

# Equity—targeting the underserved



Equity was noticeably absent in the original formulation of the Millennium Development Goals.<sup>38</sup> Since its first report, *Countdown* has provided original analyses of inequalities in intervention coverage by wealth, sex of the child, place of residence and other social determinants. These analyses consistently show systematic pro-rich inequalities for virtually all coverage indicators.<sup>39</sup> The gaps are wider for interventions that require access to fixed health facilities or repeat contacts with a health provider (such as four or more antenatal care visits and skilled attendant at delivery) than for interventions that can be delivered through outreach strategies at the community level (such as immunization).<sup>40</sup> The countries that have made rapid progress in coverage are those that effectively reached the poorest families.<sup>41</sup> The *Countdown* Equity Technical Working Group prepares equity

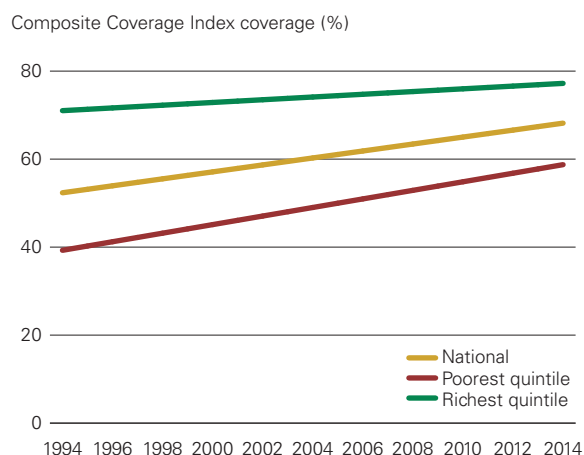
profiles for each *Countdown* country (see [www.countdown2015mnch.org](http://www.countdown2015mnch.org)).

The growing number of countries with repeated surveys allows analyses of global trends in coverage not only at the national level, but also for the poorest and richest quintiles of mothers and children. Globally, the Composite Coverage Index<sup>42</sup> increased for both the richest and poorest quintiles, but the increase was steeper among the poorest (1.0 percentage point per year; 95% confidence interval: 0.8, 1.1) than for the richest (0.3 percentage point; 95% confidence interval: 0.2, 0.4; left panel of figure 4). The rich–poor gap declined from 28 percentage points in 2000 to 19 in 2014, indicating an increase in coverage equity in both absolute and relative terms (both trends with  $P < 0.001$ ; right panel of figure 4).

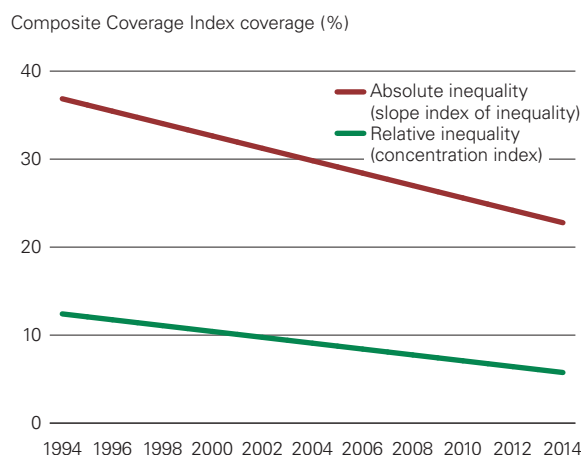
FIGURE 4

## Greater data availability permits global tracking of declining inequalities

**Trends in the Composite Coverage Index, national and poorest and richest quintile, 47 *Countdown* countries**



**Trends in absolute and relative inequality in the Composite Coverage Index**



Source: Re-analysis of Demographic and Health Survey and Multiple Indicator Cluster Survey data sets at the International Center for Equity in Health at the Federal University of Pelotas.

Despite the persistent coverage gap between rich and poor mothers and children, the gap has been closing, at least for the eight long-standing interventions that are part of the Composite Coverage Index (box 8).

Like coverage, data availability for equity analyses has improved, but much scope for progress remains. Repeated surveys using consistent measurement of equity stratifiers, such as wealth, gender, residence or ethnicity, are required to identify priority groups and track subnational progress over time.

**BOX 8**

**How does equity change as coverage increases in *Countdown* countries?**

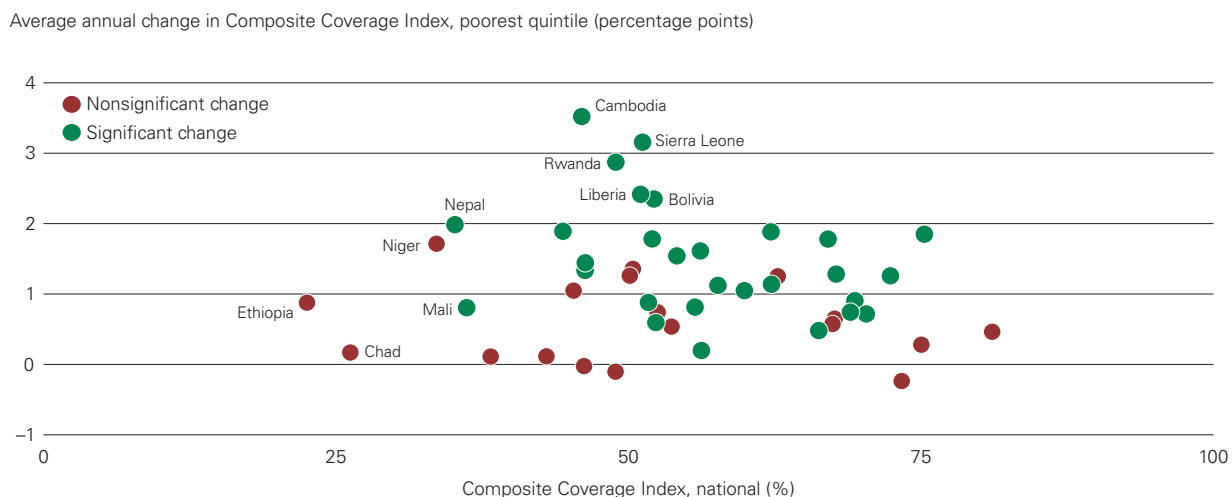
Focusing on coverage at the national level can mask large differences in access to services among different population groups within and across countries. Understanding country progress in reaching all population groups and determining strategies for improving coverage require exploring how inequalities in reproductive, maternal, newborn and child health interventions have changed over time.

Countries with higher average annual change on the Composite Coverage Index between 2000 and 2014 among the poorest quintile had national coverage around 50% at the baseline—Bolivia, Cambodia, Liberia, Rwanda and Sierra Leone (figure 1). Countries with high baseline national coverage are expected to make slower progress because they have less room for improvement. But several countries with lower baseline

coverage had slow progress as well (Mali and Nepal). And countries with the lowest baseline coverage did not make progress at all (Chad and Ethiopia).

Liberia achieved the biggest reductions in both absolute and relative inequalities by increasing the Composite Coverage Index value for all wealth quintiles, except for the richest, for whom coverage remained around 70% (figure 2). Bolivia presented a somewhat similar pattern, but with coverage for the richest just over 80%. In the other three countries the Composite Coverage Index value increased for all wealth quintiles but more rapidly for the poorer ones. In Cambodia (and in Sierra Leone to a lesser extent) top inequality (the richest have much higher coverage than the rest) at the baseline disappeared, while in Niger it remained.

**Figure 1. Rapid increases in coverage among the poor were observed in several countries, particularly those with national baseline coverage around 50 percent**



Source: Re-analysis of Demographic and Health Survey and Multiple Indicator Cluster Survey data sets at the International Center for Equity in Health at the Federal University of Pelotas.

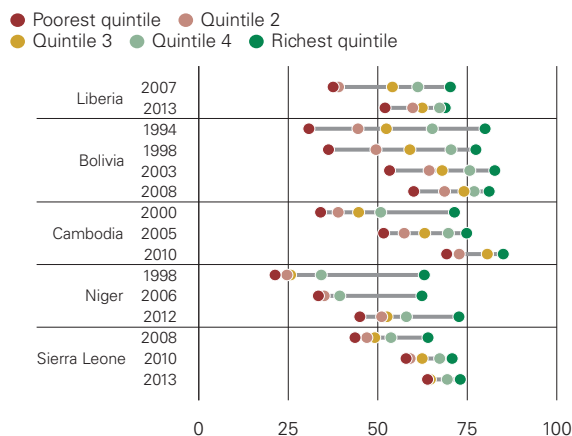
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### How does equity change as coverage increases in *Countdown* countries?

These examples indicate that rapid reductions in inequities in coverage are possible but that some countries are lagging behind and should be encouraged to introduce pro-poor strategies. Renewed efforts for increasing health intervention coverage should be based on locally designed equity-oriented policies to avoid favouring the rich first and thus increasing inequalities. This is especially important in places where baseline inequalities are already high.

**Figure 2. Reducing coverage inequalities is possible through targeting the poorest women and children**

Composite Coverage Index score for the five countries with biggest reduction in Composite Coverage Index inequality since 2000, by wealth quintile and in order of magnitude in reducing inequality



Source: Re-analysis of Demographic and Health Survey and Multiple Indicator Cluster Survey data sets at the International Center for Equity in Health at the Federal University of Pelotas.



# Determinants of coverage and equity—policies, systems and financing



*Countdown* recognizes that country ability to achieve high and equitable coverage of proven interventions depends on sufficient financial investments in women's and children's health, supportive legislative frameworks and resilient health systems. Broader contextual factors such as progress in social and economic determinants of health and political stability also influence access to and use of health services. This section provides an update on country progress in adopting key policies and improving human resources for health, as well as trends in official development assistance for reproductive, maternal, newborn and child health.

## Progress depends on adopting key policies and strong health systems

Supportive policy environments and functional health systems with adequate human resources are prerequisites for high and equitable coverage. The number of policy and systems indicators tracked in *Countdown* has increased, from 5 policies that promote child survival in the first report to 11 policies that cover the full reproductive, maternal, newborn and child health continuum of care in this year's report, including four measures of systems that are critical to effective service delivery for women and children. These indicators are consistent with the WHO health system building block framework<sup>43</sup> and the Essential Policies Compendium.<sup>44</sup> Although further work is needed to develop comparable metrics for implementation strength at the national and subnational levels, *Countdown* has developed a set of tools that can be used to generate descriptions of relevant policies and aspects of reproductive, maternal, newborn and child health programme implementation across countries and over time (box 9).

Notable progress in adopting supportive policies has occurred across the *Countdown* countries.<sup>45</sup> The number of countries that adopted each of six policies for which trend data are available

increased markedly between 2008 and 2014 (figure 5). However, gaps remain, and more progress is needed, particularly for policies that are lagging. Two policies where uptake has been slow are maternity protection in accordance with Convention 183 of the International Labour Organization (which includes maternal leave and employment protection during pregnancy and the postnatal period) and adoption of the International Code of Marketing for Breastmilk Substitutes. Although the increase in adoption of policies on the notification of maternal deaths has been impressive, more effort is needed to strengthen country capacity to record and analyse the causes of maternal and perinatal deaths. Such information is critical for improving the quality of care in the Sustainable Development Goals era (box 10).

Increased investment in information systems and a growing demand to understand the association between human resources and health have expanded available data on skilled health professionals.<sup>46</sup> Three-quarters of *Countdown* countries have fewer than 22.8 physicians, nurses and midwives per 10,000 people, the threshold that the WHO considers necessary to achieve high coverage of essential health interventions in high-burden countries.<sup>47</sup> The most recent estimates show a median density of 10.2 skilled health professionals per 10,000 people in the *Countdown* countries, ranging from 1.6 in Madagascar and Niger to 142 in Uzbekistan.

Ethiopia's rapid expansion of its human resource capacity for health through the Health Extension Program introduced in 2003 shows that countries can successfully address shortfalls in their health workforce through intensive political commitment and investments.<sup>48</sup> Although gaps remain in the country's health workforce, in less than five years Ethiopia trained and deployed more than 30,000 health extension workers and substantially increased the number of nurses, physicians, health officers and midwives. However, more health workers is only one of several essential steps



**BOX 9****What can systematic tools to track health systems and policy change contribute to understanding progress for ending preventable maternal, newborn and child deaths?**

Capturing information on adoption and implementation of policies and programmes is key to understanding how countries accelerate progress in maternal, newborn and child survival. However, few multicountry assessments on policy change and programme implementation have been undertaken, partly because of a lack of data and standardized methods for collecting and analysing this information. To address this gap, *Countdown* developed a tool set for use in country case studies to systematically analyse and compare national trends in policy adoption and programme implementation for reproductive, maternal, newborn and child health.

The tool set builds on policy-tracking approaches developed for the Decade of Change for Newborn Survival series<sup>1</sup> and inputs from more than 100 policymakers in *Countdown* countries<sup>2</sup> to help in monitoring four phases of the policy process—agenda setting, policy formulation, policy implementation and evaluation. It will be available at [www.countdown2015mnch.org](http://www.countdown2015mnch.org) in 2016 and includes four tools: the policy and programme timeline tool, the health policy tracer indicators dashboard, the health systems tracer indicators tool and the programme implementation assessment.

Figure 1 shows the timeline developed for Tanzania spanning 1990–2015,<sup>3</sup> which identifies all major policy and systems changes related to reproductive, maternal, newborn and child health. Tanzania

has experienced a complex policy and strategy environment since 1990. Child health has received consistent attention, with a focus on scaling up high-impact interventions at lower health system levels, such as the community level. Prioritization of maternal health started in the mid-1990s, with programmes and policies targeted at secondary and tertiary levels of the health system. Specific attention to newborn health started later in 2005, but programmes are being rapidly scaled up at the facility and community levels. Reproductive health lost momentum over 1990–2000s, with recent re-investment.

These tools can help tell the story of when changes in policies and programmes took place within and across countries, a starting point for understanding strategies adopted by countries to end preventable maternal, newborn and child deaths. They can also provide important lessons to guide countries in their efforts to achieve the post-2015 development goals. Further work is needed in developing standardized approaches to measure the strength of programme implementation that go beyond the *Countdown* tool set, which is critical for monitoring programme performance and impact on health outcomes.

**Notes**

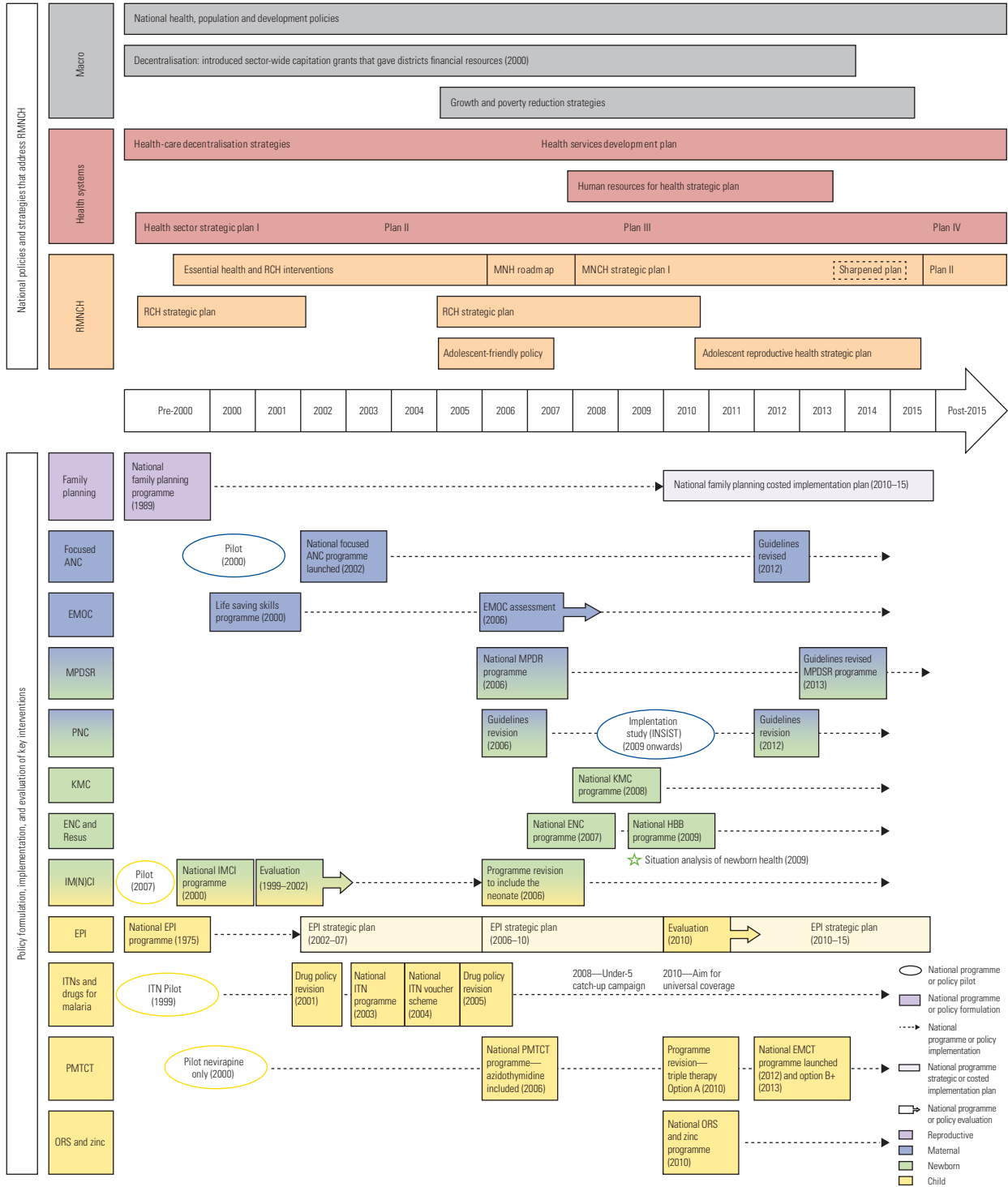
1. Brewer and DeLeon 1983.
2. Moran and others 2012.
3. Afnan-Holmes and others 2015.

*(continued)*

BOX 9 (CONTINUED)

## What can systematic tools to track health systems and policy change contribute to understanding progress for ending preventable maternal, newborn and child mortality?

### Tanzania's timeline of major policy and systems changes related to reproductive, maternal, newborn and child health, 1990–2015

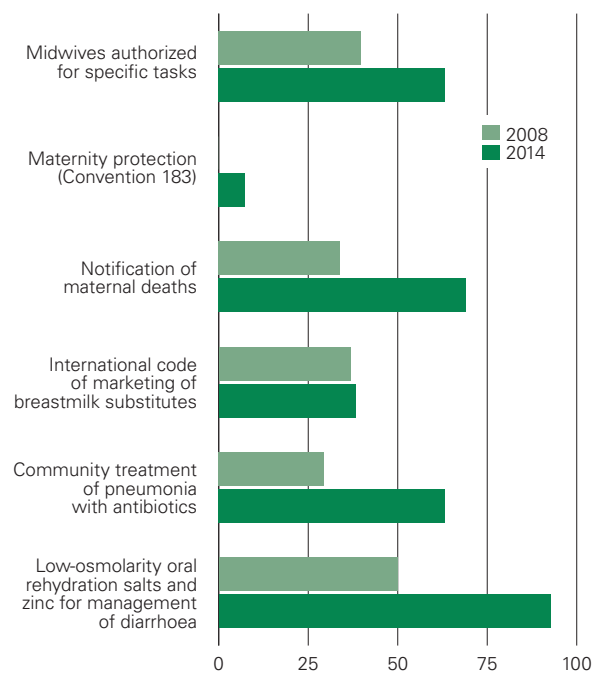


Source: Afnan-Holmes and others 2015.

FIGURE 5

**The number of countries that adopted each of six supportive policies for which trend data are available increased markedly between 2008 and 2014**

Adoption of selected tracer policies at the macro and micro policy level for 68 *Countdown* countries, 2008 and 2014 (%)



Source: World Health Organization Global Maternal Newborn Child and Adolescent Health Policy Indicator Surveys.

for increasing service access, quality and use.<sup>49</sup> The next steps in Ethiopia are to introduce health worker policies that will improve motivation and reduce turnover by ensuring a reasonable task load and supportive supervision, to strengthen the supply chain system in order to reduce stockouts of equipment and supplies, to develop a robust information system with a feedback loop in order to monitor the extent to which services are being delivered, and to improve the referral chain. The country is aiming to boost demand for services through its Health Development Army, whose tasks include disseminating health messages at the community level.

*Countdown* has contributed to substantial increases in data availability on policies by helping shape the contents of the WHO's biennial policy survey. More work is needed to overcome the limitations of using a survey-based approach in order to ensure more timely and accurate information and to explore associations between policy implementation and changes in coverage.

*Countdown's* tracking of country progress in including key reproductive, maternal, newborn and child health commodities on the essential medicine list and in having costed national plans for women's and children's health is aligned with global efforts such as the Commission on Life-Saving Commodities to improve supply chain systems and the quality of care. The WHO is leading efforts to assess the feasibility of collecting data on selected tracer indicators for measuring quality of care for maternal, newborn and child health (box 11).

**Increases in funding are encouraging, but reliable financing for reproductive, maternal, newborn and child health remains a concern**

The establishment of the Millennium Development Goals framework led to a major upswing in political prioritization of women's and children's health,<sup>50</sup> and official development assistance surged after the Millennium Development Goal summit in 2000.<sup>51</sup> Although the growth in official development assistance slowed substantially following the economic crisis in 2007–08, official development assistance to maternal, newborn and child health in the *Countdown* countries tripled over 2003–12, from \$2 billion to \$6 billion.<sup>52</sup> Most of the investment was for general health care (including health systems support), reproductive health, malaria programmes and immunization programmes. During the same period, official development assistance for projects that mention newborns grew exponentially, from \$33 million to \$1 billion, reflecting the greater visibility of newborn health.<sup>53</sup> But these investments are far too little given that neonatal causes account for almost half of deaths among children under age 5.

Government expenditures for reproductive, maternal, newborn and child health in *Countdown* countries increased approximately 31% between 2010 and 2013.<sup>54</sup> Although the increased commitments and funding associated with the UN Every Woman Every Child Initiative are encouraging, further increases are needed to accelerate progress in reducing preventable maternal and child deaths. In particular, better targeting of resources to assist countries with the greatest burden and to support the scale-up of high-impact interventions would help narrow inequities between and within countries and promote the achievement of the next set of global goals. Box 12 outlines disbursements for reproductive, maternal, newborn and child health in 2013, describing the largest donors and how aid is targeted to the *Countdown* countries.

**BOX 10****Positive policy changes for maternal death notification—but more action is needed for stillbirths and neonatal deaths**

There is widespread acknowledgment of the need for more and better data on deaths of women and newborns around the time of birth. New guidelines and tools for maternal death surveillance are now available, and many countries have adopted policies related to maternal death notification. Figure 5 in the main report shows that of the 68 countries with available trend data, 47 (69%) reported having a policy on maternal death notification in 2013–14, up from 23 (34%) in 2008. Progress has been slower for policies requiring all stillbirths and neonatal deaths to be reviewed. Only 16 Countdown countries reported having such a policy for stillbirths, and only 30 reported having one for neonatal deaths, according to a 2013–14 World Health Organization Global Maternal, Newborn Child and Adolescent Health Policy Indicator Survey.

Adoption of policies for maternal, stillbirth and neonatal death notification and review is only a first step; it must be followed by full implementation, which includes the scale-up of maternal and perinatal audits. As a complement to a country's civil and vital registration system, maternal and perinatal mortality audits can provide essential evidence to guide programmatic changes, leading to better quality of care.<sup>1</sup> However, many low- and middle-income countries lack a systematic approach for reviewing the causes and factors linked to maternal and perinatal deaths and “near-miss events” occurring in facilities and in the community. The large number of stillbirths

and neonatal deaths, particularly in comparison to maternal deaths, presents a challenge to already weak health information systems that are not equipped to capture, let alone review, the quality of services provided to each baby who died. However, some countries are making an effort towards registering every birth and death and promoting review of select stillbirth and neonatal death cases in order to improve the quality of intrapartum care.

To increase political prioritization of notification and review of stillbirths and neonatal deaths, the Every Newborn Action Plan includes a milestone for developing perinatal mortality audit guidelines. These guidelines will help clarify who is responsible for recording and reviewing stillbirths and neonatal deaths and how to use the information to improve health worker and health system performance.

The benefit of audit and feedback is well recognized, and countries need to be supported in their efforts to adopt policies related to civil and vital registration and to implement both maternal and perinatal audits as critical actions towards preventing future deaths of mothers and their babies.<sup>2</sup>

**Notes**

1. Commission on Information and Accountability for Women's and Children's Health 2011b.

2. Mathai and others forthcoming.

Each *Countdown* case study includes a detailed analysis of trends in financial flows to reproductive, maternal, newborn and child health and illustrates the complexity of the funding environment (see box 1). For example, the Peru<sup>55</sup> and Ethiopia case studies both showed rapid growth in reproductive, maternal, newborn and child health expenditures over the past decade, which their authors suggest was an important contributor to accelerations in child survival. But the two countries used different resources and financing mechanisms to fund their programmes. Peru, an upper middle-income country, relied mostly on domestic funding, while Ethiopia, a low-income country, relied heavily on external funding. Both countries have high out-of-pocket spending, which must be addressed to make health care more affordable to disadvantaged population groups (box 13).

The general consensus across the panoply of resource-tracking efforts is that official development assistance and domestic expenditures for reproductive, maternal, newborn and child health are increasing.<sup>56</sup> Data on domestic spending on reproductive, maternal, newborn and child health are insufficient to estimate trends for the *Countdown* countries. The work of the Lancet Global Commission on Investing in Health, which emphasizes the centrality of reproductive, maternal, newborn, child and adolescent health for achieving global development, and the World Bank's recently announced Global Financing Facility in support of Every Woman Every Child are signs that investments in reproductive, maternal, newborn, child and adolescent will continue to grow.<sup>57</sup> Such investments will focus on child and adolescent development in addition to survival.



## Measuring quality of care: challenges and solutions

Services for women and children must meet quality standards to be effective in saving lives. Assessing care quality and using the results to strengthen service delivery are urgent priorities. Numerous tools exist for these purposes, ranging from readiness assessments that determine whether trained personnel and system supports are available (such as the World Health Organization's [WHO] Service Availability and Readiness Assessments and Demographic and Health Surveys Service Provision Assessments) to full observation-based evaluations of the care received (such as the Maternal and Child Health Integrated Program's Rapid Health Facility Assessment, the World Health Organization's Health Facility Survey for the Integrated Management of Childhood Illness and MEASURE Evaluation's Quick Investigation of Quality).

However, a remaining challenge is to define a standard set of core quality indicators and associated measurement tools that can produce comparable data across programmes and countries. Ideally, information on these indicators should be captured through existing systems and not through special studies or surveys. In 2013 the WHO convened a technical meeting that recommended 19 quality indicators across the continuum of care.<sup>1</sup> The WHO is now assessing the feasibility of collecting comparable data on them in different settings.

The potential of routine systems to generate needed data on quality was assessed through two efforts over 2012–14. Both the U.S. Agency for International Development–funded Maternal and Child Survival Program<sup>2</sup> and the Centre for Maternal and Newborn Health at the Liverpool School of Tropical Medicine<sup>3</sup> assessed the availability of relevant routine data on service quality in selected countries in Sub-Saharan African and South Asia. The Maternal and Child Survival Program focused on national health management and information systems, and the Centre

for Maternal and Newborn Health focused on health facilities. The results were sobering and suggest that standalone tools will be needed to complement routine sources in order to generate data on service quality for some time, especially for newborn care.

Even using specific tools, however, generating data to support measurement of the 19 indicators may not be feasible in most settings, as found in a recent exercise conducted by the World Council of Churches in 24 mostly second-level health care facilities in rural areas of five African countries.<sup>4</sup> The exercise also found that some of the recommended child and newborn indicators may need to be reformulated so that the information collected is more useful for informing efforts to improve the performance of health worker systems. Strong leadership and a focused development programme will be needed to generate technical consensus on a limited number of quality indicators across the continuum of care that are feasible for measurement in low- and middle-income countries and to generate timely information useful for both programme monitoring and global reporting. The Sistema Informático Perinatal that has been implemented by the Latin American Perinatal Center in many countries of the region may provide a good model, especially because it illustrates the importance of tempering an aspirational list of indicators with concrete realities about the information actually available and able to be tracked routinely at the country level.<sup>5</sup>

### Notes

1. WHO and Partnership for Maternal, Newborn and Child Health 2014.
2. Formerly the Maternal and Child Integrated Program. See [www.mcsprogram.org](http://www.mcsprogram.org) and Dwivedi and others (2014).
3. Liverpool School of Tropical Medicine, Centre for Maternal and Newborn Health 2015.
4. Roos and others 2015.
5. PAHO 2010.

However, the very large number of goals and targets in the Sustainable Development Goals framework could detract from a sustained and accelerated focus on reproductive, maternal, newborn and child health, leaving many countries short of funds, particularly those that depend heavily on donors. The most important strategies in the coming years may be those that shore up the

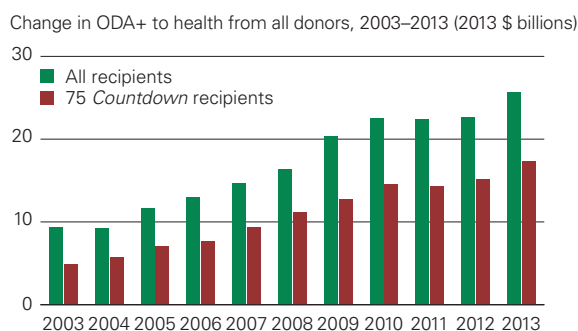
contribution of national sources to reproductive, maternal, newborn and child health. Country-level mechanisms such as concrete investment cases and accountability procedures that strengthen collaboration between citizens and governments can build more sustainable and efficient funding for reproductive, maternal, newborn and child health at the local level.

Tracking commitments and disbursements of official development assistance is valuable for holding donors to account for their commitments. This box presents data on flows of official development assistance disbursements in 2013 for reproductive, maternal, newborn and child health to the 75 *Countdown* countries. The term ODA+ is used to encompass disbursements from all donors reporting to the Organisation for Economic Co-operation and Development Creditor Reporting System, including official flows that are not official development assistance as well as private grants.<sup>1</sup> All values are in 2013 U.S. dollars.

ODA+ to health to all recipients was estimated at \$25.8 billion in 2013, accounting for 12% of total ODA+ and up 13% in real terms from 2012. ODA+ to health among the *Countdown* countries was \$17.4 billion, up 15% in real terms from 2012. Over 2003–13 ODA+ to health nearly tripled among all recipients and more than tripled in the *Countdown* countries (figure 1).<sup>2</sup>

An estimated \$13.4 billion of ODA+ was disbursed to the *Countdown* countries for reproductive, maternal, newborn and child health in 2013, up 34% from \$9.9 billion in 2012. The \$13.4 billion included \$2.5 billion for maternal and newborn health (19% of the total and up 28% from 2012), \$6.4 billion for child health (48% of the total and up 35% from 2012) and \$4.5 billion for reproductive health (including family planning, sexual health and sexually transmitted infections, including HIV; 33% of the total and up 38% from 2012). The 75 *Countdown* countries received 91.5% of the \$14.6 billion in ODA+ for reproductive,

**Figure 1. Over 2003–13 ODA+ to health nearly tripled among all recipients and more than tripled in the *Countdown* countries**



Source: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System and Aid Activities Database.

maternal, newborn and child health disbursed in 2013 to 148 countries worldwide.

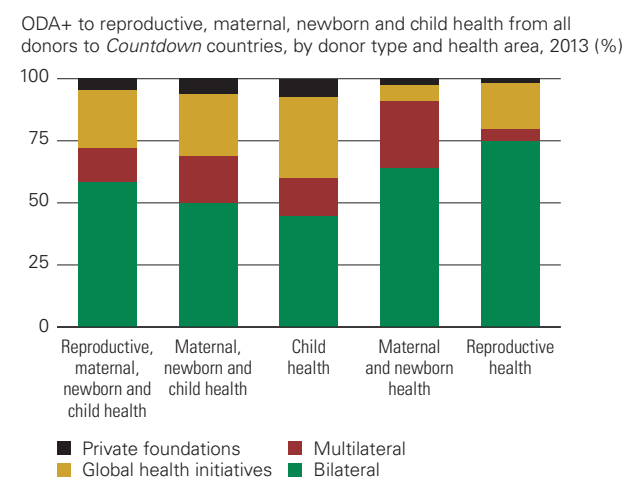
**From whom?**

In 2013, as in previous years, more than half of ODA+ to reproductive, maternal, newborn and child health to the 75 *Countdown* came from bilateral agencies (58%), 14% came from multilateral agencies, 23% came from global health initiatives and 5% came from private foundations. The relative prominence of donor types varied across health areas: bilateral agencies provided three-quarters of funding to reproductive health, global health initiatives provided a third of funding to child health and multilateral agencies provided a quarter of funding to maternal and newborn health (figure 2).

Global health initiatives and private foundations gave the majority of their reproductive, maternal, newborn and child health funding to child health projects (two-thirds by global health initiatives and three-quarters by private foundations). Multilateral agencies gave just over half their reproductive, maternal, newborn and child health funding to child health and a third to maternal and newborn health, and bilateral agencies gave over two-fifths to reproductive health (figure 3).

The largest donor to reproductive, maternal, newborn and child health in 2013 was the United States, providing 30% of the total ODA+ disbursed. The largest

**Figure 2. The relative prominence of donor types varied across health areas**



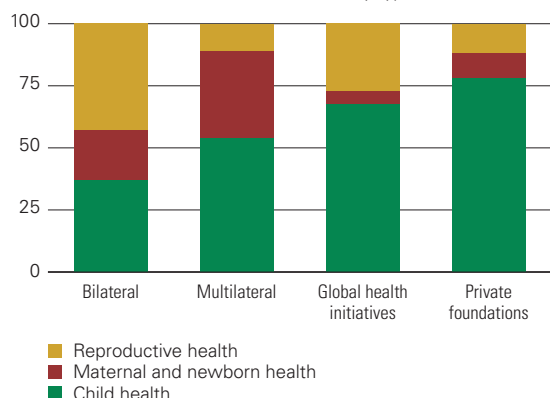
Source: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System and Aid Activities Database.

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**Official development assistance: 2013 updates**

**Figure 3. Global health initiatives and private foundations gave the majority of their reproductive, maternal, newborn and child health funding to child health projects**

Distribution of the focus areas of ODA+ to reproductive, maternal, newborn and child health disbursements by type of donor (%)



Source: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System and Aid Activities Database.

donors by health area were Gavi, the Vaccine Alliance, to child health (21%) and the United States to maternal and newborn health (15%) and to reproductive health (62%). The total proportion provided by the 10 largest donors in each health area varied from 69% of ODA+ to maternal and newborn health to 94% of ODA+ to reproductive health, and was 84% of ODA+ to reproductive, maternal, newborn and child health (see table). The increase in funding to reproductive, maternal, newborn and child health between 2012 and 2013 was driven primarily by increases in disbursements of 37% from the United States (\$3.0 billion to \$4.1 billion), 75% from the United Kingdom (\$754 million to \$1.3 billion) and 60% from Gavi, the Vaccine Alliance (\$858 million to \$1.4 billion), as well as by large increases from the Bill & Melinda Gates Foundation, the Global Fund to Fight AIDS, Tuberculosis and Malaria, the International Development Association and Norway.

As a proportion of national gross domestic product, the largest disbursements to reproductive, maternal, newborn and child health in 2013 came from Norway (0.07%), the United Kingdom (0.05%), Sweden (0.04%), Luxembourg (0.04%) and Canada (0.04%).<sup>3</sup>

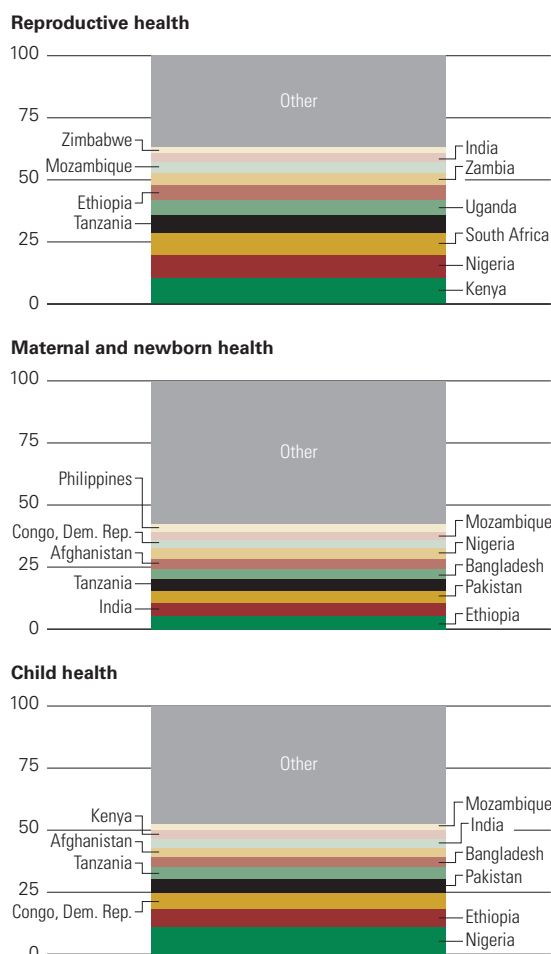
**To whom?**

As in previous years, in 2013 more-populous countries received greater absolute disbursements, and countries

with smaller populations received more funding per capita. Kenya, Nigeria, South Africa and Tanzania received the most funding for reproductive health, with the 10 largest recipients receiving 63% of ODA+ to reproductive health (figure 4). Ethiopia, India and Pakistan received the most funding for maternal and newborn health, with the 10 largest recipients receiving 42% of ODA+ to maternal and newborn health. Nigeria, Ethiopia and the Democratic Republic of Congo received the most funding for child health, with the 10 largest recipients receiving 52% of ODA+ to child health.

**Figure 4. In 2013 the 10 largest recipients received 42% of all ODA+ to maternal and newborn health, 52% of all ODA+ to child health and 63% of all ODA+ to reproductive health**

Recipients of the largest disbursements of ODA+ to reproductive, maternal, newborn and child health from all donors to Countdown countries, by health area, 2013 (%)



Source: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System and Aid Activities Database.

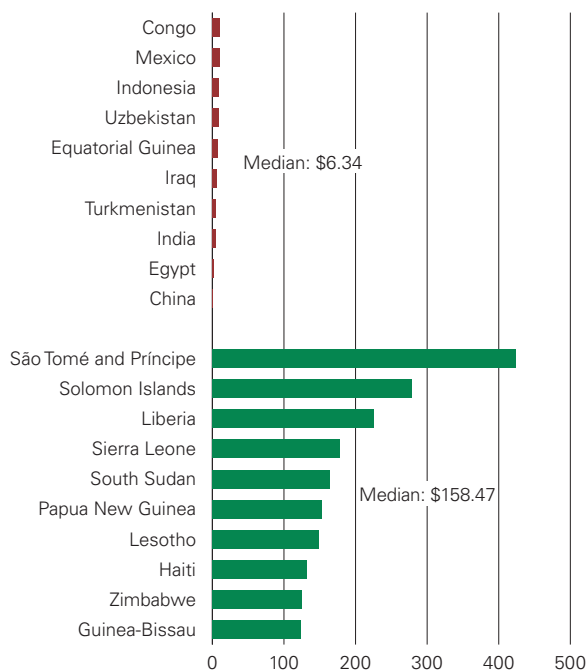
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**ODA+ to maternal, newborn and child health per capita**

Across *Countdown* countries, ODA+ to reproductive, maternal, newborn and child health varies widely, even after adjusting for the size of the population. For example, the median ODA+ to maternal and newborn health per live birth was \$6.34 for the 10 countries receiving the least and \$158.47 for the 10 countries receiving the most (figure 5). The median ODA+ to child health per child under age 5 was \$2.50 for the 10 countries receiving the least ODA+ and \$54.68 for the 10 countries receiving the most (figure 6). Nigeria received the most ODA+ to child health in absolute terms (\$697 million) but ranked 37th in ODA+ to child health per child under age 5 (\$22.91). Conversely, São Tomé and Príncipe ranked 71st in total ODA+ to child health received (under \$5 million) but had the highest disbursement per child under age 5 (\$162.23).

**Figure 5. The median ODA+ to maternal and newborn health per live birth was \$6.34 for the 10 countries receiving the least and \$158.47 for the 10 countries receiving the most**

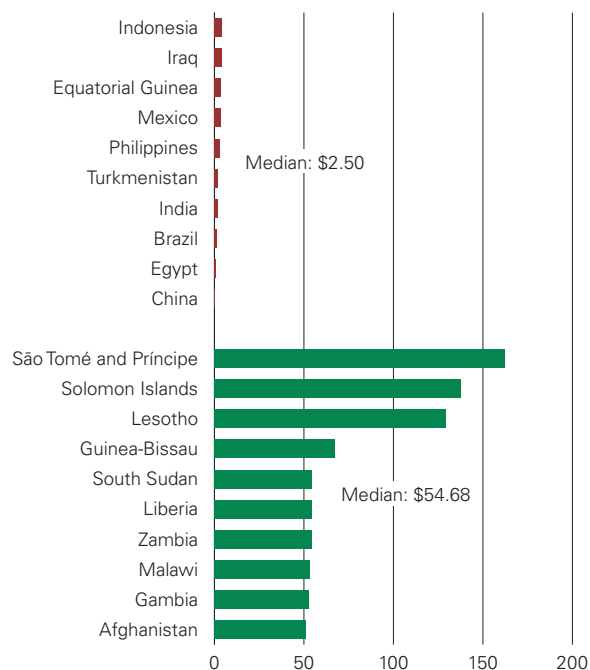
Ten highest and ten lowest disbursements of ODA+ for maternal and newborn health per live birth among *Countdown* countries (%)



Source: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System and Aid Activities Database.

**Figure 6. Median ODA+ to child health per child under age 5 was \$2.50 for the 10 countries receiving the least ODA+ and \$54.68 for the 10 countries receiving the most**

Ten highest and ten lowest disbursements of ODA+ for child health per child under age 5 among *Countdown* countries (\$)



Source: Organisation for Economic Co-operation and Development–Development Assistance Committee Creditor Reporting System and Aid Activities Database.

**Funding by type of health activity**

The largest share of ODA+ to child health supported immunization activities, excluding polio (27%, \$1.7 billion), followed by generic malaria programming benefitting children (16%, \$1.0 billion) and primary health care benefitting children (14%, \$892 million). Maternal and neonatal health benefitted most from activities specifically focused on maternal and neonatal health (28%, \$695 million), on maternal and child health spending (21%, \$526 million), nutrition programming (13%, \$327 million) and generic malaria programming (11%, \$284 million). Disbursements for reproductive health were overwhelmingly for HIV programming (77%, \$3.4 billion), followed by family planning (17%, \$753 million).

(continued)



## Official development assistance: 2013 updates

## Sources of 10 largest disbursement totals by health area, 2013

|   | Reproductive, maternal, newborn and child health |   | Maternal, newborn and child health |   | Child health |                                   | Maternal and newborn health |  | Reproductive health |  |
|---|--|---|------------------------------------|---|--------------|-----------------------------------|-----------------------------|--|---------------------|--|
|   | \$ millions                                      | Share of ODA+ to reproductive, maternal, newborn and child health (%) | \$ millions                        | Share of ODA+ to maternal, newborn and child health (%) | \$ millions  | Share of ODA+ to child health (%) | \$ millions                 | Share of ODA+ to maternal and newborn health (%) | \$ millions         | Share of ODA+ to reproductive health (%) |
| Australia   |  |   |                                    |   |              |                                   | 91.4                        | 4  | 49.4                | 1  |
| Bill & Melinda Gates Foundation                     | 617.0  | 5   | 543.4                              | 6   | 481.5        | 7                                 |                             |  | 73.5                | 2  |
| Canada  | 547.7  | 4   | 522.7                              | 6   | 353.5        | 5                                 | 169.3                       | 7  |                     |  |
| EU institutions                                     | 491.4  | 4   | 465.1                              | 5   | 296.1        | 5                                 | 164.2                       | 7  |                     |  |
| Gavi, the Vaccine Alliance                          | 1,369.6  | 10  | 1,364.8                            | 15  | 1,354.4      | 21                                |                             |  |                     |  |
| Germany   | 312.3  | 2   | 251.5                              | 3   | 154.1        | 2                                 | 97.3                        | 4  | 60.8                | 1  |
| Global Fund to Fight AIDS, Tuberculosis and Malaria | 1,725.7  | 13  | 893.3                              | 10  | 735.0        | 11                                | 158.4                       | 6  | 832.4               | 19                                       |
| International Development Association               | 556.3  | 4   | 496.3                              | 6   | 366.5        | 6                                 | 129.9                       | 5  | 59.9                | 1  |
| Japan   | 228.2  | 2   | 216.9                              | 2   | 129.6        | 2                                 | 87.3                        | 4  |                     |  |
| Netherlands   |  |   |                                    |   |              |                                   |                             |  | 79.1                | 2  |
| Norway  |  |   |                                    |   |              |                                   | 93.4                        | 4  | 58.6                | 1  |
| Sweden  |  |   |                                    |   |              |                                   |                             |  | 49.0                | 1  |
| United Kingdom                                      | 1,322.2  | 10  | 1,159.7                            | 13  | 816.5        | 13                                | 343.3                       | 14   | 162.4               | 4  |
| United States                                       | 4,050.9  | 30  | 1,304.1                            | 15  | 921.5        | 14                                | 382.7                       | 15   | 2746.8              | 62                                       |
| Other donors  | 21,51.4  | 16  | 1,700.7                            | 19  | 829.1        | 13                                | 759.0                       | 31   | 282.0               | 6  |
| Total   | 13,372.6   | 100   | 8,918.6                            | 100   | 6,442.6      | 100                               | 2,476.0                     | 100  | 4,454.0             | 100                                      |

Source: Organisation for Economic Co-operation and Development's Development Assistance Committee.

## Notes

1. The 2014 *Countdown* report used the same methodology, but the term "ODA+" was not introduced until the publication of Arregoces and others (2015). Prior to 2014, *Countdown* reports included only the 31 donors that had consistently reported to the Creditor Reporting System for all years. The 2014 report and the present report include all donors.
2. ODA+ to health is the total disbursement reported to the Creditor Reporting System under sector codes 120 (health) and 130 (population and reproductive health). It is not strictly a denominator for the projects

included as ODA+ to reproductive, maternal, newborn and child health in the present report, which includes projects outside those sector codes that benefitted reproductive, maternal, newborn and child health and excludes some projects in those sector codes. However, the vast majority of reproductive, maternal, newborn and child health expenditure by value (94% in 2013) is from projects in those sector codes.

3. Based on 2013 GDP values from the Organisation for Economic Co-operation and Development (<https://data.oecd.org/gdp/gross-domestic-product-gdp.htm>).

## Financing for women's and children's health in Ethiopia and Peru

As part of *Countdown's* efforts to better understand country progress towards Millennium Development Goals 4 and 5, analyses of domestic health care financing and official development assistance were completed for each country case study. These analyses documented trends in reproductive, maternal and child health expenditures, tracked government, external and out-of-pocket health expenditures and examined how health spending correlated with reproductive, maternal, newborn and child health outcomes. Below are summaries of the findings from Peru and Ethiopia, two countries that achieved Millennium Development Goal 4.

### Health financing in Peru

Peru has made remarkable achievements in the last two decades to reduce under-five, maternal and neonatal mortality; these achievements were accompanied by increased health financing. Over the past 15 years total health expenditure more than doubled in real terms, boosting per capita health expenditure from \$195 in 1995 to \$333 in 2012.<sup>1</sup> However, health expenditure as a percentage of GDP changed little, fluctuating around 4% to 5%, because of the country's rapid economic growth.<sup>2</sup>

Peru experienced a similar increase for reproductive, maternal, newborn and child health financing: from \$72 in 1999 to \$2,135 in 2012.<sup>3</sup> Reproductive, maternal and newborn health expenditure per pregnant woman rose from \$828 in 2006 to \$1,644 in 2012, and child health expenditure per child rose from \$119 in 2006 to \$319 in 2012. The increase in reproductive, maternal, newborn and child health expenditure was funded mainly domestically, as donor funding as a form of official development assistance averaged only 4% of total reproductive, maternal, newborn and child health expenditure between 2003 and 2012. Government expenditures grew from 24% of reproductive, maternal, newborn and child health expenditures in 2006 to 40% in 2012; however, household out-of-pocket spending remains high, at 26% in 2012. For child health in particular, Peru saw a rapid increase in government contributions, which rose from 24% of child health expenditures in 2006 to 47% in 2012. Consequently, the contribution of household out-of-pocket spending fell from 34% in 2006 to 23% in 2012.

Several main policies and movements can be linked to the rise in reproductive, maternal, newborn and child health spending in the past 15 years. During the 1990s increased focus on social assistance and family planning policies and programmes appears to have fuelled increases in reproductive, maternal, newborn and child health expenditure. In the 2000s stronger civil society advocacy further spurred political commitments on maternal and child health, leading to increased government expenditure on reproductive, maternal, newborn and child health interventions. From 2007 onwards, Peru also adopted results-based budgeting policies, which likely improved efficient spending with the potential to translate into better reproductive, maternal, newborn and child health outcomes now and in the future.

### Health spending in Ethiopia

Although Ethiopia will not achieve Millennium Development Goal 5, the country achieved Millennium Development Goal 4 before the 2015 deadline. Over the past 15 years (1995/96–2010/11) Ethiopia has invested heavily in health. Total health expenditure as a percentage of GDP increased from 3.8% in 1995/96 to 5.2% in 2010/11.<sup>4</sup> This led to an increase in per capita health expenditure of about 400%, from \$4.09 in 1995/96 to \$20.77 in 2010/11.

Ethiopia's spending on reproductive, maternal, newborn and child health experienced a similar increase from 2004/05 to 2010/11. Per capita reproductive and maternal health spending tripled (from \$3.69 to \$12), and per capita child health spending doubled (from \$8 to \$16) in nominal terms. The rapid growth in reproductive and maternal health funding between 2005 and 2011 was due mostly to continued high external support (outside sources accounted for 44% of total reproductive and maternal health expenditures in 2004/05 and 47% in 2010/11). The government's contribution also increased from 19% in 2004/05 to 25% in 2010/11. These funding increases reduced household out-of-pocket spending for reproductive and maternal health 10 percentage points. By contrast, household out-of-pocket spending for child health increased, from 42% of total child health spending in 2004/05 to 48% in 2010/11, while contributions to child health from government and external resources stagnated or decreased.<sup>5</sup>

(continued)

**Financing for women's and children's health in Ethiopia and Peru**

Ethiopia mobilized more external resources for health (especially for reproductive and maternal health) through its harmonization initiative to enhance donor effectiveness. Acceleration in reproductive, maternal, newborn and child health funding between 2005 and 2011 enabled some health sectorwide changes, including the expansion of service delivery programmes such as the Health Extension Program and the community-based nutrition programme.

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The Peru and Ethiopia case studies show that both countries had strong political support for reproductive, maternal, newborn and child health and experienced rapid growth in total health expenditure and reproductive, maternal, newborn and child health expenditure in the past decade. Yet that growth resulted from different sources, perhaps related to the

two countries' development status. Peru, an upper middle-income country, relied mostly on domestic funding, while Ethiopia, a low-income country, relied heavily on external funding. Despite these differences, both countries have high out-of-pocket spending, which should be addressed to make health care more affordable to lower income groups and to improve the sustainability of health gains achieved.

**Notes**

1. All dollar values in the discussion of Peru are in 2012 U.S. dollars.
2. WHO Global Health Expenditure Database.
3. Peru Ministry of Economy and Finance, Organisation for Economic Co-operation and Development Creditor Reporting System, Encuesta Nacional de Hogares and Instituto Nacional de Estadística e Informática (INEI).
4. All dollar values in the discussion of Ethiopia are in nominal U.S. dollars.
5. Ethiopian Public Health Institute 2015.





# Monitoring and accountability: how the *Countdown* experience can inform the Sustainable Development Goals



The Millennium Development Goals encouraged global political consensus, provided a focus for advocacy and visibility, improved the targeting and flow of aid and strengthened monitoring of process and outcome indicators.<sup>58</sup> Within the context of the health Millennium Development Goals, *Countdown* played a unique role as a multistakeholder initiative aimed at monitoring and accountability. The country profiles and the global report linked to peer-reviewed journal articles in *The Lancet*, coupled with dissemination through a global event, represented *Countdown's* persistent efforts to galvanize evidence-based advocacy for women's and children's health. Its success in advocacy and in country-level monitoring and accountability for Millennium Development Goals 4 and 5 was complemented by other initiatives, such as the independent Expert Review Group on Information and Accountability for Women's and Children's Health,<sup>59</sup> that relied heavily on *Countdown's* analysis and interpretation of data to push for global accountability.

*Countdown's* experience has inspired others. For example, advocates for the Non-Communicable Diseases Countdown 2025 wrote, "Lessons from Countdown to 2015 include the importance of collaboration and inclusiveness; adaptation of global targets to the national situation; regular measurement; transparent review and publication of progress on priority interventions and outcomes; strong engagement of academia and civil society; regular reports based on fairly simple summaries of country progress; and adequate resources. Countdown to 2015, while retaining a core of basic information, has evolved to include detailed country reports and shows the value of a strong and independent partnership for global health."<sup>60</sup> Leaders of global initiatives developed to track physical activity<sup>61</sup> and nutrition<sup>62</sup> also acknowledge that *Countdown* has inspired their work.

This final *Countdown* report focuses on trends over the past 15 years. Intervention coverage

increased for most interventions, and particularly for interventions that received substantial donor investment, such as those against malaria and HIV.<sup>63</sup> The gap in intervention coverage between rich and poor seems to be narrowing, at least for interventions that have been available in low-income countries for many years, as well as for some interventions introduced more recently that benefit from strong political support and do not require functional health systems such as insecticide-treated nets and new vaccines (rotavirus and pneumococcal). More countries are adopting supportive policies, and financing for reproductive, maternal, newborn and child health has increased.

But each of these positive statements about general trends must be qualified. Cost-effective interventions still fail to reach a large proportion of those who need them. Socioeconomic inequities in coverage remain rampant. Political conflict severely disrupts health service delivery in many *Countdown* countries. Most countries still lack essential policies and sufficient and equitably distributed human resources and commodities. And despite increased funding, there is still a huge shortfall of reliable, sustainable resources for reproductive, maternal, newborn, child and adolescent health, plus a tendency for donors and governments to favour a few types of interventions (such as vaccines and family planning) over others (such as promoting breastfeeding and managing diarrhoea and pneumonia).

The Sustainable Development Goals are unquestionably much broader and more complex than the Millennium Development Goals—and will bring about substantive challenges to monitoring and accountability. This final section discusses how lessons from the *Countdown* process may be relevant to the Sustainable Development Goals era.

- *Establish clear, consistent baseline data.* The Millennium Development Goals were launched



in 2000 with a baseline of 1990, a peculiar choice implying that signatory countries were accountable for trends in the intervening decade. In addition, the absence of consistent, comparable, timely data on births and deaths led to complex modelling procedures for estimating current and past maternal and child mortality in many countries. Reliance on these methods meant that historical trends were revised every time new data became available. Baseline values therefore kept changing, and countries seemed to be aiming at moving targets. Fortunately, the starting date for the Sustainable Development Goals is fixed in 2015, but substantial investments in data collection are urgently needed to provide valid and precise baseline values.<sup>64</sup>

- *Solve the modelled mortality problem.* Whereas child mortality estimates are modelled based on actual mortality data from censuses, surveys or civil registration, maternal mortality was, until 2015, modelled for most low- and middle-income countries based on predictor variables such as gross domestic product per capita, general fertility rate and coverage of skilled attendants at delivery due to lack of sufficient data points.<sup>65</sup> The model only changed in 2015 to take better account of the gradually increasing number of data points from death registration systems, censuses and surveys. Despite important problems with the acceptability of modelled estimates in many countries, very few countries have invested in large-scale data collection efforts able to accurately measure maternal mortality,<sup>66</sup> and even fewer countries have developed full-scale registration systems that yield reliable mortality statistics.<sup>67</sup> Stillbirths should also not be forgotten—and must be included in efforts to collect better mortality data.
- *Improve measurement and data collection.* In addition to dependence on modelled mortality estimates during the Millennium Development Goals era, coverage measurements were derived from infrequent household surveys and ad hoc systems for tracking policies, health system measures and funding flows. The Millennium Development Goals framework has also been justly criticized for its neglect of equity. The international community must invest now in improving measurement. Measuring effective coverage and quality of preventive and curative interventions deserves special attention. Regular surveys using consistent measurement of equity stratifiers, such as

wealth, residence or ethnicity, are also essential for tracking progress over time in reaching priority and disadvantaged groups with life-saving interventions. Much more should be done to obtain subnational statistics, a major gap identified by countries. Doing so will likely involve a mix of population-based, facility-based and administrative data sources.

- *Ensure that common standards of measurement and reporting are used.* Some of the larger Countdown countries (including China, Brazil, Mexico and South Africa) conducted their own surveys or substantially modified existing surveys such as Demographic and Health Surveys and Multiple Indicator Cluster Surveys. This has resulted in a lack of comparability of data from these countries on several core indicators. It is strongly recommend that countries measure and report on core indicators using international standards.
- *Set relative targets to complement fixed targets for assessing country progress.* Countdown's experience with monitoring progress towards the Millennium Development Goals shows the importance of setting targets as proportional improvements in outcomes over time that thus have universal relevance. For example, Millennium Development Goals 4 and 5 were clearly defined, with quantitative goals for relative mortality reductions. The corresponding Sustainable Development Goals (3.1 and 3.2) propose absolute targets of 25 deaths per 1,000 live births or less at the national level for under-five mortality, 12 deaths per 1,000 live births or less at the national level for neonatal mortality and 70 deaths per 100,000 live births or less at the global level for maternal mortality by 2030. According to 2015 estimates, 8 Countdown countries already meet the target for the under-five mortality rate below 25, and 11 meet the target for the maternal mortality ratio (see table 1). What type of progress, if any, should these countries be aiming for? Based on Countdown's interaction with countries regarding progress towards global goals, the provisional Sustainable Development Goal targets must be urgently revisited and improved. The targets need to be more country-specific and to consider equity, so that progress can be assessed against baselines.
- *Set targets that are aspirational but also achievable.* That only 25 Countdown countries will achieve Millennium Development Goal 4 and only 6 will achieve Millennium Development

Goal 5 suggests that the original targets were too ambitious, particularly in view of the progress in financial flows to reproductive, maternal, newborn and child health and health system strengthening (such as addressing the human resource crisis and adopting and implementing supportive policies). Targets should still be set that push countries to strive to achieve them but that are realistic and take into consideration country contexts.

- *Track specific coverage indicators and a composite coverage index.* The Countdown experience highlights the importance of focusing on interventions with an evidence-based impact on health status and of tracking how coverage for these interventions changed over time on a country-by-country basis. Although a huge task, monitoring 73 coverage indicators provides specific feedback on what needs to be improved and where. Such detail is essential but is complemented by a summary measure—the Composite Coverage Index. Rigorous tests have shown that it is robust, stable and highly associated with measures of mortality. In fact, the Composite Coverage Index provides a promising approach to measuring universal health coverage and includes a focus on equity, two pillars at the heart of the health Sustainable Development Goal.
- *Choose indicators carefully and balance focus with breadth.* The large number of Sustainable Development Goal targets—recently estimated at 169—has brought about substantial criticism.<sup>68</sup> Each target will require specific indicators, often two or more. The Countdown experience shows that an initial, short list of goals, targets and associated indicators can expand rapidly over time, as new interventions become available and as interest groups lobby—often with strong justification—for additional indicators. A rigorous technical process must be in place for ensuring the validity and reliability of new indicators, for ensuring that monitoring efforts stay coordinated and focused, for minimizing the reporting burden on countries and for ensuring that indicators are relevant to policymakers and program managers.

*Countdown's* niche has been country-level intervention coverage. This focus recognizes that

biomedical interventions are one of the most important pathways through which broader contextual and health systems factors affect women's and children's health. During the Sustainable Development Goals era, with its focus on a wider set of health challenges and emphasis on universal health care, tracking progress in social and environmental determinants—including understanding the multiple pathways through which these determinants impact health and development—will be just as important as tracking progress in coverage and health status. These efforts will likely face data availability challenges similar to those faced by *Countdown*.

Several aspects of the *Countdown* experience may be relevant to similar initiatives in the Sustainable Development Goals era. Involving multiple stakeholders is essential for ensuring that data lead to action. Retaining scientific independence while forging a partnership of stakeholders with different interests and agendas is not always a smooth process, but *Countdown* achieved and maintained consensus about the indicators that should be monitored and disseminated based on the evidence. Positive pressure from stakeholders led to *Countdown's* expansion from child survival in 2003 to the full reproductive, maternal, newborn and child health continuum of care. Balancing focus with breadth is not easy, and will likely be even harder in the Sustainable Development Goals era, both within the health goal and across all 17 Sustainable Development Goals.

Regardless of what lies ahead, *Countdown's* experience over the past 10 years has established the importance and feasibility of a vibrant multistakeholder initiative with independence and a strong technical component in accelerating progress for the world's women and children. The launch and growth of Every Woman Every Child under the auspices of the UN Secretary-General, further supported by a new Global Financing Facility,<sup>69</sup> increase the relevance of *Countdown's* work, challenging it to rise to the occasion by continuing its independent monitoring role and innovative technical work at the global and country levels, with the ultimate aim of holding all to account for saving women's and children's lives over the next 15 years. *Countdown* stands ready to begin.