

Maternal Health from 1985-2013: Hopeful Progress and Enduring Challenges

a paper commissioned by the Population and Reproductive Health program of the John D. and Catherine T. MacArthur Foundation
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I. A Brief History of the Maternal Health Field

The health of the mother during pregnancy and childbirth was not a focus for policy-making, research and programming until 1985, when a seminal paper provocatively entitled “Maternal health – a neglected tragedy: Where is the M in MCH (Maternal and Child Health)?”¹ was published by two researchers at Columbia University in New York, Alan Rosenfield and Deborah Maine, who posited that the global policy and programmatic focus on newborn and child health, while essential and worthy, neglected the health of the mother. In the paper, they called on multi-lateral agencies, particularly the World Bank, *to prioritize maternity care, considerably reduce maternal morbidity and mortality and perinatal mortality, and encourage contraceptive practice*. Also in 1985, the first International Decade for Women culminated with widely cited WHO estimates that approximately 500,000 women die annually from obstetric complications.² In 1987, the [Safe Motherhood Initiative](#) (SMI) was born at the International Safe Motherhood Conference in Nairobi and [Family Care International](#), a new and arguably the first maternal health NGO, became the secretariat of the SMI Inter-Agency Group. That same year, the Preventing Maternal Mortality program (now known as the [Averting Maternal Death and Disability](#) program) was established at Columbia University with early support from the Carnegie Corporation and the Gates Foundation. Most experts agree that 1987 is the year when the field of maternal health was firmly established in the

¹ Rosenfield A, Maine D. *Maternal mortality: a neglected tragedy. Where is the “M” in MCH?* Lancet. 1985;2:83-5

² World Health Organization. *Maternal mortality rates*. Unpublished Document FHE/85.2 (Geneva. Division of Family Health, WHO, 1985)

global and health and development sector.

In 1988, as maternal health began to be recognized as a core component of overall health systems strengthening, Dr. Mahmoud Fathalla, an ob-gyn at the World Health Organization, made a video titled “Why Did Mrs. X Die?”³ which for the first time, presented the direct causes of maternal mortality in a concise and compelling format by telling an all too familiar tale of how Mrs. X embarks on and cannot escape the road to maternal death or disability. The film fast gained popular audiences and Dr. Fathalla’s observations confirmed what is now the common global definition of the 5 direct causes of maternal mortality: post-partum hemorrhage, sepsis, eclampsia and pre-eclampsia, obstructed labor, and unsafe abortion.⁴

Another seminal paper, “Too Far to Walk: Maternal Mortality in Context”⁵ was published in 1994 by Screen Thaddeus and Deborah Maine at Columbia, which laid out the three principal delays in health seeking behavior among resource-poor women: 1) the delay in the decision to seek care, 2) delayed arrival at a health facility, and 3) the delay in the provision of adequate care. For the first time, policy makers were given an evidence-based framework for addressing pragmatic challenges experienced by women with obstetric complications.

Two ensuing global U.N. conferences included strong affirmations of the basic human right for women to have access to quality and comprehensive maternal and reproductive health care: the 1994 International Conference on Population and Development⁶, and the Fourth International Conference on Women in 1995⁷. Both conferences identified maternal health as a priority component of global health and development, and the 1994 ICPD produced a Programme of Action that accelerated the mandate to measure global

³ Fathalla, M. *Why Did Mrs. X Die?* WHO. 1988

⁴ [WHO Fact Sheets No 348, Maternal Health](#), May 2012. Accessed July 10, 2013

⁵ Thaddeus, S. Maine, D. *Too Far To Walk: Maternal Mortality in Context*; Soc Sci. Med. Vol 38 No. 8 pp1091-1110, 1994

⁶ *Programme of action of the International Conference on Population and Development*, paragraphs 7.2-7.3. United Nations; 1994

⁷ Fourth World Conference on Women, Beijing, 1995, *Platform for Action*, Section C, paragraphs 95-97, United Nations; 1995

progress on maternal health.

When the eight [Millennium Development Goals](#) were established in 2000, the fifth goal, *Improve Maternal Health*, set a target to reduce maternal mortality ratios by 75% by 2015. In 2007, a target on reproductive health was added after some controversy. MDG5b called for universal access to reproductive health; it explicitly merged the ICPD platform for action with the MDGs.⁸ Although widely deemed unattainable by countries with the highest maternal mortality levels, the act of setting MDG5 as a global ambition laid down the gauntlet to donors and policy-makers at all levels.

Estimates

In 1979, Dr. Halfdan Mahler, then Director-General of the WHO and an early champion of maternal health, reported that *500,000 women in developing countries die every year from complications of pregnancy, abortion attempts, and childbirth.*⁹ The WHO definition of the direct causes of maternal mortality announced in 1991 gave programmers, researchers, donors, and policy-makers at all levels a framework in which they could act responsibly, if not coherently. In 1996, WHO and UNICEF published a revision of their 1990 estimates and found that 585,000 women died from maternal health complications.¹⁰ When WHO conducted what they claimed was the first systematic review of the causes of maternal health in 2006,¹¹ not much had changed. Data continued to show mortality from the top 5 direct causes in 34 countries representing all levels of socio-economic development had not changed.

By 2005, the annual maternal mortality estimate was honed to 536,000¹² and that held

⁸ MDG target 5a is measured by two indicators: the maternal mortality ratio and the proportion of births attended by skilled health personnel. MDG target 5b is measured by four indicators: contraceptive prevalence rate; adolescent birth rate; antenatal care coverage; and unmet need for family planning.

⁹ Mahler, H, *Maternal and child health*, Report by the Director General, presented at the 32nd World Health Assembly, Geneva, April 3, 1979, as cited in *Maternal Mortality – A neglected tragedy: Where is the M in MCH*, Rosenfield and Maine, The Lancet, July 13, 1985.

¹⁰ [Revised 1990 Estimates of Maternal Mortality](#); WHO and UNICEF, accessed December 7, 2013.

¹¹ Khan, KS, Say, L, Wojdyla, Gülmezoglu, AM, Van Look, P. *WHO analysis of causes of maternal death: a systematic review*. Lancet 2006; 367: 1066–74, Published Online, March 28, 2006

¹² Shah, IH, Say, L. [Maternal Mortality and Maternity Care from 1990-2005: Uneven but important Gains](#). [Reprod Health Matters](#). 2007 Nov;15(30):17-27

until 2010 when both the U.N. and the [Institute for Health Metrics](#) announced steep declines in 2008 figures using new, sophisticated statistical modeling. The first IHME report came out in May 2010, and a U.N. inter-agency group released their fifth set of global estimates in the following December.^{13 14} Although the modeling methodologies for producing the estimates differed, both reports concluded that the number of maternal deaths had declined by almost half of what was previously assumed.

According to global estimates generated in 2012 by the UN inter-agency group, 287,000 maternal deaths occurred in 2010, a decline of 47% from levels in 1990.¹⁵ The IHME figures released in 2011 show a further decline to 273,465 maternal deaths.¹⁶ These precipitous declines have been attributed to enabling policy changes, increased quality of programming and service delivery, and better data collection and statistical modeling to create more accurate estimates (which will continue to improve as in-country data collection capacities are expanded.)

In 2005 The Lancet, along with leading academics and a coalition of UN agencies, jointly launched [Countdown 2015](#), which *tracks coverage levels for health interventions proven to reduce maternal, newborn and child mortality. It calls on governments and development partners to be accountable, identifies knowledge gaps, and proposes new actions to reach Millennium Development Goals 4 and 5, to reduce child mortality and improve maternal health.*

A full analysis of the status of the 75 countries that account for 95% of the world's maternal and child health deaths is found in the latest Countdown 2015 report¹⁷, which shows several surprising instances of MDG5 being met in countries where maternal

¹³ Lopez, A, Lozano, R, Murray, C. *Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5*. The Lancet. May 2010.

¹⁴ WHO, UNFPA, UNICEF, and WHO. [Trends in maternal mortality: 1990-2008](#) accessed July 9, 2013.

¹⁵ WHO, UNFPA, UNICEF and WHO. [Trends in maternal mortality: 1990-2010](#) accessed July 9, 2013.

¹⁶ Lozano R, Wang H, Foreman KJ, Rajaratnam JK, Naghavi M, Marcus JR, Dwyer-Lindgren L, Lofgren KT, Phillips D, Atkinson C, Lopez AD, Murray CJL: *Progress towards millennium development Goals 4 and 5 on maternal and child mortality: an updated systematic analysis*. Lancet 2011, 378:1139-1165.

¹⁷ [Accountability for Maternal, Newborn and Child Survival: The 2013 Update](#), accessed July 9, 2013

mortality burdens historically have been highest. Vietnam, for example, had a maternal mortality ratio (MMR) of 240 per 100,000 live births in 1990; in 2015 the MMR is projected to be 60 per 100,000. Nepal had an MMR of 770 in 1990; in 2015 it is projected to be 193.¹⁸

New and ambitious targets for the future are being proposed by a group of experts representing WHO and the US Government to be considered in the new global development goal-setting underway as the MDGs expire (see below.) The experts suggest that an absolute reduction of MMRs to less than 50 per 100,000 live births by 2035 is realistic in almost all countries except for those with MMRs of 400 or more.¹⁹ Setting an absolute target raises the bar significantly on the MDG relative target of a 75% MMR reduction. They also propose a method of measuring and tracking individual countries' progress every five years, and weighting support towards those countries with higher MMRs.

Policies and Structures

Since 1987, the maternal health field has evolved quickly if not always systematically. The Safe Motherhood Strategy²⁰ issued by the Safe Motherhood Initiative in 1987, called for a four-pronged policy approach to improving maternal health outcomes: *1) adequate primary health care and an adequate share of available food for females from infancy to adolescence, and universally available family planning; 2) good prenatal care, including nutrition, with early detection and referral of those at high risk; 3) the assistance of a trained person at all births; and 4) access to the essential elements of obstetric care for women at higher risk.*

From 2000 to today, several seminal global policy agreements and initiatives have cemented maternal health as a foundational element of improving health and livelihoods throughout developing countries. Among them, the 13th International AIDS Conference

¹⁸ [Countdown2015 Country Profiles](#); accessed July 8, 2013

¹⁹ Bustreo F, Say L, Koblinsky M, Pullum TW, Temmerman M, Pablos- Méndez P. *Ending preventable maternal deaths: the time is now*. The Lancet Global Health - 19 August 2013
DOI: 10.1016/S2214-109X(13)70059-7

²⁰ Mahler, H. *The Safe Motherhood Initiative: A Call to Action*. The Lancet. March 1987; 21-1(8534)

held in Durban in 2000, identified women as the largest group of new infections in the global pandemic, and concerted efforts were rolled out to prevent the transmission of HIV from mother to newborns while using ante-natal care as an opportunity to provide counseling and treatment to women vulnerable to HIV infection. In 2005, the [Partnership for Maternal, Newborn and Child Health](#) was established at WHO with the mandate to shed new light and emphasis on the *continuum of care*,²¹ and maternal health emerged as a focal point. In October 2007, the first [Women Deliver](#) conference was held in London bringing together the public and private sectors to commit new resources and energies to improving the health of girls and women with an emphasis on maternal health.

In May of that year, the MacArthur Foundation was a pivotal player in bringing together key players in the field as well as donors and communications experts, to help create a framework that was used as an advocacy platform, branded the Three Pillars of Maternal Health:

1. Family planning and other reproductive health services;
2. Skilled attendance during and immediately following pregnancy and childbirth;
3. Emergency obstetric care when life-threatening complications develop.

(A fourth pillar, immediate postnatal care for mothers and newborns, was added later.²²)

For its first 20 years or so, the maternal health field struggled to raise awareness and funding, contract and sustain political will, align research and program priorities, and establish an institutional home. In papers published in 2007 and 2009, the political scientists Jeremy Shiffman and Stephanie Smith, illuminated the vicissitudes of global health priorities and the status of maternal health issues among those priorities.^{23 24}

Their analysis helped maternal health advocates better understand the ebb and flow of

²¹ When the PMNCH was founded, the continuum of care was defined as maternal, newborn and child health. Recently, reproductive health has been added in their publications and communications, but the title of the entity remains focused on maternal, newborn and child health.

²² Cohen, S., *Promoting Sexual and Reproductive Health Advances Maternal Health*; Guttmacher Policy Review Spring 2009, Volume 12, Number 2

²³ Shiffman J, Smith, S. *Generation of political priority for global health initiatives: a framework and case study of maternal mortality*. 2007. *The Lancet*; 370: 1370-79

²⁴ Shiffman, J. *A social explanation for the rise and fall of global health issues*. *Bulletin of the World Health Organization* 2009; 87 608-613. doi: 10.22471/BLT.08.060749

political health and development priorities, and reframe their efforts to ensure sustained and expanding attention to maternal health, both globally and nationally.

Subsequent Women Deliver conferences were held in June 2010 (Washington, DC) and May 2013 (Kuala Lumpur.) In addition to the Pillars of Maternal Health, the 2007 conference yielded announcements of significant new funding, the largest of which came from the Government of Norway which pledged \$1 billion for maternal and child health over the coming decade. The 2010 conference saw impressive new participation from the private sector and a five-year, \$1.5 billion commitment to maternal and child health from the Gates Foundation. The 2013 conference was heralded for progressive declarations of commitment to family planning and reproductive health from the Islamic host government (Malaysia), as well as an enhanced focus on the next generation of leaders in women's sexual and reproductive health and rights.

In addition to sustaining long-time maternal health centers of research, advocacy and programs such as FCI, AMDD, Impact, and others, the two leading US private donors to maternal health (Gates and MacArthur) launched in 2009 and re-funded in 2012 the [Maternal Health Task Force](#) (MHTF) to establish a neutral space for convening the maternal health community through conferences, technical meetings, research, education and a state-of-the-art knowledge management system providing a “one-stop shop for all things maternal health.”

In August 2010, the MHTF organized the first Global Maternal Health Conference, held in New Delhi where technical and scientific experts were given the opportunity to share new research and seminal findings. The demand for participation in [GMHC2010](#) far exceeded expectations confirming the need for such a conference. Of note was a plenary session on accountability in which the panel emphasized the urgency of holding governments accountable for their commitments to improving maternal health through grassroots-based advocacy using solid evidence. The second GMHC was held in Arusha, Tanzania in January 2013, where demand again exceeded expectations. A

*Manifesto for maternal health post-2015*²⁵ was generated in a plenary session at [GMHC2013](#); it was subsequently published in The Lancet, and presented at a high-level UN meeting of experts contributing to the global discussion on the post-MDG framework in Gaborone, Botswana.

During the U.N. Millennium Development Goals Summit in September 2010, the [Every Woman Every Child](#) campaign was launched by UN Secretary General Ban Ki-moon to raise awareness and new funding for maternal, newborn and child health based on a new Global Strategy for Women's and Children's Health which aims *to save 16 million lives by 2015 in the world's 49 poorest countries*.²⁶ Governments, civil society, multilaterals and the private sector made pledges amounting to \$40 billion in response to the EWEC campaign. Tracking the commitments remains in the purview of the EWEC campaign secretariat with technical input from the PMNCH and an independent expert review group (see below.)

Two new global commissions were established from the Global Strategy for Women's and Children's Health. In early 2011, [The Commission on Information and Accountability for Women's and Children's Health](#) was convened and one of their key recommendations was establishing an independent Expert Review Group (iERG) to monitor global commitments to improving reproductive, maternal, newborn and child health.²⁷ The iERG released its first report in 2012,²⁸ and the second report in 2013²⁹. Annual reports are expected through and including 2015. In 2012, a [U.N. Commission on Life Saving Commodities for Women and Children](#) convened, and the Commissioners made improved access to essential maternal health commodities intrinsic to the success of global efforts to attain MDG5.³⁰ The influential public-private [Reproductive Health](#)

²⁵ Langer A, Horton R, Chalamilla G. [A manifesto for maternal health post-2015](#). The Lancet, [Volume 381, Issue 9867](#), 2013.

²⁶ WHO. [Global Strategy for Women's and Children's Health](#). 2010, accessed July 10, 2013.

²⁷ WHO. Commission on Information and Accountability for Women's and Children's Health. [Keeping Promises, Measuring Results](#), 2011 accessed July 10, 2013.

²⁸ WHO. [Every Women Every Child: from commitments to action](#). 2012. Published online. Accessed July 9, 2013

²⁹ WHO. [The 2013 iERG Report](#). Published online. Accessed November 2, 2013.

³⁰ Gates Foundation, MacArthur Foundation, and Government of Norway funded this Commission's work.

[Supplies Coalition](#), which focused primarily on contraceptives in its first ten years, has taken up maternal health supplies in their advocacy and coordination activities. Health commodities, infrastructure and systems are all receiving significant attention in the maternal health movement at this writing.

From the Safe Motherhood strategy in 1987 to the revised estimates in 2010 to the new series of Global Maternal Health Conferences, experts have begun to view maternal mortality as a fixable problem. Programs and projects have been established in academic centers, donor agencies, policy think tanks, Ministries of Health and in communities throughout the world. It would be impossible to catalogue here all the maternal health programs, research, and policies that have contributed to improving maternal health; the attached timeline depicts key moments in the maternal health field from 1985 to today.

Maternal health has become an established field of study and practice, and a bona fide sub-sector of global health and development. Leaders of the maternal health movement over three decades have succeeded in persuading the world that no women should die needlessly in pregnancy or childbirth. The credibility and integrity of the field are shored up by 2 major multi-lateral policy agreements, which are coming to fruition: in 2014, the 20-year ICPD Programme of Action will be evaluated, and 2015 is the deadline for the MDGs. With more funding than ever, better evidence, declining maternal mortality levels and new global development architecture on the horizon, the maternal health sector is at a pivotal point.

II. Trends in Funding for Maternal Health

A recent analysis of US donors to maternal health was conducted by [Global Health Visions](#) and commissioned by the Maternal Health Task Force in 2011.³¹ In 2009-2010, only two private donors demonstrated dedicated maternal health funding mandates: the Gates and MacArthur Foundations, albeit at very different financial levels. In all other

³¹ Global Health Visions. [Maternal Health Donor Landscape](#), published online, May 2011.

cases included in the study, maternal health was subsumed within larger reproductive health, family planning, or global health programs.

A handful of government overseas development assistance programs fund maternal health discretely, among them: the U.S. Agency for International Development, the UK's Department for International Development, the Norwegian Agency for Development Cooperation, the Swedish International Development Agency and the Canadian International Development Agency. Foreign policy priorities shift with political winds; at this writing, USAID and DFID lead in actual ODA for maternal health.

By most calculations, funding for maternal health has increased steadily since it was established as a global health sub-sector in the late 1980s. The Gates Foundation has prioritized maternal and newborn health since its inception in 1995, and the MacArthur Foundation has taken a leading funding role on maternal health specifically since 2003, with a smaller amount of grant resources but strong public messaging on the issue. All three Women Deliver conferences have included announcements of new and expanded funding streams for maternal health by a range of public and private sector donors.

The Secretary-General's Every Woman, Every Child campaign was heeded by the private sector, most notably pharmaceutical giants Merck and Johnson & Johnson. Merck soon thereafter launched their [Merck for Mothers](#) initiative with a \$500 million budget disbursed annually over ten years with a dual focus on eclampsia/pre-eclampsia and post-partum hemorrhage, coinciding directly with MacArthur's Population and Reproductive Health program mandate since 2003.

[Johnson & Johnson](#) widely publicizes their 2012 global charitable contribution of \$966.3 million in products and cash.³² Their specific commitment to the Every Woman Every Child campaign was recorded in 2011:

*J&J commits \$200 million over the next 5 years for a package...that aims to help as many as 120 million women and children each year...to increase life expectancy and quality-of-life for women and children in the developing world.*³³

There is no question that the Gates Foundation dominates the maternal health donor base. Coincidentally, the Foundation grew up alongside the maternal health movement – Gates began giving in 1994/95, just as maternal health was being codified in the two major global agreements of the decade, the ICPD Programme of Action and the Beijing Platform for Action. The Gates Foundation’s ongoing leadership is evident both in terms of their rhetoric and investments. They fund maternal health discretely and in combination with newborn and child health, and nutrition, all within a family health rubric. Gates is in the midst of revising their maternal health strategy at this writing, as they re-organize around an assertive family planning mandate. Since MacArthur’s Board of Directors approved the Population and Reproductive Health program’s adoption of maternal health as a priority in February 2001, the two foundations have worked together to complement each other’s funding decisions.

III. The Future of the Maternal Health Field

The pivot point that the maternal health field sits at today is clear. Most experts agree: “We know what to do, we just don’t know how to do it at scale and with limited human and financial resources.” So the focus is shifting from the phenomenon of maternal mortality (who dies? why does she die? what can be done to save her?) to the pragmatics of improving maternal health (skilled attendance, proper referral, post-natal care, family planning counseling, and quality care). Implementation research on how to deliver proven solutions at scale in disparate contexts is now a high priority.

Technology and innovation have permeated the maternal health agenda, just as they have every other sector of society. Mobile health for maternal health is now a studied discipline, a funding priority, and increasingly an essential component of research and

³³ [Every Woman Every Child commitment blog](#), accessed July 10, 2013

programs. The evaluation of various m-health technologies is a noted gap and efforts are underway to fill it. As new technologies are developed, implemented and upgraded, it is likely that the maternal health field will benefit considerably by more and better data collection and analysis, improved client and provider adherence to proven protocols, and expanded reach of services for previously neglected, high-burden populations. Several entities have emerged to accelerate the development and use of new technologies to improve maternal health, among them the [mHealth Alliance](#) and the [Grand Challenges](#) network.

Family planning is re-ascending in global health priorities, so the maternal health numbers could decline further and faster. It's simple logic: the fewer pregnancies a woman has, the less likely she is to die in pregnancy and childbirth.³⁴ Fewer pregnancies will result from providing more women with more access to more family planning services, especially contraception.³⁵ Using computer simulations and cost-effectiveness modeling, the science of decision making was applied to maternal health by Harvard professor and MacArthur Fellow, Sue Goldie, starting in 2007 in Mexico and followed up with a larger, more robust study in 2010 in India.^{36 37} Goldie and her teams showed solid evidence that an integrated and stepped up package of maternal health services led by family planning and emergency obstetric care could reduce maternal mortality by 75% in some settings and save millions of dollars.

If [Family Planning 2020](#), a new multi-lateral initiative led by Gates, DFID and UNFPA derived from the London Summit on Family Planning held in 2012 attains its goal of

³⁴ Ross JA, Blanc, AK. *Why Aren't There More Maternal Deaths? A Decomposition Analysis* Matern Child Health J. 2012 February; 16(2): 456–463. Published online 2011 March 24. doi: 10.1007/s10995-011-0777-x

³⁵ Singh S and Darroch JE, *Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012*, New York: Guttmacher Institute and United Nations Population Fund (UNFPA), 2012

³⁶ Hu D, Bertozzi SM, Gakidou E, Sweet S, Goldie SJ (2007) The Costs, Benefits, and Cost-Effectiveness of Interventions to Reduce Maternal Morbidity and Mortality in Mexico. PLoS ONE 2(8): e750. doi:10.1371/journal.pone.0000750

³⁷ Goldie SJ, Sweet S, Carvalho N, Natchu UCM, Hu D (2010) *Alternative Strategies to Reduce Maternal Mortality in India: A Cost-Effectiveness Analysis*. PLoS Med 7(4): e1000264. doi:10.1371/journal.pmed.1000264

adding 120 million more girls and women to the global family planning reach by 2020, it is probable that global maternal mortality rates will fall concomitantly.

The 20-year Programme of Action from the 1994 ICPD was designed to end in 2014, however a recent [UN resolution](#) promises to extend that deadline with an initiative called [ICPD Beyond 2014](#), lead by a high-level task force, which is not time bound. In 2015, the Millennium Development Goals will be either reached or missed. Stakeholders within and outside of the global health and development sector are eagerly anticipating the outcomes of UN-coordinated consultations on a new set of global development goals.

As discussions on the post-2015 development architecture accelerate, all eyes were on the UN Secretary General, Ban-ki Moon, when he issued a report on the MDGs and the next framework of development goals at a special meeting held prior to the opening of the 68th UN General Assembly in 2013. He said, “A new post-2015 era demands a new vision and a responsive framework. Sustainable development — enabled by the integration of economic growth, social justice and environmental stewardship — must become our global guiding principle and operational standard. This is a universal agenda that requires profound economic transformations and a new global partnership.”³⁸

A series of official UN consultations have occurred and more are planned to inform and advise deliberations on the post-2015 development framework. In late May 2013, a report by a High Level Panel of Eminent Persons was released entitled *A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development*, which frames the next set of global goals with economic development and the environmental sustainability. The report proposes 12 illustrative goals, each supported by five targets. Of these, Goal 4, “To Ensure Healthy Lives,” builds on the health Millennium Development Goals. New targets propose to:

4c. Decrease the maternal mortality ratio no more than x per 100,000.

³⁸ United Nations. [A life of dignity for all: Accelerating progress toward the MDGs and advancing the UN development goals beyond 2015](#) Accessed on line November 2, 2013

*4d. Ensure universal sexual and reproductive health and rights.*³⁹

The new WHO and US Government proposal to set a global MMR target of 50 per 100,000 live births (with caveats for countries with MMRs over 400 - see above) could influence this future goal setting considerably.

Amid the post-2015 development discussions, the ambitious concept of universal health coverage (UHC) has received a great deal of attention. Although the concept is not new, evidence is being amassed that UHC is economically viable and sustainable, especially when implemented with a mandate to significantly reduce inequities in health care coverage.

The Lancet published a [series on universal health coverage](#) in September 2013, well-timed as a resource for the UN General Assembly's special event on the MDGs. The World Bank maintains [a study series](#) on universal health coverage, providing tools and recommendations based on ongoing analyses of 22 countries. Together, the Bank and WHO convened a [ministerial meeting in February 2013](#) to discuss best practices for moving forward on universal health coverage.

The Rockefeller Foundation is leading funding and research on universal health coverage at the moment, as evidenced in their September 2013 report, [Universal Health Coverage: A commitment to close the gap](#), which presents strong data showing the potential impact of UHC on a variety of public health challenges, maternal and newborn health among them. Universal health coverage could become a principal component of the post-2015 development architecture, posing the challenge to all health sub-sectors to integrate policies, services and reporting more so than ever before.

Further directions toward UHC and health sector integration were published in a Lancet Commission report issued in late 2013, with an impressive roster of commissioners led

³⁹ The High Level Commission report calls for universal targets that account for individual countries' unique challenges in meeting them, so the "x per 100,000" in 4c remains undefined until experts can create a realistic consensus target.

by the two authors of the seminal [1993 World Development Report](#), which, for the first time, established an evidence base for the economic advantages of investing in public health. The new report, [Global Health 2035: a world converging within a generation](#), suggests that increased investments and stronger coordination of health policies and programs could result in eradication of preventable diseases and mortalities. The second conclusion of the report is portentous for the maternal health field: *A unique characteristic of our generation is that, with the right investments, the stark differences in infectious, maternal, and child death rates between countries of differing income levels could be brought to an end within our lifetimes.* (p14)

New policies and programs that emanate from deliberations around the post-2015 health and development agenda hold great promise for accelerating improvements in maternal health. But the silo focus that maternal health has enjoyed, especially since 2010, may wane as all health and development agendas are subsumed within a larger focus on economics and the environment. The challenge for the maternal health community will be to continue emphasizing the inextricable links between the health of mothers and the sustainable development of families, communities and nations.

IV. Conclusion

Milestones in maternal health are accruing rapidly: 2012 marked the 25th anniversary of the Safe Motherhood Initiative, 2014 marks the end of the 20-year ICPD Programme of Action, and 2015 marks the end of the Millennium Development Goals. There is no doubt that progress has been made in the global goal to eliminate preventable maternal mortality as recent lower MMR estimates have proved. With progress, new and enduring challenges abound. Funding has increased, but its sustainability is unsure; political will is at an all-time high, but conservative political trends threaten it; new technologies are being developed and implemented, but their efficacy and potential for scale remain unproven.

The argument can be made that the tipping point in improving maternal health has been reached, and that the next phase of the movement will be the refinement and scale-up of proven interventions to eradicate preventable maternal mortality. Of course sustained funding and political will be needed, and the maternal health advocacy architecture is well poised to ensure that.

Another point of view is that while maternal mortality is waning, efforts to measure, prevent and treat maternal morbidities remain unnecessarily stagnant. There is a dearth of research on morbidities affecting women in pregnancy and childbirth, and few large-scale initiatives underway or in development to tackle enduring morbidities caused by obstructed labor, post-partum depression, uterine prolapse, and dyspareunia (painful intercourse).^{40 41} The [Fistula Care](#) program at EngenderHealth and funded by USAID is a notable exception. WHO recently established a promising four-year Maternal Morbidity Working Group (MMWG) charged with *improving the scientific basis for defining, measuring and monitoring maternal morbidity*.⁴²

Some experts and advocates continue to argue that maternal health will never be fully addressed until the social determinants of women's inequality overall are fully addressed, requiring a sea-change in traditional gender norms globally.

The Manifesto for Maternal Health that was brainstormed at the 2013 Global Maternal Health Conference in Arusha could be a talisman for predicting the future. Recurring in the 12 points of the manifesto is a demand for women's voices in the development and implementation of future maternal health policies, programs and research, especially the voices of those women who are on the frontlines of high risk maternal care, both clients

⁴⁰ Koblinsky M, Chowdhury ME, Moran A, Ronsmans C. [Maternal morbidity and disability and their consequences: neglected agenda in maternal health](#), J Health Popul Nutr. 2012 June; 30(2): 124–130;

⁴¹ Karen Hardee , Jill Gay & Ann K. Blanc (2012) *Maternal morbidity: Neglected dimension of safe motherhood in the developing world*, Global Public Health: An International Journal for Research, Policy and Practice, 7:6, 603-617.

⁴² Tabassum F, Chou D, von Dadelszen, P Agrawal P, Vanderkruik R, Tunçalp O, Magee LA, van Den Broeke N, Say L *Measuring maternal health: focus on maternal morbidity*. Bulletin of the World Health Organization. August 2013. Article ID: BLT.13.11756

and providers. The manifesto implicitly and explicitly makes the case for a global strengthening of health systems based on all that is required to make pregnancy and childbirth safe. With maternal health at the core of all health systems, improved health outcomes for all members of society are highly likely.

As integration, innovation, and information expand in the new global health and development architecture, the era of an exclusive focus on maternal health could be coming to an end. A more intricate and efficient connection between maternal health and larger health and development goals such as health systems strengthening, economic development, and environmental sustainability could result in more inclusive and comprehensive services for women throughout the continuum of care.

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