OUR APPROACH

Saving Mothers, Giving Life (SMGL) is a five-year public-private partnership among the U.S. Government, the Governments of Nigeria, Norway, Uganda, and Zambia, Merck for Mothers, Every Mother Counts, Project C.U.R.E., and the American College of Obstetricians and Gynecologists to dramatically reduce maternal and newborn mortality in sub-Saharan African countries. The partnership’s accomplishments over the past four years demonstrate that a comprehensive systems approach can achieve impressive results in saving women’s and newborns’ lives in resource-constrained settings.

Launched in 2012, SMGL’s ambitious goals are to reduce maternal mortality by 50 percent and perinatal mortality by 30 percent in 10 learning districts in Uganda and Zambia, and then scale up nationally in both countries.

In 2015, SMGL expanded to 28 districts in Uganda and Zambia, as well as Cross River State, Nigeria. Thanks to additional funding from the Government of Sweden, the SMGL approach will be scaled to all of Eastern and Southern Zambia by 2017.
The SMGL approach addresses the major factors that contribute to maternal and newborn deaths by employing evidence-based interventions that focus on labor, delivery and the first 48 hours postpartum, when mothers and newborns are most vulnerable.

Mobilizing community health workers and leaders to encourage women to give birth in a health facility

Providing transportation to help women reach life-saving care within two hours

Training and mentoring health providers to deliver consistent, quality care

Strengthening supply chains to provide reliable access to life-saving products

Upgrading health facilities and equipping them with needed supplies

PARTNER SPOTLIGHT // Project C.U.R.E.

Equipping health providers with lifesaving medical devices and supplies

Many of the health facilities that SMGL is working in lack even the most basic medical equipment, without which it is difficult and, at times, impossible to provide quality obstetric and newborn care. For this reason, SMGL has made upgrading and equipping health facilities a critical component of its comprehensive approach to preventing maternal and newborn deaths. This is where Project C.U.R.E. comes in.

Project C.U.R.E. collects donations of medical equipment and supplies in the United States and ships them to health facilities in countries around the world. As an SMGL partner, Project C.U.R.E. is helping to ensure that health facilities in SMGL districts have the life-saving tools they need.

Rachael Brennan, a Peace Corps volunteer in Lunga District, Zambia, notes, “There is nothing like seeing the expression on the faces of health professionals when they receive equipment that they know will save lives and make patients more comfortable. I’m honored to have served with Project C.U.R.E.”
Dear Health and Development Colleagues,

We are pleased to share an update on the substantial progress that Saving Mothers, Giving Life (SMGL) continues to make in improving maternal and newborn health in sub-Saharan Africa.

When the five-year partnership was launched in 2012, we knew that the lofty goals of reducing maternal mortality by 50 percent and perinatal mortality by 30 percent in target districts in Uganda and Zambia were ambitious, perhaps overly so. But we were right to set our sights high. The data from 2015 — the fourth year of SMGL operation — show clearly that a comprehensive systems approach can achieve remarkable results.

The maternal mortality ratio in health facilities in the 10 SMGL learning districts has decreased by 55 percent in Zambia and by 44 percent in Uganda. Perhaps more striking, the population-based maternal mortality ratio in the Uganda learning districts has also declined by 44 percent.*

In both countries, we are currently on track to meet the audacious goal of halving the maternal mortality ratio.

These successes stem from two key factors: 1) the number of women giving birth in a health facility has increased dramatically, and 2) the quality of care provided by these facilities is far better than before the start of the partnership. A few short years ago, this kind of progress would have been unthinkable.

These achievements are even more impressive given the challenges the partnership faced in 2015. Despite programmatic barriers, the dedication and focus of local government agencies and community leaders kept the initiative on track. I am particularly proud to highlight the hard work and commitment of doctors, nurses, midwives, and community health workers like Gertrude Bigirwa and Richard Kwemara, whom you will learn about in this report.

*Data based off of 2015 data
While the early years of SMGL produced significant improvements in maternal health outcomes, comparable changes in newborn health remained elusive. In 2015, our implementing partners intensified their efforts to strengthen health care providers’ ability to care for small and sick newborns. Now, we are beginning to see more newborns in Zambia surviving the first hours of life, and so in 2016, we have redoubled our efforts to bring about similar changes in Uganda.

Specifically, we are expanding home visiting programs to reach more women and newborns during the critical first three days of life, and broadening our training and mentoring programs on sick newborn care to ensure all providers are equipped to save newborn lives. In both countries, we are now striving to keep women and newborns in a health facility for 24 hours following a vaginal birth and 72 hours following a Caesarean section (per WHO recommendations) so that early postnatal complications can be diagnosed and treated.

Given the clear success, the governments of Uganda and Zambia are taking the SMGL approach and scaling it up to cover new districts and entire provinces.

We anticipate equally impressive results in Nigeria as the SMGL initiative matures in Cross River State where the rate of maternal and newborn deaths is extremely high.

The SMGL partnership formally ends in December 2017. During the last 15 months, we will be undertaking a robust evaluation to measure changes in behavior, care-seeking, timely availability of quality services, provider and client satisfaction, health system readiness and performance, and of course, health outcomes. We plan to disseminate these findings at the end of 2017.

We are proud of SMGL’s accomplishments to-date and optimistic about the partnership’s long-term impact on communities and families. But as we enter this final chapter, we must acknowledge that saving the lives of mothers and babies can only be sustained when there is zero tolerance for preventable deaths. With the continued leadership of the Ugandan, Zambian, and Nigerian governments; skill and savvy of the many stellar NGOs involved; and steadfast support of our partners, we look forward to reporting even stronger results as we near the final year of this life-saving public-private partnership.

With warm regards,

Claudia Morrissey Conlon, MD, MPH
U.S. Government Lead,
Saving Mothers, Giving Life
Senior Maternal Newborn Health Advisor, USAID
The Zambia learning districts continue to make strong progress in saving the lives of women and newborns. In four years, the maternal mortality ratio decreased by 55 percent and the perinatal mortality rate decreased by 44 percent in target facilities, surpassing both SMGL goals.

It’s important to note that these positive health outcomes and improvements in the direct obstetric case fatality rate occurred even as the proportion of women giving birth in a facility increased — a clear sign of the steadily improving quality of care delivered in health facilities.

SMGL’s emphasis on modernizing operating theaters and recruiting skilled health care providers has enabled more women to receive life-saving Caesarean sections when they need them. And intensified efforts in 2015 to train health care providers on neonatal resuscitation, essential newborn care, and kangaroo mother care helped halve the predischarge newborn mortality rate.

This remarkable success is the result of tireless work among a broad range of partners to address the “three delays” that contribute to stillbirths and maternal and newborn deaths: the delay in the decision to seek appropriate care, the delay in reaching care in a timely manner, and the delay in receiving quality, respectful care at a facility. In particular, extremely dedicated Zambian provincial and district governments, as well as local chiefs and community leaders, have played a critical role in sustaining these transformative changes to save women’s and newborns’ lives.
New partners join SMGL in Zambia

went into labor, I went to the hills to borrow an oxcart,” adds Zinthambo Musianga. “On the way, just near the health facility, I delivered in that oxcart.”

Overcoming the distance challenge so that pregnant women can receive obstetric care in a safe and timely manner is a critical part of SMGL’s work in rural Zambia. Building and renovating maternity waiting homes — residences near health facilities where pregnant women can stay until they go into labor and immediately after childbirth — is one of the partnership’s interventions.

In 2015, the Bill & Melinda Gates Foundation and The ELMA Foundation joined SMGL to help Merck for Mothers develop an additional 24 waiting homes, test out entrepreneurial models to make them sustainable, and evaluate their success. The homes should be completed by the end of 2016.

### Reduction in Institutional Maternal Mortality Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Baseline</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>311</td>
<td>140</td>
</tr>
</tbody>
</table>

### Reduction in Institutional Perinatal Mortality Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Baseline</th>
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</thead>
<tbody>
<tr>
<td>%</td>
<td>37.9</td>
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### Institutional Delivery Rate

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>%</td>
<td>62.6</td>
<td>86.4</td>
</tr>
</tbody>
</table>

### Direct Obstetric Case Fatality Rate

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>3.1</td>
<td>1.8</td>
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</table>

### Caesarean Section Rate

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>2.7</td>
<td>3.6</td>
</tr>
</tbody>
</table>

### Predischarge Newborn Mortality Rate

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>7.7</td>
<td>3.6</td>
</tr>
</tbody>
</table>

### Stillbirth Rate

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>30.5</td>
<td>17.8</td>
</tr>
</tbody>
</table>

### Women Receiving ARVs to Prevent the Spread of HIV to Their Infants

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>930</td>
<td>1721</td>
</tr>
</tbody>
</table>

### Infants Receiving HIV Prophylaxis

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>523</td>
<td>1436</td>
</tr>
</tbody>
</table>
UGANDA UPDATE

Maternal mortality has declined sharply in health facilities in the Uganda learning districts as the institutional delivery rate has increased. At the same time, notable improvements in key quality indicators like the direct obstetric case fatality rate and the Caesarean section rate demonstrate that the quality of care women receive in health facilities is far better than at the initiative’s start.

SMGL’s efforts to increase women’s access to lifesaving care and improve the quality of that care are paying off — the institutional maternal mortality ratio has dropped by 44 percent from baseline. Even more encouraging is the 44 percent reduction in mothers dying across the SMGL learning districts, an indication that SMGL is not just reaching women who make it to the facility, but improving the health of mothers across the community. If these improvements continue, SMGL is on track to meet its goal of a 50 percent reduction in maternal mortality by the partnership’s end.

In order to bolster newborn survival rates in 2016, SMGL is redoubling efforts to improve the quality of newborn care. Interventions include establishing newborn corners in all delivery rooms and upgrading newborn care units in referral facilities to provide specialized attention to small and sick newborns. In addition, maternal and newborn health specialists from Mulago National Referral Hospital are mentoring health providers in rural and remote facilities to support them and help them hone their newborn care skills.

“The Mama Ambassador is instrumental to us because she has helped us to understand how we can prevent mother-to-child-transmission of HIV, and has guided us on what to carry to the health facilities when we are going to deliver. Whenever we need quick services at the health facility, the Mama Ambassador is there for us.”

— NOELINE NALUBEBA, MOTHER
### Agents for change in improving health outcomes

In Uganda, many women continue to give birth at home without the aid of a skilled birth attendant, risking serious injury or even death if they develop a severe complication. Mama Ambassadors like Gertrude Bigirwa are working to save these lives.

Gertrude meets regularly with women in her community to encourage them to give birth in a health facility. She also provides health education classes on antenatal care, HIV, and immunization. And Gertrude offers a vital service by making home visits to check up on mothers and newborns.

Richard Kwemara, the administrator of Mabaale Health Center III where Gertrude is based, describes her as a change agent in the community and a major force behind the increase in the number of women giving birth in his health facility. He adds, “I am elated to call Gertrude a member of my team.”

#### Key Indicators of Change

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>2015</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional maternal mortality ratio</td>
<td>535</td>
<td>301</td>
<td>-44%</td>
</tr>
<tr>
<td>Institutional delivery rate</td>
<td>45.5%</td>
<td>64.5%</td>
<td>+42%</td>
</tr>
<tr>
<td>Direct obstetric case fatality rate</td>
<td>2.9%</td>
<td>1.6%</td>
<td>-45%</td>
</tr>
<tr>
<td>Caesarean section rate</td>
<td>5.3%</td>
<td>8.0%</td>
<td>+51%</td>
</tr>
<tr>
<td>Predischarge newborn mortality rate</td>
<td>8.4</td>
<td>7.6</td>
<td>-10%</td>
</tr>
<tr>
<td>Stillbirth rate</td>
<td>31.2</td>
<td>28.4</td>
<td>-9%</td>
</tr>
<tr>
<td>Women receiving ARVs to prevent the spread of HIV to their infants</td>
<td>4708</td>
<td>6188</td>
<td>+31%</td>
</tr>
<tr>
<td>Infants receiving HIV prophylaxis</td>
<td>1466</td>
<td>2884</td>
<td>+97%</td>
</tr>
</tbody>
</table>
In 2015, SMGL gathered baseline data on the ability of the health system to provide quality care in Cross River State, Nigeria in preparation for roll-out of the SMGL approach. Health facility assessments (HFAs) and routine service delivery data demonstrated the urgent need to strengthen the health care delivery system across the state.

For example, the assessments found that a large proportion of health facilities — 41 percent — are functioning without a reliable source of electricity, and 44 percent have no running water. Drug stock-outs are chronic. Fewer than half of all women received a uterotonic drug during the third stage of labor to prevent postpartum hemorrhage, although the WHO recommends this for all women.

In many areas of the state, women do not have timely access to comprehensive emergency obstetric and newborn care, risking their lives and the lives of their babies should a complication arise.

The maternal mortality ratio in health facilities across the state is disturbingly high, with 313 women dying from complications of pregnancy and childbirth for every 100,000 live births. Newborn outcomes are particularly alarming, with 58 newborns dying in the first few hours of life per every 1,000 born in health facility.

Only two-thirds of women knew their HIV status by the time they gave birth, despite the risks to themselves and their infants of untreated HIV.

More encouragingly, 80 percent of those who tested HIV-positive received ARVs to reduce the risk of transmitting the infection to their babies.
GLOSSARY

**Cesarean section rate**: in SMGL districts, percentage of births by a cesarean section (C-section).

**Community maternal mortality ratio**: the maternal mortality ratio within the entire community, including both women who gave birth in a health facility and those who gave birth outside of a health facility.

**Direct obstetric case fatality rate**: the percentage of women giving birth in a health facility who died due to an obstetric complication.

**Institutional delivery rate**: the percentage of births in a given catchment area that occur within a health facility.

**Institutional maternal mortality ratio**: the maternal mortality ratio within health facilities.

**Institutional perinatal mortality rate**: the perinatal mortality rate within health facilities.

**Maternal mortality ratio**: the number of maternal deaths (deaths that occur due to a complication of pregnancy and/or childbirth within 42 days of the termination of the pregnancy) per 100,000 live births.

**Perinatal mortality rate**: the number of perinatal deaths (stillbirths and early newborn deaths) per 1,000 births.

**Predischarge newborn mortality rate**: the number of newborns delivered in a health facility that died before being discharged from the facility, per 1,000 births.

**Stillbirth rate**: the number of deliveries in a health facility that resulted in a stillbirth per 1,000 births.

NEW PARTNERS JOIN SMGL IN ZAMBIA

The Total Market Approach // Improving quality of care in all health facilities

There is a common misperception that all health facilities in sub-Saharan Africa are government-run. However, many countries also have robust private health sectors, composed of independent doctors, nurses, and midwives, even in rural areas. Some of these health facilities are private for-profit clinics and others are operated by faith-based organizations and NGOs.

Throughout her pregnancy, a woman may seek care from providers in a range of health facilities, both public and private.

That’s why SMGL is strengthening the quality of care in both public and private maternity facilities in all three partnership countries.

In Nigeria — with targeted funding from Merck for Mothers and USAID — Pathfinder International, SMGL’s implementing partner, is improving the quality of care in both public and private health facilities to create a seamless safety network. Pathfinder is also building a stronger referral system, so that if a woman develops complications, she can be transferred to the closest facility best able to provide the care she needs. Together, these efforts will save many more women’s and newborns’ lives.

Percentage of women receiving ARVs to prevent the spread of HIV to their infants: 80%

Predischarge neonatal mortality ratio (per 1,000 live births): 58

Percentage of health facilities with reliable electricity: 59%

Percentage of health facilities with access to running water: 56%

Percentage of women who received a uterotonic in the third stage of labor: 46%

Percentage of pregnant women who knew their HIV status by the time they gave birth: 67%

Institutional maternal mortality ratio (per 100,000 live births): 313

Institutional perinatal mortality rate: 58

Percentage of women who received ARVs to prevent the spread of HIV to their infants: 80%

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www.savingmothersgivinglife.org

* Merck for Mothers is known as MSD for Mothers outside of the U.S. and Canada.