



PUTTING MOTHERS AND NEWBORNS FIRST

INTEGRATING POLICIES, PROGRAMS AND SERVICES

WISH 2015 Policy Briefing

Ana Langer
Joy Riggs-Perla
Mark Steedman
Mary Nell Wegner



BILL & MELINDA
GATES foundation

**PUTTING MOTHERS AND
NEWBORNS FIRST**
INTEGRATING POLICIES,
PROGRAMS AND SERVICES

WISH 2015 Policy Briefing

CONTENTS

03	Foreword
04	Executive summary
05	Introduction
11	The social and health burden of mothers and newborns
13	Moving forward: integration and innovation
18	Translating policy into action
20	Acknowledgments
21	References

FOREWORD

Since 2000, eight Millennium Development Goals (MDGs) have shaped the world's response to some of the most difficult global challenges. Three of the MDGs specifically look at issues that affect women and children, including goals 4 and 5, which strive to sharply decrease preventable child and maternal mortality, respectively. Goal 6 aims to reduce HIV, AIDS, malaria, and other conditions that significantly affect women and children.¹

Looking back at the progress that has been made since the MDGs were put in place, there are achievements relating to maternal and child health to be celebrated, but also enduring challenges that must be acknowledged and solved with new and innovative strategies. Maternal and child deaths have decreased dramatically across the world since 2000, yet in 2013 more than 280,000 women and girls died unnecessarily due to complications of pregnancy and childbirth² and 2.9 million newborns died.³ Clearly, much more must be done to prevent this tragic loss of life.

In 2015, the MDGs will be replaced by the Sustainable Development Goals (SDGs), which will expand the framework for global development for the future. As this transition occurs, maternal and newborn health must remain at the forefront of global and national health policies, programming, and advocacy and remain one of our highest priorities.

This policy briefing aims to build a case for integrating policies, programs and services in ways that improve the quality and accessibility of care for mothers and newborns. Service integration is a key strategy to sustain the current momentum. We examine the social and health burdens caused by ineffective care, the opportunities to provide more integrated care, and the actions that various key players can take to achieve a common goal: improving the health and wellbeing of all women and newborns.

Ana Langer, MD

Director of the Women and Health Initiative,
Maternal Health Task Force
Harvard School of Public Health

Joy Riggs-Perla

Saving Newborn Lives
Save the Children

EXECUTIVE SUMMARY

In low- and middle-income countries, mothers and newborns are often the victims of weak health systems and cultural norms that fail to prioritize their health needs, leading to a disproportionate share of disease and mortality. To redress this unacceptable reality, reproductive, maternal and newborn healthcare must be priorities.

Reproductive health issues are the leading cause of death and disability for girls and women between the ages of 15 and 44 globally.⁴ Maternal mortality, a key component of poor reproductive health, is concentrated among young and vulnerable women who die unnecessarily of complications that can often be effectively and affordably prevented or managed. The impact of these deaths goes well beyond the women themselves and severely affect their families, as newborns and older children are left without the care of their mothers and are more likely to die themselves. This reverberates throughout society, as women typically contribute substantially to the financial well-being of families and communities.

As the health of mothers and their children are inextricably linked – biologically, socially, and through health systems – integrated responses that use innovative approaches are needed across the full range of reproductive, maternal, newborn, and child healthcare. The integration of maternal and newborn healthcare would increase women and babies' access to quality care, while easing the burden on policymakers and healthcare providers, increasing efficiency, and reducing costs. While more research is needed to determine how best to integrate care and to draw lessons from best practice cases, burgeoning data suggest that integration is a promising approach to reaching mothers and newborns, particularly those who are the most vulnerable.

Recommendations

In this policy briefing, we provide five recommendations for healthcare stakeholders who are committed to improving the health and wellbeing of mothers and newborns:

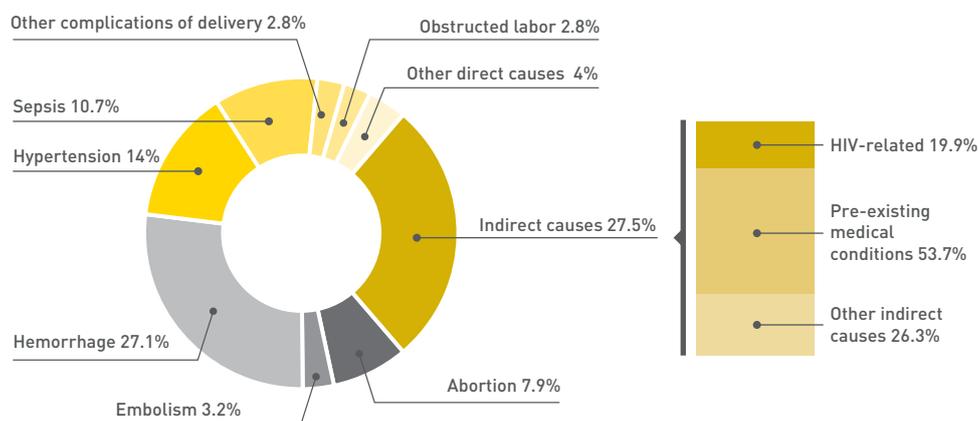
1. Keep maternal and newborn health at the forefront of health policies, programming and advocacy, especially in national settings.
2. Develop an array of funding mechanisms that are targeted and integrated.
3. Build health systems infrastructure and improve processes to foster change.
4. Involve a wide range of organizations, including private sector providers, in integrated efforts.
5. Generate new knowledge to support integration through research, monitoring and evaluation.

INTRODUCTION

In 2000, more than 180 United Nations (UN) member states launched a vast, international effort to decrease poverty, reduce gender discrimination in education and economic opportunities, protect the environment, and improve health and wellbeing worldwide by 2015. Member states identified eight Millennium Development Goals (MDGs) to focus these important changes, turning renewed attention toward the high costs of poor health among women and children. Goals 4 and 5 strove to sharply decrease preventable child and maternal mortality, respectively, and goal 6, to reduce HIV and AIDS and other conditions that significantly affect women and children.¹

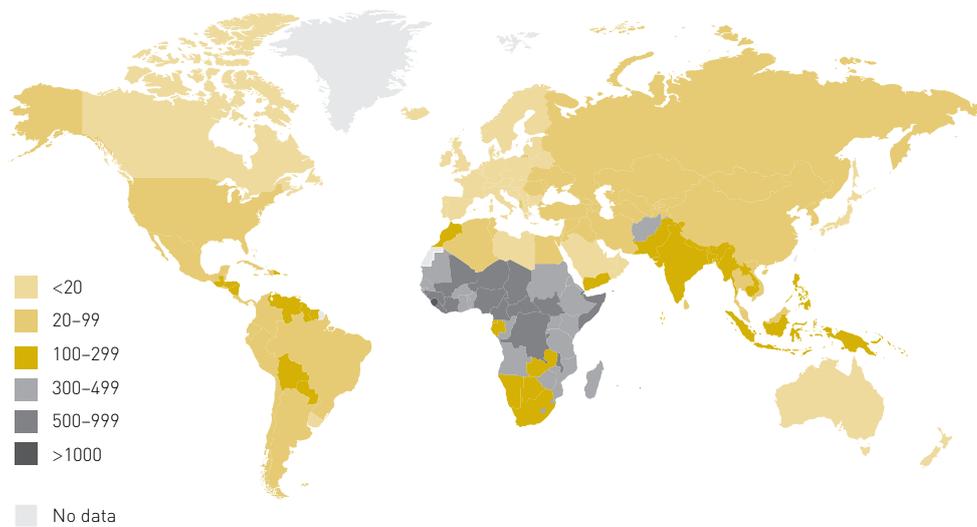
As the 15-year timeframe for these goals comes to an end, it is a critical moment to take stock of the hard-won gains and also the enduring challenges faced by women and children. At a global level, the number of maternal deaths – defined as deaths during pregnancy, childbirth, or during the 42 days following delivery – has decreased dramatically. However, more than 280,000 women and girls died in 2013 from preventable or manageable complications of pregnancy, such as hemorrhage, hypertensive disorders, unsafe abortion, and infection (see Figure 1).^{2,5} The global situation masks important differences within and across countries, since maternal deaths are overwhelmingly concentrated among the poorest and most disempowered women, who do not have access to existing life-saving interventions (see Figure 2). In fact, maternal mortality is not decreasing enough in low- and middle-income countries (LMICs) where maternal deaths are all too common.⁶

Figure 1: Causes of global maternal mortality (2013)



Source: Global Health Observatory Data Repository, World Health Organization
Numbers are rounded so may not add to precisely 100%

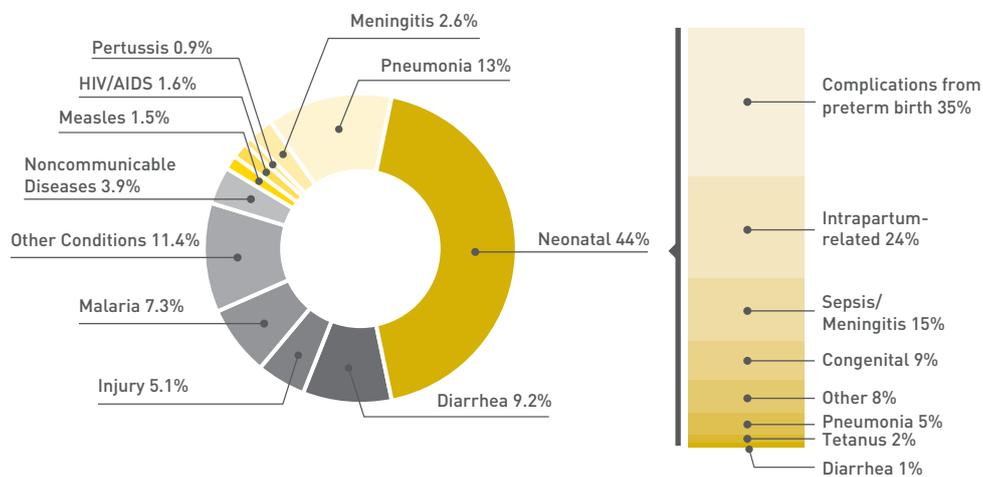
Figure 2: Global maternal mortality ratio (deaths per 100,000 births)



Source: Global Health Observatory Data Repository, World Health Organization

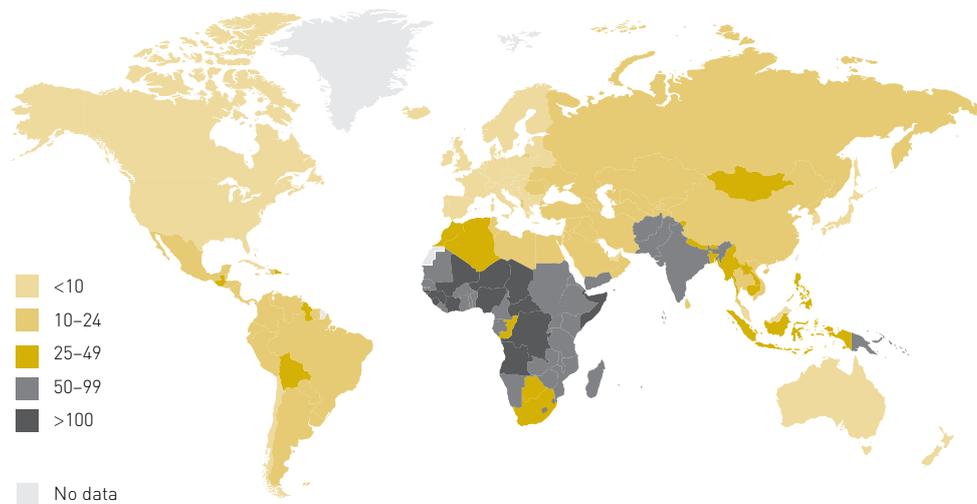
Innovative approaches in healthcare are needed to build on the current momentum and reach the most vulnerable women to reduce inequalities. Innovation is also needed to reduce the number of newborn deaths – deaths during the first 28 days of life – and stillbirths or in utero deaths, which remain stubbornly high, despite reductions in infant and child mortality.

Figure 3: Causes of global mortality of children under 5 (2012)



Source: Global Health Observatory Data Repository, World Health Organization. Adapted from the Every Newborn Action Plan. Numbers are rounded so may not add to precisely 100%

Figure 4: Global mortality of children under 5 (per 1,000 births) (2013)



Source: Global Health Observatory Data Repository, World Health Organization. Adapted from the Every Newborn Action Plan

Worldwide, more than 2.9 million newborns died in 2013, comprising roughly 44 percent of all deaths of children younger than five years of age (see Figure 3).³ Up to half a million babies in Africa die on the day they are born (see Figure 4).⁷ The majority of newborn deaths are caused by infections, complications of premature birth, and birth asphyxia. As outlined in *The Lancet's* Every Newborn Series, 2014, small size at birth, whether as a result of a preterm birth or fetal malnutrition, is a fundamental challenge and “the biggest risk factor for more than 80% of neonatal deaths”, which also “increases the risk of post-neonatal mortality, growth failure, and adult-onset of non-communicable diseases”.³

The time during and immediately after childbirth continues to be the most dangerous for mothers and children alike. Interventions to prevent maternal deaths, stillbirths and neonatal deaths are well known. The continuing high rates of mortality are largely because interventions have not been scaled up successfully, especially among the most vulnerable populations.

Most of these fatalities are preventable with relatively simple, low-cost interventions. The Global Investment Framework for Women’s and Children’s Health has estimated that, with the modest investment of \$5 per person annually, the deaths of 60 million newborns and 5 million pregnancy-related fatalities can be averted in the next 20 years.⁸ With the 2015 end date fast approaching for the MDGs, global initiatives such as *Ending Preventable Maternal Mortality*⁹ (see Box 1) and the *Every Newborn Action Plan*¹⁰ (see Box 2) must inform the new generation of SDGs. National policymakers, public and private leaders, and civil society groups in health and related sectors, as well as academic, donor and international organizations must join forces to translate policies, and the scientific evidence that informs them, into action for the benefit of women and newborns.

Box 1: Ending Preventable Maternal Mortality

The Ending Preventable Maternal Mortality working group, along with the World Health Organization (WHO), the United Nations Population Fund (UNPFA), the United States Agency for International Development (USAID), the Maternal Health Task Force (MHTF), and representatives from over 30 countries met in Bangkok, Thailand, in April 2014 to determine a shared maternal mortality reduction goal driven by national-level targets for the post-2015 development agenda, and to identify maternal health strategies to help countries achieve these targets. The goal proposed by this group was a global average maternal mortality ratio (MMR) of fewer than 70 deaths per 100,000 live births by 2030. Additionally, no country should have an MMR higher than 140.

In order to achieve this goal, two sets of national targets were recommended for individual countries:

- For countries with a current MMR less than 420 in 2010, the MMR should be reduced by at least two-thirds of the 2010 baseline by 2030.
- For all countries with a current MMR higher than 420 in 2010, the MMR rate of decline should be steeper, and no country should have an MMR over 140 in 2030.

Finally, the following strategic framework for ending preventable maternal mortality was agreed.

Guiding principles for achieving this goal:

- Empowering women, girls and communities.
- Protecting and supporting the mother-baby dyad.
- Ensuring country ownership, leadership, and supportive legal, regulatory and financial frameworks.
- Applying a human rights framework to ensure that high quality reproductive, maternal and newborn healthcare are available, accessible and acceptable to all who need them.

Cross-cutting actions for achieving this goal:

- Improving metrics, measurement systems and data quality to ensure that all maternal and newborn deaths are counted.
- Allocating adequate resources and effective healthcare financing.

Five strategic objectives that contribute to achieving this goal:

1. Addressing inequities in access to and quality of reproductive, maternal, and newborn healthcare services.
2. Ensuring universal health coverage for comprehensive reproductive, maternal and newborn healthcare.

[Continued]

3. Addressing all causes of maternal mortality, reproductive and maternal morbidities, and related disabilities.
4. Strengthening health systems to respond to the needs and priorities of women and girls.
5. Ensuring accountability in order to improve quality of care and equity.

Box 2: Every Newborn Action Plan

The Every Newborn Action Plan (ENAP) was agreed and endorsed at the 67th World Health Assembly. ENAP presented a new vision for newborn health, supported by six guiding principles. It also set two new goals for newborn health and provided five strategic objectives to achieve these goals.



Goals

1. **Ending Preventable Newborn Deaths.** By 2035, all countries will reach the target of 10 or fewer newborn deaths per 1,000 live births and continue to reduce death and disability, ensuring that no newborn is left behind.
2. **Ending Preventable Stillbirths.** By 2035, all countries will reach the target of 10 or fewer stillbirths per 1,000 total births and continue to close equity gaps.

(Continued)

Strategic Objectives

- 1. Strengthen and invest in care during labour, birth and the first day and week of life.** A large proportion of maternal and newborn deaths and stillbirths occur within this period, but many deaths and complications can be prevented by ensuring high-quality essential care to every woman and baby during this critical time.
- 2. Improve the quality of maternal and newborn care.** Substantial gaps in the quality of care exist across the continuum for women's and children's health. Many women and newborns do not receive quality care even when they have contact with a health system before, during and after pregnancy and childbirth. Introducing high-quality care with high-impact, cost-effective interventions for mother and baby together – delivered, in most cases, by the same health providers with midwifery skills at the same time – is key to improvement.
- 3. Reach every woman and newborn to reduce inequities.** Having access to high-quality healthcare without suffering financial hardship is a human right. Robust evidence for approaches to ending preventable newborn deaths is available and, if applied, can effectively accelerate the coverage of essential interventions through innovations and in accordance with the principles of universal health coverage.
- 4. Harness the power of parents, families and communities.** Engaged community leaders and workers, as well as women's groups, are critical for better health outcomes for women and newborns. Education and empowerment of parents, families and communities to demand quality care and improve home care practices are crucial.
- 5. Count every newborn through measurement, program-tracking and accountability.** Measurement enables managers to improve performance and adapt actions as needed. Assessing outcomes and financial flows with standardized indicators improves accountability. There is a need to improve metrics globally and nationally, especially for birth outcomes and quality of care around the time of birth. Every newborn needs to be registered and newborn and maternal deaths and stillbirths need to be counted.

Given the importance of accelerating improvements in healthcare for women and newborns, life-saving services of sufficient quality must be made available and accessible to the populations who need them most. Fragmented healthcare translates into missed opportunities to address the needs of mothers and their babies during the same visit. Also, insufficient attention on promoting healthy behaviors that benefit both mothers and babies can have a negative impact on the quality, access and utilization of care.

This policy briefing makes a clear case for the benefits of integrating policies, programs and services in ways that improve the quality and accessibility of care for women and newborns. It also examines the social and health burdens that result from ineffective care, the opportunities to provide better integrated care, and the actions that key players can take to improve the health and wellbeing of mothers and their babies.

THE SOCIAL AND HEALTH BURDEN OF MOTHERS AND NEWBORNS

Around the world, and especially in LMICs, women and newborns face stark challenges and obstacles to accessing safe, effective, timely, and affordable healthcare. Building a policy environment and health systems where all mothers and babies, especially the most vulnerable ones, overcome these barriers is a paramount concern. It is also a foundation for equitable and peaceful societies. Healthy and well-educated women are better able to make decisions, be engaged in civic enterprise, support themselves and their families, and ensure the health of their children, while chipping away at the gender discrimination that often serves as the backdrop of their lives. Ensuring that women's and babies' health needs and rights are met is a prerequisite for getting closer to a society that values all of its citizens equally.

Reproductive health

Bearing the brunt of weak health systems and cultural norms that fail to prioritize their health, women and newborns endure a disproportionate share of disease burden and ill health. Challenges for women start early and managing fertility is a concern that spans decades of their lives. Millions of women worldwide are unable to choose from among the most effective family planning methods. Many face a high risk of contracting HIV and other sexually-transmitted infections and are victims of gender-based violence and other forms of discrimination. Not surprisingly, reproductive health issues are the leading causes of death and disability globally for women and girls aged 15–44 years.⁴ The provision of high-quality reproductive health services, including family planning, can help women choose the timing, spacing, and number of births, thereby improving their health and the health of their newborns, as well as their families' wellbeing.

The impact of maternal mortality on families

From biological, cultural and social perspectives, maternal health is the most critical factor in whether newborns survive and thrive. Complications during pregnancy and delivery directly affect the fetus and newborn, reducing their chances of survival. When mothers die and newborns are left without caregivers, they are highly vulnerable and more likely to die, especially if they cannot be breastfed or cared for by a close and dedicated relative.

The implications of a mother's death on older children are also overwhelming: their chances of surviving to their 10th birthday are 80 percent lower than that of children in the same community whose mothers are alive, since families tend to disintegrate and orphans can be neglected. Fathers' deaths represent tragic events, but do not impact children's chances of survival.¹¹ From a social perspective, care-seeking costs to families can increase substantially when services are fragmented and require multiple visits or make it difficult to receive timely care. Complications that result in procedures

such as Caesarean sections or prolonged hospital stays can be financially catastrophic for the poor, who may need to sell assets to pay for care, plunging the family deeper into poverty. Policies that reduce the financial burden on poor families when accessing care for mothers and newborns can increase the use of services during the critical period of childbirth, and improve outcomes overall, provided the quality of care is adequate.

Impact on communities

The effects of maternal or neonatal death also reverberate outside the individual household and have concrete impacts on communities, health systems, and national economies. Women's financial contributions are important for families' wellbeing and societies' development worldwide. For example, women are the engines of agriculture in many societies; their sickness and disability can result in missed harvests, market days, or other key moments in the cultivation and commerce cycle. This can undermine their individual and family livelihood and also the society they live in. Though financial contributions are difficult to quantify, there is evidence that shows that the earnings women lose due to ill health and gender discrimination diminish the productivity and development prospects of their communities and, consequently, nations.

Too often, the needs of mothers and newborns are considered distinct and so are addressed by disconnected policies, programs, and healthcare services. Funding is restricted to separate sources designed to tackle an important condition or disease, (such as HIV or malaria) without considering the interconnected conditions of a woman and her newborn. In reality, these needs are part of a continuum. As the health of mothers and babies are inextricably linked biologically, socially, and through health systems, an integrated response is needed across the full range of reproductive, maternal, newborn and child healthcare. Integration is an important and promising approach that cannot be overlooked as we strive to improve conditions for mothers and newborns everywhere.

MOVING FORWARD: INTEGRATION AND INNOVATION

The integration of maternal and newborn healthcare has the potential to increase communication and collaboration between seemingly disparate parts of health policies, programs and services, translating into better access to and quality of care, benefitting clients, providers, and health systems. Integration strives to create a policy environment that enables healthcare programs to maximize each point of interaction where women can access care and information for themselves and their children; where healthcare workers can address comprehensive needs; and where health systems can streamline their work and conserve resources. The co-location of services, or 'one-stop-shop' approach, cuts direct costs of care for families and also indirect expenses such as transportation fees, or the hidden costs of missed work or caretaking for other children.

The availability of bundled services contributes to the health and wellbeing of the mother and newborn as a unit by identifying problems earlier and providing more opportunities for education and counseling.

Integrated care for mothers and newborns involves a client-focused approach and requires that both the mother's and the baby's needs are addressed together, during antenatal visits, prior to discharge from maternal care, and during postnatal visits.

Examples of integrated services

Integration may take the form of offering family planning counseling during antenatal care or making contraceptive services available postnatally when a mother brings a newborn to the clinic for routine care. Providers can also discuss with mothers of premature babies the importance of spacing pregnancies as an important step in reducing the likelihood of future preterm births.

In locations where antenatal care includes information and education on mothers' and newborns' health, both groups are ultimately served better (See Box 3).

Box 3: Antenatal care

Antenatal care is critical for the prevention and treatment of infections such as malaria, sexually-transmitted infections, and mother-to-child transmission of HIV. Proper prevention or management of these infections contributes to better health for the mothers and increases the chances that their newborns will survive. If a mother understands why, for example, it is important to prevent and treat malaria in pregnancy, her chance of being able to carry her baby to term is dramatically increased, as is the likelihood that she will not be profoundly anemic. Additionally, good nutrition is essential for a mother's health, as well as for fetal health and development, with providers ideally guiding women to make the best nutritional choices available for their own and their babies' health.¹²

Quality care during childbirth, focusing on monitoring labor and managing complications, dramatically reduces the chance of death or disability for the mother and newborn. Similarly, postnatal care provides opportunities for promoting breastfeeding and discussing contraception, among other critical issues.

But integration is not the norm and requires innovative approaches to delivering healthcare. Various care delivery models have been shown to improve quality of care through the integration of maternal and newborn health services (see Box 4).

Box 4: Integration with quality

Group care models

Group care models use community women's groups during and after pregnancy to bring women together, normalize pregnancy through the sharing of common experiences, and increase the acceptability and take-up of care. In India, participatory women's group members identified and prioritized maternal and newborn health problems in the community, collectively selected relevant strategies to address these problems, implemented the strategies, and assessed the results. The use of antenatal and delivery services improved, neonatal mortality decreased by 32 percent, and maternal mortality appeared to decrease as well.¹³

In the US, women in antenatal care groups have higher health-related knowledge, are more satisfied with care, and face a 33 percent lower risk of preterm birth than women receiving individual antenatal care.¹⁴ In many settings, participatory groups built for and by women can improve the acceptability and accessibility of high-quality, integrated care focused on bettering outcomes for mothers and newborns.

Integrated care for poor women and newborns in urban settings

Jacaranda Health is an organization that aims to provide women living in rural areas adjacent to the urban areas of Nairobi, Kenya with high-quality, affordable maternity care through a network of self-sustaining and scalable clinics. *Jacaranda's* vision is to serve the needs of mothers and newborns, with quality improvement at its

(Continued)

center. The organization's nurse-midwives deliver pregnancy, labor, and postpartum care to mothers and infants at the clinic, including counseling on preparation for birth, family planning and vaccinations. In response to patient feedback, *Jacaranda* is testing a number of innovations: providers are examining ways to increase male involvement in decision-making; and they are examining ways to bundle maternal postnatal care services with newborn preventive care, such as vaccinations.

Electronic medical records have been developed to foster information flow and encourage continuity of care. A 24-hour hotline for health and logistical concerns has proven to be an important, dynamic communication channel, connecting clients and providers. With quality improvement in mind, *Jacaranda* has developed these integrated delivery platforms to improve access to and use of care, and promote patient satisfaction. Surveys conducted with *Jacaranda*'s patients have shown that 95 percent are happy with the completeness and quality of the care they have received.¹⁵

At its best, integration offers new avenues for bolstering health systems. Within a healthcare facility, staff in multiple departments work together to assess the interrelated needs of mothers and babies. For example, the leadership team and staff may devise checklists to accompany a mother's visit to a clinic with her newborn. Such lists could include questions about the use of contraception, schedules for infant immunization, or assessments of the mother's and newborn's nutritional status.

Integration also paves the way for more cohesive planning between private and public sectors at the local, district, regional and national levels, as the sectors collaborate to set agendas and specific healthcare coverage targets. Service integration provides the impetus to plan more comprehensively for the distribution of key drugs and commodities and to discuss approaches about the training and deployment of healthcare workers to improve access to and quality of services.

In settings where many women prefer to give birth at home, such as northern Nigeria, the community-based delivery of paired services has shown early success for the health of mothers and newborn babies (see Box 5).

Box 5: Integrated health systems' responses to women's and newborns' needs

With support from the United States Agency for International Development (USAID) and the Bill & Melinda Gates Foundation, John Snow Inc. (JSI) Research and Training Institute is working in the northern Nigerian state of Sokoto to establish a program using community health workers to distribute the life-saving drugs chlorhexidine (to prevent newborn infections) and misoprostol (to prevent maternal postpartum hemorrhage) to women and their families who prefer to give birth at home rather than in health facilities.¹⁶ This is a first-of-its-kind program in Africa.

Health program officials and traditional leaders from other states in Nigeria are currently visiting the program to learn how it is making a difference by using the same distribution channel for a simple and safe disinfectant for umbilical cord care and a uterotonic to prevent dangerous postpartum hemorrhage. By combining the distribution of these two preventive drugs, the program is able to make healthcare for mothers and newborns more efficient than when traditional channels are used.

Technological innovation also has a role in the integration of maternal and newborn care, as the example of mHealth in Box 6 describes.

Box 6: mHealth for maternal and newborn health

Mobile technology for health (*mHealth*) is a rapidly growing and evolving field. Mobile technology's ability to improve access to information and manage communication in smarter, more dynamic ways is well aligned with the pursuit of more coordinated and more effective obstetric and neonatal care.

A critical aspect of integration is the ability to reach women and families with comprehensive, user-friendly information to improve decision-making around key interventions related to maternal and newborn health. Even in resource-poor environments, it is now increasingly common for women and their families to own or have reliable access to a mobile phone.¹⁷ The proliferation of mobile technology represents an enormous opportunity to overcome traditional barriers, such as physical distance from a health facility, and reach potential care-seekers with integrated maternal and newborn health messages.

Mobile Alliance for Maternal Action (MAMA) leverages the opportunity to use text messages to deliver context-specific and integrated behavior-change communication about key interventions proven to improve maternal and newborn health. MAMA South Africa promotes antenatal care early in pregnancy, supports HIV-positive mothers with key information about prevention of mother-to-child transmission programs and encourages facility-based care delivery. The messages aim to

(Continued)

empower mothers, partners, and family members to prioritize the key interventions that will benefit mothers and babies. The text messages have encouraged women to access integrated interventions that benefit themselves and their babies, including antenatal care services, giving birth at a health facility rather than at home, and engaging in exclusive breastfeeding (giving their babies breast milk only).¹⁸ Delivering integrated care that positions mothers and babies at the center of care-related decision-making requires providers who are committed to this operational philosophy and who are equipped with the skills and motivation to put it into action. While some aspects of co-ordinating care at the frontline require joint pre- and in-service training for well-established groups such as obstetricians, pediatricians, clinical officers and nurses, large investments are also being made in supporting new healthcare cadres, such as Auxiliary Nurse Midwives (ANM) in India. This program is charged with promoting life-saving health behaviors and delivering interventions from pregnancy through to a child's second birthday.

To support the implementation of this integrated training, *BBC Media Action* conducted an analysis of ways to reach ANMs without unnecessary travel and expense of personal attendance at training sessions. They found that the vast majority of ANMs in Bihar state in Northern India already owned and regularly used a mobile phone, so it was decided to introduce the standard ANM training and job-related resource materials in a format compatible with mobile phones used in the area. ANMs report that this method of receiving information has been helpful in continuing their learning about maternal and newborn health in between personal training sessions.¹⁹

mHealth can also be used as a tool to clarify the interactions between processes and stakeholders at multiple levels of the health system, and between those working to provide care for mothers and newborns. *mHealth for Safer Deliveries* in Zanzibar partners with the Ministry of Health to take a systems-based approach to overcoming barriers to seeking and delivering care. Using a single system involving mobile phones, stakeholders are able to schedule screenings of pregnant mothers to identify risks or danger signs, establish community-based referral systems to transport women in labor or in emergency situations, co-ordinate payment of transport to health facilities using mobile banking, and follow up with the family within two to five days after delivery to ensure a continuum of postpartum and postnatal care.²⁰ This example illustrates how mobile phones can be used to better co-ordinate and integrate maternal and newborn healthcare to the benefit of systems, providers, and most importantly, mothers and babies.

Even with the proven potential for improving quality and access to care to create better health outcomes for mothers and babies, integrated approaches have not been implemented at scale. Integration has been adopted slowly due in part to separate funding streams that concentrate on particular diseases or population groups. Furthermore, health systems that have their own cultures may be resistant to reorganization or trying new approaches, and fear that integration will be costly in terms of staff time, money, and other resources. Finally, with integration as largely uncharted terrain in maternal and neonatal health, decision-makers, managers, and clinicians have limited evidence about its benefits and few practical tools for moving integration from concept into practice.

TRANSLATING POLICY INTO ACTION

Maternal and neonatal illness, injury, and death touch millions of lives each year. Tragically, much of this could be prevented. Policymakers, donors, governments, civil society, academia, and multilateral and non-governmental organizations have critical roles to play to improve health outcomes for women and newborns. Key priorities for partners and stakeholders committed to improving the health and wellbeing of mothers and newborns are:

- 1. Keep maternal and newborn health at the forefront of health policies, programming and advocacy, especially in national settings.**

At this critical crossroad, as world leaders are beginning to identify new goals and targets for sustainable development, it is essential that women and newborns are at the center of future policy agendas. International and multilateral organizations must work together with national decision-makers and civil society to continue the momentum of the MDGs and amplify the attention to maternal and newborn health in the transition to SDGs. Countries should formulate new targets designed to facilitate the reduction of maternal and newborn mortality and reduce the number of stillbirths, to follow through on the consensus achieved in the Ending Preventable Maternal Mortality and Every Newborn Action Plan global initiatives.

Parliamentarians and legislators should take the lead in discussing maternal and neonatal health and establishing a climate where women's and children's health are valued and resources are mobilized accordingly.

- 2. Develop an array of funding mechanisms that are targeted and integrated.**

Global funders, including charitable foundations and multilateral donors, must dedicate resources to reducing maternal and neonatal death and disability in an integrated way. Some donor-supported projects have had the unintended consequences of focusing on specific diseases and keeping separate the people and programs that should be treated in an integrated manner. Funders must find a middle ground between single-issue investments that can accelerate progress and meaningful integration that can strengthen and sustain health systems and benefit mothers and newborns.

- 3. Build health systems infrastructure and improve processes to foster change.**

National health systems must recognize that integration is not a one-size-fits-all approach and cannot occur in isolation. Creating integration – both as a model and mindset for healthcare providers and clients – means mandatory improvements to the infrastructure of health systems, continuing education for the healthcare workforce, and ensuring smoother supply chains of medications and commodities. While integration may start and be most visible in the one-on-one interaction between client and provider, work is also needed at the managerial level to support change, improve infrastructure, and streamline services.

4. Involve a wide range of organizations, including private sector providers, in integrated efforts.

In a majority of low- and middle-income countries, private healthcare providers are often women and families' first choice and are playing an expanding role as a source of care. This is especially true for mothers seeking care for sick newborns and children. The quality of this care is too often unregulated and unknown. It is critically important for policymakers to document the care provided in the private sector and work with managers and providers to enhance the quality of care they deliver, or help clients find more appropriate and reliable sources of healthcare.

5. Generate new knowledge to support integration through research, monitoring and evaluation.

While there is consensus among public health experts about the theoretical benefits of integrating maternal and newborn healthcare, evidence about integration's effects on the health and social wellbeing of women, newborns, and families is limited. The changes in health systems that are needed to offer cost-effective and high-quality integrated services are also not well understood. Research is urgently needed on the design, implementation and impact of integrated policies, programs, and services, the challenges associated with introducing integrated solutions into a health system, and the necessary components for large-scale implementation and sustainable development. This evidence gap must be closed to determine the best approaches and gather enough data to encourage government and private donor support.

The integration of health services for mothers and babies offers a way forward to reduce preventable maternal and newborn mortality. Integration should not be framed as a panacea or an end in itself, but a promising approach that needs monitoring and evaluation.

ACKNOWLEDGMENTS

This policy briefing was written by:

Ana Langer | Director of the Women and Health Initiative, Maternal Health Task Force, Harvard School of Public Health, Boston, US

Joy Riggs-Perla | Saving Newborn Lives, Save the Children, Washington DC, US

Mark Steedman | Institute of Global Health Innovation, Imperial College London, London, UK

Mary Nell Wegner | Maternal Health Task Force, Women and Health Initiative, Harvard School of Public Health, Boston, US

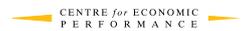
The authors would like to acknowledge, with appreciation, Cynthia Greenlee, who wrote the first draft of this paper. In addition, Box 4 was written by Annie D. Kearns, and Box 6 by Alison Chatfield, both from Maternal Health Task Force, Harvard School of Public Health.

REFERENCES

01. UN Millennium Project. Investing in development: A practical plan to achieve the millennium development goals. London: United Nations; 2005 [cited 2014 December 5]. Available at: www.unmillenniumproject.org/documents/MainReportComplete-lowres.pdf
02. Global Health Observatory. Maternal and reproductive health. [Internet]. Geneva: World Health Organization [cited 2014 December 5]. Available at: www.who.int/gho/maternal_health/en/
03. Lawn JE, Blencowe H, Oza S, You D, Lee ACC, Waiswa P, et al. The Lancet Every Newborn Study Group. Every Newborn 2: Progress, priorities, and potential beyond survival. *The Lancet*. 2014;384(9938):189–205. Available at: [http://dx.doi.org/10.1016/S0140-6736\(14\)60496-7](http://dx.doi.org/10.1016/S0140-6736(14)60496-7)
04. Institute for Health Metrics and Evaluation (US). GBD 2010 heat map. Seattle (WA): University of Washington; 2013 [cited 2014 December 5]. Available at: <http://vizhub.healthdata.org/irank/heat.php>
05. World Health Organization (WHO), United Nations Children’s Fund (UNICEF), United Nations Population Fund (UNFPA), World Bank. Trends in maternal mortality: 1990 to 2010. Geneva: WHO; 2012 [cited 2014 December 5]. Available at: http://whqlibdoc.who.int/publications/2012/9789241503631_eng.pdf?ua=1
06. The millennium development goals report 2014. New York: United Nations; 2014 [cited 2014 December 5]. Available at: www.un.org/millenniumgoals/2014%20MDG%20report/MDG%202014%20English%20web.pdf
07. The Partnership for Maternal, Newborn and Child Health. Opportunities for Africa’s newborns: Executive summary. Cape Town, South Africa: The Partnership for Maternal, Newborn and Child Health; 2006 [cited 2014 December 5]. Available at: www.who.int/pmnch/media/publications/oanexecsum.pdf
08. Stenberg K, Axelson H, Sheehan P, Anderson I, Gülmezoglu AM, Temmerman M, et al. Advancing social and economic development by investing in women’s and children’s health: A new Global Investment Framework. *The Lancet*. 2014;383(9925):1333–1354. Available at: [http://dx.doi.org/10.1016/S0140-6736\(13\)62231-X](http://dx.doi.org/10.1016/S0140-6736(13)62231-X)
09. Targets and strategies for ending preventable maternal mortality: Consensus statement. Geneva: World Health Organization; 2014. Available at: http://apps.who.int/iris/bitstream/10665/130776/1/WHO_RHR_14.21_eng.pdf?ua=1&ua=1
10. Every Newborn: An action plan to end preventable deaths. Geneva: WHO; 2014 [cited 2014 December 5]. Available at: www.who.int/maternal_child_adolescent/topics/newborn/enap_consultation/en/. Joint publication of UNICEF.

11. Ronsmans C, Chowdhury ME, Dasgupta SK, Ahmed A, Koblinsky M. Effect of parent's death on child survival in rural Bangladesh: A cohort study. *The Lancet*. 2010;375(9730):2024–31. Available at: [http://dx.doi.org/10.1016/S0140-6736\(10\)60704-0](http://dx.doi.org/10.1016/S0140-6736(10)60704-0)
12. Administrative Committee on Coordination (ACC)/Sub-Committee on Nutrition with the International Food Policy Research Institute. Fourth report – the world nutrition situation: Nutrition throughout the life cycle. Geneva: United Nations; 2000 [cited 2014 December 5]. Available at: www.ifpri.org/sites/default/files/pubs/pubs/books/4thrpt/4threport.pdf
13. Tripathy P, Nair N, Barnett S, Mahapatra R, Borghi J, Rath S, et al. Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster-randomised controlled trial. *The Lancet*. 2010;375(9721):1182–92. Available at: [http://dx.doi.org/10.1016/S0140-6736\(09\)62042-0](http://dx.doi.org/10.1016/S0140-6736(09)62042-0)
14. Ickovics JR, Kershaw TS, Westdahl C, Magriples U, Massey Z, Reynolds H, et al. Group prenatal care and perinatal outcomes: a randomized controlled trial. *Obstetrics and Gynecology*. 2007;110(2 Pt 1):330–9. Available at: <http://dx.doi.org/10.1097%2F01.AOG.0000275284.24298.23>
15. Jacaranda Health [Internet]. San Francisco (CA): Jacaranda Health; 2014 [cited 2014 December 5]. Available at: jacarandahealth.org
16. JSI Research and Training Institute, Inc. (US). Nigeria Targeted States High Impact Project (TSHIP) [Internet]. Boston (MA): John Snow Inc.; 2014 [cited 2014 December 5]. Available at: www.jsi.com/JSIInternet/IntlHealth/project/display.cfm?ctid=na&cid=na&tid=40&id=4041
17. GSMA. The Mobile Economy 2014. [Internet]. London (UK): GSMA; 2014 [cited 2014 December 5]. Available at: www.gsmamobileeconomy.com/
18. Mobile Alliance for Maternal Action (MAMA). The power of health in every mama's hand: Data and evidence – making a difference in Bangladesh and South Africa. [Internet]. Washington (DC); United Nations Foundation; 2014 [cited 2014 December 5]. Available at: www.mobilemamaalliance.org/evidence
19. MacPherson Y, Chamberlain S. Health on the move: Can mobile phones save lives? [Internet]. London (UK); BBC Media Action; 2013 February [cited 2014 December 4]. Available at: http://downloads.bbc.co.uk/mediaaction/policybriefing/bbc_media_action_health_on_the_move.pdf
20. Deussom RH, Mitchell M, Ruben JD. Using mobile technology to address the 'three delays' to reduce maternal mortality in Zanzibar. *International Journal of User-driven Healthcare*. 2014;4(1):33–47. Available at: www.igi-global.com/article/using-mobile-technology-to-address-the-three-delays-to-reduce-maternal-mortality-in-zanzibar/113433

WISH PARTNERS



WISH PARTNERS



Maternal Health **Task Force**

McKinsey & Company

NHS
National Institute for
Health Research



The New York
Academy of Sciences



NORTHWESTERN
UNIVERSITY
IN QATAR

PHILIPS



مؤسسة الرعاية الصحية الأولية
PRIMARY HEALTH CARE CORPORATION



QATAR
AIRWAYS القطرية



المعهد القطري لربطية البحث العلمي
Qatar National Research Fund
عضو في مؤسسة قطر
Member of Qatar Foundation



قطر للبترول
Qatar Petroleum



جامعة قطر
QATAR UNIVERSITY



Save the Children



مركز البحوث الطبية والبحوث
Sidra Medical and Research Center
Member of Qatar Foundation



تحدي 22
Challenge 22
المجلس القطري للبحوث والابتكار
Qatar Council for
Innovation & Legacy



دولة قطر
State Of Qatar
المجلس الأعلى للصحة
Supreme Council Of Health



جامعة كالغاري في قطر
UNIVERSITY OF CALGARY IN QATAR



vcuqatar | virginia commonwealth university in qatar
جامعة فيرجينيا كومونولث في قطر



كلية طب وايل كورنيل في قطر
Weill Cornell Medical College in Qatar



wise
world innovation summit for education
مؤتمر القمة العالمي للابتكار في التعليم
مؤسسة قطر
an initiative of Qatar Foundation

NOTES

NOTES

NOTES

NOTES

www.wish.org.qa