





THE SECRETARY-GENERAL'S SPECIAL ENVOY FOR FINANCING THE HEALTH MILLENNIUM DEVELOPMENT GOALS AND FOR MALARIA

# Roadmap to Accelerate Achievement Of Maternal and Newborn Survival and Reach MDGs 4 and 5(A&B)

### Introduction

With close to 500 days remaining until the Millennium Development Goals' (MDGs') deadline, the world has a pivotal moment to accelerate action and scale-up investment towards achieving MDGs 4 and 5(A&B). Acting now on what we know works, where we know to invest and how much, we can accelerate our achievements in 2015 so that we gain:

- MDG4<sup>1</sup>: A two-thirds reduction from the 1990 under-five mortality rate, resulting in at least 2.2 million additional children's lives saved;
- **MDG5 Target A:** A three-quarters reduction from the 1990 maternal mortality rate, resulting in at least an additional 129,000 women's lives saved<sup>2</sup>;
- **MDG5 Target B:** This "latecomer" target promises a major stride towards the promise of universal access to reproductive health.<sup>3</sup>

Achievement of MDGs 4 and 5(A&B) is also closely linked with specific achievements under **MDG3** (Promote gender equality and empower women) and **MDG6** (Combat HIV/AIDS, malaria and other diseases).

#### Why a Roadmap?

This Roadmap sets out integrated interventions across the spectrum of reproductive, maternal and newborn health that, with intensified effort, can accelerate delivery for women and children. Where the right support is provided, these critical pathways to MDG5 and MDG4 can close the remaining achievement gaps. But accelerated investment is needed urgently. This Roadmap lays out that opportunity and thereby invites the international community to mobilize in support of intensified investment (financial, material, human) in these proven solutions. To this end, this Roadmap:

- Makes a robust case for accelerated investment that national Ministries of Health can deploy to argue persuasively for additional resources;
- Offers smart options for strengthening the associated national planning and budgetary processes that respond to a country's specific context and need;
- Provides incontrovertible evidence that investing additional resources in proven solutions will provide
  valuable returns both for the health and well-being of women and children and for the country's wider
  social and economic development.

The pressing opportunity of these interventions, which urges an immediate increase in investment of both domestic and international resources, is also rooted in social and political determinants of health: these solutions require that the principles of equity, gender equality (MDG3) and human rights are also upheld.

<sup>&</sup>lt;sup>a</sup> H4+ is a joint effort by United Nations and related agencies and programmes UNAIDS, UNFPA, UNICEF, UN Women, WHO and the World Bank. Harnessing the collective power of each partner's strengths and capacities, the H4+ works to improve the health of women and children and accelerate progress towards achieving MDGs 4 and 5. UNFPA is the current chair of the H4+.

<sup>1</sup> MDG 4 – Indicators: Under 5 mortality rate; Infant Mortality Rate; and Proportion of 1-year old children immunized against measles

<sup>&</sup>lt;sup>2</sup> MDG 5 – Target A: Indicators: Maternal Mortality Ratio; Proportion of births attended by skilled health personnel. Similarly, related to MDG6, *The Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive* target #2 calls for the reduction by half in the number of AIDS-related maternal deaths, resulting in fewer maternal deaths attributable to AIDS-related indirect causes.

<sup>&</sup>lt;sup>3</sup> MDG 5 – Target B, which is the late-comer of the MDGs being agreed only in 2007,: Contraceptive prevalence rate; adolescent birth rate; antenatal care coverage and unmet need for family planning.

This Roadmap is founded on the inextricable links between achievement of MDG5(A&B) (improve maternal health and universal access to reproductive health) and MDG4 (reduce child mortality): the risk of death being highest for both pregnant women and babies during childbirth and in the days immediately thereafter. Moreover, progress under MDG6 is also key, given HIV is the leading cause of death in women of reproductive age, and in high prevalence countries in particular, contributes significantly to maternal mortality (as high as 41% in South Africa). Newborn survival is intimately linked to women's survival: when a woman dies after giving birth, her newborn baby is also at much greater risk of death. Additionally, for every woman that dies in childbirth, 20-30 more suffer an infection or injury such as obstetric fistula. Further, recent estimates suggest that meeting the needs for modern contraception of women who don't want to get pregnant but are not using contraceptives could reduce maternal deaths by almost one quarter and newborn deaths by one fifth.<sup>4</sup>

Accelerative interventions strengthen critical health systems by improving access to quality reproductive, maternal, newborn and child health (RMNCH) commodities and, in particular to 13 life-saving commodities addressed by the UN Commission on Life-Saving Commodities for Women and Children. They support improvement in human resources for health by strengthening both midwifery and integrated sexual and reproductive health and HIV services (e.g. for the elimination of mother-to-child transmission of HIV) to enhance the quality of sexual, reproductive, maternal and newborn health services. They expand access to commodities and services, and, as the "easier to reach" populations already have enhanced access to services, accelerative interventions focus on reaching those who have the least access whether this is by virtue of their age, socioeconomic status, identity or geography.

The interventions set out in this Roadmap have demonstrated their potential for impact within the remaining MDG timeframe. However, achievements in reproductive, maternal and newborn health must be sustained achievements. For this, interventions must be grounded in human rights and uphold the principles of gender equality and equity. Empowerment of women to make informed choices, prevention of violence against women and eroding discrimination against women in health care settings: are all key to accelerated and sustained transformation of maternal and newborn health outcomes.

With only 18 months left in which to achieve the MDGs, we have to accelerate our progress: increase access to essential information, services and commodities particularly for the critical days around delivery; reach the most marginalized, disadvantaged, and underserved populations and dismantle the barriers that obstruct their access. For these are the drivers of the stark contrast in maternal and newborn health outcomes of rich, as compared to poor, countries and that contrast is intolerable.

#### **Closing the Gap for Maternal and Newborn Survival**

# The Gap in MDG5 Target A - Maternal Mortality

Working together, we have reduced maternal mortality globally by 45% since 1990 from an estimated **523,000** maternal deaths to approximately **289,000** in 2013<sup>5</sup>. However, to reach MDG5's Target A of fewer than 131,000 women dying from all maternal causes, including from obstetric and indirect causes, we must avert an additional 158,000 women's deaths in calendar year 2015.<sup>6</sup> Yet, the projections warn us that unless we accelerate investment in proven solutions, we will fall well short of these targets. The most recent reduction rates suggest we will prevent just **19,000** more maternal deaths in 2015, leaving a gap of **139,000** women's deaths<sup>7</sup> that must be averted during 2015 if we are to meet our target. **Figure 1** illustrates this trajectory.

<sup>&</sup>lt;sup>4</sup> Singh S and Darroch JE, Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012, pg. 21, Guttmacher Institute and United Nations Population Fund (UNFPA), 2012.

<sup>&</sup>lt;sup>5</sup> United Nations estimate, published 2014

<sup>&</sup>lt;sup>6</sup> Particularly in countries with generalized epidemics, HIV contributes significantly as an indirect cause of maternal mortality – in 8 countries in Africa, well exceeding 10% (South Africa 41.4%); Botswana (23.5%); Swaziland (18.6%); Zambia (15.4%); Lesotho (14.8%); Namibia (13.9%); Mozambique (13%); Gabon (10.4). Trends in Maternal Mortality: 1990 to 2013; Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division, available at http://apps.who.int/iris/bitstream/10665/112682/2/9789241507226 eng.pdf?ua=1

Women dying of reproductive or maternal-related causes are referred to as "mothers" throughout this document for simplicity.

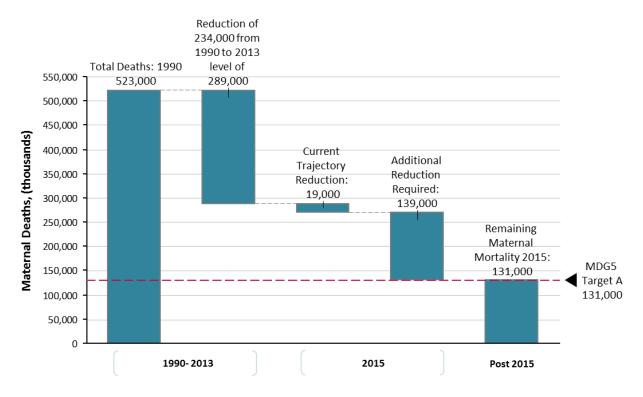


Figure 1. Current Trajectory and Needed Additional Maternal Lives Saved to Achieve MDG5 Target A

# Gap in MDG5 Target B - Universal Access to Reproductive Health

Full achievement by 2015 of MDG5 Target B<sup>8</sup> requires that we provide all women who have an unmet need for such option, a choice from among modern contraceptive methods.<sup>9</sup> In 2012, an estimated 222 million women in the developing world do not wish to become pregnant but are not using modern contraceptive methods.<sup>10</sup> This is the gap that was highlighted at the London Family Planning Summit where donors and national governments agreed to provide an additional 120 million women who have an unmet need with access to modern methods of contraception by 2020. To get on track to achieve this life saving goal, we must reach 30 million more women by 2015.

#### The Gap in MDG4 - Newborn Survival

Since 1990, newborn mortality has decreased by one-third, from **4.4 million** newborn deaths in 1990 to **2.9 million** newborn deaths in 2012.<sup>11</sup> While newborn survival is not an explicit MDG4 target, the harsh reality is that 44 percent of all under-five child deaths occur during the newborn period. Improving newborn survival will have a significant impact on MDG4's achievement.<sup>12</sup> The Lancet Every Newborn Series underscores the critical importance for MDG4's achievement that accelerating investments can play in reducing newborn deaths: "MDG4 for child survival will not be achieved without increased attention to newborn health".<sup>13</sup> Estimates

The

Universal access to reproductive health requires access to a comprehensive package of services including family planning, maternal health (ante and post natal care and skilled birth attendance); emergency obstetric and newborn care (basic and comprehensive); HIV; prevention, care and treatment of sexually transmitted infections and HIV; reproductive cancers; and gender based violence.

Unmet need for modern contraception is defined by the number of women at risk of pregnancy who do not want to have any more children, or want to wait at least two years before having another child who are not using a modern method of contraception (women using traditional methods are considered here as in need of modern contraception). Singh S and Darroch JE, Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012, pg. 21, Guttmacher Institute and United Nations Population Fund (UNFPA), 2012.

<sup>&</sup>lt;sup>10</sup> Singh S and Darroch JE, Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012, Guttmacher Institute and United Nations Population Fund (UNFPA), 2012.

<sup>&</sup>lt;sup>11</sup> Newborns, also known as neonates, are children under 28 days of age, as defined by the World Health Organization.

<sup>&</sup>lt;sup>12</sup> UN Inter-agency Group for Child Mortality Estimation, Levels & Trends in Child Mortality Report, 2013.

<sup>&</sup>lt;sup>13</sup> Darmstadt DL, Kinney MV, et al, Who Has Been Caring for the Baby? Lancet 2014. For overall estimates on MDG4 achievement, see the UNSEO/MDGHA companion document Overview of Proposed Approaches to Reach MDG4, which shows that 2.2 million children's deaths would need to be averted by

suggest that we are on track to prevent 250,000 newborn deaths in 2015, but we also know that, with the right investments, we can double this number. And 500,000 newborn lives saved would be real progress towards closing the MDG4 gap of 1 million more child lives saved in 2015.

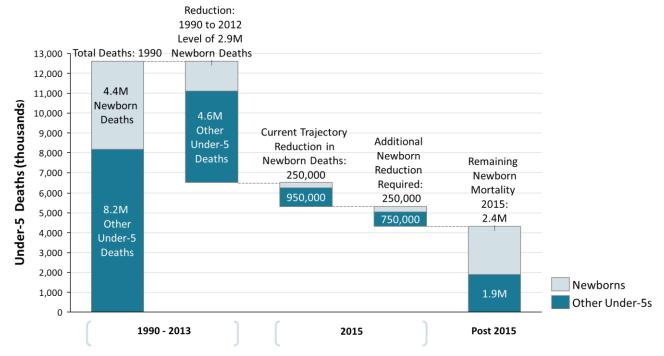


Figure 2. Current Trajectory and Potential Additional Newborn Lives Saved to Contribute to MDG4 Achievement

#### **Closing the Gaps: Critical "Accelerants" for Greater Progress**

If we are to achieve the targets of MDGs 4 and 5(A&B), we must scale-up the interventions that we know can save the lives of an additional 139,000 women and 250,000 newborns in 2015, above and beyond the current trajectory. The evidence is clear: with the right investment in the right interventions we can achieve MDG4 and 5(A&B) for women and the newborn.

At the 2014 World Health Assembly in May 2014, 194 governments endorsed *The Every Newborn Action Plan (ENAP)*, which sets a new global goal of ending preventable newborn deaths by 2035 and includes a focus on stillbirths. While the Plan has a longer time horizon than the MDGs, it calls for the highest impact interventions to be prioritized and scaled-up immediately within current health systems, thereby accelerating MDG4 achievement and laying a strong foundation on which to reach longer-term targets.<sup>14</sup>

Comparable focus and action is needed to accelerate delivery for MDG5(A&B). We must invest to meet the unmet need for modern contraception. We must invest to improve, expand and deliver high-impact, cost-effective services, information and commodities to pregnant women as well as to new mothers and their baby **together** and at the same service points by the same health provider at the same time. Increased coverage and quality of sexual and reproductive health services for women and adolescents, particularly those who don't want to be pregnant, combined with effective antenatal, intrapartum and postnatal interventions could avert by 2025 71% of neonatal deaths (1.9 million), 33% of stillbirths (.82 million), and 54% of maternal deaths (.16 million) per year.<sup>15</sup>

<sup>2015</sup> to meet MDG4, of which 1.2 million are currently on track to be averted, leaving an estimated gap of one million children whose deaths must be prevented.

<sup>&</sup>lt;sup>14</sup> For newborn lives saved estimates, the draft Every Newborn Action Plan (ENAP) was consulted in order to set parameters for scale-up levels and interventions; however our intention is not to estimate the impact of the ENAP. This analysis differs from the projected impact of the ENAP for numerous reasons, including that some of the interventions are more easily scaled in the next year than others and therefore more appropriate for inclusion in this Roadmap. When impact estimates are completed and made available for the ENAP, we foresee them being more comprehensive and nuanced than this undertaking.

<sup>&</sup>lt;sup>15</sup> Bhutta ZA et al. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? *The Lancet*. Early Online Publication, 20 May 2014.

However, we must act now. We must invest to target the populations where both maternal and newborn deaths are concentrated in particular. Together, such interventions have the potential to save an additional 134,000 maternal lives and an additional 250,000 newborn lives in 2015. The Appendix provides further detail of what we mean. However, the following overviews these interventions and together they constitute our Roadmap for closing the gap for achievement of MDGs 4 and 5(A&B).

# Step 1. Take Life Saving Measures During and After Birth

The Lancet Every Newborn Series reports that half of all newborn lives saved are the result of interventions given to pregnant women. That's why an integrated strategy for the remaining days of the MDGs that targets together the leading causes of both maternal and newborn deaths will yield the fastest and most cost-effective results.

Close to half of all maternal and newborn deaths occur on the day of birth or in the days immediately following. These leading causes<sup>16</sup> include maternal hemorrhage (27%), hypertensive disorders/eclampsia (14%), infections/ sepsis (11%), unsafe abortions (8%), other indirect (28%), and direct (12%) causes. Most newborn deaths are attributed to prematurity, birth complications and infections. In addition, each year an estimated 1.2 million intra-partum stillbirths occur, many of which could be avoided if women were to have reliable access to quality care around and throughout the time of labor and birth.<sup>17</sup>

In all cases, increasing pregnant women's access to essential information, services and life saving commodities, such as oxytocin, misoprostol, magnesium sulfate and antenatal corticosteroids, as well as to simple devices to resuscitate newborns right after birth: together these will an reduce significantly rates of death among women and the new born. It is critical that such interventions reach those who, because of discrimination, have little or no access.

Additional interventions can also have huge impact: simply ensuring that all babies are breastfed within an hour of their birth has been associated with reductions in newborn mortality of up to 44 percent. 18 This is a quantity quality improvement for which all facilities should aim, while, with the support of a skilled birth attendant or midwife, early breastfeeding can be enabled immediately after birth, including at home. Exclusive breastfeeding also prevents HIV transmission to infants. Such strengthening of the quality of care during labor and delivery has the potential to deliver a "triple return" on investment, as highlighted: saving women's lives, saving the lives of newborns and preventing stillbirths. This opportunity is highlighted in the Every Newborn Action Plan

Around the world, countries and regions differ considerably as to the settings in which maternal and newborn deaths occur. It means that for success, investments must be tailored to reach the populations at greatest risk. Where skilled birth attendance in facilities is more common - such as in Democratic Republic of Congo and Indonesia – accelerated investments should focus on strengthening the quality of care. Where the vast majority of women deliver without benefit of a skilled attendant -- such as in Ethiopia and Pakistan -- investments should target improvement in family members' knowledge of danger signs, and provide support for timely referral to emergency obstetric care facility. Special note should be made of countries' experiences and associated outcomes of introducing incentives to encourage women to deliver their babies in facilities.

<sup>&</sup>lt;sup>16</sup> Say L et al, *Global causes of maternal death: A WHO systematic analysis*, Lancet, 2014.

<sup>&</sup>lt;sup>17</sup> The Lancet Stillbirth Series, 2009.

<sup>&</sup>lt;sup>18</sup> Debes AK et al, *Time to Initiation of Breastfeeding and Neonatal Mortality and Morbidity: A Systematic Review*, BMC Public Health, 2013.

## Step 2. Optimize the Delivery Platforms Already in Place

Selected integrated maternal and newborn interventions can be scaled up relatively quickly by building on infrastructure and platforms already in place, such as existing antenatal care systems. As **Table 1** below shows, many countries burdened with high maternal and newborn mortality already have relatively high rates of antenatal care coverage.

	Country	Maternal Deaths, 2013 <sup>19</sup>	Newborn Deaths, 2012 <sup>20</sup>	Skilled Birth Attendance Rate (%) <sup>21</sup>	"Facility" Delivery (%)	Antenatal Care Coverage: At Least 1 Visit (%)	Contraceptive Prevalence Rate, 2008-2012, Any Method (%)
1	India	50,000	779,000	52%	47%	74%	55%
2	Nigeria	40,000	267,000	49%	45%	66%	18%
3	Democratic Republic of the Congo	21,000	118,100	80%	75%	89%	17%
4	Ethiopia	13,000	87,800	10%	10%	43%	29%
5	Indonesia	8,800	72,400	83%	63%	96%	62%
6	Pakistan	7,900	202,400	43%	41%	61%	27%
7	United Republic of Tanzania	7,900	39,500	49%	50%	88%	34%
8	Kenya	6,300	40,000	44%	43%	92%	46%
9	Uganda	5,900	34,600	57%	57%	93%	30%
10	China	5,900	157,400	100%	99%	94%	85%
11	Chad	5,800	22,000	23%	16%	53%	5%
12	Bangladesh	5,200	75,900	32%	29%	55%	61%
13	Cameroon	4,900	22,000	64%	61%	85%	23%
14	Sudan	4,600	34,900	23%	21%	74%	9%
15	Afghanistan	4,200	37,200	39%	33%	48%	21%
	Sub-Total/Average	191,400	1,990,200	46%	46%	74%	<b>31%</b> (excludes China)
	Global Total/Average	289,000	2,852,000	68%	63%	83%	<b>55%</b> (excludes China)
	% of Global Total	66%	70%				

Table 1. Countries with the Largest Numbers of Maternal and Newborn Deaths, and related indicators on Skilled Birth **Attendance, Antenatal Coverage and Contraceptive Prevalence** 

These systems can readily be optimized to more fully protect women and their babies post-natally, including against the major infections that can harm both the mother and baby during and post-pregnancy. For example, quick and cost-effective syphilis testing, when combined with penicillin treatment, can reduce syphilis-related neonatal mortality by 80%.<sup>22</sup> Similarly, the morbidity and mortality associated with tetanus infections in women that can be passed on to their babies during birth can be prevented if the tetanus toxoid vaccine is given to women during antenatal care. Mother to child transmission of HIV can be prevented through access to antiretroviral drugs during pregnancy, delivery and breastfeeding.

Nutritional needs, especially daily micronutrient requirements, increase during both pregnancy and lactation, bringing higher risks of under-nutrition for both mother and baby. Delivery of essential nourishment through multiple micronutrient powders is a cost-effective treatment for maternal under-nutrition, and can help reduce the risk of newborn death caused by low birth weight, as can balanced energy supplements when given to undernourished pregnant women. Periconceptional folic acid supplementation, which can be delivered at the same time as other nutritional supplementation interventions, has been shown to reduce the risk of neural tube defects by 72%.<sup>23</sup> Antenatal care also offers an important platform on which to assist women's birth-planning,

<sup>&</sup>lt;sup>19</sup> Trends in maternal mortality: 1990 to 2013. Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. Published

<sup>&</sup>lt;sup>20</sup> The UN Inter-agency Group for Child Mortality Estimation, 2013

<sup>&</sup>lt;sup>21</sup> The State of the World's Children 2014 in Numbers. UNICEF. Published January 2014.

<sup>&</sup>lt;sup>22</sup> Lancet Newborn Series paper 3

<sup>&</sup>lt;sup>23</sup> De-Regil LM, Fernández-Gaxiola AC, Dowswell T, Peña-Rosas JP. Effects and safety of periconceptional folate supplementation for preventing birth defects. Cochrane Database Syst Rev 2010; 10. CD007950.

to provide quality counseling on modern methods for family planning, to ensure access to key commodities such as chlorhexidine and misoprostol, and to offer clean delivery kits.

#### Step 3. Increase Access to Choice from among Modern Contraceptive Options

Maternal and newborn survival are positively correlated with modern contraceptive use. Increasing their access to modern contraception options can make a substantial difference for adolescent girls in particular, who are at a much higher risk of death in pregnancy and childbirth. With a 1.5 times higher risk of death in pregnancy and childbirth (women aged 15-19 compared to those 20-24) and a higher probability that their babies will die during pregnancy and childbirth, adolescent girls need increased access to modern contraceptive options. Yet they face grave barriers impeding their access to essential information and services. If we are to achieve MDG 4 and 5(A&B), reaching this age group must rank among our highest priorities in the countdown to 2015.24

Improving adolescents' access to sexual and reproductive health information, counseling, and, as needed, services including for the very young (10 to 15 years of age) – particularly those who are married as children – is a critical step. These services must be accompanied by comprehensive sexuality education, which should be provided as part of school-based programmes and/or through health-outreach services. Education of this kind should address issues of gender equity and include skills-building for negotiation of safer sex, and elimination of violence in intimate relationships. Provision of such education is an essential step in an equity-based approach whose implementation will deliver multiple benefits: It will help delay first pregnancies; it will increase the likelihood of girls remaining in school; it will open greater economic opportunity for girls later in life and it will save their lives and those of their newborns. Preventing adolescent pregnancy and delaying early childbearing is a crucial entry point for improving maternal and newborn health, and for improving women's lives more broadly.<sup>25</sup> The benefit of increasing demand for, access to and availability of family planning options for women and adolescents with unmet need for these choices and access to newborn health services include (a) a greater decline in maternal mortality than if we are to invest in maternal and newborn health care alone (78% reduction vs 70%), (b) a greater decline in newborn deaths than the ones obtained from maternal and newborn care alone (36% vs 24%), (c) 78% reduction in the number of DALY due to pregnancy-related illness and premature death among women, (d) 47% reduction in healthy years of life lost among newborns and (e) fewer new HIV infections in children.<sup>26,27</sup>

Contraception is a game changer too, for older women who want to space their next pregnancies. Estimates suggest that if we meet the family planning needs of the 222 million women in the world who have an unmet need for modern contraception, we would reduce maternal deaths by 80,000 and newborn deaths by 600,000 per year. By meeting the unmet need for family planning in the 20 countries with the highest burden of HIV, we could prevent 6 million unintended pregnancies, resulting in 61,000 fewer children with HIV in 2015. <sup>29</sup>

Giving access to modern contraceptives by the end of 2015 to 30 million women who don't want to get pregnant and are not using contraceptives, would save 80,000 newborn lives. This number, however, is not included in the total calculation of lives saved in Table 1.30 These 80,000 lives saved also do not include an additional the

<sup>&</sup>lt;sup>24</sup> Nove A et al, Maternal Mortality in Adolescents Compared with Women of Other Ages: Evidence from 144 Countries, The Lancet, 2014.

<sup>&</sup>lt;sup>25</sup> Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health – 2014, Pg. 37, Guttmacher Institute and United Nations Population Fund (Forthcoming)

<sup>&</sup>lt;sup>26</sup> Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health – 2014, Pg. 43, Guttmacher Institute and United Nations Population Fund (Forthcoming)

<sup>&</sup>lt;sup>27</sup> Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health – 2014, Pg. 43, Guttmacher Institute and United Nations Population Fund (Forthcoming)

<sup>&</sup>lt;sup>28</sup> Singh S and Darroch JE, Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012, Guttmacher Institute and United Nations Population Fund (UNFPA), 2012.

<sup>&</sup>lt;sup>29</sup> Stover J, Mahy M. *The cost-effectiveness of family planning in reducing the number of children with HIV infection*. Presentation at the 16th International Conference on AIDS and STIs in Africa, 2011, Addis Ababa, Ethiopia; http://www.fhi360.org/sites/default/files/media/documents/PMTCTbrief.pdf

These lives saved are not being counted toward the MDG 4 target lives saved in the table, as the prevention of unintended pregnancies through contraceptive use will decrease both the numerator and denominator of the MDG 4 indicator: child deaths per 1,000 live births. Although these 80,000 lives would not be additive to the newborn total of lives saved, the provision of contraception to these 30 million women would allow for reduced adolescent birth rates, decreases in parity, and reduced level of high-risk birth, thus contributing to the progress both towards MDG4 and newborn survival.

55,000 infant lives that could be saved by appropriate birth spacing (over 18 months), which can be made possible through increased modern contraceptive uptake by 30 million additional women.<sup>31</sup>

There are clear economic arguments in favour of such investments. For example, in a large economy such as China's, the World Bank estimates that the lifetime opportunity cost of adolescent pregnancy equals 1 per cent of annual GDP, or \$124 billion. In a smaller economy, such as Uganda's, the costs can amount to as much as 30 per cent of GDP—or about \$15 billion. Adolescent pregnancy and childbirth account for nearly \$11 billion per year in costs to United States taxpayers. If adolescent girls in Brazil and India had been in a position to wait to have children until their early 20s, their countries would enjoy greater economic productivity, equal to over \$3.5 billion and \$7.7 billion, respectively.

Since 2012, significant progress has been made. Family planning is increasingly prioritized at the highest levels of national policies, plans and programmes. Increasingly, developing country governments are allocating domestic resources for contraceptives. Procurement of reproductive health supplies has improved. Up-scaling has taken place in the capacity of national health systems to manage such supplies and enhance provision of essential and more integrated services in the areas of family planning, maternal health and HIV prevention. In Sierra Leone, strengthened reproductive health commodity systems have led to an unprecedented increase in contraceptive prevalence rates. In Nepal, strengthening provision of life saving medicines has reduced maternal mortality while both Nigeria and Nepal have introduced misoprostol for prevention of postpartum hemorrhage, the leading cause of maternal mortality around the world. These efforts to create enabling environments, increase demand, strengthen supply of contraceptives and improve availability of services can be capitalized on and with accelerated investment be escalated to reach millions more.

#### Step 4. Focus on Countries and Places Where Deaths are Highest

In these last days of the MDGs, our priority should be with those places where the threats are gravest. Accelerant interventions must target women and newborns most in need, including by identifying "hot spots" of maternal and newborn deaths at sub-national levels within priority countries. Targeting the most vulnerable women and newborns in advance of December 31st, 2015 can help us achieve the MDGS' largest possible impact. This must include focused interventions for women and their newborns in humanitarian and fragile contexts. UNFPA for example, is supporting high priority countries to validate their strategies, national and subnational interventions and costs. As a result, country-specific costing exercises have been drafted for 10 high-burden countries: Afghanistan, Bangladesh, DRC, Ethiopia, India, Indonesia, Nigeria, Pakistan, Sudan and Tanzania. These scale-up plans are being discussed, revised and vetted at the local level with involvement of key stakeholders in each country. The next step is to adopt, invest in and implement these endorsed interventions.

#### Planning for and Financing Acceleration

The solutions are known, proven, affordable, tried and tested in many different settings around the world.<sup>32</sup> However, country ownership and domestic financing are essential for long-term sustainability. To mobilize the necessary political support and financing for effective programming to improve reproductive, maternal and newborn health requires national plans that are robust and costed, must set clear and evidence based priorities centered on proven interventions targeted particularly at the marginalized, disadvantage and underserved populations. Furthermore, utilizing complementary and innovative financing mechanisms such as results-based financing and demand-side financing (where appropriate) can strengthen implementation. At the same time, establishing innovative revenue raising instruments such as "sin taxes" (e.g. tobacco tax) will bring increases in Gross Domestic Product that can be targeted to health.<sup>33</sup> And the potential returns to the country from such investments are significant: increasing health expenditure by just \$5 per person per year up to 2035 in 74 high-

<sup>&</sup>lt;sup>31</sup> Kozuki N et al, *The Associations of Birth Intervals with Small-for-Gestational Age, Preterm, and Neonatal and Infant Mortality: A Meta-Analysis*, BMC Public Health, 2013.

<sup>32</sup> State of the World Population 2013 - Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy. United Nations Population Fund, 2013.

<sup>&</sup>lt;sup>33</sup> The Philippines has utilized 'sin taxes' on tobacco and alcohol to mobilize resources to support universal health coverage (<a href="http://www.who.int/health-financing/ministerial-meeting-report20130328.pdf">http://www.who.int/health-financing/ministerial-meeting-report20130328.pdf</a>), including access to RMNCH.

burden countries could yield up to nine times that value in economic and social benefits – including the prevention of 127 million child deaths, 32 million stillbirths, and 5 million maternal deaths.<sup>34</sup>

And there are funds available to be so committed. In September 2013, the World Bank, UNICEF, USAID and Norway jointly announced – with the office of the UN Special Envoy for Financing the Health MDGs – \$1.15 billion for maternal and child health. A high-level Summit held in May 2014 in Toronto, focused on saving the lives of vulnerable women and children and set the stage for a commitment of \$3.5 billion by the Canadian government. USAID has announced the reprogramming of \$2.9 billion in 24 countries that will save the lives of up to 500,000 children from preventable causes by the end of 2015. To MDG5, governments have pledged financial commitments as part of FP2020 while, as partners rally around the Every Newborn Action Plan, and the Global Plan towards the elimination of new HIV infections in children and keeping mothers alive, more funding for MDG4 will be committed to accelerate newborn mortality reductions in 2015.

These pledges, coupled with the World Bank and GAVI replenishments, mean that financing the achievement of the health MDGs (and building a foundation for continued progress after 2015) is a realizable goal for countries' leaders and for the global community of donors and implementing organizations.

However, mobilizing additional financial resources must lead to strengthening of health systems' capacity to deliver real results for women and the newborn. A renewed country engagement process, facilitated by the RMNCH Strategy and Coordination Team (housed at UNICEF), aims to harmonize donor processes in support of countries seeking to improve health planning and spending across the RMNCH continuum. And, the June 2014 Partnership for Maternal, Newborn and Child Health (PMNCH) Partner's Forum brought together the global community of advocacy and demand to encourage governments to act. The H4+ agencies (UNAIDS, UNFPA, UNICEF, WHO, UN Women and the World Bank) are working together in providing technical assistance to Governments to implement accelerated plans to meet the MDGs. The Interagency Task Team on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers, and their Children (UNICEF, WHO, UNAIDS, UNFPA) will assess progress towards attainment of the Global Plan targets related to MDGs 4, 5, and 6 in October 2014. The General Assembly of the United Nations will hold a special session to mark the 20<sup>th</sup> anniversary of the International Conference on Population and Development that recognized human rights are central to development and that sexual and reproductive health are human rights matters.

# **Staying with the Road Map**

Improved and integrated antenatal care; reliable access to life saving commodities; skilled birth attendants; high quality care around the time of birth; emergency obstetric and newborn care (basic and comprehensive); improved and integrated postnatal care; access to family planning counseling, information and contraceptive choices: these are the proven, high-return investments that will accelerate maternal and newborn survival to achieve MDGs 4 and 5(A&B) and contribute to achievement of MDGs 3 and 6 as well. These proven interventions will deliver better results and provide substantial returns if we target them at those who otherwise have the least access. In the countdown to 2015, if we reach unprecedented levels of investment we can achieve strong coordination across the maternal, newborn and reproductive health community and fully engage the platforms aligned under Every Woman, Every Child and supported through the Every Newborn Action Plan, Global Plan (EMTCT), and Family Planning 2020. Taken together, these are the ways and means to accelerate delivery of life saving interventions. Implemented through robust national plans, these interventions will narrow the gap between the promise of the MDGs and the reality for women and children. With fewer than 500 days to go, we must focus these accelerant initiatives on the countries and the communities where most deaths can be prevented. Such a demonstrable escalation in the number of lives saved, in turn, will increase public expectation of investments for health, which in turn can help create political will - through pressure on governments and donors - to maintain the gains realized. Doing so in the final days of the MDGs has the potential to save thousands more maternal and newborn lives and increase the likelihood of even more lives being saved post-2015.

<sup>34</sup> Stenberg K, et al, Advancing Social and Economic Development by Investing in Women's and Children's Health: A New Global Investment Framework, Lancet 2014.

# Appendix: Interventions to Accelerate Achievement of Maternal and Newborn Survival and Reach MDGs 4 and 5(A&B)

		A NEACH MIDOS 4 and S(A&D)			
Accelerants for Newborn Survival & MDG5(A&B)	Programmatic Objectives and Activities	Maternal <sup>35</sup> Est. Lives Saved in 2015	Newborn <sup>36</sup> Est. Lives Saved in 2015	Potential Lead Country Support Partners	
(1.1) Prevent deaths <u>in</u> facilities of	<ul> <li>Ensure availability and appropriate use of all essential commodities by health providers at health facilities:</li> <li>Maternal: (1) Magnesium sulfate*; (2) Oxytocin*; (3) Misoprostol*; (4) Antibiotics (including those</li> </ul>	94,000	306,000	Maternal: WHO, UNICEF, UNFPA, UNCoLSC, PATH, BMGF, Merck for Mothers, USAID, CHAI, World Bank	
mothers and newborns in the days surrounding birth	for preterm premature rupture of membranes)  o Newborn: (1) Case management of severe neonatal infection (including breastfeeding and Kangaroo Mother Care as part of full supportive care); (2) Antenatal corticosteroids for preterm labor*; (3) Neonatal resuscitation*			Newborn: WHO, UNICEF, Helping Babies Breathe, UNCoLSC, CHAI, Becton Dickinson, Johnson & Johnson, Save the Children	
	Ensure promotion of clean birth practices	N/A	19,000	WHO, UNICEF, UNFPA, Save the Children, Merck for Mothers	
(1.2) Prevent deaths <u>at</u> <u>home</u> of mothers and newborns in the days	Ensure availability and appropriate use of appropriate commodities by health providers in community settings     Maternal: (1) Misoprostol*; (2) Clean delivery kits     Newborn: (1) Neonatal resuscitation* (2) Clean postnatal practices (3) Promotion of breastfeeding (4) Immediate assessment and stimulation (5) Clean birth practices	22,000	129,000	WHO, UNFPA, UNICEF, UNCoLSC, USAID, Merck for Mothers, CHAI, Save the Children	
surrounding birth	Post-natal follow-up visit within 24 hours with appropriate commodities     Newborn: (1) Case management of severe neonatal infection; (2) Chlorhexidine*	N/A	108,000	UNICEF, Save the Children, USAID, CHAI, Johnson & Johnson	
(2) Leverage	Prevent maternal morbidity & newborn deaths through improved antenatal care in the community and at facility-level: tetanus toxoid	N/A	Syphilis: 2,000	CHAI, Global Congenital Syphilis Partnership (BMGF, Save the Children, WHO, CDC)	
existing	(TT) vaccination; increase coverage of multiple		TT: 8,000	UNICEF, EPI	
antenatal care platforms to maximize commodity	micronutrient supplements (MNPs) that include iron, as well as balanced energy supplementation (BES) supplementation to improve maternal nutrition; folic acid (FA) supplementation and		MNPs: 11,000 BES: 15,000	SUN Movement, WFP, DSM, UNICEF, GAIN, BMGF, Micronutrient Initiative, USAID	
provision	fortification; screening with syphilis rapid diagnostic tests and supply of penicillin treatment; provision of other lifesaving commodities during antenatal care.		FA: 7,000	SUN Movement, WFP, DSM, UNICEF, GAIN, BMGF, Micronutrient Initiative, USAID	
(3) Meet unmet need for contraception	<ul> <li>Provide contraceptive choice through information, post-partum counseling and reliable provision of contraceptive options to an additional 30 million women of reproductive age (15 – 44 years), with a special focus on adolescent girls.</li> </ul>	24,000 <sup>37</sup>	[80,000 <sup>38</sup> ]	UNFPA, BMGF, FP2020, International Planned Parenthood Federation, USAID	
	Total	~ 140,000	~ 605,000		

<sup>\*</sup> These interventions include the commodities outlined in the Report of the UN Commission on Life-Saving Commodities.

<sup>35</sup> UNFPA calculated the impact of global scale-up to full coverage of the maternal interventions presented in this table.

<sup>&</sup>lt;sup>36</sup> This analysis is consistent with that published in Table 43 of the Appendix of Paper 3 in the Every Newborn Lancet Series. The interventions mentioned in this document do not include all of the interventions identified by the Lancet, as some interventions listed had no clear path to scale-up by 2015. However, the additional interventions listed in the Lancet analysis could save an additional 22,000 newborn lives.

<sup>&</sup>lt;sup>37</sup> UNFPA estimates of global maternal lives saved if 30 million women are provided with modern contraceptive, in line with target set during the London Family Planning Summit goal.

<sup>&</sup>lt;sup>38</sup> This value is in brackets as it is not included in the total estimated newborn lives saved, as discussed in the text. However, the provision of modern contraceptive methods to an additional 30 million women will contribute also to the progress towards MDG4 and newborn survival.