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,[70] *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.[71] 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.[72] *Countdown* also prepares equity profiles highlighting disparities in coverage in each of the 75 priority countries.
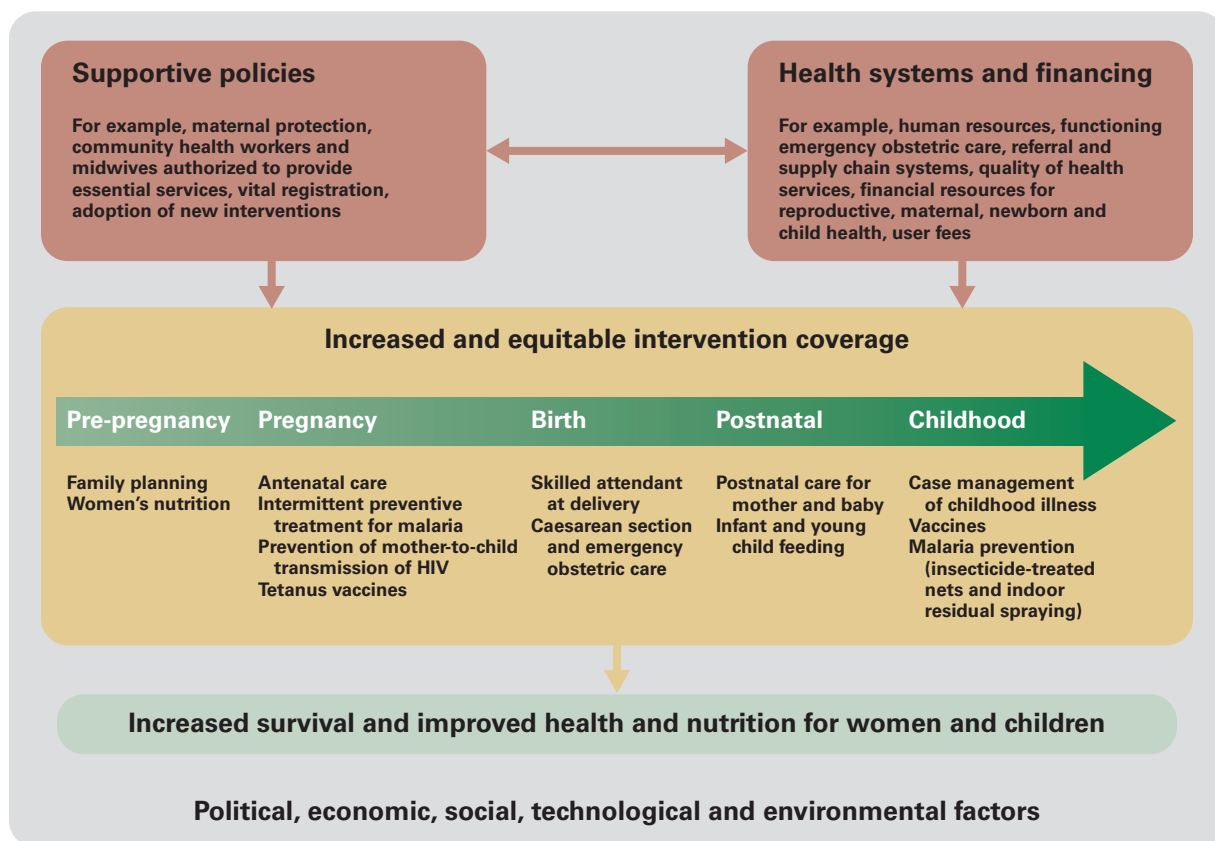
Countdown analyses are guided by a conceptual model (figure A1) consistent with the results-based evaluation framework for health systems strengthening that was developed by a working group of members from *Countdown*, the World Health Organization, the World Bank, the GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis and Malaria.[73] 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[74] and in Bangladesh for maternal survival,[75] with additional work nearing completion in Afghanistan, Pakistan, Ethiopia, Tanzania, Malawi and Peru.

Summary impact model guiding Countdown work

Supportive policies

For example, maternal protection, community health workers and midwives authorized to provide essential services, vital registration, adoption of new interventions

Health systems and financing

For example, human resources, functioning emergency obstetric care, referral and supply chain systems, quality of health services, financial resources for reproductive, maternal, newborn and child health, user fees

Increased and equitable intervention coverage

Pre-pregnancy	Pregnancy	Birth	Postnatal	Childhood
Family planning Women's nutrition	Antenatal care Intermittent preventive treatment for malaria Prevention of mother-to-child transmission of HIV Tetanus vaccines	Skilled attendant at delivery Caesarean section and emergency obstetric care	Postnatal care for mother and baby Infant and young child feeding	Case management of childhood illness Vaccines Malaria prevention (insecticide-treated nets and indoor residual spraying)

Increased survival and improved health and nutrition for women and children

Political, economic, social, technological and environmental factors

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,[70] *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.[71] 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.[72] *Countdown* also prepares equity profiles highlighting disparities in coverage in each of the 75 priority countries.
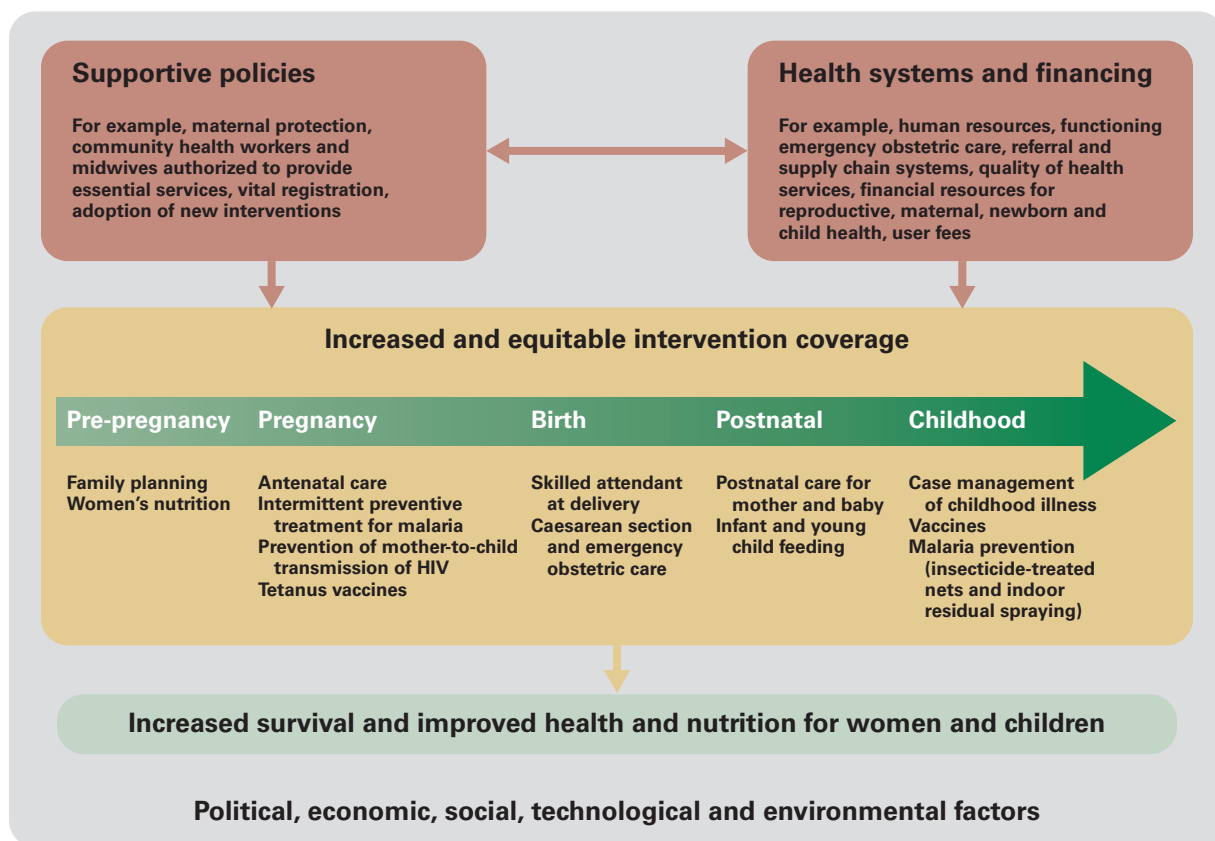
Countdown analyses are guided by a conceptual model (figure A1) consistent with the results-based evaluation framework for health systems strengthening that was developed by a working group of members from *Countdown*, the World Health Organization, the World Bank, the GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis and Malaria.[73] 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[74] and in Bangladesh for maternal survival,[75] with additional work nearing completion in Afghanistan, Pakistan, Ethiopia, Tanzania, Malawi and Peru.

Summary impact model guiding Countdown work

Supportive policies

For example, maternal protection, community health workers and midwives authorized to provide essential services, vital registration, adoption of new interventions

Health systems and financing

For example, human resources, functioning emergency obstetric care, referral and supply chain systems, quality of health services, financial resources for reproductive, maternal, newborn and child health, user fees

Increased and equitable intervention coverage

Pre-pregnancy	Pregnancy	Birth	Postnatal	Childhood
Family planning Women's nutrition	Antenatal care Intermittent preventive treatment for malaria Prevention of mother-to-child transmission of HIV Tetanus vaccines	Skilled attendant at delivery Caesarean section and emergency obstetric care	Postnatal care for mother and baby Infant and young child feeding	Case management of childhood illness Vaccines Malaria prevention (insecticide-treated nets and indoor residual spraying)

Increased survival and improved health and nutrition for women and children

Political, economic, social, technological and environmental factors

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 2015 include *Countdown* countries with available estimates for 2009–2014. To track coverage trends, subsets of countries with at least two data points for each indicator, one from 2000–2008 and one from 2009–2014, 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.[76] 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.[77]

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 2015 include *Countdown* countries with available estimates for 2009–2014. To track coverage trends, subsets of countries with at least two data points for each indicator, one from 2000–2008 and one from 2009–2014, 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.[76] 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.[77]

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.[78] 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[79] 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

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 share 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	World Health Organization, Maternal and Child Health Estimation
	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 babies***	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Saving Newborn Lives
Postnatal care	**Postnatal visit for mothers***	Multiple Indicator Cluster Surveys, Demographic and Health Surveys	Special data analysis by Saving Newborn Lives
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
	Insecticide-treated net use among children under age 5	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
	Zinc treatment for diarrhoea	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 (< 6 months)*	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
Body mass index	Women with low body mass index	Demographic and Health Surveys	Demographic and Health Surveys, STATCompiler (accessed March 2014)
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

Indicator		Data source	Global database
	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
	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 share 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 share 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	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 the pregnancy that led to their last birth in the X years preceding the survey by skilled health personnel	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 the pregnancy that led to their last birth 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™), at least one of which was received during antenatal care, 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 live births in the year who are protected from tetanus at birth	Number of live births in the year
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 a health check while in a facility or at home following delivery or a postnatal care visit within two days of delivery of their most recent live birth in the X years prior to the survey	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 last live births in the X years prior to the survey who received a health check while in a facility or at home following delivery or a postnatal care visit within two days of delivery	Total number of live births in the X years prior to the survey
Child health			
First-dose measles immunization coverage	Percentage of infants immunized with a first dose of measles-containing vaccine	Number of surviving infants who receive the first dose of measles-containing vaccine by their first birthday (or as recommended in the national immunization schedule)	Total number of surviving infants
Three doses of combined diphtheria with tetanus toxoid and pertussis containing vaccine coverage*	Percentage of infants who received three doses of diphtheria with tetanus toxoid and pertussis containing vaccine	Number of surviving infants receiving three doses of diphtheria with tetanus toxoid and pertussis containing vaccine	Total number of surviving infants
Three doses of *Haemophilus influenzae* type B immunization coverage	Percentage of infants who received three doses of *Haemophilus influenzae* type B vaccine	Number of surviving infants receiving three doses of *Haemophilus influenzae* type B vaccine	Total number of surviving infants
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 (cough with fast breathing due to problem in the chest or problem in the chest and blocked nose) 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 (cough with fast breathing due to problem in the chest or problem in the chest and blocked nose) in the two weeks prior to the survey

Intervention	Indicator definition	Numerator	Denominator
Zinc treatment for diarrhoea	Percentage of children ages 0–59 months with diarrhoea receiving zinc treatment	Number of children ages 0–59 months with diarrhoea in the two weeks prior to the survey receiving zinc	Total number of children ages 0–59 months with diarrhoea 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 previous two weeks 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 previous two weeks
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 one hour of birth	Total number of women with a live birth in the X years prior to the survey
Exclusive breastfeeding (< 6 months)*	Percentage of infants ages 0–5 months who are exclusively breastfed	Number of infants ages 0–5 months who were exclusively breastfed during the previous day	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	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) not shared with other households	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*.

Note: The indicator definitions use "in the X years prior to the survey" to indicate the different time periods for which Demographic and Health Surveys and Multiple Indicator Cluster Surveys collect information on births occurring prior to the survey.

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 2013–14 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 competencies related to the indicator on emergency obstetric care, including on care for newborns.

Financing Technical Working Group

Financing indicators

The *Countdown* Financing Working Group analysed 2013 official development assistance disbursements, as well as non–official development assistance official flows and private grants, reported to the Organisation for Economic Co-operation and Development's Development Assistance Committee's Creditor Reporting System aid activities database, using previously implemented methods.[80] Data were downloaded on 12 January 2015 and included 231,398 records of aid disbursement.

Researchers reviewed all records and manually coded them 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. 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 the codes assigned, a proportion of each record from 0% to 100% was allocated to child health, maternal and newborn health and reproductive health. These proportions were established after reviewing the literature and current estimates of health care financing (for example, general government expenditure on health as a percentage of total government expenditure), epidemiology (for example, percentage of a population group with HIV) and population structure (for example, percentage of population under age 5). The analysis included official development assistance and other official aid flows and private grants from 31 bilateral donors; 30 multilateral organizations GAVI, the Vaccine Alliance; the Global Fund to Fight AIDS, Tuberculosis and Malaria; and the Bill & Melinda Gates Foundation.[81]

The Institute for Health Metrics and Evaluation estimated total development assistance to maternal, newborn and child health to all countries at $9.7 billion in 2013, with 69% going to newborn and child health ($6.7 billion) and the remaining 31% going to newborn health ($3.0 billion).[82] It also estimated an 8.7% increase in funding to maternal, newborn and child health relative to 2012. However, these estimates

are preliminary based on early reports to the Creditor Reporting System; where data were incomplete, projections were made based on trends over time and commitments. The estimates do not include investments in malaria. The *Countdown* Financing Technical Working Group estimates are $9.8 billion for maternal, newborn and child health in 2013, $2.8 billion for maternal and newborn health and $7.1 billion for child health, covering 148 recipient countries. This is a 17% increase on the $8.4 billion estimated for maternal, newborn and child health in 2012 ($2.4 billion for maternal and newborn health and $6.0 billion for child health). The most recent Partnership for Maternal, Newborn and Child Health estimates of total official development assistance to reproductive, maternal, newborn and child health among the 75 priority countries is $12.1 billion.[83] This compares to the *Countdown* Financing Technical Working Group's estimate of $13.4 billion in ODA+ to reproductive, maternal, newborn and child health.

Some variation between the estimation exercises is not surprising, given differences in the methods used. The main differences are summarized in table F1.

TABLE F1

Overview of key differences in methods to resource tracking among *Countdown,* the Institute for Health Metrics and Evaluation and the Partnership for Maternal, Newborn and Child Health

Source of variation	*Countdown*	Institute for Health Metrics and Evaluation	Partnership for Maternal, Newborn and Child Health
Values tracked	Official development assistance disbursements, other official aid flows and private grants	Development assistance for health disbursements and commitments	Official development assistance disbursements and commitments
Recipients	All countries and 75 *Countdown* countries	Low- and middle-income countries, as classified by the World Bank	49 target countries for the Global Strategy for Women's and Children's Health and 75 *Countdown* countries
Data sources	All Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System disbursement data, including from within health, population, humanitarian, and all other sectors	Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System data on official development assistance within health and population sectors, donor and nongovernmental organization databases, and communication with donors	Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System data within health, population, and water sectors, and general budget support
Health areas tracked	Reproductive, maternal, newborn and child health; child health; maternal and newborn health; maternal, newborn and child health; and reproductive health	Eight health areas: maternal health, child and newborn health, HIV/AIDS, tuberculosis, malaria, noncommunicable diseases, sectorwide approaches and health sector support, and other infectious diseases	Reproductive, maternal, newborn and child health only
Coding approach	Researchers assign one of 27 activity-based codes to each disbursement record by reading project descriptions, Creditor Reporting System purpose codes and donor names	Automated, using theme-based key term searching and channel-specific rules	Use existing Creditor Reporting System purpose codes
How codes are used to generate estimates	A proportion of the value of records within each activity-based code is assigned to child health, maternal and newborn health or reproductive health; in some cases they are based on recipient country–specific data; in others the same allocation factor is used for all recipients.	The full value of a record containing a key term is allocated to the associated health area; if a record contains key terms for more than one health area, the value is divided across health areas according to the number of key terms.	Allocate a fixed proportion of the value of funding within each Creditor Reporting System purpose code to maternal, newborn and child health
Disease-specific spending	Allocates a proportion of disease-specific funding to maternal, newborn and child health	Excludes HIV, tuberculosis and malaria from the maternal, newborn and child health estimate	Allocates a proportion of each purpose code, including those specific to malaria, HIV and tuberculosis, to maternal, newborn and child health
Budget support and health systems funding	Allocates a proportion of budget support and health systems support to maternal, newborn and child health	Excludes health sector support from estimates	Allocates a proportion of budget support to maternal, newborn and child health

Annex G
Countdown countries prioritized for malaria intervention coverage analysis and *Countdown* countries considered vitamin A priority countries

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

- The left column includes 44 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 8 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 G2 identifies the *Countdown* countries considered priority countries for vitamin A.

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 = 44)		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 = 8)
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	Zimbabwe
Congo	Philippines	
Congo, Dem. Rep.	Rwanda	
Côte d'Ivoire	Saõ 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	Yemen	
Liberia	Zambia	

Source: WHO 2014b.

TABLE G2
Countdown countries considered priority countries for Vitamin A

Afghanistan	Congo	Haiti	Morocco	South Africa
Angola	Congo, Dem. Rep.	India	Mozambique	South Sudan
Azerbaijan	Côte d'Ivoire	Indonesia	Myanmar	Sudan
Bangladesh	Djibouti	Kenya	Nepal	Swaziland
Benin	Egypt	Kyrgyzstan	Niger	Tajikistan
Bolivia	Equatorial Guinea	Korea, Dem. People's Rep.	Nigeria	Tanzania, U. Rep.
Botswana	Eritrea	Lao People's Dem. Rep.	Pakistan	Togo
Burkina Faso	Ethiopia	Lesotho	Papua New Guinea	Turkmenistan
Burundi	Gabon	Liberia	Philippines	Uganda
Cambodia	Gambia	Madagascar	Rwanda	Uzbekistan
Cameroon	Ghana	Malawi	São Tomé and Príncipe	Viet Nam
Central African Republic	Guatemala	Mali	Senegal	Yemen
Chad	Guinea	Mauritania	Sierra Leone	Zambia
Comoros	Guinea-Bissau	Mexico	Somalia	Zimbabwe

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 Maternal Mortality Estimation Inter-agency Group (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 2015 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. Countdown to 2015 2005.
2. https://sustainabledevelopment.un.org/topics/ sustainabledevelopmentgoals.
3. The Bellagio Study Group on Child Survival 2003.
4. Countdown to 2015 2005, 2008, 2010, 2012, 2013, 2014.
5. Independent Expert Review Group 2015.
6. The Bellagio Study Group on Child Survival 2003.
7. The Bellagio Study Group on Child Survival 2003; Black and others 2008; Lawn, Cousens and Zupan 2005; Ronsmans and Graham 2006.
8. Requejo, Victora and Bryce 2014.
9. Victor and others forthcoming.
10. Maternal Mortality Estimation Inter-agency Group 2014.
11. Requejo and others 2015.
12. Say and others 2014.
13. Ahmed and others 2012.
14. Dean and others 2014; Mason and others 2014.
15. Lawn and others 2011.
16. UN Inter-agency Group for Child Mortality Estimation 2015; You and others 2015.
17. UN Inter-agency Group for Child Mortality Estimation 2015.
18. Black, Morris and Bryce 2003.
19. You and others 2015; UN Inter-agency Group for Child Mortality Estimation 2015.
20. Liu and others 2015.
21. Black and others 2008, 2013.
22. Black and others 2013; Liu and others 2015.
23. Lawn and others 2014.
24. IFPRI 2015; WHO 2012.
25. Black and others 2013.
26. Countdown to 2015 2013, 2014.
27. Summary data on stunting and wasting prevalence in the *Countdown* countries are available in the web appendix at www.countdown2015mnch.org.
28. A league table and summary measures for HIV, caesarean-section and zinc treatment tracked by *Countdown* are available in the web appendix at www. countdown2015mnch.org.
29. Walker and others 2013.
30. Hazir and others 2013.
31. The Composite Coverage Index is a weighted average of eight interventions along the continuum of care that have been available in most countries for at least a decade. The interventions include demand for family planning satisfied,

at least one antenatal care visit, skilled attendant at delivery, three immunization indicators (diphtheria-tetanus-pertussis, tuberculosis and first-dose measles), oral rehydration therapy for diarrhea and care-seeking for pneumonia. It is calculated as

$$CCI = \frac{1}{4}\left(FPS + \frac{SBA + ANCS}{2} + \frac{2DPT3 + MSL + BCG}{4} + \frac{ORT + CPNM}{2}\right).$$

This summary indicator used in *Countdown*'s routine reporting covers reproductive, maternal and newborn health, as well as both preventive and curative interventions.

32. Data are available in the web appendix at www. countdown2015mnch.org.
33. Countdown to 2015 2008.
34. Hazir and others 2013; Requejo, Newby and Bryce 2013.
35. Walker and others 2013.
36. UNICEF 2014, 2015.
37. Bryce and others 2013.
38. UNICEF 2015.
39. Victora and others 2003, 2012.
40. Barros and others 2012.
41. Victora and others 2012.
42. WHO 2007a.
43. See note 31 for the definition of the Composite Coverage Index.
44. Partnership for Maternal, Newborn and Child Health 2014.
45. See the web appendix at www.countdown2015mnch. org for adoption rates of 10 essential policies tracked by *Countdown,* based on a 2013–14 WHO survey developed in consultation with *Countdown* technical experts, as well as the latest available data on the legal status of abortion in the *Countdown* countries.
46. Global Health Workforce Alliance and WHO 2014.
47. Global Health Workforce Alliance and WHO 2014.
48. Ethiopian Public Health Institute 2015.
49. Miller and others 2014.
50. Waage and others 2010.
51. Waage and others 2010; Arregoces and others 2015.
52. Arregoces and others 2015.
53. Arregoces and others 2015.
54. Partnership for Maternal, Newborn and Child Health 2015.
55. Huicho and others forthcoming.
56. Arregoces and others 2015; Partnership for Maternal, Newborn and Child Health 2015; Dieleman and others 2015. See annex F for a description of the different methods

used by *Countdown,* the Institute for Health Metrics and Evaluation and the Partnership for Maternal, Newborn and Child Health and a discussion of the new Organisation for Economic Co-operation and Development policy marker.

57. Desalegn, Solberg and Kim 2015.
58. Jamison and others 2015.
59. Independent Expert Review Group 2015.
60. Beaglehole and others 2014.
61. Personal communication with P.C. Hallal.
62. Personal communication with L. Haddad.
63. Countdown 2008 Equity Analysis Group 2008; Dieleman and others 2015.
64. Handley and others 2015.
65. UN Inter-agency Group for Child Mortality Estimation 2015; Maternal Mortality Estimation Inter-agency Group 2014.
66. El Arifeen 2014.
67. WHO 2014a.
68. Stokstad 2015; *The Economist* 2015.
69. Desalegn, Solberg and Kim 2015.
70. The Bellagio Study Group on Child Survival 2003.
71. Bhutta and others 2010.
72. Commission on Information and Accountability for Women's and Children's Health 2011a.
73. Monitoring and Evaluation Working Group of the International Health Partnership and Related Initiatives n.d.; Bryce and others 2011.
74. Amouzou, Habi and Bensaïd 2012.
75. El Arifeen and others 2014.
76. Barros and Victora 2013.
77. Victora and others 2001.
78. Filmer and Pritchett 2001.
79. Requejo, Victora and Bryce 2014.
80. Arregoces and others 2015.
81. See www.oecd.org/dac/stats/methodology.htm for notes on the methodology used to calculate these values.
82. In 2013 prices. Dieleman and others 2015.
83. In 2013 prices. Partnership for Maternal, Newborn and Child Health 2015.

References

Afnan-Holmes, H., M. Magoma, T. John, and others. 2015. "Tanzania's Countdown to 2015: An Analysis of Two Decades of Progress and Gaps for Reproductive, Maternal, Newborn and Child Health, to Inform Priorities for Post-2015." *Lancet Global Health* 3(7): e396–409.

Ahmed, S., Q. Li, L. Liu, and others. 2012. "Maternal Deaths Averted by Contraceptive Use: An Analysis of 172 Countries." *Lancet* 380(9837): 111–25.

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

Arregoces, L., F. Daly, C. Pitt, and others. 2015. "Countdown to 2015: Changes in Official Development Assistance to Reproductive, Maternal, Newborn and Child Health, an Assessment of Progress between 2003 and 2012." *Lancet Global Health* 3(7): e410–21.

Barros, A.J., C. Ronsmans, H. Axelson, and others. 2012. "Equity in Maternal, Newborn, and Child Health Interventions in Countdown to 2015: A Retrospective Review of Survey Data from 54 Countries." *Lancet* 379(9822): 1225–33.

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

Beaglehole, R., R. Bonita, M. Ezzati, and others. 2014. "NCD Countdown 2025: Accountability for the 25 × 25 NCD Mortality Reduction Target." *Lancet* 384(9938): 105–07.

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.

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

Black, R.E., L.H. Allen, Z.A. Bhutta, and others. 2008. "Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences." *Lancet* 371(9608): 243–60.

Black, R.E., S.S. Morris, and J. Bryce. 2003. "Where and Why Are 10 Million Children Dying Every Year?" *Lancet* 361(9376): 2226–34.

Brewer, G.D., and P. DeLeon. 1983. *The Foundations of Policy Analysis*. Homewood, IL: Dorsey Press.

Bryce, J., F. Arnold, A. Hancioglu, and others. 2013. "Measuring Coverage in Maternal, Newborn and Child Health: New Findings, New Strategies and Recommendations for Action." *PLOS Med* 10(5): e1001423. doi/10.1371/journal.pmed.1001423.

Bryce, J., C.G. Victora, J.T. Boerma, and others. 2011. "Evaluating the Scale-Up to MDGs 4 and 5: A Common Framework." *International Health* 3(3): 139–46.

Carter, E., J. Bryce, J. Perin, and others. 2015. "Harmful Practices in the Management of Childhood Diarrhea in Low- and Middle-Income Countries: A Systematic Review." *BMC Public Health* 15: 788.

Chowdhury, R., B. Sinha, M.J. Sankar, and others. Forthcoming. "Breastfeeding and Maternal Health Outcomes: A Systematic Review and Meta-Analysis. *Acta Paediatrica*.

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

Cleland, J., S. Bernstein, A. Ezeh, and others. 2006. "Family Planning: The Unfinished Agenda." *Lancet* 368(9549): 1810–27.

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

——. 2011b. "Working Group on Accountability for Results: Final Paper." World Health Organization, Geneva.

Countdown 2008 Equity Analysis Group. 2008. "Mind the Gap: Equity and Trends in Coverage of Maternal, Newborn, and Child Health Services in 54 Countdown Countries." *Lancet* 371(9620): 1259–67.

Countdown to 2015. 2005. *Tracking Progress in Child Survival: The 2005 Report.* New York: United Nations Children's Fund.

——. 2008. *Tracking Progress in Maternal, Neonatal and Child Survival: The 2008 Report.* New York: United Nations Children's Fund.

——. 2010. *Countdown to 2015 Decade Report (2000–2010): Taking Stock of Maternal, Newborn and Child Survival.* New York: United Nations Children's Fund.

——. 2012. *Countdown to 2015: Building a Future for Women and Children: The 2012 Report.* Geneva: World Health Organization.

——. 2013. *Countdown to 2015: Accountability for Maternal, Newborn and Child Survival: The 2013 Update.* Geneva: World Health Organization.

——. 2014. *Countdown to 2015: Fulfilling the Health Agenda for Women and Children.* Geneva: World Health Organization.

Darroch, J.E., and S. Singh. 2013. "Trends in Contraceptive Use in Developing Countries in 2003, 2008 and 2012: An Analysis of National Surveys." *Lancet* 381(9879): 1756–62.

Davis, A., Z. Matthews, S. Szabo, and others. 2015. "Measuring the SDGs: A Two-Track Solution." Lancet 386(9990): 221–22.

Dean, S.V., Z.S. Lassi, A.M. Imam, and others. 2014. "Preconception Care: Closing the Gap in the Continuum of Care to Accelerate Improvements in Maternal, Newborn and Child Health." *Reproductive Health* 11(Suppl 3): S1.

Desalegn, H., E. Solberg, and J.Y. Kim. 2015. "The Global Financing Facility: Country Investments for Every Woman, Adolescent and Child." *Lancet* 386(9989): 105–06.

Dieleman, J.L., C. Graves, E. Johnson, and others. 2015. "Sources and Focus of Health Development Assistance, 1990–2014." *Journal of the American Medical Association* 313(23): 2359–68.

Dwivedi, V., M. Drake, B. Rawlins, and others. 2014. "A Review of the Maternal and Newborn Health Content of National Health Management Information Systems in 13 Countries in Sub-Saharan Africa and South Asia." United States Agency for International Development, Washington, DC.

The Economist. 2015. "The 169 Commandments." 28 March.

El Arifeen, S., K. Hill, K.Z. Ahsan, and others. 2014. "Maternal Mortality in Bangladesh: A Countdown to 2015 Country Case Study." *Lancet* 384(9951): 1366–74.

Ethiopian Public Health Institute. 2015. "Countdown to 2015: Ethiopia's Progress towards Reduction in Under-Five Child Mortality." Addis Ababa.

Fabic, M.S., Y. Choi, J. Bongaarts, and others. 2015. "Meeting Demand for Family Planning within a Generation: The Post-2015 Agenda." *Lancet* 385(9981): 1928–31.

Filmer, D., and L.H. Pritchett. 2001. "Estimating Wealth Effects without Expenditure Data-or Tears: An Application to Educational Enrollments in States of India." *Demography* 38(1): 115–32.

Glasier, A., A.M. Gülmezoglu, G.P. Schmid and others. 2006. "Sexual and Reproductive Health: A Matter of Life and Death." *Lancet* 368(9547): 1595–607.

Global Health Workforce Alliance and WHO (World Health Organization). 2014. *A Universal Truth: No Health Without a Workforce.* Geneva.

Handley, K., T. Boerma, C. Victora, and others. 2015. "An Inflection Point for Country Health Data." *Lancet Global Health* 3(8): e437–38.

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.

Horta, B.L., C.L. de Mola, and C.G. Victora. Forthcoming a. "Breastfeeding and Intelligence: Systematic Review and Meta-analysis." *Acta Paediatrica*.

Horta, B.L., C.L. de Mola, and C.G. Victora. Forthcoming b. "Long-term Consequences of Breastfeeding on Cholesterol, Obesity, Systolic Blood Pressure, and Type-2 Diabetes: Systematic Review and Meta-analysis." *Acta Paediatrica*.

Huicho, L., E. Segura E., J. Niño de Guzman, and others. Forthcoming. "Placing Child Health and Nutrition at the Centre of the Antipoverty Political Agenda: The Peruvian Experience, 2000–2013." *Lancet Global Health*.

IFPRI (International Food Research Policy Institute). 2014. *Global Nutrition Report 2014: Actions and Accountability To Accelerate the World's Progress on Nutrition*. Washington, DC.

——. 2015. *Global Nutrition Report 2015: Actions and Accountability To Advance Nutrition and Sustainable Development*. Washington, DC.

Independent Expert Review Group. 2015. *Every Woman Every Child: A Post-2015 Vision.* Third report of the independent Expert Review Group on Information and Accountability for Women's and Children's Health. Geneva: World Health Organization.

Jamison, D.T., L.H. Summers, G. Alleyne, and others. 2015. "Global Health 2035: A World Converging within a Generation." *Lancet* 382(9908): 1898–955.

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.

Lawn J.E., H. Blencowe, S. Oza, and others. 2014. "Every Newborn: Progress, Priorities, and Potential beyond Survival." *Lancet* 384(9938): 189–205.

Lawn, J.E., S. Cousens, and J. Zupan for the Lancet Neontal Survival Steering Team. 2005. "4 Million Neonatal Deaths: When? Where? Why?" *Lancet* 365(9462): 891–900.

Liu, L., S. Oza, D. Hogan, and others. 2015. "Global, Regional, and National Causes of Child Mortality in 2000–13, with Projections to Inform Post-2015 Priorities: An Updated Systematic Analysis." *Lancet* 385(9966): 430–40.

Liverpool School of Tropical Medicine, Centre for Maternal and Newborn Health. 2015. "Indicators for Quality of Maternal and Newborn Health Care at Facility Level: Report on Secondary Analysis of Facility Data." Liverpool, UK.

Lutter, C.K., C.M. Chaparro, L. Grummer-Strawn, and others. 2011. "Backsliding on a Key Health Investment in Latin America and the Caribbean: The Case of Breastfeeding Promotion." *American Journal of Public Health* 101(11): 2130–06.

Mason, E., V. Chandra-Mouli, V. Baltag, and others. 2014. "Preconception Care: Advancing from 'Important To Do and Can Be Done' to 'Is Being Done and Is Making a Difference'." *Reproductive Health* 11(Suppl 3): S8.

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.

Mathai, M., T.R. Dilip, I. Jawad, and others. Forthcoming. "Strengthening Accountability to End Preventable Maternal Deaths." *International Journal of Gynecology and Obstetrics*.

Miller, N.P., A. Amouzou, M. Tafesse, and others. 2014. "Integrated Community Case Management of Childhood Illness in Ethiopia: Implementation Strength and Quality of Care." *American Journal of Tropical Medicine and Hygiene* 91(2): 424–34. doi:10.4269/ajtmh.13–0751

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.C., K. Kerber, A. Pfitzer, and others. 2012. "Benchmarks to Measure Readiness to Integrate and Scale Up Newborn Survival Interventions." *Health Policy and Planning* 27(Suppl 3): iii29–39.

PAHO (Pan American Health Organization). 2010. "Sistema Informático Perinatal." 28 April. www.paho.org/clap/index.php?option=com_content&view=article&id=84%3Asistema-informa%C2%A1tico-perinatal&Itemid=242&lang=es.

Partnership for Maternal, Newborn and Child Health. 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.

——. 2015. *Strengthening Accountability: Achievements and Perspectives for Women's, Children's and Adolescent's Health.* Geneva.

Peres, K.G., A.M. Cascaes, G.G. Nascimento, and others. Forthcoming. "Effect of Breastfeeding on Malocclusions: A Systematic Review and Meta-Analysis." *Acta Paediatrica*.

Perin, J., L. Carvajal-Velez, E. Carter, and others. 2015. "Fluid Curtailment during Childhood Diarrhea: A Countdown Analysis." *BMC Public Health* 15: 588.

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* 43(2): 586–96.

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.

Requejo, J.H., J. Bryce, A.J.D. Barros, and others. 2015. "Countdown to 2015 and Beyond: Fulfilling the Health Agenda for Women and Children." *Lancet* 385(9966): 466–76.

Ronsmans, C., and W.J. Graham on behalf of The Lancet Maternal Survival Series steering group. 2006. "Maternal Mortality: Who, When, Where and Why." *Lancet* 368(9542): 1189–200.

Roos, N., M. Zolzer-Yazdani, S. Purcell-Gilpin, and others. 2015. "Exploring the Feasibility of Measurement of Quality of Care Indicators for Maternal, Newborn and Child Care in Faith Based Health Care Facilities in Five Sub-Saharan African Countries." World Health Organization and World Council of Churches, Geneva.

Sankar, M.J., B. Sinha, R. Chowdhury, and others. Forthcoming. "Optimal Breastfeeding Practices and Infant and Child Mortality: A Systematic Review and Meta-Analysis." *Acta Paediatrica*.

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.

Singh, S., J.E. Darroch, and L.S. Ashford. 2014. *Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014.* New York: Guttmacher Institute.

Stokstad, E. 2015. "Sustainable Goals from U.N. under Fire." *Science* 347(6223): 702–03.

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

UNFPA (United Nations Population Fund). 2008. *Family Planning and the Environment: Stabilizing Population Would Help Sustain the Planet.* New York.

UNICEF (United Nations Children's Fund). 2014. *Committing to Child Survival: A Promised Renewed: Progress Report 2014.* New York.

——. 2015. *Progress for Children: Beyond Averages: Learning from the MDGs.* Number 11. New York.

UN Inter-agency Group for Child Mortality Estimation. 2014. *Levels & Trends in Child Mortality: Report 2014.* New York: United Nations Children's Fund.

——. 2015. *Levels & Trends in Child Mortality: Report 2015.* New York: United Nations Children's Fund.

United Nations. 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development.* New York.

USAID (United States Agency for International Development). 2015. "Ending Preventable Maternal Mortality: USAID Maternal Health Vision

for Action: Evidence for Strategic Approaches." Washington, DC.

Victora, C.G., A. Wagstaff, J.A. Schellenberg, and others. 2003. "Applying an Equity Lens to Child Health and Mortality: More of the Same Is Not Enough." *Lancet* 362(9379): 233–41.

Victora, C.G., A.J. Barros, H. Axelson, and others. 2012. "How Changes in Coverage Affect Equity in Maternal and Child Health Interventions in 35 Countdown to 2015 Countries: An Analysis of National Surveys." *Lancet* 380(9848): 1149–56.

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.

Victora, C.G., B.L. Horta, C.L. de Mola, and others. 2015. "Association between Breastfeeding and Intelligence, Educational Attainment, and Income at 30 Years of Age: A Prospective Birth Cohort Study from Brazil." *Lancet Global Health* 3(4): e199–205.

Victora, C.G., J. Requejo, A.J. Barros, and others. Forthcoming. "Countdown to 2015: A Decade of Tracking Progress for Maternal, Newborn and Child Survival." *Lancet.*

Waage, J., R. Banerji, O. Campbell, and others. 2010. "The Millennium Development Goals: A Cross-Sectoral Analysis and Principles for Goal Setting after 2015: *Lancet* and London International Development Centre Commission." *Lancet* 376(9745): 991–1023.

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.

WHO (World Health Organization). 2007a. *Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action.* Geneva.

——. 2007b. "Standards for Maternal and Neonatal Care." Geneva.

——. 2012. "Sixty-Fifth World Health Assembly Resolutions And Decisions Annexes." 21–26 May, Geneva. www.who.int/nutrition/topics/WHA65.6_resolution_en.pdf.

——. 2014a. "Improving Mortality Statistics through Civil Registration and Vital Statistics Systems: Strategies for Country and Partner Support." Outcome of a technical meeting, 4–5 November, Geneva.

——. 2014b. *World Malaria Report 2014.* Geneva.

WHO and Partnership for Maternal, Newborn and Child Health. 2014. *Consultation on Improving Measurement of the Quality of Maternal, Newborn and Child Care in Health Facilities.* Geneva.

You, D., L. Hug, S. Ejdemyr, and others. 2015. "Global, Regional, and National Levels and Trends in Under-5 Mortality between 1990 and 2015, with Scenario-Based Projections to 2030: A Systematic Analysis by the UN Inter-agency Group for Child Mortality Estimation." *Lancet*, 8 September. www.thelancet.com/journals/lancet/article/PIIS0140–6736(15)00120–8/abstract.