Annex A
About Countdown to 2015 for Maternal, Newborn and Child Survival

Countdown to 2015 for Maternal, Newborn and Child Survival is a global movement to track, stimulate and support country progress towards achieving the health-related Millennium Development Goals, particularly goals 4 (reduce child mortality) and 5 (improve maternal health). Established in 2003,[42] *Countdown* includes academics, governments, international agencies, professional associations, donors, nongovernmental organizations and other members of civil society, with *The Lancet* as a key partner. Members of the *Countdown* community share a common goal of using data to increase accountability for women's and children's health. *Countdown* specifically focuses on tracking coverage of a core set of evidence-based interventions proven to reduce maternal, newborn and child mortality.

What *Countdown* does

Countdown produces periodic publications, reports and other materials on key aspects of reproductive, maternal, newborn and child health, using data to hold stakeholders to account for global and national action.[43] At the core of *Countdown* reporting are two-page country profiles, updated approximately every two years, that present key demographic, nutritional status and mortality statistics; coverage levels and trends for proven reproductive, maternal, newborn and child health interventions; and policy, health system, financial and equity indicators to enable assessment of country progress in improving reproductive, maternal, newborn and child health. *Countdown* plays a central role in the follow-up to the UN Secretary-General's Global Strategy for Women's and Children's Health by annually updating one-page profiles showcasing the 11 indicators selected by the Commission on Information and Accountability for Women's and Children's Health.[44] *Countdown* also prepares equity profiles highlighting disparities in coverage in each of the 75 priority countries.

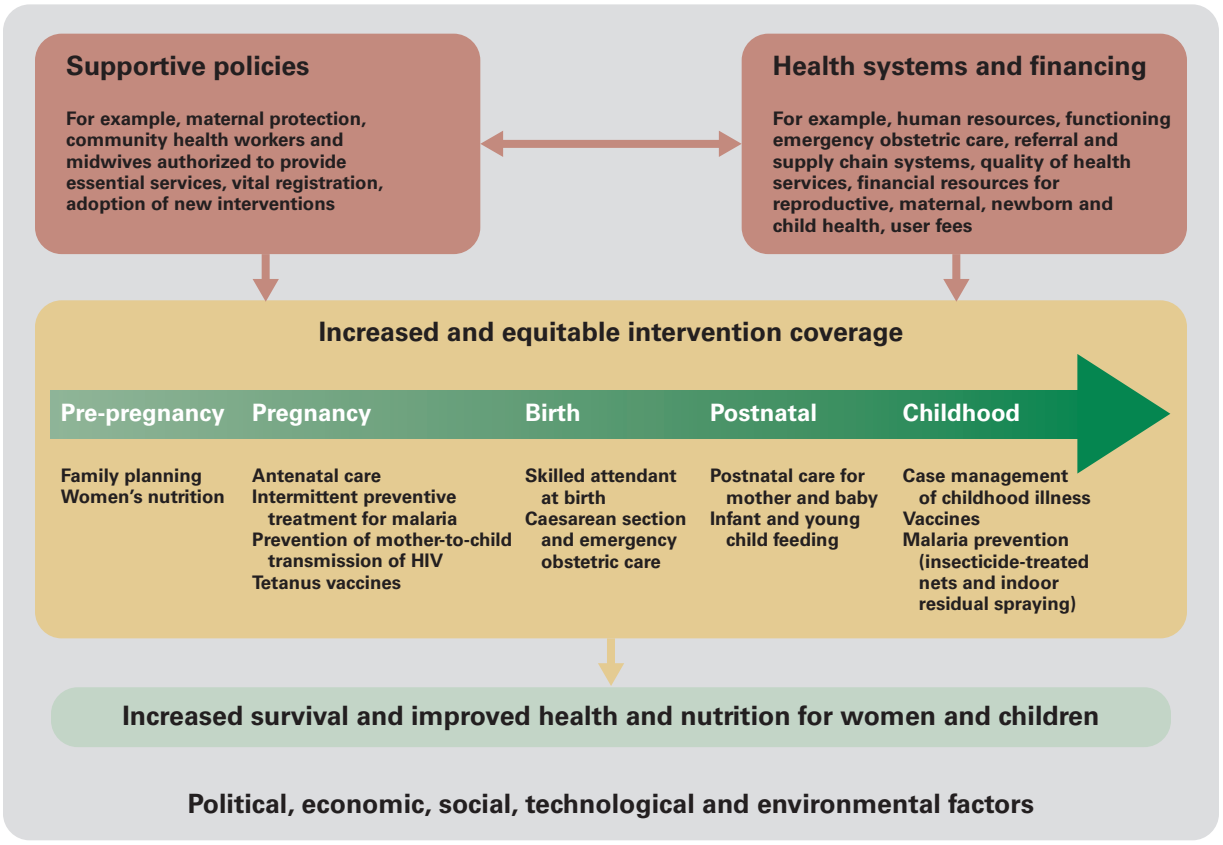
Countdown analyses are guided by a conceptual model (figure A1) consistent with the results-based evaluation framework for health systems strengthening that was developed by a working group of members from *Countdown*, the World Health Organization, the World Bank, the GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis and Malaria.[45] The model shows the range of indicators included in *Countdown's* four linked datasets on coverage, equity, policies and systems, and financial flows and illustrates possible pathways through which policy, systems and financing measures in a given context impact levels and trends in coverage of proven reproductive, maternal, newborn and child health interventions.

Countdown recognizes the paramount role of social, political, economic, cultural and environmental determinants in shaping population health. Many of these broader determinants influence health outcomes by increasing access, utilization and coverage with available life-saving interventions. Intervention coverage is thus the specific niche occupied by *Countdown* in the array of initiatives aimed at monitoring the Millennium Development Goals.

Countdown harnesses the global learning potential of its datasets through cross-cutting research and country case studies that allow for an in-depth exploration of the "how" and "why" of progress in reproductive, maternal, newborn and child health. These have been completed to date in Niger for child survival[46] and in Bangladesh for maternal survival,[47] with additional work nearing completion in Afghanistan, Pakistan, Ethiopia, Tanzania, Malawi and Peru.

FIGURE A1

Summary impact model guiding Countdown work



Annex B
Summary of *Countdown* data sources and analysis methods

Data sources

Most *Countdown* coverage, equity and nutrition data are from standardized, nationally representative household surveys, primarily Demographic and Health Surveys and Multiple Indicator Cluster Surveys. For national coverage estimates, *Countdown* reviews databases provided by stakeholder organizations, particularly the United Nations Children's Fund but also the United Nations Population Division and Save the Children, and extracts the data for the 75 *Countdown* countries.

Cause of death profiles are abstracted from World Health Organization statistical databases based on work by the Child Health Epidemiology Reference Group. As in past *Countdown* reports, the child mortality estimates are based on the work of the UN Inter-agency Group for Child Mortality Estimation—led by the United Nations Children's Fund and including the World Health Organization, the World Bank, the Population Division of the United Nations Department of Economic and Social Affairs and the United Nations Economic Commission for Latin America and the Caribbean Population Division—and are the official UN estimates for measuring progress towards Millennium Development Goal 4. The maternal mortality estimates are based on the work of an interagency group comprising the World Health Organization, the United Nations Children's Fund, the United Nations Population Fund and the World Bank.

Data for the *Countdown* health systems and policies indicators are abstracted from global databases maintained by the World Health Organization and other groups such as the International Labour Organization, routine monitoring data from UN organizations, national service delivery surveys (for emergency obstetric care data) and surveys administered to government authorities by the World Health Organization with responses validated by UN agencies at the country level. *Countdown* financing data are abstracted from datasets maintained by the Development Assistance Committee of the Organisation for Economic Co-operation and Development.

Analysis methods

Countdown assesses progress at the country level, so it uses the country as the unit of analysis when summarizing results across databases. The summary measure used for the coverage indicators is the median, which gives each of the 75 *Countdown* countries equal weight, and the range, which illustrates the extent of variation across countries. *Countdown* coverage data are compiled and analysed by the Institute for International Programs at the Johns Hopkins University in collaboration with the Countdown Coverage Working Group and the United Nations Children's Fund.

Summary estimates of coverage for 2014 include *Countdown* countries with available estimates for 2008–2012. A small number of data points for 2013 were available in time to be included in this report and are indicated in footnotes. To track coverage trends, subsets of countries with at least two data points for each indicator, one from 2000–2007 and one from 2008–2015, were used. The difference between the two summary point estimates were calculated for each indicator, as well as the proportion of the gap closed between the earlier estimate and 100% coverage.

Countdown tracks coverage ("the proportion of women and children in need of interventions who actually receive them") in preference to measures of "effective coverage" that include estimates of intervention effectiveness, access, use and service quality. Effective coverage metrics are difficult to use in global monitoring because they typically require data that are rarely available in *Countdown* countries and sometimes rely on modelling procedures that must then be unpacked to guide decisionmaking.

Two summary metrics of coverage are used in presenting the results. The first, the Composite Coverage Index, is a weighted average of eight interventions and reflects the performance of each *Countdown* country in achieving coverage along the continuum of care.[48] The second, the co-coverage index, reflects the extent to which individual women and their children are receiving eight well established preventive interventions. These interventions have been available in most if not all countries—even the poorest—for at least a decade.[49]

The equity analyses require that indicators be estimated for subgroups of the country population. Results are presented for selected individual coverage indicators as well as the two summary indices stratified by wealth quintiles.[50] Equity analyses are conducted by the International Center for Equity in Health at the University of Pelotas, Brazil, in collaboration with the *Countdown* Equity Technical Working Group.

Information on country-specific policies and systems indicators related to maternal and newborn health is reviewed and confirmed by technical staff at World Health Organization headquarters and country offices and maintained by the World Health Organization with inputs from the *Countdown* Health Systems and Policies Technical Working Group. The data on financial flows are compiled and analysed by a team at the London School of Hygiene and Tropical Medicine in collaboration with the *Countdown* Financial Flows Technical Working Group.

Additional information

Further detail on *Countdown's* data sources and methods are available in the published literature[51] and on the *Countdown* website (www.countdown2015mnch.org). *Countdown* databases are publicly available for free through the *Countdown* website (http://countdown2015mnch.org/about-countdown/countdown-data).

Annex C
Country profile indicators and data sources, organized by order of presentation in the profile

Indicator		Data source	Global database
Demographics			
Demographics	Total population	United Nations Population Division	United Nations Population Division
	Total under-five population	United Nations Population Division	United Nations Population Division
	Births	United Nations Population Division	United Nations Population Division
	Birth registration	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national household surveys, censuses and vital registration systems	United Nations Children's Fund
	Total fertility rate	United Nations Population Division	United Nations Population Division
	Adolescent birth rate	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys, civil registration systems and censuses	United Nations Population Division, United Nations Population Fund
Child mortality	Total under-five deaths	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Neonatal deaths as a proportion of all under-five deaths*	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Neonatal mortality rate	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Infant mortality rate	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Under-five mortality rate*	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)	The UN Inter-agency Group for Child Mortality Estimation (United Nations Children's Fund, World Health Organization, United Nations Population Division, World Bank)
	Causes of under-five deaths	World Health Organization, Child Health Epidemiology Reference Group, United Nations Children's Fund	World Health Organization, Child Health Epidemiology Reference Group, United Nations Children's Fund
	Stillbirth rate	Cousens and others 2011	Cousens and others 2011
Maternal mortality	Total maternal deaths	Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank)	Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank)
	Lifetime risk of maternal death	Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank)	Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank)
	Maternal mortality ratio (adjusted)*	Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank)	Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, World Bank)
	Causes of maternal deaths (regional)	World Health Organization	World Health Organization
Maternal and newborn health			
Delivery care	**Skilled attendant at delivery***	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys	United Nations Children's Fund
AIDS	**Pregnant women living with HIV receiving antiretroviral therapy for their own health***	Country reporting through the Global AIDS Response Progress Report and Universal Access joint reporting process by the World Health Organization, the United Nations Children's Fund and the Joint United Nations Programme on HIV/AIDS and UNAIDS Spectrum estimates	Joint United Nations Programme on HIV/AIDS, United Nations Children's Fund, World Health Organization
	Pregnant women living with HIV receiving antiretroviral drugs for prevention of mother-to-child transmission*	Country reporting through the Global AIDS Response Progress Report and Universal Access joint reporting process by the World Health Organization, the United Nations Children's Fund and the Joint United Nations Programme on HIV/AIDS and UNAIDS Spectrum estimates	United Nations Children's 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)*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys Demographic and Health Surveys, Reproductive Health Survey, other national surveys	United Nations Children's Fund

Indicator		Data source	Global database
Demand for family planning satisfied	**Demand for family planning satisfied***	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Surveys, other national surveys	United Nations Population Fund
Intermittent preventive treatment of malaria during pregnancy	Intermittent preventive treatment of malaria during pregnancy	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Malaria Indicator Surveys, other national surveys	United Nations Children's Fund
Caesarean section	Caesarian section rate	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Reproductive Health Survey, other national surveys	United Nations Children's Fund
Neonatal tetanus protection	Neonatal tetanus vaccine	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	United Nations Children's Fund, World Health Organization
Postnatal care	**Postnatal visit for baby***	Demographic and Health Surveys	Special data analysis by Saving Newborn Lives
Postnatal care	**Postnatal visit for mother***	Demographic and Health Surveys	Special data analysis by Saving Newborn Lives
Body mass index	Women with low body mass index	Demographic and Health Surveys	Demographic and Health Surveys, STATCompiler (accessed March 2014)
Equity			
	Demand for family planning satisfied*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Antenatal care (at least one visit)	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Antenatal care (four or more visits)*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Skilled attendant at delivery*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Early initiation of breastfeeding	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	ITN use among children < 5 years	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Three doses of combined diphtheria/tetanus/ pertussis vaccine immunization coverage*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Measles immunization coverage	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Vitamin A (past 6 months)	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Oral rehydration therapy and continued feeding	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
	Careseeking for pneumonia	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Federal University of Pelotas, Brazil
Child Health			
Immunization	Measles immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage
	Three doses of combined diphtheria/tetanus/ pertussis vaccine immunization coverage*	World Health Organization and United Nations Children's Fund estimates of national immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage
	Haemophilus influenzae type B immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage
	Rotavirus vaccine coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage
	Pneumococcal conjugate vaccine coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage	World Health Organization and United Nations Children's Fund estimates of national immunization coverage
Pneumonia treatment	Careseeking for symptoms of pneumonia	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
	Antibiotic treatment for symptoms of pneumonia*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
Diarrhoeal disease treatment	Oral rehydration therapy and continued feeding	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
	Oral rehydration salts	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund

Indicator		Data source	Global database
Malaria prevention and treatment	Children receiving first-line treatment among those receiving any antimalarial	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Malaria Indicator Surveys, other national surveys	United Nations Children's Fund
	Insecticide-treated net use	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, Malaria Indicator Surveys, other national surveys	United Nations Children's Fund
Nutrition			
Anthropometry	Underweight prevalence	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund, World Health Organization, World Bank
	Stunting prevalence*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund, World Health Organization, World Bank
	Wasting prevalence	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund, World Health Organization, World Bank
Infant feeding	Early initiation of breastfeeding	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
	Exclusive breastfeeding rate (for first six months of life)*	Multiple Indicator Cluster Surveys, Demographic and Health Surveys, other national surveys	United Nations Children's Fund
	Introduction of solid, semi-solid and soft foods (ages 6–8 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, routine reporting	United Nations Children's Fund
Micronutrient supplementation	Vitamin A two dose coverage	United Nations Children's Fund	United Nations Children's Fund
Water and sanitation			
Water	Improved drinking water coverage	Joint Monitoring Programme for Water Supply and Sanitation (World Health Organization and United Nations Children's Fund)	Joint Monitoring Programme for Water Supply and Sanitation (World Health Organization and United Nations Children's Fund)
Sanitation	Improved sanitation coverage	Joint Monitoring Programme for Water Supply and Sanitation (World Health Organization and United Nations Children's Fund)	Joint Monitoring Programme for Water Supply and Sanitation (World Health Organization and United Nations Children's Fund)
Policies, systems and financing			
Policies	Laws or regulations that allow adolescents to access contraceptives without parental or spousal consent	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Legal status of abortion	United Nations Population Division policy database	United Nations Population Division policy database http://esa.un.org/poppolicy/about_database.aspx (Accessed January 2014)
	Midwives authorized for specific tasks	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Maternity protection (Convention 183)	International Labour Organization	International Labour Organization, NORMLEX Information System on International Labour Standards, at: https://www.ilo.org/dyn/normlex/en (Accessed March 2014)
	Maternal deaths notification	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Postnatal home visits in first week after birth	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Kangaroo mother care in facilities for low-birthweight and preterm newborns	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Antenatal corticosteroids as part of management of preterm labour	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	International Code of Marketing of Breastmilk Substitutes	World Health Organization	World Health Organization and United Nations Children's Fund special data compilation
	Community treatment of pneumonia with antibiotics	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health

Indicator		Data source	Global database
	Low-osmolarity oral rehydration salts and zinc for management of diarrhoea	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
Systems	Costed national implementation plans for maternal, newborn and child health available	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Reproductive lifesaving commodities in essential medicines list: emergency contraceptives, implants and female condoms	U.S. Agency for International Development Deliver Project and World Health Organization	Emergency contraceptives and implants information: U.S. Agency for International Development Deliver Project, http://deliver.jsi.com/dhome/whatwedo/commsecurity/csmeasuring/csindicators/csindicatordashboards (Accessed March 2014) Female condoms information: World Health Organization EML database www.who.int/medicines/publications/essentialmedicines (Accessed March 2014)
	Maternal lifesaving commodities in essential medicines list: oxytocin, misoprostol and magnesium sulfate	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Newborn lifesaving commodities in essential medicines list: injectable antibiotics, antenatal corticosteroids, chlorhexidine and resuscitation equipment	World Health Organization and the Chlorhexidine Working Group	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health and the Chlorhexidine Working Group
	Child lifesaving commodities in essential medicines list: amoxicillin, oral rehydration salts and zinc	World Health Organization	Global Maternal Newborn Child and Adolescent Health Policy Indicator Survey 2013 by the World Health Organization Department of Maternal Child and Adolescent Health
	Density of doctors, nurses and midwives	World Health Organization	Global Health Observatory 2013
	National availability of emergency obstetric care services	Averting Maternal Death and Disability, United Nations Children's Fund, United Nations Population Fund	Averting Maternal Death and Disability, United Nations Children's Fund, United Nations Population Fund special data compilation
Financing	Per capita total expenditure on health	World Health Organization	Global Health Expenditure Database http://apps.who.int/gho/data/node.main.484?lang=en (Accessed February 2014)
	General government expenditure on health as % of total government expenditure	World Health Organization	Global Health Expenditure Database http://apps.who.int/gho/data/node.main.484?lang=en (Accessed February 2014)
	Out-of-pocket expenditure as % of total expenditure on health	World Health Organization	Global Health Expenditure Database http://apps.who.int/gho/data/node.main.484?lang=en (Accessed February 2014)
	Reproductive, maternal, newborn and child health expenditure by source	World Health Organization	World Health Organization
	Official development assistance to child health per child	Organisation for Economic Co-operation and Development's 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's Development Assistance Committee	London School of Health and Tropical Medicine

* Indicators in bold are those recommended by the Commission on Information and Accountability for Women's and Children's Health. The commission indicator for under-five mortality includes the proportion of neonatal deaths, also tracked by *Countdown*.

Annex D
Definitions of *Countdown* coverage indicators

Intervention	Indicator definition	Numerator	Denominator
Maternal and newborn health			
Skilled attendant at delivery*	Percentage of live births attended by skilled health personnel	Number of women ages 15–49 with a live birth in the X years prior to the survey who were attended during delivery by skilled health personnel (doctor, nurse, midwife or auxiliary midwife)	Total number of women ages 15–49 with a live birth in the X years preceding the survey
Treatment of pregnant women living with HIV*	Percentage of eligible pregnant women with HIV who received antiretroviral therapy	Number of pregnant women living with HIV who are receiving lifelong antiretroviral therapy	Estimated number of pregnant women living with HIV[a]
Prevention of mother-to-child transmission of HIV	Percentage of pregnant women living with HIV who received most efficacious regimens of antiretrovirals to prevent mother-to-child transmission of HIV	Number of pregnant women living with HIV who received most efficacious regimens of antiretrovirals to prevent mother-to-child transmission of HIV	Estimated number of pregnant women living with HIV[a]
Antenatal care (at least one visit)	Percentage of women attended at least once during pregnancy by skilled health personnel	Number of women ages 15–49 who were attended at least once during pregnancy in the X years preceding the survey by skilled health personnel (doctor, nurse, midwife, or auxiliary midwife)	Total number of women ages 15–49 with a live birth in the X years preceding the survey
Antenatal care (four or more visits)*	Percentage of women attended four or more times during pregnancy by any provider	Number of women ages 15–49 who were attended four or more times during pregnancy in the X years preceding the survey by any provider	Total number of women ages 15–49 with a live birth in the X years preceding the survey
Demand for family planning satisfied*	Percentage of women ages 15–49, either married or in union, who have their need for family planning satisfied	Women who are married or in union and currently using any method of contraception	Women who are married or in union and who are currently using any method of contraception or who are fecund, not using any method of contraception but report wanting to space their next birth or stop childbearing altogether
Intermittent preventive treatment for malaria during pregnancy	Percentage of women who received intermittent preventive treatment for malaria during their last pregnancy	Number of women ages 15–49 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 ages 15–49 with a live birth in the X years preceding the survey
Caesarean section rate	Percentage of live births delivered by Caesarean section	Number of women ages 15–49 with a live birth in the X years preceding the survey delivered by caesarean section	Total number of women ages 15–49 with a live birth in the X years preceding the survey
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
Postnatal care for mothers*[b]	Percentage of mothers who received postnatal care within two days of childbirth	Number of women ages 15–49 who received postnatal care within two days of childbirth (regardless of place of delivery)	Total number of women ages 15–49 with a last live birth in the x years prior to the survey (regardless of place of delivery)
Postnatal care for babies*	Percentage of babies who received postnatal care within two days of childbirth	Number of babies who received postnatal care within two days of birth	Total number of last-born babies in the X years prior to the survey
Child health			
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 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 *Haemophilus influenzae* type B immunization coverage	Percentage of infants who received three doses of *Haemophilus influenzae* type B vaccine	Number of children ages 12–23 months receiving three doses of *Haemophilus influenzae* type B vaccine	Total number of children ages 12–23 months surveyed
Careseeking for symptoms of pneumonia	Percentage of children ages 0–59 months with symptoms of pneumonia taken to an appropriate health provider	Number of children ages 0–59 months with symptoms of 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 symptoms of pneumonia in the two weeks prior to the survey
Antibiotic treatment for symptoms of pneumonia*	Percentage of children ages 0–59 months with symptoms of pneumonia receiving antibiotics	Number of children ages 0–59 months with symptoms of pneumonia in the two weeks prior to the survey receiving antibiotics	Total number of children ages 0–59 months with symptoms of pneumonia in the two weeks prior to the survey
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 salts packet, pre-packaged oral rehydration salts fluid, recommended homemade fluid or increased fluids) and continued feeding	Total number of children ages 0–59 months with diarrhoea in the two weeks prior to the survey

Intervention	Indicator definition	Numerator	Denominator
Oral rehydration salts treatment	Percentage of children ages 0–59 months with diarrhoea receiving oral rehydration salts	Number of children ages 0–59 months with diarrhoea in the two weeks prior to the survey receiving oral rehydration salts	Total number of children ages 0–59 months with diarrhoea in the two weeks prior to the survey
First line antimalarial treatment	Percentage of children ages 0–59 months receiving first-line antimalarial treatment	Number of children ages 0–59 months who had a fever in the two weeks prior to the survey who received first line treatment according to national policy	Total number of children ages 0–59 months who had a fever in the two weeks prior to the survey who received any antimalarial drugs
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
Nutrition			
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 surveyed
Exclusive breastfeeding (for first 6 months of life)*	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
Introduction of solid, semi-solid and soft foods (ages 6–8 months)	Percentage of infants ages 6–8 months who receive solid, semi-solid or soft foods	Number of infants ages 6–8 months who received solid, semi-solid or soft foods during the previous day	Total number of infants ages 6–8 months surveyed
Vitamin A supplementation	Percentage of children ages 6–59 months who received two doses of vitamin A during the calendar year	Estimated 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
Water and sanitation			
Use of improved drinking water sources	Percentage of the population using improved drinking water sources (piped on premises or other improved drinking water sources)	Number of household members using improved drinking water sources (including piped on premises, public standpipe, borehole, protected dug well, protected spring, rainwater collection)	Total number of household members
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

* Indicators in bold are those recommended by the Commission on Information and Accountability for Women's and Children's Health. The commission indicator for under-five mortality includes the proportion of neonatal deaths, also tracked by *Countdown*.

a. More details on the HIV estimates methodology can be found at www.unaids.org.

b. As used for postnatal care in the graph on coverage along the continuum of care on the first page of each country profile.

Annex E
Definitions of health policies, systems and finance indicators

Indicator	Definition	Criteria for ranking
Policy indicators		
Family planning for adolescents	Laws or regulations allow adolescents (married or unmarried) to access contraception without parental or spousal consent.	Yes = legislation is available that allows adolescents to access contraception without parental or spousal consent. Partial = legislation is available that allows either married adolescents to access contraception without spousal consent or allows unmarried adolescents to access contraception without parental consent. No = no legislation is available that allows adolescents to access contraception without parental or spousal consent.
Legal status of abortion	Legal grounds under which abortion is allowed.	Abortion allowed on the following grounds: I = to save a woman's life. II = to preserve physical health and above. III = to preserve mental health and above. IV = for economic and social reason and the above. V = on request and above. R = in case of rape or incest. F = in case of foetal impairment. — = data are not available.
Midwives authorized for specific tasks	Midwifery personnel are authorized to deliver basic emergency obstetric and newborn care.	Number of the seven lifesaving interventions tasks authorized: • Parental antibiotics. • Parenteral oxytocin. • Parental anticonvulsants. • Manual removal of placenta. • Removal of retained products of conception. • Assisted vaginal delivery. • Newborn resuscitation.
Maternity protection (Convention 183)	Country has ratified International Labour Organization Convention 183 or has passed national legislation that is in compliance with the three key provisions of the convention (14 weeks of maternity leave, 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 benefits of previous earnings paid by social security or public funds). No = no ratification of any maternal protection convention.
Maternal deaths notification	National policy has been adopted requiring health professionals to notify any maternal death to a responsible national body.	Yes = national policy adopted and implemented. Partial = national policy adopted but no systematic implementation. No = no national policy adopted.
Postnatal home visits in the first week after birth	National policy recommending home visits to mother and newborn in the first week after childbirth by a trained provider have been adopted and implemented.	Yes = national policy or guidelines recommending postnatal home visits adopted and implemented. No = no national policy or guidelines on postnatal home visits adopted.
Kangaroo mother care for low birthweight newborns	National policy recommends kangaroo mother care for low-birthweight newborns.	Yes = national policy recommends kangaroo mother care for low-birthweight newborns. No = national policy does not recommend kangaroo mother care for low-birthweight newborns.
Antenatal corticosteroids for preterm labour	National policy recommends antenatal corticosteroids for preterm labour.	Yes = national policy recommends use of antenatal corticosteroids for preterm labour. No = national policy does not recommend use of antenatal corticosteroids for preterm labour.
International Code of Marketing of Breastmilk Substitutes	National policy has been adopted on all provisions stipulated in International Code of Marketing of Breastmilk Substitutes.	Yes = all provisions stipulated in International Code of Marketing of Breastmilk Substitutes adopted in legislation. Partial = voluntary agreements or some provisions stipulated in 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.
Community treatment of pneumonia with antibiotics	National policy or guidelines authorizing case management of pneumonia in the community by a trained provider has been adopted and implemented.	Yes = national policy or guidelines adopted on the identification and treatment of pneumonia by trained providers in the community. No = no national policy or guidelines on the identification and treatment of pneumonia by trained providers.

Indicator	Definition	Criteria for ranking
Low-osmolarity oral rehydration salts and zinc for management of diarrhoea	National policy on management of diarrhoea with low osmolality oral rehydration salts and zinc has been adopted and implemented.	Yes = national policy or guidelines adopted on use of low osmolality oral rehydration salts and zinc for management of diarrhoea. No = no national policy or guidelines adopted on use of low osmolality oral rehydration salts and zinc for management of diarrhoea
Systems indicators		
Costed national implementation plan for maternal, newborn and child health	National plan for scaling up maternal, newborn and child health interventions is available and costed.	Yes = costed plan or plans to scale up maternal, newborn and child health interventions available at the 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.
Reproductive lifesaving commodities in essential medicines list	Emergency contraceptives, implants and female condoms are in the essential medicines list.	Number of the three listed commodities that are included in the essential medicines list.
Maternal lifesaving commodities in essential medicines list	Oxytocin, misoprostol and magnesium sulfate are in the essential medicines list.	Number of the three listed commodities that are included in the essential medicines list.
Newborn lifesaving commodities in essential medicines list	Injectable antibiotics, antenatal corticosteroids, chlorhexidine and resuscitation equipment are in the essential medicines list.	Number of the four listed commodities that are included in the essential medicines list.
Child lifesaving commodities in essential medicines list	Amoxicillin, oral rehydration salts and zinc are in the essential medicines list.	Number of the three listed commodities that are included in the essential medicines list.
Density of health workers	Proportion of physicians, nurses and midwives who are available per 10,000 population.	Percentage
National availability of emergency obstetric care services	At least 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 Countdown.)	Availability is expressed as a percentage of the minimum acceptable number of emergency obstetric care facilities. The minimum acceptable number of emergency obstetric care facilities (comprehensive and basic) is calculated by dividing the population by 500,000 and multiplying by 5. The percentage of recommended minimum number of emergency obstetric care facilities 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
Finance indicators		
Per capita total expenditure on health		Numerical
General government expenditure on health as a share of total government expenditure		Numerical
Out-of-pocket expenditure as a share of total expenditure on health		Numerical

Annex F
Technical annex for the Health Systems and Policies Technical Working Group and the Financing Technical Working Group

Health systems and policies indicators

Most of the policy indicators compiled by the *Countdown* Health Systems and Policies Technical Working Group are the result of a biannual survey implemented by the World Health Organization's Department of Maternal, Newborn, Child and Adolescent Health. Indicators are developed as a composite measure summarizing the presence and implementation of a given policy. If a policy is endorsed and implemented, the value of the indicator is marked as "Yes". If the policy is not endorsed, the value of the indicator is marked as "No". If the policy is endorsed but lacks implementation, the value of the indicator is marked as "Partial". For policies such as midwifery personnel authorized to deliver basic emergency obstetric and newborn care or reproductive, maternal, newborn and child health lifesaving commodities in essential list of medicines, the value of the indicator is the number of policy components endorsed or present in the policy document. Respondents to the survey are ministry of health officials responsible for maternal, newborn, child and adolescent health in their country. The information reported is independently validated by the World Health Organization country office and at least one other UN organization that operates in the country. Data analysis and compilation are done by the World Health Organization. Data reported are collected from the 2013–2014 survey. The legal status of abortion indicator is a result of the analysis of legal grounds under which abortion is legally allowed, as per the information reported in the United Nations Population Division policy database.

The Health Systems and Policies Technical Working Group regularly reviews the evidence base for all the systems and policy measures that *Countdown* tracks. For example, a small working group has been formed to review the signal functions related to the indicator on emergency obstetric care, including on care for newborns.

Financing indicators

The *Countdown* Financing Working Group analysed 2011 official development assistance disbursements in the Organisation for Economic Co-operation and Development's Development Assistance Committee's Creditor Reporting System aid activities database using previously implemented methods.[52] Data were downloaded on 3 April 2014 and included 242,382 records of aid disbursement.

All records were reviewed to correct for errors in the classification of health expenditures within the database. Records were manually coded against a framework defining reproductive, maternal, newborn and child health activities. Broadly, maternal and newborn health activities were defined as those that aim to restore, improve or maintain the health of women and their newborn during pregnancy, childbirth and the postnatal period, and child health activities were defined as those that aim to restore, improve or maintain the health of children ages 1 month to 5 years. Additional activities considered as reproductive health include family planning and those related to sexual health and sexually transmitted infections, including HIV. Based on these codes, each record was given an allocation factor between 0% and 100%, representing the proportion of expenditures spent on reproductive, maternal, newborn and child health. Allocation factors were established after reviewing the literature and current financial (for example, general government expenditure on health as a percentage of total government expenditure), epidemiological (for example, percentage of a population group with HIV) and population estimates (for example, percentage of population under age 5). Official development assistance from all 27 bilateral organizations, 22 multilateral organizations and 3 global health initiatives (including the Bill and Melinda Gates Foundation) to the *Countdown's* priority countries was analysed and reported in two indictors: official development assistance to child health per child and official development assistance to maternal and neonatal health per live birth.

Comparison of results with those of the Institute for Health Metrics and Evaluation

Recent data from the Institute for Health Metrics and Evaluation report that development assistance to maternal, newborn and child health grew just under 18% in real terms between 2010 and 2011 among all recipient countries (not just the 75 *Countdown* countries), from $5.2 billion to $6.1 billion (in 2011 prices).

When considering official development assistance to all recipient countries (not just *Countdown* countries), *Countdown* estimates a 3% increase in real terms, from $6.9 billion to $7.1 billion (in 2012 prices).

These differences in estimates may reflect differences in methods used by the two resource tracking initiatives, which could explain the variation in findings (see table F1 for examples of differences). First, the Institute for Health Metrics and Evaluation estimates development assistance to health, which is defined more broadly than official development assistance to include all financial and in-kind contributions from global health channels that aim to improve health. Further, the *Countdown* analysis relies on the data reported in the Creditor Reporting System, which is restricted to donors that report to the system. The Institute for Health Metrics and Evaluation's wider range of data sources account for 67% of the data analysed (Joe Dieleman, personal communication). For *Countdown* other, non-purpose-specific funding modalities and general health systems strengthening support that can be attributed to maternal, newborn and child health are picked up through the manual coding process. The Institute for Health Metrics and Evaluation conducts an automated keyword search. The Institute for Health Metrics and Evaluation

TABLE F1

Overview of key differences in methods to resource tracking between *Countdown* and the Institute for Health Metrics and Evaluation

Methods	*Countdown*	Institute for Health Metrics and Evaluation	Expected effect on estimates
What is being tracked?	Official development assistance.	Development assistance to health.	Institute for Health Metrics and Evaluation > *Countdown*
Donors	Donors reporting to the Creditor Reporting System.	Donors reporting to the Creditor Reporting System plus nongovernmental organizations, US private foundations, and the Pan American Health Organization.	Institute for Health Metrics and Evaluation > *Countdown*
Recipient countries	75 *Countdown* priority countries and all countries receiving official development assistance captured in the Creditor Reporting System.	Low- and middle-income countries as defined by the World Bank.	Institute for Health Metrics and Evaluation > *Countdown*
Data sources	Organisation for Economic Co-operation and Development's Creditor Reporting System.	Creditor Reporting System plus donor databases, annual reports, and audited financial statements; nongovernmental organization databases; and communication with donors.	Institute for Health Metrics and Evaluation > *Countdown*
Approach to coding	Manual, line by line coding of the entire Creditor Reporting System database according to predefined methods. Includes in maternal, newborn and child health spending HIV and malaria spending that is related to maternal, newborn and child health.	Automated keyword search of the health and population sector codes. Allocates 100% of United Nations Children's Fund and United Nations Population Fund spending to maternal, newborn and child health spending and 100% of Joint United Nations Programme on HIV/AIDS spending to reproductive health spending. Health focus areas are mutually exclusive so that projects that are for maternal, newborn and child health and another health focus area get divided between the multiple health focus areas.[a]	*Countdown* > Institute for Health Metrics and Evaluation
Categorization of health focus areas	Family planning included in reproductive health.	Family planning included in maternal, newborn and child health.	Institute for Health Metrics and Evaluation > *Countdown* for MNCH
Aid modality and health systems	Allocates a share of pooled funding and health systems funding to maternal, newborn and child health.	Does not include pooled funding or health systems funding that is not explicitly earmarked for maternal, newborn and child health.	*Countdown* > Institute for Health Metrics and Evaluation
Data adjustments	Disbursements as reported in the Creditor Reporting System. No adjustments made.	For projects where the Creditor Reporting System does not report disbursement data, commitment data are adjusted to reflect disbursements.	Institute for Health Metrics and Evaluation > *Countdown*

a. The Institute for Health Metrics and Evaluation tracks a wide range of health focus areas (such as maternal, newborn and child health; HIV; and malaria). To avoid double counting, it divides projects across these areas, so a project addressing malaria in mothers and children would be divided between the maternal, newborn and child health and the malaria health focus areas. *Countdown* would include such projects as maternal, newborn and child health.

allocates certain donors' contributions, such as the United Nations Children's Fund, in full to maternal, newborn and child health, whereas *Countdown* relies on manual coding to allocate only projects with direct relevance to maternal, newborn and child health.

Technical note on box 9

The evidence used for the *Countdown* countries in box 9 on out-of-pocket financing for health came from published, publicly available sources (table F2 and figures F1 and F2). Other estimates for the *Countdown* countries may be available in the grey literature, including UN reports. The aim of box 9 is to highlight the need for improvements in the collection, analysis and dissemination of data on financial risk protection.

TABLE F2

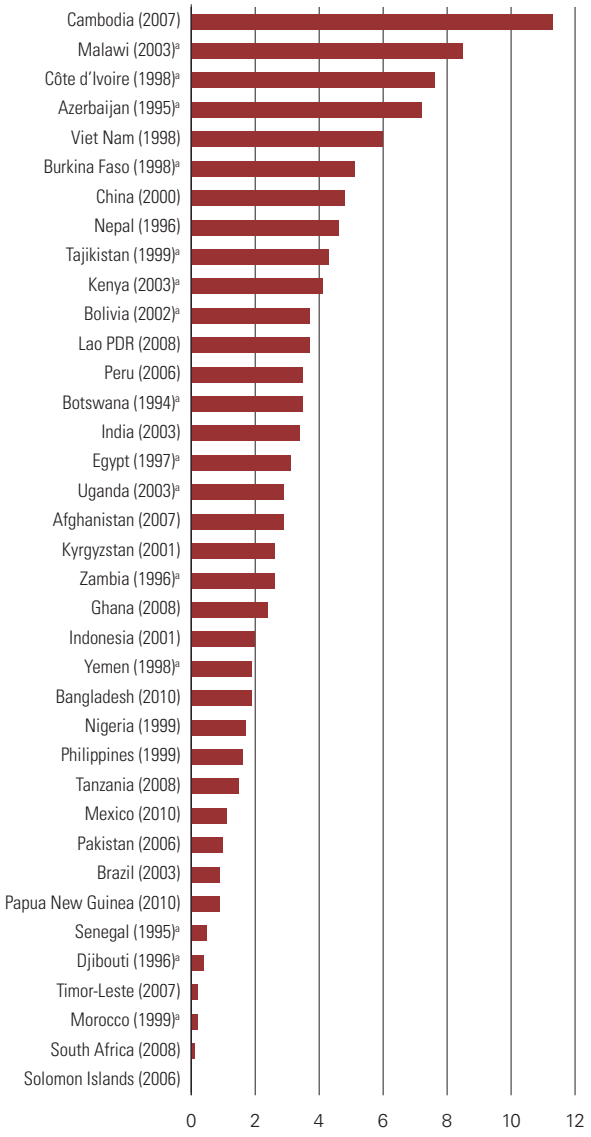
Estimates and sources of available data on catastrophic expenditure, *Countdown* countries

Reference	Indicator	Year	*Countdown* countries with data
van Doorslaer and others 2007	Share of population spending more than 40% of nonfood expenditure in a given month on direct health care payments	1994–2002	Bangladesh, China, India, Indonesia, Kyrgyzstan, Nepal, Philippines, Viet Nam
Xu and others 2007	Share of population spending more than 40% of nonsubsistence expenditure in a given month on direct health care payments	1990– 2003	32 *Countdown* countries
van Doorslaer and others 2006	Share of population falling below PPP$2.15 poverty line as a result of out-of-pocket expenditure on health in past month	1998–2001	Bangladesh, China, India, Indonesia, Kyrgyzstan, Nepal, Philippines, Viet Nam
Rannan-Eliya and others 2012	Share of population spending more than 40% of nonfood expenditure in a given month on direct health care payments Share of population falling below PPP$2.15 poverty line as a result of out-of-pocket expenditure on health in past month	2005–2010	Bangladesh, Cambodia, Lao PDR, Pakistan, Papua New Guinea, Timor-Leste
Knaul, Wong and Arreola-Ornelas 2012	Share of population spending more than 40% of nonfood expenditure in a given month on direct health care payments	2003–2010	Brazil, Mexico, Peru
Mills and others 2012	Share of population spending more than 40% of nonfood expenditure in a given month on direct health care payments	2008	Ghana, South Africa, Tanzania
Ichoku and Fonta 2009	Share of population spending more than 40% of nonfood expenditure in a given month on direct health care payments	1999	Nigeria
Countdown and World Bank studies (unpublished)	Share of population spending more than 40% of nonfood expenditure in a given month on direct health care payments Share of population falling below PPP$2.15 poverty line as a result of out-of-pocket expenditure on health in past month	2007–2010	Afghanistan, Solomon Islands

FIGURE F1

Households with out-of-pocket health expenditure greater than 40% of nonfood spending

Share of households spending 40% or more of nonfood expenditures on health (%)



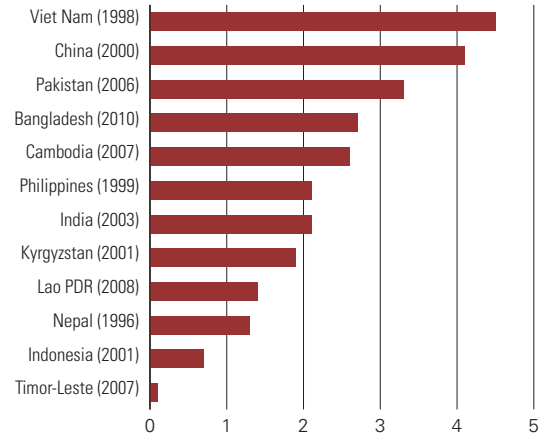
a. Estimate from Xu and others (2007) using similar but not strictly comparable definition.

Source: See table F2.

FIGURE F2

Households falling below international poverty line of PPP$2.15 a day as a result of out-of-pocket health expenditure

Share of people falling below poverty line of PPP$ 2.15 per day as a result of out-of-pocket payments for health care (%)



Source: See table F2.

Annex G
Countdown countries prioritized for malaria intervention coverage analysis

Table G1 organizes the *Countdown* countries according to a set of criteria related to malaria transmission risk:

- The left column includes 43 countries where at least 75% of the total population is at risk of malaria transmission and where a substantial proportion (50% or more) of malaria cases is due to *Plasmodium falciparum*. Only the countries meeting these criteria were included in the analyses for the malaria indicators in this report.

- The right column includes nine countries where 50–74% of the population is at risk of malaria transmission and where a substantial proportion (50% or more) of malaria cases is due to *Plasmodium falciparum.* When available, malaria intervention coverage data are included in the *Countdown* profiles.

TABLE G1

Countdown countries by malaria transmission risk

Countries where at least 75% of the population is at risk of malaria and where a substantial proportion (50% or more) of malaria cases is due to *Plasmodium falciparum* (*N* = 43)		Countries where 50–74% of the population is at risk of malaria and where a substantial proportion (50% or more) of malaria cases is due to *Plasmodium falciparum* (*N* = 9)
Angola	Madagascar	Botswana
Benin	Malawi	Cambodia
Burkina Faso	Mali	Djibouti
Burundi	Mauritania	Ethiopia
Cameroon	Mozambique	Indonesia
Central African Republic	Niger	Lao People's Democratic Republic
Chad	Nigeria	Myanmar
Comoros	Papua New Guinea	Yemen
Congo	Philippines	Zimbabwe
Congo, Dem. Rep.	Rwanda	
Côte d'Ivoire	São Tomé and Príncipe	
Equatorial Guinea	Senegal	
Eritrea	Sierra Leone	
Gabon	Solomon Islands	
Gambia	Somalia	
Ghana	South Sudan	
Guinea	Sudan	
Guinea-Bissau	Tanzania, United Republic	
Haiti	Togo	
India	Uganda	
Kenya	Zambia	
Liberia		

Source: Country profiles from WHO (2013).

Annex H
Details on estimates produced by interagency groups used in the *Countdown* report—mortality, immunization, and water and sanitation

Mortality

Countdown to 2015 aims to stimulate progress towards Millennium Development Goals 4 and 5, so it relies on UN interagency estimates on child and maternal mortality that are produced for official Millennium Development Goal reporting. These estimates are used to monitor progress at the global level because they are made comparable across countries and over time by applying standard methods to generate country, regional and global estimates. The UN mortality estimates are generated based on national data but may not always correspond precisely to the results from the most recent available data source or to country official estimates due to differences in the methods applied.

Child mortality. The child mortality estimates in this report (neonatal mortality rate, infant mortality rate, under-5 mortality rate and under-5 deaths) are based on the work of the UN Inter-agency Group for Child Mortality Estimation (UN IGME), which includes the United Nations Children's Fund, the World Health Organization, the United Nations Population Division and the World Bank. The UN IGME estimates are the official UN estimates for measuring progress towards Millennium Development Goal 4 (reduce child mortality). The UN IGME compiles available data from all possible nationally representative sources for a country, including household surveys, censuses and vital registration systems, 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 may result in adjustments to previously reported estimates as new data become available and provide more information on past trends.

The data inputs, methods and full time series of the UN IGME estimates for all countries are available at www.data.unicef.org and www.childmortality.org.

Maternal mortality. Maternal mortality estimates for 1990–2013 are based on the work of the Maternal Mortality Estimation Inter-agency Group, which comprises the World Health Organization, the United Nations Children's Fund, the United Nations Population Fund and the World Bank. Maternal mortality data—more sparse than child mortality data—are from sources such as vital registration systems, surveys and censuses. Maternal mortality estimates from these sources are subject to serious misclassification and underreporting. These data are therefore adjusted to account for these errors, and multilevel regression models are fit to predict levels and trends in maternal mortality between 1990 and 2013. Covariates used in the models include gross domestic product per capita, general fertility rate and skilled birth attendance. For more information, see WHO and others (2014).

Immunization

The immunization data published in this report are based on the work of the World Health Organization and the United Nations Children's Fund. The estimates should not be confused with other sources of information, such as Demographic and Health Surveys, Multiple Indicator Cluster Surveys or administratively reported data from ministries of health. The World Health Organization and United Nations Children's Fund use data reported by national immunization programmes as well as surveys and other sources to obtain estimates of national immunization coverage each year. A draft report is sent to each country for review and comment. Final reports are published in July with coverage estimates for the preceding calendar year. All new evidence, such as final survey reports received after publication, are taken into consideration during production of the following year's estimates. For each country's final report for 2012 as well as methods, data sources and brief description of trends, see www.data.unicef.org.

Water and sanitation

The drinking water and sanitation coverage estimates are produced by the World Health Organization–United Nations Children's Fund 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 censuses. For specific country data, see www.childinfo.org and www.wssinfo.org.

Notes

1. The Bellagio Study Group on Child Survival 2003.
2. UN Inter-agency Group for Child Mortality Estimation 2013.
3. Wang and others forthcoming; UN IGME 2013.
4. UN Inter-agency Group for Child Mortality Estimation 2013.
5. UNICEF Division of Policy and Strategy 2013.
6. WHO 2014.
7. WHO 2014.
8. Lawn and others 2010; Requejo, Newby and Bryce 2012.
9. Kassebaum and others forthcoming; WHO and others 2014.
10. WHO and others 2014.
11. Kassebaum and others forthcoming; Say and others 2014.
12. *Lancet* 2008, 2013.
13. Black and others 2013; Bhutta and others 2013a.
14. *Lancet* 2013.
15. *Lancet* 2013.
16. WHO Executive Board 2013.
17. *Lancet* 2008; UNICEF 2013a.
18. Bhutta and others 2013a.
19. Ruel, Alderman and the Maternal and Child Nutrition Study Group 2013; Gillespie and others 2013.
20. Bhutta and others 2013a.
21. The Composite Coverage Index is a weighted score reflecting coverage of eight interventions along the continuum of care. For more details, see www.countdown2015mnch.org/reports-and-articles/equity.
22. Wang and others forthcoming.
23. Walker and others 2013.
24. Darmstadt and others forthcoming.
25. Global Health Workforce Alliance and WHO 2013.
26. UN Commission on Life-Saving Commodities for Women and Children 2012.
27. Hsu and others 2013.
28. Differences with the data reported by the Institute for Health Metrics and Evaluation are discussed in annex G.
29. Note that three additional donors now report to the Creditor Reporting System, accounting for an additional $3.9 million to maternal, newborn and child health and $760,000 to reproductive health.
30. Hsu and others 2012. [add to reference list]
31. Independent Expert Review Group, Commission on Information and Accountability for Women's and Children's Health 2013.
32. Moran and others 2013.
33. Campbell and others 2013; Hazir and others 2013.
34. Bryce and others 2013.
35. Barros and Victora 2013.
36. Hancioglu and Arnold 2013.
37. Requejo, Newby and Bryce 2013.
38. Sustainable Development Solutions Network 2014.
39. Partnership for Maternal, Newborn & Child Health and WHO 2014.
40. Data prepared by World Health Organization.
41. The Bellagio Study Group on Child Survival 2003.
42. The Bellagio Study Group on Child Survival 2003.
43. Bhutta and others 2010.
44. Commission on Information and Accountability for Women's and Children's Health 2011.
45. Monitoring and Evaluation Working Group of the International Health Partnership and Related Initiatives n.d.; Bryce and others 2011.
46. Amouzou, Habi and Bensaïd 2012.
47. El Arifeen and others forthcoming.
48. Barros and Victora 2013.
49. Victora and others 2005.
50. Filmer and Pritchett 2001.
51. Requejo, Victora and Bryce 2014.
52. Powell-Jackson and others 2006; Hsu, Berman and Mills 2013; Hsu and others 2012.

References

Ahmed, S., Q. Li, L. Liu, and others. 2012. "Maternal Deaths Averted by Contraceptive Use: An Analysis of 172 Countries." *Lancet* 380(9837): 111–125.

Amouzou, A., O. Habi, and K. Bensaïd. 2012. "Reduction in Child Mortality in Niger: A Countdown to 2015 Country Case Study." *Lancet* 380(9848): 1169–78.

Austin J., S. Guy S., L. Lee-Jones, and others. 2008. "Reproductive Health: A Right for Refugees and Internally Displaced Persons." *Reproductive Health Matters* 16(31): 10–21.

Barros, A.J.D., and C.G. Victora. 2013. "Measuring Coverage in MNCH: Determining and Interpreting Inequalities in Coverage of Maternal, Newborn, and Child Health Interventions." *PLOS Medicine* 10(5): e1001390. doi:10.1371/journal.pmed.1001390

The Bellagio Study Group on Child Survival. 2003. "Knowledge into Action for Child Survival." *Lancet* 362(9380): 323–27.

Bhutta, Z., M. Chopra, H. Axelson, and others. 2010. *Countdown to 2015 Decade Report (2000-10): Taking Stock of Maternal, Newborn, and Child Survival. Lancet* 375(9730): 2032–44.

Bhutta, Z., J. Das, A. Rizvi, and others. 2013a. "Evidence-based Interventions for Improvement of Maternal and Child Nutrition: What Can Be Done and at What Cost?" *Lancet* 382(9890): 452–77.

Bhutta, Z., J. Das, N. Walker, and others. 2013b. "Interventions to Address Deaths from Childhood Pneumonia and Diarrhoea Equitably: What Works and at What Cost?" *Lancet* 381(9875): 1417–29.

Black, R., C. Victora, S. Walker, and others. 2013. "Maternal and Child Undernutrition and Overweight in Low-income and Middle-income Countries." *Lancet* 382(9890): 427–51.

Brearley, L., S. Mohamed, V. Eriyagama, and others. 2012. *Impact of Maternal and Child Health Private Expenditure on Poverty and Inequity: Review of the Literature on the Extent and Mechanisms by which Maternal, Newborn, and Child Healthcare Expenditures Exacerbate Poverty, with Focus on Evidence from Asia and the Pacific*. Manila: Asian Development Bank.

Bryce, J., F. Arnold, A. Blanc, and others. 2013. "Measuring Coverage in MNCH: New Findings, New Strategies, and Recommendations for Action." *PLOS Medicine* 10(5): e1001423. doi:10.1371/journal.pmed.1001423.

Bryce J.B., C.G. Victora, T. Boerma, and others. 2011. "Evaluating the Scale-up for Maternal and Child Survival: A Common Framework." *International Health* 3(3): 139–46.

Campbell, H., S. el Arifeen, T. Hazir, and others. 2013. "Measuring Coverage in MNCH: Challenges in Monitoring the Proportion of Young Children with Pneumonia Who Receive Antibiotic Treatment." *PLOS Medicine* 10(5): e1001421. doi:10.1371/journal.pmed.1001421.

Cleland, J., A. Conde-Aqudelo, H. Peterson, and others. 2012. "Contraception and Health." *Lancet* 380(9837): 149–56.

Commission on Information and Accountability for Women's and Children's Health. 2011. *Keeping Promises, Measuring Results.* Geneva: World Health Organization.

Cousens, S., H. Blencowe, C. Stanton, and others. 2011. "National, Regional, and Worldwide Estimates of Stillbirth Rates in 2009 with Trends since 1995: A Systematic Analysis." *Lancet* 377(9774): 1319–30.

CPD (Centre for Policy Dialogue). 2003. "Bangladesh's Population Policy: Emerging Issues and Future Agenda." CPD-UNFPA Paper

Series 23. Dhaka. http://cpd.org.bd/pub_attach/unfpa23.pdf. Accessed 28 June 2013.

CRED (Centre for Research on the Epidemiology of Disasters). 2013. *People Affected by Conflict 2013: Humanitarian Needs in Numbers.* Brussels: Université catholique de Louvain. http://cred.be/sites/default/files/PubID303ConflictReport.pdf. Accessed 6 February 2014.

Darmstadt, G.L., M.V. Kinney, M. Chopra, and others. Forthcoming. "Who Has Been Caring for the Baby?" *Lancet*.

El Arifeen, S., K. Hill, K. Ahsan, and others. Forthcoming. "Maternal Mortality in Bangladesh: A Countdown to 2015 Country Case Study." *Lancet*.

Filmer, D., and L.H. Pritchett. "Estimating Wealth Effects without Expenditure Data-or Tears: An Application to Educational Enrollments in States of India." *Demography* 38(1): 115–32.

Gillespie, S., L. Haddad, V. Mannar, and others. 2013. "The Politics of Reducing Malnutrition: Building Commitment and Accelerating Progress." *Lancet* 382(9891): 552–69.

Global Health Workforce Alliance and WHO (World Health Organization). 2013. *A Universal Truth: No Health without a Workforce.* Geneva: World Health Organization.

Hancioglu, A., and F. Arnold. 2013. "Measuring Coverage in MNCH: Tracking Progress in Health for Women and Children Using DHS and MICS Household Surveys." *PLOS Medicine* 10(5): e1001391. doi:10.1371/journal.pmed.1001391

Hazir, T., K. Begum, S. el Arifeen, and others. 2013. "Measuring Coverage in MNCH: A Prospective Validation Study in Pakistan and Bangladesh on Measuring Correct Treatment of Childhood Pneumonia." *PLOS Medicine* 10(5): e1001422. doi:10.1371/journal.pmed.1001422.

Horta, B., and C.G. Victora. 2013. *Long-term Effects of Breastfeeding: A Systematic Review.* Geneva: World Health Organization; 2013.

Hsu, J., P. Berman, and A. Mills. 2013. "Reproductive Health Priorities: Evidence from a Resource Tracking Analysis of Official Development Assistance in 2009 and 2010." *Lancet* 381(9879): 1772–82.

Hsu, J., C. Pitt, G. Greco, and others. 2012. "Countdown to 2015: Changes in Official Development Assistance to Maternal, Newborn, and Child Health in 2009-10, and Assessment of Progress since 2003." *Lancet* 380(9848): 1157–68.

Ichoku, H.E., and W.M. Fonta. 2009. "Catastrophic Healthcare Financing and Poverty; Empirical Evidence from Nigeria." *Journal of Social and Economic Development* 11(2): 1–16.

Independent Expert Review Group, Commission on Information and Accountability for Women's and Children's Health. 2013. *Every Woman, Every Child: Strengthening Equity and Dignity.* The Second Report of the independent Expert Review Group (iERG) on Information and Accountability for Women's and Children's Health. Geneva: World Health Organization.

Kassebaum, N.J., A. Bertozzi-Villa, M.S. Coggeshall, and others. Forthcoming. "Global, Regional, and National Levels and Causes of Maternal Mortality during 1990–2013: A Systematic Analysis for the Global Burden of Disease Study 2013." *Lancet*.

Knaul, F.M., R. Wong, and H. Arreola-Ornelas, eds. 2012. *Household Spending and Impoverishment.* Financing Health in Latin America Volume 1. Cambridge, MA: Harvard University Press.

Lancet. 2008. Series on Maternal and Child Nutrition. January 2008.

———. 2013. Series on Maternal and Child Nutrition. June 2013.

Lawn, J.E., H. Blencowe, R. Pattinson, and others. 2011. "Stillbirths: Where? When? Why? How to Make the Data Count?" *Lancet* 377(9775): 1448–63.

Maternal Mortality Estimation Inter-agency Group (World Health Organization, United Nations Children's Fund, United Nations Population Fund, United Nations Population Division and World Bank). 2014. *Trends in Maternal Mortality: 1990 to 2013.* Geneva: World Health Organization.

Mills, A., J.E. Ataguba, J. Akazili, and others. 2012. "Equity in Financing and Use of Health Care in Ghana, South Africa, and Tanzania: Implications for Paths to Universal Coverage." *Lancet* 380(9837): 126–33.

Monitoring and Evaluation Working Group of the International Health Partnership and Related Initiatives. n.d. "Common Framework for Monitoring Performance and Evaluating

Progress in the Scale-up for Better Health." www.internationalhealthpartnership.net/CMSfiles/documents/a_proposed_common_framework_EN.pdf.

Moran, A., K. Kerber, D. Sitrin, and others. 2013. "Measuring Coverage in MNCH: Indicators for Global Tracking of Newborn Care." *PLOS Medicine* 10(5): e1001415. doi:10.1371/journal.pmed.1001415.

Partnership for Maternal, Newborn & Child Health and WHO (World Health Organization). 2014. *A Policy Guide for Implementing Essential Interventions for Reproductive, Maternal, Newborn and Child Health (RMNCH): A Multisectoral Policy Compendium for RMNCH.* Geneva: World Health Organization.

Powell-Jackson, T., J. Borghi, D.H. Mueller, E. Patouillard, and A. Mills. 2006. "Countdown to 2015: Tracking Donor Assistance to Maternal, Newborn, and Child Health." *Lancet* 368(9541): 1077–87.

Rannan-Eliya, R.P., C. Anuranga, J. Chandrasiri, R. Hafez, R. Wickramasinghe, and J. Jayanthan. 2012. "Impact of maternal and child health private expenditure on poverty and inequity: Evidence from National Household Surveys of Healthcare Use and Expenditures" Manila: Asian Development Bank.

Requejo, J., J. Bryce, and C. Victora, and others. 2012. *Building a Future for Women and Children: The 2012 Report.* Paris: United Nations Children's Fund; and Geneva: World Health Organization.

Requejo, J.H., H. Newby, and J. Bryce. 2013. "Measuring Coverage in MNCH: Challenges and Opportunities in the Selection of Coverage Indicators for Global Monitoring." *PLOS Medicine* 10(5): e1001416. doi:10.1371/journal.pmed.1001416.

Requejo, J., C. Victora, and J. Bryce, on behalf of the scientific review group of Countdown to 2015. 2014. "Data Resource Profile: Countdown to 2015: Maternal, Newborn and Child Survival." *International Journal of Epidemiology.* Doi: 10.1093/ije/dyu034.

Ruel, M., H. Alderman, and the Maternal and Child Nutrition Study Group. 2013. "Nutrition-sensitive Interventions and Programmes: How Can They Help to Accelerate Progress in Improving Maternal and Child Nutrition?" *Lancet* 382(9891): 536–51.

Say, L., D. Chou, A. Gemmill, and others. 2014. "Global Causes of Maternal Death: A WHO Systematic Analysis." *Lancet Global Health* 2(6): e323–33.

Sustainable Development Solutions Network. 2014. "Indicators for Sustainable Development." Draft report. Paris. Available at unsdsn.org/wp-content/uploads/2014/02/140214-SDSN-indicator-report-DRAFT-for-consultation1.pdf.

UN Commission on Life-Saving Commodities for Women and Children. 2012. *Commissioners' Report.* New York: United Nations.

UNDESA (United Nations Department of Economic and Social Affairs). 2013. *World Population Prospects: The 2012 Revision.* DVD edition. New York: United Nations.

UN Inter-agency Group for Child Mortality Estimation. 2013. *Levels and Trends in Child Mortality: Report 2013.* New York: United Nations Children's Fund.

UNFPA (United Nations Population Fund). 2014. *State of the World's Midwifery 2014.* New York.

UNICEF (United Nations Children's Fund). 2013a. *Improving Child Nutrition: The Achievable Imperative for Global Progress.* New York: United Nations Children's Fund.

———. 2013b. "Protecting Children, Safeguarding Their Development from Conflict, Violence and Disasters." Joint press release, 13 March. www.unicef.org/media/media_68183.html. Accessed 3 February 2014.

UNICEF (United Nations Children's Fund), Division of Policy and Strategy. 2013. *Committing to Child Survival: A Promise Renewed.* Progress Report 2013. New York: United Nations Children's Fund.

UNICEF (United Nations Children's Fund), UNFPA (United Nations Population Fund), and UN Women (United Nations Entity for Gender Equality and the Empowerment of Women). 2012. "Joint Statement: International Day of the Girl Child 2012." 10 October. www.unwomen.org/en/news/stories/2012/10/joint-statement-international-day-of-the-girl-child-2012/.

van Doorslaer, E., O. O'Donnell, R.P. Rannan-Eliya, and others. 2006. "Effect of Payments for Health Care on Poverty Estimates in 11 Countries in Asia:

An Analysis of Household Survey Data." *Lancet* 368(9544): 1357–64.

———. 2007. "Catastrophic Payments for Health Care in Asia." *Health Economics* 16(11): 1159–84.

Victora, C.G., L. Adair, C. Fall, and others. 2008. "Maternal and Child Undernutrition: Consequences for Adult Health and Human Capital." *Lancet* 371(9609): 340–57.

Victora, C.G., B. Fenn, J. Bryce, and others. 2001. "Co-coverage of Preventive Interventions and Implications for Child-survival Strategies: Evidence from National Surveys." *Lancet* 366(9495): 1460–66.

Walker, N., G. Yenokyan, I.K. Friberg, and others. 2013. "Patterns in Coverage of Maternal, Newborn, and Child Health Interventions: Projections of Neonatal and Under-5 Mortality to 2035." *Lancet* 382(9897): 1029–38.

Wall, S., A.C.C. Lee, S. Niermeyer, and others. 2009. "Neonatal Resuscitation in Low-resource Settings: What, Who, and How to Overcome Challenges to Scale Up?" *International Journal of Gynecology & Obstetrics* 107(Suppl.): S47–S64.

Wang, H., C.A. Liddell, M.M. Coates, and others. Forthcoming. "Global, Regional, and National Levels of Neonatal, Infant, and Under-5 Mortality during 1990–2013: A Systematic Analysis for the Global Burden of Disease Study 2013." *Lancet*.

WHO (World Health Organization). 2011. *Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008.* Geneva: World Health Organization.

———. 2012. *Born Too Soon: The Global Action Report on Preterm Birth.* Geneva: World Health Organization.

———. 2013. *World Malaria Report*. Geneva: World Health Organization.

———. 2014. *World Health Statistics 2014.* Geneva: World Health Organization.

WHO (World Health Organization) Executive Board. 2013. "Maternal, Infant and Young Child Nutrition: Report by the Secretariat." EB134/15, 20 November. Geneva. Available at http://apps.who.int/gb/ebwha/pdf_files/EB134/B134_15-en.pdf?ua=1. Accessed 29 May 2013.

WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2013. *Ending Preventable Child Deaths from Pneumonia and Diarrhoea by 2025: The Integrated Global Action Plan for Pneumonia and Diarrhoea (GAPPD).* Geneva: World Health Organization; and New York: United Nations Children's Fund.

WHO (World Health Organization) and World Bank. 2013. "Monitoring Progress towards Universal Health Coverage at Country and Global Levels: A Framework." Joint WHO–World Bank Group Discussion Paper. World Health Organization, Geneva.

Xu, K., D.B. Evans, G. Carrin, and others. 2007. "Protecting Households from Catastrophic Health Spending." *Health Affairs* 26(4) 972–83.