

## Annex A

### Country profile indicators and data sources

Indicator		Data source	Global database
<b>Demographics</b>			
Demographics	Total population	United Nations Population Division	United Nations Population Division
	Total children under-five population	United Nations Population Division	United Nations Population Division
	Total births	United Nations Population Division	United Nations Population Division
	Birth registration	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund
Child mortality	Under-five mortality rate	Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Infant mortality rate	Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Neonatal mortality rate	World Health Organization	World Health Organization
	Total deaths for children under age 5	Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Cause of death of children under age 5	World Health Organization/Child Health Epidemiology Reference Group	World Health Organization/Child Health Epidemiology Reference Group
	Causes of neonatal deaths	World Health Organization/Child Health Epidemiology Reference Group	World Health Organization/Child Health Epidemiology Reference Group
Maternal mortality	Maternal mortality ratio (adjusted)	World Health Organization/United Nations Children's Fund/United Nations Population Fund/World Bank	World Health Organization/United Nations Children's Fund/United Nations Population Fund/World Bank
	Lifetime risk of maternal death	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Bank	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Bank
	Total maternal deaths	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Bank	United Nations Children's Fund/World Health Organization/United Nations Population Fund/World Bank
	Maternal deaths by cause (regional)	World Health Organization	World Health Organization
<b>Nutrition</b>			
Anthropometry	Underweight prevalence	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund/World Health Organization
	Stunting prevalence	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund/World Health Organization
	Wasting prevalence	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund/World Health Organization
Infant feeding	Exclusive breastfeeding rate (<6 months)	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
	Complementary feeding rate (6-9 months)	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
Low birthweight	Low birthweight incidence	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
Micronutrient supplementation	Vitamin A supplementation (2 doses)	National Immunization Days Reporting, Demographic and Health Surveys, Multiple Indicator Cluster Survey, Routine reporting	United Nations Children's Fund
<b>Child health</b>			
Immunization	Measles immunization coverage	Routine reporting, Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
	Three doses of combined diphtheria/pertussis/tetanus vaccine immunization coverage (DPT)	Routine reporting, Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
	Hib3 immunization coverage	Routine reporting, Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
Malaria	Children under age 5 sleeping under insecticide-treated nets	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Malaria Indicator Surveys	United Nations Children's Fund

Indicator		Data source	Global database
	Antimalarial treatment (children under age 5 with fever)	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Malaria Indicator Surveys	United Nations Children's Fund
Pneumonia	Careseeking for pneumonia	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund
	Antibiotic treatment for pneumonia	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund
Diarrhoeal diseases	Oral rehydration therapy and continued feeding	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund
AIDS	HIV-positive pregnant women receiving antiretrovirals for prevention of mother-to-child transmission of HIV	Ministries of Health, Joint United Nations Programme on HIV/AIDS	United Nations Children's Fund
<b>Maternal and newborn health</b>			
Adolescent birth rate	Adolescent birth rate	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys	United Nations Population Fund/United Nations Population Division
Unmet need	Unmet need for family planning	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Population Fund
Antenatal care	Antenatal care (at least one visit)	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys	United Nations Children's Fund
	Antenatal care (four or more visits)	Demographic and Health Surveys, Reproductive Health Survey, other national surveys	United Nations Children's Fund
Intermittent preventive treatment of malaria during pregnancy	Intermittent preventive treatment for pregnant women	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund
Neonatal tetanus protection	Neonatal tetanus protection	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund/World Health Organization
Delivery care	Skilled attendant at birth	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys	United Nations Children's Fund
Caesarean section	Caesarean section rate	Demographic and Health Surveys, Reproductive Health Survey, other national surveys	United Nations Children's Fund
Postnatal visit	Postnatal visit for mother	Demographic and Health Surveys	Special data analysis by Saving Newborn Lives
	Postnatal visit for newborn	Demographic and Health Surveys	Special data analysis by Saving Newborn Lives
Breastfeeding	Early initiation of breastfeeding	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
Contraceptive prevalence	Contraceptive prevalence rate	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys	United Nations Population Fund/United Nations Population Division
<b>Water and sanitation</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 equities</b>			
Policies	International code of marketing of breastmilk substitutes	World Health Organization/ United Nations Children's Fund	Special data compilation by World Health Organization and the United Nations Children's Fund
	New oral rehydration salts formula and zinc for management of diarrhoea	World Health Organization/ United Nations Children's Fund	Special data compilation by World Health Organization and the United Nations Children's Fund
	Community treatment of pneumonia with antibiotics	World Health Organization/ United Nations Children's Fund	Special data compilation by World Health Organization and the United Nations Children's Fund
	Integrated management of childhood illness adapted to cover newborns ages 0–1 week	World Health Organization	Special data compilation by World Health Organization
	Costed implementation plan for maternal, newborn and child health available	World Health Organization	Special data compilation by World Health Organization
	Midwives authorized to administer a core set of life-saving interventions	World Health Organization	Special data compilation by World Health Organization

Indicator		Data source	Global database
	Maternity protection in accordance with International Labour Organization Convention 183	International Labour Organization Database of Conditions of Work and Employment Laws – Maternity Protection	International Labour Organization
	Specific notification of maternal deaths	World Health Organization	Special data compilation by World Health Organization
Systems	Per capita expenditure on health	World Health Organization, <i>International Travel and Health Report 2010</i>	World Health Organization
	General government expenditure on health as percentage of total government expenditure	World Health Organization, <i>International Travel and Health Report 2010</i>	World Health Organization
	Out-of-pocket expenditure as percentage of total expenditure on health	World Health Organization, <i>International Travel and Health Report 2010</i>	World Health Organization
	Density of doctors, midwives and nurses per 10,000 population	World Health Organization, <i>Global Atlas of the Health Workforce</i>	World Health Organization
	Official development assistance to child health per child	Organisation for Economic Co-operation and Development/Development Assistance Committee	London School of Health and Tropical Medicine
	Official development assistance to maternal and neonatal health per live birth	Organisation for Economic Co-operation and Development/Development Assistance Committee	London School of Health and Tropical Medicine
	National availability of emergency obstetric care services	Averting Maternal Death and Disability Project and United Nations Children's Fund analysis from available emergency obstetric care surveys	Averting Maternal Death and Disability/United Nations Children's Fund
Equity	Coverage gap by wealth quintile (based on a weighted average of coverage levels of reproductive, maternal, newborn and child interventions)	Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil, and the World Health Organization

## Annex B

### Definitions of Countdown indicators

Intervention	Indicator definition	Numerator	Denominator
<b>Nutrition</b>			
Exclusive breastfeeding (<6 months)	Percentage of infants ages 0–5 months who are exclusively breastfed	Number of infants ages 0–5 months who are exclusively breastfed	Total number of infants ages 0–5 months surveyed
Complementary feeding (6–9 months)	Percentage of infants ages 6–9 months who are breastfed and receive complementary food	Number of infants ages 6–9 months who are breastfed and receive complementary food	Total number of infants ages 6–9 months surveyed
Vitamin A supplementation	Percentage of children ages 6–59 months who received two doses of vitamin A during the calendar year	Number of children ages 6–59 months who received two doses of vitamin A during the calendar year	Total number of children ages 6–59 months
<b>Child health</b>			
Measles immunization coverage	Percentage of infants immunized with measles containing vaccine	Number of children ages 12–23 months who are immunized against measles	Total number of children ages 12–23 months surveyed
Three doses of combined diphtheria/pertussis/tetanus (DPT) vaccine immunization coverage	Percentage of infants who received three doses of diphtheria/pertussis/tetanus vaccine	Number of children ages 12–23 months receiving three doses of diphtheria/pertussis/tetanus vaccine	Total number of children ages 12–23 months surveyed
Three doses of <i>Haemophilus influenzae</i> type B immunization coverage	Percentage of infants who received three doses of <i>Haemophilus influenzae</i> type B vaccine	Number of children ages 12–23 months receiving three doses of <i>Haemophilus influenzae</i> type B vaccine	Total number of children ages 12–23 months surveyed
Oral rehydration therapy and continued feeding	Percentage of children ages 0–59 months with diarrhoea receiving oral rehydration therapy and continued feeding	Number of children ages 0–59 months with diarrhoea in the two 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 ages 0–59 months with diarrhoea in the two weeks prior to the survey
Insecticide-treated net use	Percentage of children ages 0–59 months sleeping under an insecticide-treated mosquito net	Number of children ages 0–59 months sleeping under an insecticide-treated mosquito net the night before the survey	Total number of children ages 0–59 months surveyed
Antimalarial treatment	Percentage of children ages 0–59 months with fever receiving any appropriate antimalarial drugs	Number of children ages 0–59 months reported to have fever in the two weeks prior to the survey who were treated with any appropriate antimalarial	Total number of children ages 0–59 months reported to have fever in the two weeks prior to the survey
Prevention of mother-to-child transmission of HIV	Percentage of HIV-infected pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	Number of HIV-infected pregnant women who received antiretrovirals in the last 12 months to reduce mother-to-child transmission	Estimated unrounded number of HIV-infected pregnant women <sup>a</sup>
Careseeking for pneumonia	Percentage of children ages 0–59 months with suspected pneumonia taken to an appropriate health provider	Number of children ages 0–59 months with suspected pneumonia in the two weeks prior to the survey who were taken to an appropriate health provider	Total number of children ages 0–59 months with suspected pneumonia in the two weeks prior to the survey
Antibiotic treatment for pneumonia	Percentage of children ages 0–59 months with suspected pneumonia receiving antibiotics	Number of children ages 0–59 months with suspected pneumonia in the two weeks prior to the survey receiving antibiotics	Total number of children ages 0–59 months with suspected pneumonia in the two weeks prior to the survey
<b>Maternal and newborn health</b>			
Contraceptive prevalence	Percentage of women currently married or in union ages 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 ages 15–49 years that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Total number of women ages 15–49 that are currently married or in union
Adolescent birth rate	Number of births to adolescent women per 1,000 adolescent women <sup>b</sup>	Number of live births to adolescent women ages 15–19	1,000 adolescent women ages 15–19
Unmet need for family planning	Percentage of women who are currently married or in union that have an unmet need for contraception	Number of women who are currently married or in union that are fecund and want to space their births or limit the number of children they have but that are not currently using contraception	Total number of women who are currently married or in union
Antenatal care (at least one visit)	Percentage of women attended at least once during pregnancy by skilled health personnel for reasons related to the pregnancy	Number of women attended at least once during pregnancy by skilled health personnel (doctor, nurse, midwife or auxiliary midwife) 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
Antenatal care (four 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	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
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 two doses of tetanus toxoid vaccine within the appropriate interval prior to the infant's birth	Total number of women ages 15–49 with a live birth in the year prior to the survey

Intervention	Indicator definition	Numerator	Denominator
Intermittent preventive treatment for malaria during pregnancy	Percentage 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 sulfadoxine-pyrimethamine (Fansidar™) to prevent malaria during their last pregnancy that led to a live birth	Total number of women surveyed who delivered a live newborn within the last two years
Skilled attendant at birth	Percentage of live births attended by skilled health personnel	Number of live births to women ages 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 ages 15–49 years in the X years prior to the survey <sup>c</sup>
Caesarean section rate	Percentage of live births delivered by Caesarean section	Number of live births to women ages 15–49 years in the X years prior to the survey delivered by caesarean section	Total number of live births to women ages 15–49 years in the X years prior to the survey
Early initiation of breastfeeding	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>d</sup>
Postnatal care for mothers <sup>e</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 ages 15–49 years with a last live birth in the x years prior to the survey (regardless of place of delivery)
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>f</sup>	Total number of last-born babies born outside of a health facility in the X years prior to the survey <sup>g</sup>
<b>Water and sanitation</b>			
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
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).
- Also referred to as the age-specific fertility rate for women ages 15–19.
- The reference period may differ between surveys.
- The reference period may differ between surveys.
- As used for postnatal care in figure 4.
- Information on postnatal care for babies who were born in health facilities has historically not been collected by Demographic and Health Surveys.
- This denominator differs from the all births denominator used for the indicator for postnatal care for mother. Therefore, the coverage for mother and newborn cannot be compared.

## Annex C

### Definitions of policy and health systems indicators

Indicator	Indicator definition	Criteria for ranking
Midwives authorized to administer a core set of life-saving interventions	National policy adopted authorizing midwives to administer the following: <ul style="list-style-type: none"> <li>• parental antibiotics</li> <li>• parental oxytocics</li> <li>• parental anticonvulsants</li> <li>• manual removal of placenta</li> <li>• removal of retained products of conception</li> <li>• assisted vaginal delivery</li> <li>• newborn resuscitation</li> </ul>	Yes: midwives authorized for all tasks  Partial: midwives authorized for some tasks  No: midwives not authorized for any of these tasks
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
Integrated management of childhood illness adapted to cover newborns ages 0–1 week	National integrated management of childhood illness guidelines adapted to cover major conditions affecting newborn survival in the first week of life	Yes: National integrated management of childhood illness guidelines adapted and in line with World Health Organization generic guidelines 2006  Partial: National integrated management of childhood illness guidelines adapted but not fully in line with World Health Organization generic guidelines 2006  No: National integrated management of childhood illness guidelines not adapted
New oral rehydration salts formula and zinc for management of diarrhoea	National policy guidelines adopted on management of diarrhoea with low osmolarity oral rehydration salts and zinc supplements	Yes: low osmolarity oral rehydration salts and zinc supplements in national policy  Partial: low osmolarity oral rehydration salts or zinc supplements in national policy  No: low osmolarity oral rehydration salts and zinc supplements not promoted in national policy
Community treatment 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
Maternity protection in accordance with International Labour Organization Convention 183	International Labour Organization Convention 183 ratified by the country or national legislation in compliance with three key provisions of International Labour Organization Convention 183 (length of maternity leave and level and source of funding of maternity benefits—namely 14 weeks paid at 66% of previous earnings by social security or general revenue)	Yes: International Labour Organization Convention 183 ratified (maternity leave of at least 14 weeks with cash benefits of previous earnings paid by social security or public funds)  Partial: International Labour Organization Convention 183 not ratified but previous maternity convention ratified (maternity leave of at least 12 weeks with cash benefit paid by social security or public funds)  No: no ratification of any maternity protection convention
International Code of Marketing of Breastmilk Substitutes	National policy adopted on all provisions stipulated in the International Code of Marketing of Breastmilk Substitutes	Yes: all provisions of the International Code of Marketing of Breastmilk Substitutes adopted in legislation  Partial: voluntary agreements or some provisions of the International Code of Marketing of Breastmilk Substitutes adopted in legislation  No: no legislation and no voluntary agreements adopted in relation to the International Code of Marketing of Breastmilk Substitutes
Costed implementation 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 maternal, newborn and child health available
Per capita expenditure on health (at international dollar rate)	Data on per capita health expenditure in international dollars for 2004 in this edition of <i>Countdown</i> are not comparable with data in previous editions because the estimates in this edition are based on the new purchasing power parity series from the World Bank's 2005 International Comparison Program. Data for 2004 and 2006 in this edition are fully comparable.	Numerical
Per capita expenditure on health as percentage of total government expenditure		Numerical

Indicator	Indicator definition	Criteria for ranking
Out-of-pocket expenditure as percentage of total expenditure on health		Numerical
Density of health workers per 10,000 population	Total number of physicians, nurses and midwives relative to the overall population	Numerical minimum standard: 23 health workers per 10,000 people needed to deliver basic maternal and child health services
Availability of emergency obstetric care services as percentage of recommended minimum	Minimum recommended is five emergency obstetric care facilities per 500,000 people, including one comprehensive and four 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> .)	<p><i>Availability</i> is expressed as a percentage of the minimum acceptable number of emergency obstetric care facilities</p> <p>The <i>minimum acceptable number of emergency obstetric care facilities</i> (comprehensive and basic) is calculated by dividing the population by 500,000 and multiplying by 5</p> <p>The <i>percentage of recommended minimum number of emergency obstetric care facilities</i> is calculated by dividing the number of functioning emergency obstetric care facilities by the recommended number and multiplying by 100. To qualify as a fully functioning basic or comprehensive emergency obstetric care facility, a facility must provide a standard set of signal functions</p>

## Annex D

### Technical notes on measuring equity in reproductive, maternal, newborn and child health through the coverage gap index

#### Coverage indicators

The measure of equity constructed for the *Countdown* report is the coverage gap index. For guidance on interpreting the coverage gap graphs in the country profiles, please see the section on explanation and interpretation of coverage gap below. The coverage gap index combines information on four intervention areas across the continuum of care: family planning, maternal and newborn care, immunization and treatment of sick children. Data from Demographic and Health Surveys and Multiple Indicator Cluster Surveys on eight coverage indicators in these four intervention areas was used to construct the coverage gap index (table D1).

#### Calculation of the coverage gap index

The coverage gap index was calculated using the formula:

$$100\% - ([ORT + ARI] / 2 + FPS + [SBA + ANC] / 2 + [MSL + 2 * DPT3 + BCG] / 4) / 4$$

Each of the four intervention areas is given equal weight.

If need data on need for family planning satisfied were not available, the contraceptive prevalence

rate among married women ages 15–49 was used to estimate the need satisfied according to the following formula:  $FPS = CPR * 1.07 + 27$ . This formula was derived from analysis of more than 100 Demographic and Health Surveys with data on both unmet need and contraceptive prevalence rate.

#### Wealth index

The coverage gap index was calculated for the total sample for each country and data point. To measure equity, the total sample must be divided into groups by socioeconomic status. Demographic and Health Surveys and Multiple Indicator Cluster Surveys do not collect information on income and expenditure, which could be used to do this. But the surveys 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 or expenditure data.<sup>40</sup>

For coverage of health interventions in the Demographic and Health Surveys, data from an analysis by Gwatkin and others (2007) were used. They took information on household assets and access to basic household services from Demographic and Health Surveys to construct a wealth index. The index was used to rank households and then divide the household population into quintiles. Results from recent

TABLE D1  
Coverage gap index indicator definitions

Number	Indicator	Definition
1a.	Need for family planning satisfied (FPS)	Percentage of currently married women who are fecund and say that they do not want any more children or that they want to wait two or more years before having another child or who had a unwanted pregnancy in the previous six months that are using contraception (any method)
1b.	Contraceptive prevalence rate (CPR)	Percentage of women ages 15–49 currently married or in union who 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 ages 12–23 months who are immunized against measles
5.	Diphtheria, pertussis and tetanus vaccination (three doses of combined DPT vaccine)	Percentage of children ages 12–23 months who received three doses of DPT vaccine
6.	BCG vaccination (BCG)	Percentage of children age 1–23 months currently vaccinated against BCG
7.	Oral rehydration therapy (ORT)	Percentage of children under age 5 with diarrhoea in the last two weeks who received oral rehydration therapy (oral rehydration salts packets, recommended home solution or increased fluids) and continued feeding
8.	Treatment of acute respiratory infection (ARI)	Percentage of children ages 0–59 months with suspected pneumonia (cough and dyspnoea) who sought care from a health provider

Demographic and Health Surveys results were also included. For Multiple Indicator Cluster Surveys, data from the United Nations Children's Fund's Multiple Indicator Cluster Surveys website (<http://childinfo.org>) were used for those countries as well as data points for which a wealth index had been constructed.<sup>41</sup>

### **Explanation and interpretation of coverage gap graph**

The x-axis shows the wealth quintiles; from the poorest quintile to the best-off quintile. The y-axis shows the mean coverage of the selected interventions (in green, bottom part of the area chart) and the coverage gap (in red, top part of the area chart). The coverage gap represents how much the mean coverage is below 100%.

The difference between the poorest and richest quintiles and the 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 upward slope of the mean coverage line. With a few exceptions, the green area increases moving from the poorest quintile to the best-off quintile in the country profiles, showing higher coverage (and therefore a smaller gap) among the better off.

The shape of the area is equally important.<sup>42</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. Coverage increases by a similar fraction as one goes from the poorest to the richest quintile.

The shape of the coverage gap line can inform policies to address inequities. Many country graphs have relatively straight upward-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 Nigeria and Uganda country profiles, with a relatively small coverage gap among the best-off quintile, suggests that inequities would be reduced by raising the overall population coverage of interventions.

An upward 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 South Africa 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.

**Annex E**  
**Countdown priority countries considered to be malaria endemic**

Table E1 indicates which *Countdown* priority countries are malaria endemic—defined as having a documented risk of *Plasmodium falciparum* transmission nationwide and throughout the year—and which countries have subnational risk, mostly *p. vivax*, no risk or very limited risk.

TABLE E1

***Plasmodium falciparum* transmission risk in Countdown countries**

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	Kenya <sup>a</sup>	Bolivia	Azerbaijan
Angola	Lao PDR	Brazil	Egypt
Bangladesh	Liberia	China	Guatemala
Benin	Madagascar	Haiti	Iraq
Botswana	Malawi	India	Korea, Dem. Rep.
Burkina Faso	Mali	Indonesia	Lesotho
Burundi	Mozambique	Mauritania	Mexico
Cambodia <sup>a</sup>	Myanmar <sup>a</sup>	Nepal	Morocco
Cameroon	Niger	Peru	Turkmenistan
Central African Republic	Nigeria	Philippines	
Chad	Pakistan <sup>a</sup>	South Africa	
Congo	Papua New Guinea <sup>a</sup>	Swaziland	
Congo, Dem. Rep. of the	Rwanda	Tajikistan	
Côte d'Ivoire	Senegal <sup>a</sup>	Yemen	
Djibouti	Sierra Leone		
Equatorial Guinea	Somalia		
Eritrea	Sudan <sup>a</sup>		
Ethiopia <sup>a</sup>	Tanzania, U. Rep.		
Gabon	Togo		
Gambia	Uganda		
Ghana	Zambia		
Guinea	Zimbabwe		
Guinea-Bissau			

a. Country has lower risk of *Plasmodium falciparum* transmission in identifiable areas (such as certain urban centres) but the highest prevention strategy is still recommended nationwide.

Source: WHO 2010.

## **Annex F**

### **Details on estimates from the Inter-agency Group for Child Mortality Estimation used in the *Countdown* report**

#### **Child mortality estimates**

The child mortality estimates in this report (infant mortality rate, under-five mortality rate and under-five deaths) are based on the work of the Inter-agency Group for Child Mortality Estimation, which includes the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), the United Nations Population Division and the World Bank. The estimates are the official UN estimates for measuring progress towards Millennium Development Goal 4—reducing child mortality. The Inter-agency Group for Child Mortality Estimation compiles data available from all possible nationally representative sources for a country, including household surveys, censuses, vital registration and then like, and uses a model to fit a regression line to the data to produce the mortality estimates. Estimates are updated every year after a detailed review of all newly available data points. The review occasionally results in adjustments to previously reported estimates. The full time series for all countries is published at [www.childinfo.org](http://www.childinfo.org) and [www.childmortality.org](http://www.childmortality.org).

#### **Maternal mortality estimates**

Maternal mortality estimates for 2005 are based on the work of an interagency group comprising the WHO, UNICEF, the United Nations Population Fund and the World Bank. The model-based estimates use a dual approach to take into account the frequent underreporting and misclassification of maternal deaths. For more information, see WHO, UNICEF, UNFPA and World Bank (2007).

#### **Immunization**

The immunization data published in this report are based on the work of the WHO and UNICEF. The estimates should not be confused with other sources of information, such as Demographic and Health Surveys, Multiple Indicator Cluster Surveys, or Ministries of Health. The WHO and UNICEF derive national estimates of immunization coverage each year and send each country a draft report for review. Based on comments and new evidence from the country reviews, final reports are published in August with data for the preceding year. All new evidence, such as final survey reports received after publication, are taken into consideration for the following year's estimates. For each country's final report for 2008 as well as data sources and a description of trends, see [www.childinfo.org](http://www.childinfo.org).

#### **Water and Sanitation**

The drinking water and sanitation coverage estimates are produced by the WHO–UNICEF Joint Monitoring Programme for Water Supply and Sanitation. The estimates are the official UN estimates for measuring progress towards the Millennium Development Goal targets for drinking water and sanitation. They use a standard classification of what constitutes coverage. The Joint Monitoring Programme does not report the findings of the latest nationally representative household survey or census. Instead, it estimates coverage using a linear regression line that is based on coverage data from all available household sample surveys and census. For specific country data, see [www.childinfo.org](http://www.childinfo.org) and [www.wssinfo.org](http://www.wssinfo.org).

## Annex G

### Calculating the financing gap for maternal, newborn and child health

To project likely trends of financial flows to maternal, newborn and child health over 2008–2015, a spreadsheet model was developed covering two scenarios: a business as usual scenario based on past experience and a public commitments scenario based on national government and bilateral donor commitments (see table G1 for the main assumptions of the model).

To estimate the financing gap, forecasted expenditure was compared with costs of scaling

up maternal, newborn and child interventions. The costs used were estimated by the Millennium Development Goals 4 and 5 costing and impact estimate group for the Global Campaign for the Health Millennium Development Goals (2008).

Data were converted from nominal values in national currency units into real data with a 2007 base year using country-specific consumer price index growth rates and then converted into U.S. dollars using International Monetary Fund exchange rates.

The complete aid activities database for 2007 was analyzed and coded according to the methodology used in Powell-Jackson and others

TABLE G1

#### Assumptions of the two scenarios in the model for projecting financial flows to maternal, newborn and child health

Variable	Scenario 1: business as usual	Scenario 2: public commitments	Source
<b>Panel A: General government health expenditure</b>			
GDP forecast	Country-specific annual growth rates		International Monetary Fund <i>World Economic Outlook</i>
Ratio of general government expenditure to GDP	Average 2000–2007		World Health Organization and International Monetary Fund historic data
Ratio of general government expenditure for health to general government expenditure	Average 2000–2007	Linear increase to 15% for African countries  Linear increase to 12% for non-African countries	World Health Organization historic data  Abuja Declaration
Distribution of external health expenditure among public and private financing agents	70% government financing agents  30% private financing agents		Mean of estimates from national health accounts reports
<b>Panel B: Private health expenditure</b>			
Private health expenditure	Increases in line with real GDP growth from 2007 baseline value		Best estimate
Distribution of external health expenditure among public and private financing agents	70% government financing agents  30% private financing agents		Mean of estimates from national health accounts reports
<b>Panel C: external health expenditure</b>			
Annual real GDP growth in donor countries	2% a year		Organisation for Economic Co-operation and Development/Development Assistance Committee projections of net official development assistance
Ratio of official development assistance to GDP in donor countries	2008–2015 remains constant at 2007 ratio	Linear increase to 0.7% in 2015, or the ratio committed to in 2010, whichever is higher. Exceptions are Japan and the United States : linear increase to 0.3% in 2015	Organisation for Economic Co-operation and Development/Development Assistance Committee 2007 data  Organisation for Economic Co-operation and Development/Development Assistance Committee projections of net official development assistance
Distribution of official development assistance to health and across study countries	2008–2015 remains constant at 2007 apportionment		Organisation for Economic Co-operation and Development Creditor Reporting System 2007 data
<b>Panel D: maternal, newborn and child health expenditure</b>			
Ratio of maternal, newborn and child health expenditure to health expenditure	Government expenditure: 25%  Private expenditure: 25%  External expenditure: 25%		National health accounts reports

(2006) and Greco and others (2010). This is a preliminary analysis; a final analysis of the 2007 and 2008 data will be completed by December 2010.

All 22 donor countries and the EU members of the Organisation for Economic Co-operation and Development's Development Assistance Committee were included. In addition, the World Bank, UNICEF, the Joint United Nations Programme on HIV/AIDS, the Global Alliance for Vaccines and Immunisation and the Global Fund to Fight AIDS, Tuberculosis and Malaria were included as multilateral development organizations and global health funds. After two years of nonreporting, the United Nations Population Fund

reported data for 2007, so its disbursements are also included.

For all but one donor, the analysis used data from the Organisation for Economic Co-operation and Development Creditor Reporting System database ([www.oecd.org/dac/stats/idsonline](http://www.oecd.org/dac/stats/idsonline)). The Global Alliance for Vaccines and Immunisation provided disbursement data, which were also included in the analysis. Disbursements from the Global Fund to fight AIDS, Tuberculosis and Malaria were available in the Creditor Reporting System database, but data were cross-checked against the data on the Global Fund website and found to be consistent. The World Bank did not report disbursements, so its commitment data were used instead.