding	Number of children aged 0-59 months with diarrhoea in the 2 weeks prior to the survey receiving oral rehydration therapy (oral rehydration solution and/or recommended homemade fluids or increased fluids) and continued feeding	Total number of children aged 0-59 months with diarrhoea in the 2 weeks prior to the survey
8	Insecticide-treated net coverage	Percentage of children aged 0-59 months sleeping under an insecticide-treated mosquito net	Number of children aged 0-59 months sleeping under an insecticide-treated mosquito net the night before the survey	Total number of children aged 0-59 months surveyed
9	Antimalarial treatment	Percentage of children aged 0-59 months with fever receiving appropriate antimalarial drugs	Number of children aged 0-59 months reported to have fever in the 2 weeks prior to the survey who were treated with an appropriate antimalarial within 24 hours of the onset of symptoms	Total number of children aged 0-59 months reported to have fever in the 2 weeks prior to the survey
10	Prevention of mother-to-child transmission of HIV	Percentage of all HIV-positive pregnant women who received a complete course of ART prophylaxis	Number of HIV-positive pregnant women given ART prophylaxis in the preceding 12 months	Estimated number of HIV-positive pregnant women giving birth in the preceding 12 months <sup>a</sup>

11	Careseeking for pneumonia	Percentage of children aged 0-59 months with suspected pneumonia taken to an appropriate health provider	Number of children aged 0-59 months with suspected pneumonia in the 2 weeks prior to the survey who were taken to an appropriate health provider	Total number of children aged 0-59 months with suspected pneumonia in the 2 weeks prior to the survey
12	Antibiotic treatment for pneumonia	Percentage of children aged 0-59 months with suspected pneumonia receiving antibiotics	Number of children aged 0-59 months with suspected pneumonia in the 2 weeks prior to the survey receiving antibiotics	Total number of children aged 0-59 months with suspected pneumonia in the 2 weeks prior to the survey
<b>MATERNAL AND NEWBORN HEALTH</b>				
13	Contraceptive prevalence	Proportion of women currently married or in union aged 15-49 that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Number of women currently married or in union aged 15-49 years that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Total number of women aged 15-49 years that are currently married or in union
14	Unmet need for family planning	Proportion of women that are currently married/in union that have an unmet need for contraception	Number of women that are currently married or in union that are fecund and want to space their births or limit the number of children they have and that are not currently using contraception	Total number of women interviewed that are currently married or in union
15	Antenatal care (at least one visit)	Percent of women attended at least once during pregnancy by skilled health personnel for reasons related to the pregnancy in the X years prior to the survey	Number of women attended at least once during pregnancy by skilled health personnel for reasons related to the pregnancy in the X years prior to the survey	Total number of women who had a live birth occurring in the same period
16	Antenatal care (4 or more visits)	Percent of women attended at least four times during pregnancy by any provider (skilled or unskilled) for reasons related to the pregnancy in the X years prior to the survey	Number of women attended at least four times during pregnancy by any provider (skilled or unskilled) for reasons related to the pregnancy in the X years prior to the survey	Total number of women who had a live birth occurring in the same period
17	Neonatal tetanus protection	Percentage of newborns protected against tetanus	Number of mothers with a live birth in the year prior to the survey who received 2 doses of TT within the appropriate interval prior to the infant's birth	Total number of women aged 15-49 with a live birth in the year prior to the survey
18	Intermittent preventive treatment for malaria	Proportion of women who received intermittent preventive treatment for malaria during their last pregnancy	Number of women at risk for malaria who received two or more doses of a recommended antimalarial drug treatment to prevent malaria during their last pregnancy that led to a live birth	Total number of women surveyed at risk for malaria who delivered a live baby within the last two years.
19	Skilled attendant at delivery	Percentage of live births attended by skilled health personnel (doctor, nurse, midwife or auxiliary midwife)	Number of live births to women aged 15-49 years in the X years prior to the survey attended during delivery by skilled health personnel (doctor, nurse, midwife or auxiliary midwife)	Total number of live births to women aged 15-49 years in the X years prior to the survey <sup>b</sup>

20	C-section rate	Percentage of live births delivered by Caesarean section	Number of live births to women aged 15-49 years in the X years prior to the survey delivered by Caesarean section	Total number of live births to women aged 15-49 years in the X years prior to the survey
21	Early initiation of breast-feeding	Percentage of newborns put to the breast within one hour of birth	Number of women with a live birth in the X years prior to the survey who put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the X years prior to the survey <sup>c</sup>
22	Postnatal care for mothers <sup>d</sup>	Percentage of mothers who received postnatal care visit within two days of childbirth	Number of women who received a postnatal care visit within two days of childbirth (regardless of place of delivery)	Total number of women aged 15-49 years with a last live birth in the x years prior to the survey (regardless of place of delivery)
23	Postnatal care for babies who were born at home	Percentage of babies born outside a facility who received a postnatal care visit within two days of birth.	Number of babies born outside of a health facility who received a postnatal care visit within two days of birth <sup>e</sup>	Total number of last-born babies born outside of a health facility in the x years prior to the survey <sup>f</sup>
<b>WATER AND SANITATION</b>				
24	Use of improved drinking water sources	Percentage of the population using improved drinking water sources	Number of household members living in households using improved drinking water sources (including household connections, public standpipe, borehole, protected dug well, protected spring, rainwater collection)	Total number of household members in households surveyed
25	Use of improved sanitation facilities	Percentage of the population using improved sanitation facilities	Number of household members using improved sanitation facilities (including connection to a public sewer, connection to a septic system, pour-flush latrine, simple pit latrine, or a ventilated improved pit latrine)	Total number of household members in households surveyed

#### Notes

- More details on the HIV estimates methodology can be found at [www.unaids.org](http://www.unaids.org).
- This reference period may differ between surveys.
- This reference period may differ between surveys.
- As used for postnatal care in the continuum of care figure.
- Information on postnatal care for babies who were born in health facilities is not collected because it is assumed by DHS that mothers would not know whether or not their newborn received specific aspects of immediate care, for example early bathing.
- This denominator differs from the all births denominator used for the indicator for postnatal care for mother. Therefore, the coverage for mother and baby cannot be compared. Data for both mothers and babies that is comparable (home birth denominator) is available for only four countries.

## Annex D

### Definitions of policy and health systems indicators

NO.	POLICY	INDICATOR DEFINITION	CRITERIA FOR RANKING	2007 RESULTS (68 Countries)	2005 RESULTS (60 Countries)
POLICIES					
1	Midwives authorized to administer a core set of life saving interventions	National policy adopted authorizing midwives to administer the following: a. perenteral antibiotics b. perenteral oxytocics c. perenteral anticonvulsants d. manual removal of placenta e. removal of retained products of conception f. assisted vaginal delivery g. newborn resuscitation	Yes: midwives authorized for all tasks  Partial: midwives authorized for some tasks  No: midwives not authorized for any of these tasks	Yes: 27  Partial: 25  No: 5  No data: 11	
	Specific notification of maternal deaths	National policy adopted requiring health professionals to notify any maternal death	Yes: national policy adopted and implemented  Partial: national policy adopted but no systematic implementation  No: no national policy	Yes: 23  Partial: 14  No: 18  No data: 13	
	IMCI adapted to cover newborns 0-1 week of age	National IMCI guidelines adapted to cover major conditions affecting newborn survival in the first week of life generic guidelines 2006	Yes: National IMCI guidelines adapted and in line with WHO generic guidelines 2006  Partial: National IMCI guidelines adapted but not fully in line with WHO generic guidelines 2006  No: National IMCI guidelines not adapted	Yes: 39  Partial: 3  No: 21  No data: 5	
	New ORS formula and zinc for management of diarrhoea	National policy guidelines adopted on management of diarrhoea with low osmolarity ORS and zinc supplements	Yes: low osmolarity ORS and zinc supplements in national policy  Partial: low osmolarity ORS or zinc supplements in national policy  No: low osmolarity ORS and zinc supplements not promoted in national policy	Yes: 34  Partial: 17  No: 10  No data: 7	Yes: 6  Partial: 17  No: 36  No data: 1

	Community management of pneumonia with antibiotics	National policy adopted authorizing community health workers to identify and manage pneumonia with antibiotics	Yes: community health workers authorized to give antibiotics for pneumonia  Partial: no national policy but some implementation of community-based management of pneumonia  No: no national policy and no implementation	Yes: 18  Partial: 11  No: 31  No data: 8	Yes: 16  Partial: 2  No: 41  No data: 1
	Maternity protection in accordance with ILO Convention 183	ILO Convention 183 ratified by the country	Yes: ILO Convention 183 ratified  Partial: ILO Convention 183 not ratified but previous maternity convention ratified  No: No ratification of any maternity protection convention	Yes: 0  Partial: 21  No: 47  No data: 0	
	International Code of Marketing of Breast milk Substitutes	National policy adopted on all provisions stipulated in the International Code of Marketing of Breast milk Substitutes	Yes: all provisions of the International Code adopted in legislation  Partial: voluntary agreements or some provisions of the international Code adopted in legislation  No: no legislation and no voluntary agreements adopted in relation to the International Code	Yes: 25  Partial: 28  No: 13  No data: 2	Yes: 15  Partial: 39  No: 3  No data: 3
FINANCIAL FLOWS AND HUMAN RESOURCES					
	Costed implementation on plan for maternal, newborn and child health	National plan or plans for scaling up maternal, newborn and child health interventions available and costed	Yes: costed plan or plans to scale up maternal, newborn and child health interventions available at national level  Partial: costed plan available for either maternal and newborn health or child health  No: no costed implementation plan for MNCH available	Yes: 31  Partial: 18  No: 14  No data: 5	Data obtained from expert opinion in countries  Variability between countries in interpretation of the indicator with respect to the scope of costing (programme costs versus programme and recurrent costs) and the time period covered by the plan
	Per capita total expenditure on health (at international US\$ rate)		Numerical		World Health Statistics 2007
	Per capita expenditure on health as % of total government expenditure		Numerical		World Health Statistics 2007

	Out-of-pocket expenditure as % of total expenditure on health		Numerical		World Health Statistics 2007
	Density of health workers per 1000 population	Total number of physicians, nurses and midwives relative to the overall population	Numerical Minimum Standard: 2.5 health workers per 1000 people needed to deliver basic maternal and child health services	Above minimum standard: 14  Below minimum standard: 54	WHO Global atlas of the health work force ( <a href="http://www.who.int/globalatlas/default.asp">http://www.who.int/globalatlas/default.asp</a> )
HEALTH SYSTEM					
	Availability of Emergency Obstetric Care (EmOC) Services % of recommended minimum	Minimum recommended is five EmOC facilities per 500,000 people. This should include 1 Comprehensive and 4 Basic Emergency Obstetric Care facilities. The breakdown of Comprehensive and Basic by population and geographic area is available in country Assessment Reports, but not included in the <i>Countdown</i> .	Availability is expressed as a percentage of the minimum acceptable number of EmOC facilities.  The minimum acceptable number of EmOC facilities (C-EmOC and B-EmOC) is calculated by dividing the population by 500,000 and multiplying by 5.  The percentage of recommended minimum number of EmOC facilities is calculated by dividing the number of functioning EmOC facilities by the recommended number and multiplying by 100. To qualify as fully functioning Basic or Comprehensive EmOC a facility must provide a standard set of signal functions.	27 countries had comparable data from EmOC Assessments. 2 of these countries had additional updates from national inventory or health system reports  Of the 27 countries with data: • 4 had over 80% of the recommended minimum number of EmOC facilities. • 7 countries had 50-79% • 14 countries had 25-49% • 2 countries had 14-21%  18 additional countries have data from EmOC Assessments for specific geographic regions or using different criteria.  23 countries had no data	UNICEF/AMDD data base of Emergency Obstetric Care Assessments, Bangladesh National EmOC Inventory, HIS for Nepal and Bangladesh for updates

## Annex E

### Countdown to 2015 measuring equity in maternal, newborn and child health through the coverage gap index: technical notes

#### 1. Coverage indicators

The measure of equity constructed for this report is called the 'coverage gap index'. For guidance on interpreting the coverage gap graphs in the country profiles, please see section 4 below. The coverage gap index combines information on four intervention areas across the Continuum of Care: family planning, maternal and newborn care, immunisation and treatment of sick children. Data from Demographic and Health Surveys and Multiple Indicator Cluster Survey on eight coverage indicators in these four intervention areas was used to construct the coverage gap index. Table E1 defines the indicators.

Table E1. Coverage gap index indicator definitions

No.	Indicator	Definition
1a.	Need for family planning satisfied (FP)	Percentage of currently married women who say that they do not want any more children or that they want to wait two or more years before having another child, and are using contraception
1b.	Contraceptive prevalence rate (CPR)	Percentage of women currently married or in union aged 15–49 that are using (or whose partner is using) a modern contraceptive method
2.	Antenatal care (ANC)	Percentage of women attended at least once during pregnancy by skilled health personnel for reasons related to the pregnancy in the three years prior to the survey
3.	Skilled birth attendance (SBA)	Percentage of live births in the three years prior to the survey attended by skilled health personnel (doctor, nurse, midwife or auxiliary midwife)
4.	Measles vaccination (MSL)	Percentage of children aged 12–23 months who are immunized against measles
5.	Diphtheria, pertussis and tetanus vaccination (three doses of combined diphtheria/pertussis/tetanus vaccine)	Percentage of children aged 12–23 months who received three doses of DPT vaccine
6.	BCG vaccination	Percentage of children age 1–23 months currently vaccinated against BCG
7.	Oral rehydration therapy (ORT)	Percentage of under-five children with diarrhoea in the last two weeks who received ORT (ORS packets, recommended home solution or increased fluids) and continued feeding
8.	Treatment of acute respiratory infection (ARI)	Percentage of children aged 0–59 months with suspected pneumonia (cough and dyspnoea) who sought care from a health provider

#### 2. Calculation of the coverage gap index

The coverage gap index was calculated using the formula:

$$100 \text{ per cent} - ((\text{ORT} + \text{ARI})/2 + \text{FP} + [\text{SBA} + \text{ANC}]/2 + [\text{MSL} + 2 * \text{DPT3} + \text{BCG}]/4)/4$$

Each of the four intervention areas is given equal weight.

Note: If need satisfied for family planning (FP) was not available, the contraceptive prevalence rate (CPR) among married women 15–49 years was used to estimate the need satisfied according to the following formula:  $\text{FP} = \text{CPR} * 1.07 + 27$ . This formula was derived from analysis of more than 100 Demographic and Health Surveys with data on both unmet need and contraceptive prevalence rate.

#### 3. Wealth index

The coverage gap index was calculated for the total sample for each country and data point. To measure equity, one needs to divide the total sample into groups by socioeconomic status. The Demographic and Health Surveys and Multiple Indicator Cluster Survey do not collect information on income and expenditure, which could be used to divide the sample into socioeconomic groups. However, the Demographic and Health Surveys and Multiple Indicator Cluster Survey do collect information on asset ownership and availability of basic household services. For the purposes of analyzing socioeconomic inequalities in health, it has been shown that using such variables to develop an index of socioeconomic status leads to similar results as using income and/or expenditure data.<sup>1</sup>

For coverage of health interventions in the Demographic and Health Surveys, we used data from an analysis conducted by Gwatkin and colleagues (2005). They used information in Demographic and Health Surveys on household assets and access to basic household services to construct a wealth index.<sup>2</sup> The index was used to

rank households and then divide the household population into quintiles. Results from recent Demographic and Health Surveys results were also included. For Multiple Indicator Cluster Surveys, we used data provided by UNICEF through the MICS website (<http://childinfo.org>) for those countries and data points for which a wealth index had been constructed.<sup>3</sup>

#### 4. Explanation and interpretation of coverage gap graph

The x-axis shows the wealth quintiles; from the poorest 20 per cent to the best-off 20 per cent. The y-axis shows the coverage gap, which is measured as a percentage as explained in section 2. No percentage gap implies maximum coverage for all interventions. A 20 per cent gap means that the coverage as calculated in the index is 80 per cent. Given that the gap is measured as maximum coverage minus actual coverage, a low figure is preferable to a high figure.

The difference between the poorest and richest quintiles and shape of the line show the patterns of inequality within a country. First, the greater the inequality between the poorest and richest quintiles, the steeper the downward slope. With a few exceptions, the coverage gap line declines as one moves from the poorest quintile to the best-off quintile in the country profiles. A horizontal line indicates relative equity, which was observed in some of the surveys in Central Asian Republics.

The shape is equally important.<sup>4</sup> The way the lines are curved can illustrate where inequities are concentrated. There are three main patterns. First, bottom inequity occurs when the poorest lag behind. Second, top inequity occurs when the richest do substantially better than the other quintiles. The intermediate pattern is more or less linear. The coverage gap increases by a similar fraction as one goes from the richest to the poorest quintile.

The shape of the coverage gap line can inform policies to address inequities. Many country graphs have relatively straight downward-sloping lines from the poorest to the best-off quintile, which would suggest that efforts should be made to increase the overall coverage of interventions, but with special attention paid to the poor. A top inequity pattern, as illustrated in the Burkina Faso and Niger country profiles, with a relatively small coverage gap among the best off 20 per cent, suggests that inequities would be reduced by raising the overall population coverage of interventions.

A downward slope from the poorest quintile to the second-poorest quintile and then a more or less straight line (or at least less steep) to the best-off quintile would be an example of bottom inequity, as shown in the Brazil country profile. Such a pattern indicates that inequities are concentrated among the poorest and that the most appropriate policy response would be to target that particular group.

For coverage gap graphs with data from two or more surveys, it can also be used to analyze trends, both by overall levels by wealth quintile and patterns between quintiles. A good example of the change from top inequity to linear pattern to bottom inequity as the overall coverage gap is reduced over time is Nepal between 1996 and 2006.

#### 5. Explanation and interpretation of coverage gap ratio

The 'coverage gap ratio' was derived by dividing the coverage gap for the poorest quintile with that of the best-off quintile. A ratio of 1 indicates equity in coverage in terms of comparing those two quintiles (there could still be inequities with regards to the three middle quintiles). A ratio of less than 1 indicates a lower coverage gap (higher coverage of interventions) among the poor, while a ratio of more than 1 indicates a lower coverage gap among the best-off. The higher the ratio, the more inequity there is in coverage of interventions.

#### 6. Explanation and interpretation of coverage gap difference

The difference is derived by subtracting the coverage gap of the best-off quintile from that of the poorest quintile. A positive difference implies that the coverage gap is larger among the poor; that is, coverage of interventions is lower among the poor. A relatively large poorest–best-off difference can occur in all patterns: top or bottom inequality or linear patterns. A small difference tends to occur in countries with smaller coverage gaps.

#### Notes:

<sup>1</sup> Wagstaff and Watanabe 2003.

<sup>2</sup> Gwatkin, Rutstein, Johnson, and others 2005.

<sup>3</sup> For more information on the calculation of the wealth index from DHS and MICS data, please refer to Rutstein and Johnson 2004.

<sup>4</sup> Victora, Fenn, Bryce and Kirkwood 2005.

## Annex F

### Countdown priority countries considered to be malaria endemic

Table F1. *Plasmodium falciparum* transmission risk in Countdown priority countries. This table indicates which of the Countdown priority countries are malaria endemic – defined as having a documented risk of *Plasmodium falciparum* transmission nationwide and throughout the year – and, of the remainder, which countries have subnational risk, mostly *P. vivax*, no risk or very limited risk.

Malaria endemic countries (n=45)	Countries with subnational risk of <i>Plasmodium falciparum</i> transmission (n=14)	Countries with mostly <i>P. vivax</i> , no <i>Plasmodium falciparum</i> or very limited risk (n=9)
Afghanistan	Bolivia	Azerbaijan
Angola	Brazil	Egypt
Bangladesh	China	Guatemala
Benin	Haiti	Iraq
Botswana	India	Korea Democratic Republic of
Burkina Faso	Indonesia	Lesotho
Burundi	Mauritania	Mexico
Cambodia <sup>a</sup>	Nepal	Morocco
Cameroon	Peru	Turkmenistan
Central African Republic	Philippines	
Chad	South Africa	
Congo	Swaziland	
Congo Democratic Republic of the	Tajikistan	
Cote d'Ivoire	Yemen	
Djibouti		
Equatorial Guinea		
Eritrea		
Ethiopia <sup>a</sup>		
Gabon		
Gambia, The		
Ghana		
Guinea		
Guinea-Bissau		
Kenya <sup>a</sup>		
Lao People's Democratic Republic		
Liberia		
Madagascar		
Malawi		
Mali		
Mozambique		
Myanmar <sup>a</sup>		
Niger		
Nigeria		
Pakistan <sup>a</sup>		
Papua New Guinea <sup>a</sup>		
Rwanda		
Senegal <sup>a</sup>		
Sierra Leone		
Somalia		
Sudan <sup>a</sup>		
Tanzania, United Republic of		
Togo		
Uganda		
Zambia		
Zimbabwe		

Note:

a. Countries having lower risk of *Plasmodium falciparum* transmission in identifiable areas (such as certain urban centres), but with highest prevention strategy still recommended nationwide.

Source: World Health Organization International Travel and Health Report