Salud Mesoamerica Initiative

PROGRAM DESCRIPTION, PROGRESS AND RESULTS

General Description

Salud Mesoamerica Initiative (SMI) is a public-private partnership between the Bill & Melinda Gates Foundation, the Carlos Slim Foundation, the Government of Spain, the Inter-American Development Bank (IDB), the countries of Central America, and the state of Chiapas, Mexico. SMI aims to reduce maternal and child health inequalities through a results-based aid model (RBA), according to priorities established by the governments of the region. Among the poor in Mesoamerica, only 5 out of every 10 pregnant women are attended during childbirth by skilled birth personnel; the mortality rate among children in poverty is twice the regional average; and at age 5, a child from the poorest 20% is 6cm shorter than a child from the richest 20%.

The SMI model is based on four basic concepts:
1) Countries work within the poorest 20%, selected based on Poverty Incidence Data;
2) SMI finances evidence-based and cost-effective interventions for maternal and child health;
3) Countries co-finance all projects with SMI with 50% average cost-sharing
4) All results are externally verified by an independent third party through both household and health facility surveys.

If countries meet 80% of their goals, they receive 50% of their original investment to use freely within the health sector. In the region, SMI interventions are directly benefiting 1.8 million women of reproductive age and children less than 5 years of age. Indirectly 4.5 million people living in the poorest areas are also benefitting from these interventions.

The three donors of the Mesoamerican Health Facility (MHF) initially established a fund of US$142 million for developing three phases with the 8 participating countries. BMGF and the Carlos Slim Foundation have disbursed their commitments; however, due to the financial crisis, the Government of Spain has not been able to meet its entire contribution and the current fund allows financing only two of the three phases planned. Phase 3 is critical to achieving the health targets at the population level, to consolidate the institutionalization of new cost effective interventions and to build financial and technical sustainability of the achievements over time and at scale. The gap to cover Phase 3 in the region is US$38.5m.

The Results Based Aid Model

At the start of the program, each country receives an investment donation that is matched by country domestic funding to implement evidence-based interventions in the poorest areas. If the country meets the agreed targets, it receives an incentive (the performance tranche) equal to half of the country funds initially invested for unrestricted use within the health sector.

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1 SMI Proposal, 2009
The Initiative’s RBA model considers different measures to mitigate the risk for perverse incentives. In order to prevent governments from focusing on some indicators while ignoring others, a minimum score of 0.8 was established for the disbursement of the performance tranche. An evaluation is performed to ensure funds are not transferred from some areas to others. A shared set of 40 indicators from the SMI Results Framework are measured in all countries, not just performance indicators.²

Program Design
The Initiative’s RBA model is also accompanied by several components that strengthen the institutional capacity of the health sector. SMI has a strong component of policy dialogue activities, which have proven to be effective during the first phase working with decision makers in each country to approve evidence-based policies, incorporate changes in their systems, and increase allocation of funding to the poorest. Countries have developed policy dialogue plans including fiscal, technical and operational policy changes.

The program is designed with three phases:

Phase 1
Phase 1 prepared health systems to achieve population-level results during the subsequent phases. It focused on system readiness and introducing countries to the RBF scheme. Targets focused on changing national norms, and ensuring that critical supplies were available in the poorest areas of the country. All countries have completed Phase 1 implementation as of June 2016. Household and Health Facility baseline surveys were also conducted in this phase.

Each country worked with the SMI/IDB country team to choose indicators, set targets, review literature, research supply and demand side barriers, and created a theory of change and action plan. These plans were verified by stakeholders at various levels of the system, and were reviewed and approved by both the IDB and the SMI Donors’ Committee.

SMI and country teams met at least once every month with a small committee to discuss program progress, review bottlenecks and find solutions. Every three months, a field visit was conducted and a broader group of stakeholders from the system were brought together to discuss the program. SMI also designed demand-driven technical assistance plans with each country to provide technical expertise and operational know-how to help build institutional capacity to implement key innovations and processes.

Phase 2

² With the exception of Costa Rica, whose framework is focused on adolescent sexual and reproductive health
Phase 2 introduces coverage and quality targets and, in some countries, changes in health outcomes, like reducing anemia. Countries are committed to reaching challenging, but achievable, targets focused on coverage (i.e. increase in institutional birth rate), quality (i.e. increase in obstetric complications treated according to the norms) and effective coverage (i.e. in anemia prevalence in children 6-23 months). All eight countries have started implementation of the second phase.

During Phase 2, countries also receive targeted technical assistance to implement continuous quality improvement strategies and optimize critical maternal, neonatal and child health processes from the hospital to community levels. Countries like Nicaragua and the State of Chiapas in Mexico are testing the use of demand-side incentives for mothers and midwives to increase prenatal, institutional birth and post-partum care.

Phase 3
Phase 3 extends coverage, quality and impact indicators, in addition to focusing on institutionalization of key interventions, sharing lessons learned, and sustaining and scaling up and effective interventions. Many of the processes and innovations introduced through the program need time to be institutionalized by health systems. This requires time, funding and technical assistance. SMI is dedicated to sharing lessons learned and has invested in the implementation of various randomized controlled trials and process evaluations, creating a wealth of knowledge for the greater global community.

Countries need assistance in translating evidence from these studies about what works well and what does not into national norms, policies and budgets. Phase 3 will also increase the achievement of health status targets at the population level, including increasing the percent children effectively vaccinated (with anti-bodies) for measles in Chiapas, decreasing anemia in Chiapas, Honduras and Nicaragua, and continuing to improve the quality of neonatal and maternal complications in all countries. This phase would provide countries with technical assistance for sustainability and scale-up of innovations.

Sustainability
SMI includes funding from the domestic budgets of 8 Mesoamerican governments that otherwise would not be directed to the poorest 20%. This transfers risk and responsibility for achieving the goals to the countries, ensuring ownership and sustainability. As national governments are working directly through SMI, there is buy-in for the successful interventions so that they are adopted and institutionalized. Further, the technical assistance and capacity building provided by the Initiative will remain in country.

External Verification of Results
Compliance of targets is externally and independently verified by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. In addition to assessing performance, surveys provide robust and comparable data about the maternal and child health of the poorest 20% of the regions’ population which allows monitoring the progress of interventions, and tracking the tendency of main health indicators especially those not included in the performance framework.

In collaboration with IDB and country stakeholders, IHME designed four modes of data collection to comprehensively measure performance:
- **Household interviews**: surveys in households capture use, access, expenditure, and perceived quality of key interventions for women of reproductive age and children under 5.
- **Biometric/anthropometric measurement**: in select households, height, weight, and anemia measurements are taken, as well as dried blood spots for assessing effective coverage of measles vaccinations.
- **Health facility observation and interviews**: surveyors record the availability of key interventions, supplies, equipment, infrastructure, staff, and good management practices.
- **Medical record reviews**: information on record-keeping and quality of maternal and child health care, as measured against the norms in each country, is extracted from medical records.

Performance is measured at baseline and at the end of each phase – after 24, 48 and 72 months – using household and health facility surveys. Mid-term and final evaluations, as well as randomized control trials of selected interventions (e.g. use of incentives to increase institutional births) are also performed to evaluate the impact of the SMI RBA model and its package of interventions.

The external and independent verification of targets for Phase 1 have been completed, and for Phase 2 will be conducted by IHME during the first semester of 2018. Until these results are available, and while Phase 2 implementation occurs, countries are monitoring their own progress to meet the targets based on data coming from their routine health information systems.

**Baseline Findings**

The baseline highlighted challenges to improve coverage and quality of care for the poorest 20% populations. In most countries, less than half of the women that did not want to get pregnant were currently using modern family planning methods. The coverage of institutional birth by qualified staff was particularly low in areas with high indigenous populations\(^3\) where only about 1 in 4 women had access to institutional deliveries by qualified staff.

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\(^3\) such as the poorest areas of Chiapas and Guatemala
In some of the poorest provinces in Panama and Guatemala, complete vaccination for children under age 5 was only 9.9% and 12.5%, respectively. There were high levels of anemia in children living in poverty: almost 1 in every 2 children between 6 and 23 months is anemic.

There were also challenges in quality of care – for instance, in countries such as Belize, El Salvador and Nicaragua, where the coverage of institutional deliveries by qualified staff is high, equipment and supplies to attend obstetric and neonatal complications were not always available in most health facilities that attend birth. Moreover, a medical record review showed that in all countries less than 15% of obstetric complications were attended according to national norms and protocols.

**Results from Phase 1**

All countries made great advances, and five countries (El Salvador, Honduras, Nicaragua, Costa Rica, and Panama) achieved 80% of their rigorous targets, making them eligible for the performance cash incentive.

All countries achieved significant results in the first phase. Overall:

- Over 1,000 health facilities substantially increased the availability of essential equipment and supplies for maternal and child care.
- Six countries introduced zinc to manage diarrhea.
- More than 200,000 children will receive micronutrients for the first time, an initial step towards decreasing anemia.
- Four countries updated their sexual and reproductive health norms.
- Six national policies were updated to improve nutrition standards in children under 5.

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4 *Guna Yala* and *Embera* in Panama and poorest municipalities of Huehuetenango and San Marcos in Guatemala
Three countries are reorganizing their service network to provide improved care and stronger referrals of obstetric and neonatal emergencies. Health care providers across all countries received skill development training.

All the countries showed significant progress in the availability of inputs and equipment for family planning, prenatal, normal deliveries, postnatal, emergency obstetric and neonatal care (EmONC) and child care. Some key results by country:

- **Nicaragua**: Availability of family planning methods improved from about 60% to 87%. Health facilities with available supplies for emergency obstetrics care in the last three months rose from 60% to 90.9%. Transport vouchers for prenatal and birth care and lodging in the maternity care homes are available.

- **Panama**: Availability of condoms, injectable, oral contraceptives and IUDs increased from less than 10% to almost 80% of health facilities equipped with all methods. Equipment and inputs for prenatal care increased from 17.6% to 100%.

- **El Salvador**: Community health teams with supplies and within 8 days of birth increased from 51% to 90.1%.

- **State of Chiapas, Mexico**: Health facilities with consistent availability of inputs and equipment for prenatal and postnatal care rose from 3.6% to 45.8%. At baseline, none of the health facilities that attended births in the State had all essential input equipment for delivery and newborn care. This improved by 20% on the follow-up and to 100% after implementing a Performance Improvement Plan. Gave transport vouchers for prenatal and birth care and lodging in the maternity care homes.

- **Honduras**: Consistent availability of micronutrients rose from 0% to 93.5%. Maternities with equipment for EmONC increased from about 60% to almost 90%.

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**Heat map of inputs and equipment for child care in Nicaragua: Baseline and 1st Follow-up**

<table>
<thead>
<tr>
<th>Indicator 7010</th>
<th>Baseline(%)</th>
<th>18-Month(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric scale</td>
<td>81.1</td>
<td>100</td>
</tr>
<tr>
<td>Height rod</td>
<td>53.4</td>
<td>98.1</td>
</tr>
<tr>
<td>Stethoscope</td>
<td>51.4</td>
<td>98.1</td>
</tr>
<tr>
<td>Pediatric stethoscope¹</td>
<td>0</td>
<td>94.4</td>
</tr>
<tr>
<td>Oral or auxiliary thermometer</td>
<td>21.6</td>
<td>96.2</td>
</tr>
<tr>
<td>Growth and development card¹</td>
<td>80.5</td>
<td>92.3</td>
</tr>
<tr>
<td>All equipment available on day of survey</td>
<td>2.7</td>
<td>86.3</td>
</tr>
<tr>
<td>Pharmacy inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packets/envelopes of oral rehydration salt</td>
<td>89.2</td>
<td>100</td>
</tr>
<tr>
<td>Ferrous sulfate or zinc sulfate/glusinate</td>
<td>97.3</td>
<td>100</td>
</tr>
<tr>
<td>Albendazole/Mebendazole</td>
<td>94.6</td>
<td>94.3</td>
</tr>
<tr>
<td>Erythromycin/amoxicillin/benzathine penicillin³</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>All pharmacy inputs available on day of survey</td>
<td>81.1</td>
<td>94.3</td>
</tr>
<tr>
<td>Continuous availability in previous three months</td>
<td>75.7</td>
<td>88.8</td>
</tr>
<tr>
<td>Vaccines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pentavalent or (DTP + Hib + HepB)²</td>
<td>99.2</td>
<td>100</td>
</tr>
<tr>
<td>Polio</td>
<td>95.2</td>
<td>100</td>
</tr>
<tr>
<td>MMR</td>
<td>95.2</td>
<td>100</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>85.7</td>
<td>100</td>
</tr>
<tr>
<td>Pneumococcal conjugate</td>
<td>61.9</td>
<td>97</td>
</tr>
<tr>
<td>BCG</td>
<td>28.6</td>
<td>100</td>
</tr>
<tr>
<td>Continuous availability in previous three months</td>
<td>14.3</td>
<td>88.3</td>
</tr>
</tbody>
</table>

Source: Institute for Health Metrics and Evaluation (IHME)
• **Belize**: Steady availability of family planning methods increased from 73.7% to 89.5% and more than 6 in every 10 health facilities had new sexual and reproductive health counseling targeted to adolescents. The Quality Innovation Fund was established for which 95% of eligible health facilities presented proposals.

• **Costa Rica**: 90% of health facilities had continuous availability of family planning methods and also implemented specialized appointment programming schedules for adolescents.

**Phase 2 Progress**

All countries have started implementation of Phase 2 as of June 2016. The external and independent verification of targets for Phase 2 will be conducted by IHME during the first semester of 2018. In the meanwhile, we can see progress in countries using data from country internal measurements using routine HMIS.

In Belize, for example, the percentage of women receiving early antenatal care and timely newborn enrollment seems to be increasing steadily. In the baseline by IHME, only 2 of every 10 received antenatal care before 12 weeks; Belize’s latest internal measurement results show that now 5 of every 10 women receive timely antenatal care. There are similar results for timely newborn enrollment: only 1 of every 4 newborns were enrolled within 7 days of births in the baseline, but the latest internal measurement shows that almost 3 out of 4 newborns are now enrolled in a timely manner.

In El Salvador, prevalence of family planning reported by the internal measurement has improved from 53% to 75%.

<table>
<thead>
<tr>
<th>Internal Measurement Results in El Salvador: Family Planning</th>
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<tbody>
<tr>
<td>Prevalence of family planning among women in need</td>
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<tr>
<td>IHME Baseline</td>
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<tr>
<td>---</td>
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<tr>
<td>Target</td>
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</tbody>
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*Note: Internal measurements are not strictly comparable with IHME measurements and should not be interpreted as already met targets.*