Final Evaluation of the Salud Mesoamérica Initiative:
Qualitative Report

August 2023
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BMGF</td>
<td>Bill &amp; Melinda Gates Foundation</td>
</tr>
<tr>
<td>COMISCA</td>
<td>Consejo de Ministros de Salud de Centroamérica y República Dominicana</td>
</tr>
<tr>
<td>CSF</td>
<td>Carlos Slim Foundation</td>
</tr>
<tr>
<td>EONC</td>
<td>Essential Obstetric and Newborn Care</td>
</tr>
<tr>
<td>FESMI</td>
<td>Final Evaluation of the Salud Mesoamérica Initiative</td>
</tr>
<tr>
<td>GAC</td>
<td>Global Affairs Canada</td>
</tr>
<tr>
<td>HCP</td>
<td>Health care provider</td>
</tr>
<tr>
<td>IDB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IHME</td>
<td>Institute for Health Metrics and Evaluation</td>
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<tr>
<td>KI</td>
<td>Key Informant</td>
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<tr>
<td>KII</td>
<td>Key Informant Interview</td>
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<tr>
<td>MoH</td>
<td>Ministry of Health (Secretaría de Salud)</td>
</tr>
<tr>
<td>RBF</td>
<td>Results-based funding</td>
</tr>
<tr>
<td>SMI</td>
<td>Salud Mesoamérica Initiative</td>
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<tr>
<td>TA</td>
<td>Technical assistance</td>
</tr>
<tr>
<td>TG</td>
<td>Topic guide</td>
</tr>
<tr>
<td>TOC</td>
<td>Theory of change</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Executive Summary

Background
The Salud Mesoamérica Initiative (SMI) is a regional public-private partnership that brings together Mesoamerican governments, private foundations and bilateral and multilateral donors with the purpose of reducing health inequalities affecting the poorest 20% of the population in the region. Funding focuses on supply- and demand-side interventions, including evidence-based interventions, the expansion of proven and cost-effective healthcare packages, and the delivery of incentives for effective health services. One of its defining features is the application of a results-based financing (RBF) model that relies on performance measurement and enhanced transparency and accountability. The Initiative focuses its resources on integrating key interventions aimed at reducing health inequalities that stem from the lack of access to quality reproductive, maternal, neonatal and child health services (including immunization and nutrition services) for the poorest quintile of the population.

The objective of the final evaluation Salud Mesoamérica Initiative is to assess the Initiative’s mechanisms, results, sustainability, and implications for future projects using a mixed methods approach. The quantitative arm aims to assess the causality between SMI and changes in health outcomes in Mesoamerica. The qualitative arm aims to explore how SMI reached its results, what changes it introduced in the health system, and prospects for sustainability or translation to other contexts. This report focuses on the results of the qualitative evaluation.

Methods
This evaluation used semi-structured in-depth interviews with key informants from different audiences involved with SMI, including funder representatives and topic area experts; individuals involved in SMI’s design, implementation, and evaluation; IDB representatives; Ministry of Health (MOH) representatives; Health care providers (HCP) in SMI areas and non-SMI areas; and traditional birth attendants or community health workers. Interviews were conducted on videocalls in Spanish and English, depending upon the preference of the interviewee. Interviews were recorded with informed consent, transcribed, and analyzed in their original language. A multi-disciplinary team performed thematic data analysis using an integrative methodology which combines deductive and inductive coding.

Key Results

Relevance
SMI collaborated with a broad range of stakeholders to target impoverished populations and implement effective interventions tailored to each country’s unique needs. The Initiative’s work had a high degree of relevance due to its alignment with national health priorities, its data-driven methodology, and its collaborative approach built on the involvement and leadership of country Ministries of Health. SMI interventions focused on maternal and child health, aligning with pre-existing strategies of participating countries and emphasizing a systemic approach rather than vertical interventions. SMI’s flexibility, adaptability, and investment in healthcare systems and institutional capacity-building reflected its relevance to participating countries. The Initiative’s emphasis on patient-centered care, continuous quality improvement, and healthcare delivery contributed to its relevance and impact on the region.

Effectiveness
The successful aspects of SMI are attributed to key design elements, outstanding leadership, and country commitment. Key components include result-based financing (RBF), technical assistance,
external evaluation, and collaborative relationships with participating countries.

SMI interventions led to some improvements in health system performance across service delivery, health workforce, health information systems, and leadership/governance. Technical assistance played a vital role in SMI's success, involving rapid learning cycles and problem-driven iterative approaches. Local innovations and adaptations further contributed to the Initiative's effectiveness. The regional model promoted knowledge transfer, healthy competition, and reduced transactional costs for participating countries. However, delays and turnover led to setbacks, and the discontinuation of three countries with steep health challenges after the second operation threatened the regional approach.

Sustainability
Despite facing challenges such as political turnover, turnover of healthcare providers and facility directors, long delays, and the COVID-19 pandemic, some elements of SMI were integrated into health systems, providing the potential for long-term sustainability. SMI was seen as a seed for change and a catalyst, generating change within the health system through a small investment. However, respondent reports of discontinuation of services and supplies once SMI operations concluded raise the alert that sustainability is not to be taken for granted.

External evaluation was perceived as a fair and necessary element, providing transparent, high-quality, reliable information for all stakeholders. The confidence and accountability generated made the investment worthwhile. The importance of local context adaptation and the role of the Inter-American Development Bank (IDB) in providing technical assistance and adapting to local contexts further solidified SMI's impact on healthcare in the region.

Conclusion
The results of this qualitative evaluation showed positive views of SMI, though the limitations of the Initiative and threats to its sustainability were also important findings. By focusing on collaboration, adaptability, population outcomes, and investment in health systems strengthening, SMI has provided valuable insights for future health initiatives. It is important for the global health community to fully understand where the initiative succeeded and where it fell short, especially with the increased need for efficient use of global assistance for health.
Chapter I: Background

Background of the Salud Mesoamérica Initiative (SMI)

The Salud Mesoamérica Initiative (SMI) is a public-private partnership including the Bill & Melinda Gates Foundation (BMGF), the Carlos Slim Foundation (CSF), Global Affairs Canada (GAC), the Inter-American Development Bank (IDB), the countries of Central America, and the state of Chiapas in Mexico. At the beginning of the Initiative and through the end of the second operation, eight countries were involved: El Salvador, Belize, Honduras, Nicaragua, Guatemala, Costa Rica, Panama, and the state of Chiapas in Mexico. Four countries participated in the third and final operation: Belize, El Salvador, Honduras, and Nicaragua. The Initiative aims to strengthen the health system to improve health outcomes in the poorest 20% of the population and reduce health inequities, using an innovative results-based financing (RBF) model which is supported and reinforced by other unique elements to achieve broader-reaching results. These unique elements are described in detail below.

Priority areas

SMI was implemented over a decade in three operations and carried out various interventions in participating countries to improve health outcomes for the poorest populations by addressing both coverage and quality themes for relevant health areas. Intervention approaches included:

1. **Maternal and neonatal health**: SMI focused on improving maternal health and reducing maternal mortality across the life cycle, from family planning and sexual and reproductive health services to enhancing the access to and quality of care during pregnancy, childbirth, and the postpartum period. Interventions included promoting family planning, active search of pregnant women, prenatal care visits to standard, birth plans, maternal waiting homes, skilled birth attendance, postnatal care to standard, and improving processes for management of obstetric and neonatal complications.

2. **Child health**: SMI promoted child health through increasing immunization and deworming activities and reducing malnutrition by promoting exclusive breastfeeding, providing micronutrient supplements, detecting and treating anemia, and implementing nutrition counseling. It also emphasized the appropriate treatment of diarrhea via oral rehydration solutions and zinc.

3. **Health systems strengthening**: The Initiative supported a systems-wide approach to the improvement of health outcomes by enhancing the capacity of health workers via trainings, promoting the use of information systems to permit quality improvement activities, and improving the availability and quality of health services at both primary and specialized care levels. This also included enhancing record-keeping in both traditional paper formats and new electronic information systems. SMI placed a strong emphasis on data collection, monitoring, and evaluation to track progress, measure the impact of interventions, and inform decision-making.

4. **Capacity building and technical assistance**: The Initiative provided training and technical assistance to health workers, managers, and policymakers to enhance their skills, knowledge, and competencies, enabling them to better plan, implement, and evaluate health programs.

These interventions were also designed to approach health services from a supply- and demand-side perspective. While SMI improved the quality of health services, it also reduced barriers at the population level through interventions such as adaptation of services in indigenous areas, creating
maternal waiting homes, enacting behavior change strategies, implementing transportation vouchers for health service access, and others.

**Funding model**
The results-based financing model of SMI was designed to efficiently utilize a small amount of money to encourage outsized improvements in the health system. For example, the Initiative’s $134 million donation funding for eight countries, combined with $44 million leveraged from domestic funding, made up less than 1% of the annual operating budget of participating Ministries of Health over a ten-year period.¹

Ministries of Finance negotiated the Initiative’s budget and Ministries of Health negotiated performance targets related to process, coverage, quality, and impact indicators aligned with country health priorities at the beginning of each operation (rather than setting indicators aligned with donor priorities in advance). These targets were designed to be achievable, even while they were challenging enough to provoke meaningful improvements in the health system given the time and resources available. Countries who met the performance targets received an incentive equal to half of the initially invested funds for unrestricted use within the health sector.³ The Initiative was unique in using this style of national level incentive to produce outcome-level (rather than output-level) results targeting large geographic areas.

**Technical support**
IDB was the intermediary between the donors and the countries and supported implementation in the form of technical assistance to help with planning, promote continuous quality improvement processes, streamline procurement, strengthen learning outcomes, improve service delivery, and enhance the generation and use of information in the health system. This accompaniment from IDB followed a systems approach rather than a siloed or vertical one, so that even when only a few indicators per operation were prioritized for target verification, results could still be seen along the continuum of care and throughout the lifecycle for women and children.

Technical assistance from IDB was founded on the principles of coaching and mentorship rather than the imposition of external solutions, which allowed for implementation to be deeply informed by the local context and expertise of participating country personnel. IDB supported local plans for implementation that took into consideration an analysis of the contexts and health challenges at participating subnational levels alongside Ministries of Health and their personnel, who were responsible for implementing evidence-based program interventions with this support. This emphasis on country implementation rather than non-governmental organization involvement is another factor that sets SMI apart from other international health and development initiatives. To maintain relevance for each country’s context, SMI involved all levels of the Ministry of Health in meetings during intervention design and implementation processes.

**Implementation**
SMI’s uniqueness has as much to do with its implementation as its design. IDB has described the following implementation tactics that define the Initiative’s activities.¹ The approach focused on improving management practices, motivating leaders and workers, and optimizing processes and flows, which were seen as catalytic elements to identifying and close gaps in service and quality.
A focus on outcomes and planning for each necessary step to achieve those outcomes was part of the SMI model, which allowed for an integrated approach that avoided the duplication of efforts often seen in siloed initiatives. This implementation planning for results was done regardless of funding source to promote local ownership and prevent redundant activities or competition between priority areas for multiple projects.

Quality improvement was a central emphasis throughout, aiming to build a culture that valued providing high quality care and promoted the use of data for priority setting, problem solving, and decision-making. Routine monitoring through improved health information systems and electronic dashboards converged with external measurement to contribute to the reliance on data throughout the system. The supportive approach to technical assistance emphasized solution-focused learning and constructive accountability between interdependent levels of the health system to solve problems together, rather than passing blame.

SMI aimed to make space for experimentation and innovation at the local level to address the most stubborn gaps and difficulties in health service provision based on community wisdom, testing and then scaling successful strategies for change. SMI’s interventions were sustainably embedded in the health system not only through encouraging direct interventions intended to affect health services, but also in the push to update and modify country norms, guidelines, and protocols based on international evidence. Some examples include the new norms of using powdered micronutrients to address anemia in children and oral rehydration salts and zinc for home management of diarrhea in children.

Evaluation
After completion of each operation, an independent external evaluation verified the target achievement in each country. The Institute for Health Metrics and Evaluation (IHME) serves as the third-party independent evaluation partner for the Initiative and conducted a full-scale quantitative measurement following each implementation phase. A regional framework of indicators for SMI was developed and measured based on recognized evidence-based interventions to reduce maternal, neonatal and child mortality; evaluations included all these indicators, not only the performance indicators linked to incentives.

Through health facility surveys and observation, medical record review, and household health surveys, IHME collected data to assess maternal and child health outcomes including immunization, nutrition, obstetric and neonatal care, and reproductive health. Data collection took place in the intervention areas representing the poorest 20% of the population in each country, along with comparison areas with similar socioeconomic characteristics in five participating countries. Information collected thus far has been used to measure the progress of the countries towards the Initiative targets and make decisions about the disbursement of funds. The methods used for quantitative data collection in households and health facilities are further described in Mokdad et al.4
Figure 1 shows the timeline of intervention and measurement for SMI. Initially conceived to finish by 2015, the Initiative has been prolonged with each operation. Due to the COVID-19 pandemic, the final quantitative and qualitative measurement was delayed by approximately two years. The final measurement was adapted to account for this delay and the effects of the pandemic, including the addition of survey questions related to COVID-19 and the collection of additional medical records from the time just prior to COVID-19.

Justification for the qualitative evaluation

Even though SMI resources were limited and account for less than 1% of expenditure in health compared to total country health budgets, the Initiative has shown some improvement in health outcomes in some areas, especially during the second measurement.6 However, four countries did not continue SMI into the third operation, including Guatemala, the largest operation and with the highest budget. In addition, the COVID-19 pandemic interrupted the final operation and its accompanying evaluation. The third operation measurement showed less improvement than the second. In fact, none of the 4 remaining countries met the agreed-upon targets for the indicators. About 50% of the indicator performance targets were met among all countries compared to a goal of 80%. Though ample quantitative information on the results of SMI has been made available through the previous rounds of household and health facility surveys, these data alone do not explain how and why SMI achieved (or didn’t achieve) its results. Therefore, the qualitative component of the final evaluation of SMI aims to understand factors that have contributed to the Initiative’s performance and explore its contributions to the health system, its unique components, barriers and threats, lessons learned, and its prospects for sustainability and translation to other settings. This qualitative evaluation assesses SMI processes from implementation through the Initiative’s conclusion to explain the mechanisms by which SMI’s outputs, outcomes, and impact have been achieved.

As proposed, this evaluation followed the six steps of the guidelines of the Centers for Disease Control and Prevention for evaluating public health programs.6 This framework is meant to be an operational framework that sets the order of the different steps to be followed from inception to conclusion of the evaluation. Through this work, we maintain four core standards: utility, feasibility, propriety and accuracy. Figure 2 represents the steps and standards of FESMI’s operational framework.
SMI program theory

The overall Initiative has been guided by a Theory of Change, which has undergone several iterations over time, evolving into SMI’s latest Program Theory (Figure 3). This updated program theory illustrates not only the hypothesized contribution of improved health system inputs, but also the use of SMI’s defining elements- the RBF model, emphasis on evaluation, and technical assistance around processes, quality improvement, and service provision- to catalyze health system processes with the overall goal of improving system performance.

One example pathway through the program theory is illustrated in Figure 4. Technical assistance is realized as training for healthcare providers. This training yields improved skills for the providers, which contributes to a stronger healthcare system. This channel could influence outcomes like antenatal care, skilled birth attendance, postnatal care, and immunization coverage, and through improving these outcomes could impact mortality, health equity, and population health. In this report, we present findings on causal pathways like these for outcomes across the reproductive, maternal, infant and child health lifecycle. The interview guides for the qualitative measurement (Appendix A) were designed to
follow the logic of the program theory and to examine pathways of impact, according to the same approach used in the Salud Mesoamerica Initiative Process Evaluation. The next chapter provides detail on our methods.

![Figure 4. Pathways through program theory](image)

At the onset of the Initiative, a comprehensive SMI evaluation plan was included and has been under continuous development considering a mixed methods approach. Its latest iteration is represented in Figure 5. In addition to assessing country performance on the general framework of indicators across all countries (including the indicators incentivized by the performance framework) through data collection for target verification, the SMI evaluation strategy seeks to disentangle and explain the complexity of the program to understand what worked and what did not work, and why and how it happened. The multiple rounds of evaluation activities’ main purposes are: 1) to contribute to the broader evidence base of development aid, public health programs and interventions; and 2) to improve the program by continuing or changing current rules or practices.

![Figure 5. SMI Operations, Timeline and Evaluation](image)
Chapter 2: Methods

Evaluation design

FESMI’s qualitative component contributes to a sequential explanatory design for the final evaluation. A sequential explanatory design is typically used to explain and interpret quantitative results by collecting and analyzing additional qualitative data. This design is specifically useful to explore results arising from a quantitative study, especially in the case that there are under-explored phenomena involved, such as SMI’s catalytic combination of a multinational RBF model with an emphasis on evaluation, process and quality improvement, and technical accompaniment outlined in the program theory. Given the novelty of this initiative, it is essential to explore each of these components to better assess their relevance.

In this case, quantitative data from SMI’s four rounds of data collection for target verification on performance and monitoring indicators were obtained from household and health facility surveys which do not provide complete information on the reasons why the indicators were or were not reached. Quantitative methods such as a cross-country statistical comparison of performance trends on comparable health facility and household indicators, as well as a trend analysis of maternal, neonatal, and under-5 mortality at the national level, will indicate what results were achieved by SMI. Meanwhile, understanding of the processes, strengths, and weaknesses of SMI (why and how it worked) to explain those quantitative results is achieved through in-depth interviewing and discussion of SMI according to a smaller sample of key informants representing information-rich cases. Figure 6 represents a scheme of the sequential explanatory design.

![Diagram of sequential explanatory design]

Figure 6. General diagram of the mixed methods sequential explanatory design

Theoretical framework and research questions

Based on SMI’s general program theory, we developed a theoretical framework to guide this evaluation. This allows us to relate the health system and health outcomes elements of the program theory (as measured in the ongoing quantitative evaluation) to the SMI catalysts intended to enhance the health system inputs and processes for participating countries. The theoretical framework developed for the final mixed methods evaluation, of which this qualitative work is a part, can be found in Figure 7.
Naturally, this evaluation has a formal, external, explicit mode in regards to the three main components of the evaluation: information process, value judgment, and decision-making.

- An evaluation process is formal if it involves indicators, a method and tools of information collection;
- An evaluation is considered as internal or external depending on the status of the person(s) in charge of the evaluation; it is internal when such persons belong to the management team, and external otherwise;
- An evaluation is considered explicit when carried out through a recognized process.

In this final evaluation, we are guided by the five criteria for evaluation of developmental aid designated by the Development Assistance Committee of the Organization for Economic Co-operation and Development. These criteria are: relevance, effectiveness, efficiency, impact, and sustainability. Given the scope of the qualitative evaluation, we focus on relevance, effectiveness, and sustainability, while impact will be assessed through quantitative household and health facility data. Additionally, we grounded our data collection and analysis in relevant frameworks for this evaluation. Health system analysis is grounded in the framework established by the Health System Strengthening Evaluation Collaborative which centers on the four characteristics of: ownership, participation, and accountability; service delivery; use of resources; and learning and resilience. Analysis and discussion of access to healthcare utilizes the conceptual framework proposed by Levesque et al. Furthermore, the examination of sustainability is informed by a literature review of sustainability concepts in health programs. This evaluation applies these criteria to address the evaluation questions outlined in the Request for Proposal and refined in conjunction with IDB:

1. What was the impact of SMI on maternal, neonatal and/or children under five mortality?
2. What was the magnitude of change on maternal, neonatal and child health outcomes in SMI target areas, and to what extent can changes be attributed to SMI?
3. How did SMI influence changes in the coverage, quality of care and effective coverage indicators and in health systems performance?
4. What was the contribution of SMI in the performance of health systems in the region? What are the prospects for sustainability of SMI interventions and results?
5. What components of SMI influenced whether outcomes were achieved or not according to stakeholders?
6a. What was the effect of COVID-19 on coverage and quality of MNCH services in the poorest regions? (including aspects of system resilience and performance)
6b. How did SMI mediate the effects of COVID-19 on coverage and quality of MNCH services in the poorest regions? (including aspects of system resilience and performance)
6c. What was the contribution of SMI to COVID-19 pandemic preparedness, response, and recovery? (at community, country, and regional levels)
7. How does the SMI model compare to other financing or intervention models?
8. What was the role of the IDB as a change agent supporting health systems and health service provision improvements?

Given the scope of the evaluation, we attempt to answer, to the extent possible, each of these questions between this qualitative final report and the accompanying mixed methods final report. In addition to answering these evaluation questions, we maintain a special focus on the possibilities for sustainability of the Initiative, as well as lessons generated for application to future health and development programs in this region or elsewhere.

Qualitative data collection

Instrument development

To answer the evaluation questions, key informant interview topic guides customized to study audiences were developed by IHME in collaboration with IDB and data collection partners with qualitative research expertise. Topic guide contents were developed to cover the components of the program theory which were most easily evaluated through interviews (health system inputs, health system processes, and SMI catalysts) and were based on key themes from qualitative and mixed methods study questions and in alignment with evaluation and conceptual frameworks previously outlined in this document. Topic guide development was also informed by materials from the 2016 Salud Mesoamérica Initiative Process Evaluation conducted between the first and second operation measurements.

Topic guides were iteratively and extensively refined based on feedback from IDB and data collection partners and continued to be adjusted based on emergent themes from early interviews. Key informant interview topic guides were developed specific to the following audiences:

1. Funders and knowledgeable other informants
2. IDB headquarters
3. IDB health specialists with experience in SMI countries
4. Ministries of Health
5. Health care providers in SMI areas
6. Health care providers in non-SMI areas
7. Midwives and community health workers in SMI areas
Appendix A lists samples of the interview topic guides for different study audiences.

Training and data quality assurance
To prepare for data collection, a training workshop was conducted by IHME on February 21, 2023 and attended by the Guatemalan team of interviewers and support staff as well as representatives from IDB. All retained interviewers were anthropologists with qualitative research training and experience. The workshop’s purpose was to provide a general introduction to the stakeholders of SMI, followed by an overview of the objectives and general characteristics of SMI, and the plan for the overall and qualitative evaluation. Special emphasis was placed on ethical aspects and data confidentiality, and a demonstration was provided on how to upload audio files and transcripts to the secure cloud link to be used for this study.

A description of the interview guides and the motivation behind the topics covered in the interviews was given. It was explained that the data collection instruments developed by IHME are intended to serve as guides for the interviews, emphasizing certain topics depending on the interviewee and their position or relationship with the Initiative. Representatives from IDB provided additional context on the functioning of the Initiative and specific examples of its activities. They also answered questions from the interviewers and provided an additional presentation on SMI activities in each country on February 24.

The IHME team monitored data quality, both for the audio files and transcripts, and provided feedback to data collectors to prioritize themes based on topics of particular interest, highlighting novel relevant information that arose, and alerting them to topics about which we reached a degree of saturation within each audience. The IHME team also conducted several interviews in English and Spanish. While the sample is constrained by the available budget such that full data saturation around these topics may not be reached within any given group, IHME team members monitored and evaluated incoming transcripts to assess the degree of saturation (that is, the point at which additional interviews failed to yield new information) on the themes of interest.

Recruitment and interviewing
Respondents were recruited via email, phone call, and messages via WhatsApp. After an initial contact, up to 5 additional attempts were made to schedule an interview. Interviews were conducted via the telecommunication platform of choice for the interviewer and respondent. Audio recordings, as well as interview notes and transcripts, were uploaded to a secure server for storage and access. Respondents were asked for recommendations about additional knowledgeable contacts to recruit further study participants.

Sample
Selection of study audiences was based on the success gathering rich data from these respondent types during the previous midterm process evaluation conducted by IHME, as well as guided by an attempt to respond to the central questions of why and how SMI worked. We sought to maximize the information gathered from our budgeted sample of 110 participants by gathering the diverse perspectives of three main groups who could speak to the implementation and unique features of SMI, its effects on the health system, and information about the health-related experiences and needs of the target population for SMI.
The first group included decision-makers from all SMI partner organizations. This group included: funders of SMI (e.g., representatives from Global Affairs Canada, the Carlos Slim Foundation, the Bill & Melinda Gates Foundation); experts in health and development programs (e.g., representatives from COMISCA, universities, and international health and development organizations); individuals involved in the design, implementation, and evaluation of SMI; IDB (including health specialists working in countries and at headquarters, consultants, advisors, and SMI staff); and ministries of health. The second group consisted primarily of programmatic actors. This included directors of health care facilities, doctors, nurses, specialists, and other individuals best able to speak about SMI including quality improvement officers, epidemiologists, and department heads and area leads. The third group involved community health workers and traditional birth attendants, who play a role in both providing health services and connecting women and children in the community to institutional health care. This included health promoters, midwives, and other community health workers. While the sample size was limited by general study constraints (time line and budget), a few representatives from the latter group were important to understanding some general community perspective and drivers of health-seeking behavior in the target population.

Respondents among the funder representatives/knowledgeable others, IDB/SMI representatives, and Ministry of health groups were identified by IHME in partnership with IDB based on in-depth knowledge and experience with various components of SMI across the lifetime of the project, allowing for data collection from information-rich cases. Key areas of insight desired for respondents at these levels include:

- **Funder representatives/knowledgeable others**: project conception, planning, and goals; results-based financing model and financial decision-making; regional perspectives of SMI and its operation; sustainability of SMI activities; ability to apply SMI learnings to other geographic areas and domains of health and development.

- **IDB/SMI representatives**: project conception, planning, and goals; implementation; barriers and facilitators to success of SMI interventions.

- **Ministry of health**: barriers and facilitators to success of SMI interventions; integration of SMI activities in the health system; relationships and power dynamics in the SMI partnership; sustainability of SMI activities.

Respondents at the provider level and traditional birth attendant/community health worker level were identified based on their work in SMI intervention-area facilities, with some health care provider respondents also chosen from non-SMI area facilities to capture spillover effects and provide a comparison to responses from SMI area facilities. The field team was provided with a starting list of intervention-area and non-SMI facilities in which to contact potential participants, identified through the quantitative component of the evaluation and stratified by service type in each country. Recruitment was then also supported by recommendations from ministry of health participants and early healthcare provider respondents who offered the contact information for additional knowledgeable respondents in the areas of interest. Key areas of insight desired for respondents at these levels include:

- **Health care providers**: community interest in, and acceptance of, health services; cultural adaptation of health services; changes in the health system related to SMI, including service delivery, health workforce, health information systems, access to essential supplies, and communication and governance.
• **Traditional birth attendants/community health workers**: community interest in, and acceptance of, health services; community perceptions of health service quality; cultural adaptation of health services.

Success with recruitment varied, with potential respondents at the central or international level much more likely to be interviewed and those at the country or local level less so. Furthermore, authorization to collect data during the evaluation time period was limited to Honduras, El Salvador, Belize, Guatemala, and Chiapas. While many individuals did not give a reason for rejection to be interviewed, and instead simply declined or did not respond to outreach efforts, the following reasons for rejection were most commonly brought up during data collection:

• **Lack of time or interest**: potential respondents frequently made an appointment to be interviewed but did not show up because of another commitment, in some cases multiple times. In other cases, potential respondents said that they had to review their calendars for availability and no longer responded.

• **Distrust**: this was more often the case for nurses and TBAs/CHWs. Even after being informed about the evaluation and receiving materials related to informed consent and country authorization, some potential respondents believed that this was a scam.

• **Fear of answering incorrectly and concerns about weak memories of the Initiative**: Some medical staff, nurses, and CHWs were hesitant to participate because they said the Initiative had happened a long time ago and they did not remember much anymore. In the case of countries that did not continue to the third operation, it had been several years since the last round of SMI. In other cases, it was mentioned that they did not want to respond incorrectly or make the implementation of the Initiative look bad for fear that it would not continue to support health programs.

• **Possible political tensions in Chiapas**: One of the interviewees from Chiapas mentioned that they were in a political situation and that this could be the reason for difficulty recruiting there. Potential respondents here tended to say that they had to talk to their team or leadership to ask whether an interview would be permissible, and then stopped responding.

Study audiences and sample size for each study audience are summarized in Table 1, along with the number of individuals contacted and response rate for each audience. Sample size by country is summarized in Table 2.

**Table 1: Sample of Key Informants and Response Rates**

<table>
<thead>
<tr>
<th>Study Audience</th>
<th>Contacted</th>
<th>Interviewed</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funder representatives + knowledgeable others*</td>
<td>13</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>IDB/SMI representatives*</td>
<td>14</td>
<td>13</td>
<td>93%</td>
</tr>
<tr>
<td>Ministry of Health (MoH) representatives</td>
<td>42</td>
<td>24</td>
<td>57%</td>
</tr>
<tr>
<td>Health care providers - SMI</td>
<td>71</td>
<td>35</td>
<td>49%</td>
</tr>
<tr>
<td>Health care providers – non-SMI</td>
<td>10</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>Traditional birth attendants/community health workers</td>
<td>45</td>
<td>20</td>
<td>44%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>195</strong></td>
<td><strong>110</strong></td>
<td><strong>56%</strong></td>
</tr>
</tbody>
</table>

*Key informants include both individuals who are currently involved in the Initiative and individuals who were previously involved but are no longer in the same position.*
Table 2: Sample of Key Informants by Country

<table>
<thead>
<tr>
<th>Study Audience</th>
<th>Country</th>
<th>KIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funder representatives + knowledgeable others*</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>IDB/SMI representatives*</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Ministry of Health (MoH) representatives</td>
<td>Belize</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Costa Rica</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Guatemala</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>24</td>
</tr>
<tr>
<td>Health care providers - SMI</td>
<td>Belize</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Guatemala</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>35</td>
</tr>
<tr>
<td>Health care providers – non-SMI</td>
<td>Belize</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>5</td>
</tr>
<tr>
<td>Traditional birth attendants/community health workers</td>
<td>Belize</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Belize</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Costa Rica</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Guatemala</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Mexico</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>110</td>
</tr>
</tbody>
</table>

*Key informants include both individuals who are currently involved in the Initiative and individuals who were previously involved but are no longer in the same position.

Coding and analysis

All transcripts were analyzed for their context and coded by researchers at IHME through an integrative methodology combining deductive and inductive approaches. A codebook for thematic analysis was initially developed grounded in the findings from the 2016 SMI Process Evaluation, the SMI program theory, and the evaluation questions and frameworks identified above for health systems performance and evaluation, access to healthcare, healthcare quality, and sustainability. Throughout the coding of the qualitative data, the research team modified the codebook as needed to represent emergent
concepts. A final codebook was reached after an iterative process of coding, consensus, and revision among the analytical team based on a subsample of early transcripts.

A multi-disciplinary team performed the data analysis using the constant comparative method, a grounded theory approach that allows for the development of a narrative about the results that is founded in the reality that the collected data represent. The coded text was analyzed for patterns and themes, with comparisons made between the data gathered from different audiences (e.g. IDB, healthcare providers, donors, etc.) and from different countries. The coded data were reviewed and synthesized to provide summaries and key findings. The research team met frequently to compare codes and impressions of the data, review representative quotations, and identify emergent findings. Dedoose version 9.0.27 (Los Angeles, California) qualitative analysis software was used for coding. The final codes are presented in Appendix B.

**Evaluation team**

The evaluation team’s composition, background, and location influence the collection and analysis of these data. The IHME team that worked on this evaluation is based in Seattle at the University of Washington, spans a range of seniority levels, and is comprised of researchers trained in epidemiology, public policy, public health and medicine, and linguistics. There is an even distribution of men and women on the team. The team has members from the United States, Lebanon, Mexico, and Colombia. The data collection team is based in Guatemala and performed this work independently of an academic institution, is made up of Guatemalan interviewers trained in anthropology, and led by an experienced senior qualitative researcher.

**Ethics statement**

This evaluation was reviewed by the Institutional Review Board at the University of Washington. Authorization for the evaluation was provided by the Ministries of Health in participating countries. Informed consent was obtained from participants prior to participation in interviews. Data collectors were trained and operated under instructions to maintain participants’ confidentiality, use security measures to protect the data on their devices, and manage evaluation data using unique participant identifiers rather than names.
Chapter 3: Results

SMI was an innovative initiative that was implemented for over a decade with the objective of reducing maternal, neonatal, and child mortality in the Mesoamerican region. This initiative brought together multiple stakeholders who collaborated to address the health equity gap by focusing on the poorest populations in each country. SMI brought funds to the region to contribute closing the health equity gap, and it implemented interventions known to be effective. The specific activities of SMI varied based on the unique needs of each country, but they were centered around the patients and aimed at enhancing the quality of healthcare provided.

There is not a single element that makes or determines the success of SMI, rather it is the synergy among multiple key design elements, outstanding leadership, and countries' commitment that come together to achieve the improvement seen in the health outcomes. Therefore, evaluating the impact of SMI should go beyond improvements in the payment performance indicators, it should also include the learnings about how a partnership among philanthropy, government and a development bank works, as well as what is required to implement a multi-country intervention that responds to specific local characteristics and needs.

Among the innovative key elements which contributed to the success of SMI are the result-based financing mechanism, the provision of technical assistance, external evaluation, and allyship with countries to work in a collaborative way. Additionally, having clear and established rules from the outset of the Initiative laid the foundation for a trustworthy and accountable relationship among stakeholders. Furthermore, the flexibility of the Initiative allowed for adaptability to the local context and changing circumstances. Finally, the investment in strengthening the entire health system was essential. The Initiative invested in increasing countries’ institutional capacities and their ability to improve and manage a healthcare system that can deliver high-quality care in a sustainable manner.

SMI models

The result-based financing design was well received among all audiences, with many respondents highlighting its relevance to motivate and make countries accountable. While RBF was a hook for incentivizing country participation in SMI at the initial operation, the early economic incentive lost relevance as the initiative timeline was extended for years; initially, SMI was planned to finish the three operations by 2015 and its conclusion was delayed until 2022. Over time, some respondents noted that country performance was motivated more by the reputational incentive of reaching performance targets—a finding that was also described in the 2016 SMI Process Evaluation.

“I think, related to the measurement...data is visible, not just to governments, but it's visible to the partners and to the public. And so, you know, I think we've heard enough about the reputational dynamics... I think, between M&E and then this reputational effect are two soft things that probably were under-appreciated [but] seems at this point were actually quite powerful.” - Donor

Some countries implemented their own results-based incentives at the health facility level. If the health facility achieved high performance, it was rewarded with supplies that met health facility needs and improved working conditions (rather than direct cash transfer). This increased the willingness to work
hard, increased commitment, and expanded the effort among the healthcare providers on implementation and monitoring activities.

“Te digo que estábamos, que todos con mucho, mucho entusiasmo, muy involucrados, haciendo todo lo posible para que se generaran el cumplimiento de los hitos, las metas más allá, el premio.” - Ministry of Health, Costa Rica

“I’ll tell you that all of us were very, very enthused, very involved, doing everything possible to in order to meet the targets and the goals, rather than the prize itself.” - Ministry of Health, Costa Rica

“We realize that the payment formats approach works, and it helps to motivate the staff. And over time we were able to see that the staff didn't ask for anything personal or one specific person. Whatever was earned based on their performance was reinvested back into their health center, into their workspace, into their community.” - Ministry of Health, Belize

Nevertheless, the magnitude of the economic incentive relative to countries’ health budgets and needs played a role in countries’ motivation and the amount of resources invested in reaching targets. For instance, the economic incentive in Panama was small compared to the SMI requirements, and it did not compensate for the extra effort the country had to expend or the risk of generating a bad reputational image on national news. On the other hand, countries that achieved the performance incentive were able to choose where to invest it. Some countries chose to use it to finance the next SMI operation and thereby ensure their continued participation in the Initiative. The possibility for countries to contribute their portion of the SMI investment with their own funds instead of requiring a loan gave them greater bargaining power during negotiations.

“El presupuesto del Ministerio de Salud de Panamá para atender a la cuarta parte de la población meta del Ministerio de Salud de Nicaragua, es cinco veces el presupuesto del Ministerio de Salud de Nicaragua. O sea, ni compara. Entonces una operación como Salud Mesoamérica, de poco aporte financiero, de mucha presión, de tiempo y de visibilidad y de presión política, porque a ningún ministro le gusta que salga en la prensa de que, cumplieron dos de diez indicadores, imagínese.” - IDB

“The budget of the Panamanian Ministry of Health, to attend to a population a quarter of the size of the target population for the Nicaraguan Ministry of Health, is five times the size of the budget of the Ministry of Health of Nicaragua. I mean, it doesn’t even compare. So, an operation like Salud Mesoamérica, with little financial support, and a lot of pressure, that requires a lot of time, and has a lot of visibility and political pressure, was not motivational, because no minister wants to see in the press that they have achieved two of ten indicators, as you can imagine.” – IDB

Among all audiences there was agreement that the outcome targets were negotiated. However, the perception about the capacity of each party to negotiate varied. Countries and donor representatives did not have a direct communication channel, and their interactions were all mediated by IDB. Information about SMI was initially shared at COMISCA meetings, and IDB subsequently negotiated directly with each participating country. The negotiations usually involved the ministry of health, the ministry of finance, and IDB representatives. The indicators used and the proposed targets varied by country, but all countries followed the same program design. While IDB had their own experts and
additional information relating to SMI, the countries had the opportunity to set out their unique needs and health priorities. For instance, Costa Rica was able to focus their indicators on sexual and reproductive health in adolescents.

The target system used by the Initiative as a performance payment incentive was considered appropriate and fair to supply minimum equipment requirements and healthcare quality. However, among the individuals actively involved in the implementation, both IDB members and ministry of health representatives considered certain targets to be too ambitious to be achievable in such a short timeframe, particularly for indicators that are strongly influenced by social determinants of health or those that depend on institutions outside the health system. For instance, childhood malnutrition is multicausal and the provision of micronutrients alone may have a limited impact. As another example, Panama’s indicator for water quality required highly technical work between different IDB portfolios and governmental organizations, which caused delays that prevented the country from reaching the target. However, the specific reasons behind the success of each country in reaching the targets varied by country.

“En este caso el Banco Interamericano generó un trabajo más que como un banco, sino más bien como un trabajo muy técnico, muy de trabajo articulado con especialistas técnicos en cada uno de los países, y se generaban marcos normativos, marcos jurídicos, pero principalmente modelos de atención diferenciada que permitieron mejorar la calidad de la atención. Entonces, yo creo que eso fue, digamos, como lo esencial, porque implicó institucionalizar procesos. Pero no, no fue un proyecto que simplemente dijeron ‘Es por aquí donde hay que hacerlo’, sino se construyó con los países. Yo sé que hubo participación fuerte de los países, cada cual daba sus preferencias, por supuesto que tenía sus líneas, pero los manuales operativos se construyeron con los países y eso permitió que también de acuerdo a las necesidades y características de cada país, ¿verdad? No era una receta de igual para cada uno, sino hubo particularidades trabajadas y yo creo que eso es muy importante.” - Ministry of Health, Costa Rica

“In this case the Interamerican Development Bank did more than just the work of a bank, rather it was very technical work, work together with technical specialists in each country. This work generated normative frameworks, judicial frameworks, but mainly models of differentiated care that allowed for improvements in the quality of care. So, I think this was, let’s say, essential, because it implied the institutionalization of processes. But it wasn’t, it wasn’t a project that simply said, ‘This is what needs to be done.’ Instead it was built together with the countries. I know that there was strong participation by the countries, each one gave their preferences, of course they had their own outlines, but the operation manuals were built with the countries and this meant that they were also aligned with the necessities and characteristics of each country, right? It wasn’t the same recipe for each one, rather there were particularities that were worked out, and this, I believe, was very important.” - Ministry of Health, Costa Rica

Once targets were agreed upon, they became a national goal, and all SMI teams worked towards it. SMI aimed to build a horizontal relationship among the stakeholders involved in the design and the implementation of Initiative activities. IDB had a local team in every country and a coordination unit at the central level. There were frequent meetings to assess gaps, establish strategic plans to address them, and identify what was needed to achieve goals. These meetings involved representatives from the
Technical assistance was at the heart of the Initiative. Interviewees from all countries expressed how helpful it was to work with external experts to dig deep into the causes of health disparities, plan innovative solutions and closely monitor results. The rapid-learning cycles and the problem-driven, iterative approach implemented through SMI allowed the teams to make adjustments to purposed interventions and identify what was not working on the field on short notice. Likewise, having technical people on the ground that were able to move from one country to another facilitated the knowledge transfer between countries. For instance, in El Salvador, a health facility had excellent indicators in family planning and prenatal control because they had designed a short screening survey for women which they applied to all the women visiting the health facility, regardless of whether they had an
appointment or were just coming as companion. This survey, called the hoja filtro, was scaled to be used across the whole country and was adapted for other countries as well.

SMI had a regional approach and was developed in the context of strong existing regional partnerships such as COMISCA, SICA, and Proyecto Mesoamérica. In addition to the knowledge transfer and the efficient use of technical assistance across countries described above, the regional model also benefited the Initiative by promoting reputational incentives and healthy competition and by reducing transactional costs. While there was no evidence of direct official communication among the participating countries, respondents indicated that SMI contributed to building social capital among the countries. Likewise, IDB facilitated the centralized purchase of medical inputs through COMISCA after evaluating and identifying the medicines needed in the region in the context of SMI. For instance, when there was an update on the availability of family planning methods, COMISCA first negotiated prices, and then each country agreed on specific terms with the industry. Furthermore, the experience of SMI and its success at bringing donor funding into the region for the first time led to other consecutive projects in the region such as the Regional Malaria Elimination Initiative, which has a similar partnership and model but which is focused on an infectious disease.

“I think a regional approach, depending on how you define region, you’ll likely be bundling as a group of, you know, multiple countries or societies that see each other as peers. They’re like, maybe, siblings in your household. We use them as benchmarks to assess how we’re doing. And so when you work across a region, I think you can take better advantage of this built-in kind of reputational and relational dynamic between geographies to your advantage. So, in this case, I do think it mattered that we had a scoring rubric that everybody had agreed to. They went the same from place A to place B, but getting 80% or better, having a standard platform was really quite useful...” - Donor

Many times, innovations came directly from country teams and their efforts to apply the process methodology to their context. Involving the local teams and making them accountable increased the local commitment to the project and the successful adaptation of the interventions to the local context. For instance, women are not usually admitted for childbirth until they are in the active stage of labor, but contractions often start hours earlier and women often seek care early. In high-income settings, it is possible to admit the patient earlier or send her home and ask her to return when contractions become more frequent. But in the Mesoamerican context, many women must travel long distances, and early admittance or returning home are not possibilities. To address this, SMI developed casas maternas to host women until they could be admitted to labor and where they could receive prenatal care. Similarly,
it was necessary to adapt the way that family planning was presented to women to be respectful of their beliefs and culture, and to adapt the intervention language in communities with high indigenous populations.

“El Servicio Materno Infantil fue construido hace aproximadamente diez años y junto con el servicio a la par está el hogar materno que todavía sigue funcionando. Tiene todavía bueno, después de diez años, pues el tiempo ya ha causado algunos estragos en la infraestructura, pero siempre estamos ahí tratando de mejorar algunas cositas. Pero igual nuestras pacientes, al menos tienen un techo, tienen una cama, tienen un televisor, tienen un espacio donde ellas puedan comer, hacer su comidita ahí en el servicio materno infantil y es ahí mismo, ahí en el mismo predio.” – Health care provider, Honduras, non-SMI municipality

“The Maternal and Child Health Center was built approximately ten years ago, and along with that, next door there is the maternal waiting home that is still operational. It’s still in good condition after ten years, although time has caused some damage to the infrastructure. However, we are always there, trying to improve things. But at least our patients have a roof over their heads, a bed to sleep in, a television, and a space where they can eat and prepare their, all within the same place.” – Health care provider, Honduras, non-SMI municipality

“[Regarding the meeting with IDB coordination unit] Donde íbamos a exponer cómo iban los indicadores que nos evaluaba la iniciativa, cuáles eran nuestras experiencias o a contar lo que nosotros estábamos haciendo con el fin único de cambiar esa experiencia de entre, entre un director y otro. Íbamos a presentar nuestras creaciones [ríe] que hacíamos para lograr esos indicadores. Y sí, el trabajo con la Iniciativa fue para mí, en mi experiencia, uno de los mejores trabajos que hemos tenido, tanto que te ayudó a desarrollarte como persona, a tener ese nivel de compromiso, de responsabilidad que teníamos...Entonces eran cosas que nosotros, como le digo, nos ayudó para ser innovadores, para hacer, solo nos decía es que solo somos inventadores, haciendo inventos pasamos, pero era todo para mejorar esa atención. Y realmente para presentar datos que realmente fueran reales. Entonces, porque uno de los mensajes que nosotros como equipo o coordinador le remitimos al personal de salud es que ese 40% sea el esfuerzo de nosotros, que nosotros estemos bien seguro de lo que hicimos y que este 40% nos sintamos orgullosos de lo que logramos, porque nosotros sabemos el gran trabajo que hemos hecho.” – Health Care Provider, Honduras, SMI municipality

“[Regarding the meeting with IDB coordination unit] We used to go to present how the indicators that the Initiative was evaluating us on were going, what our experiences had been, or to share what we were doing, with the only goal being to share experiences between one director and the next. We presented the creations [laughs] that we had come up with to meet the indicators. And yes, the work with the Initiative was for me, in my experience, one of the best jobs that we’ve had, because it helped you to develop as a person, and therefore to have this level of commitment, of responsibility that we had...So these were things that, as I was saying, helped us to be innovators. They would always tell us ‘We are just inventors, we can only pass if we innovate,’ but it was all to improve the level of care. And really to present data that was real. So, one of the messages that we as a team or coordinator communicated to the health personnel was that improving 40% should reflect our work, that we should be very confident of what we did and that we should feel proud of achieving the 40% because we know the great work we have done.” – Health Care Provider, Honduras, SMI municipality
The importance of local context adaptation led IDB to take over the technical assistance work after the first operation to respond to countries' specific needs. This meant a significant change for the bank since it went from being a fund manager and having a negotiating role to leading and supporting the implementation on the ground. This change came with adjustments to the IDB team, to be able to provide technical assistance directly rather than hiring an outside firm. The adaptation to local contexts was facilitated by having a team from the region, who knew the culture, the health system, and the countries' policy dynamics.

“Una cosa que tuvo bueno, que tuvo la iniciativa, es que los protagonistas del banco, en su gran mayoría, eran de la misma región. O sea, eran hondureños, eran salvadoreños, eran nicaragüenses, eran de la misma región. O sea, no es que eran puros españoles o puros alemanes que estaban ahí, que. No, no, no, había unos cuantos de América del Sur, poquitos, pero la mayoría eran, era gente de la misma región que conocía la zona que había caminado, los centros de salud, o sea que estaba clara en la realidad.” – IDB

“One good thing that the initiative had is that the leaders from the bank, in large part, were from the region. I mean, they were Honduran, Salvadoran, Nicaraguan, they were from the same region. It’s not like they were all Spaniards or Germans there. No, there were a few from South America, very few, but the majority were people from the region that knew the area, who had walked the health centers, and clearly understood the reality there.” – IDB

Technical assistance was provided continuously while SMI was in the countries, sometimes for over a decade. Even after the Initiative concluded, in some countries IDB continued providing technical assistance under other programs or through negotiations with participating countries. For instance, in Mexico the Initiative ended after the second operation, but due to the high improvement on maternal mortality in the intervention areas in Chiapas, the country was interested in applying the SMI quality improvement process in Tuxtla, which at that moment had one of the country’s highest maternal mortality rates. Likewise, in Belize, IDB continued their support after the conclusion of the third operation, and the country is leading the development of a health quality improvement team at the ministry of health.

Among the administrative staff at the subnational level, there was a feeling of gratitude towards the technical assistance received during SMI. They mentioned that at the beginning it was challenging to change behaviors among the healthcare providers who were used to working in certain ways which they believed were best for their patients. However, having access to current ongoing data which demonstrated quality improvements strengthened the proposal for policy changes and facilitated their implementation. Once behavior change was accomplished, the healthcare providers themselves desired to continue with the interventions despite the external surveillance. For instance, one participant reflects about the monitoring practices learned from SMI and how they continued it after the conclusion of the Initiative:
“Por ejemplo, monitoreo de indicador, nosotros lo seguimos haciendo como nos enseñó Mesoamérica desde la primera operación hasta la fecha. Entre uno y otro, nosotros seguimos evaluando igual a lo interno porque la región, lastimosamente, nunca, a nivel departamental, nunca esa Jefatura nos pidió un informe ni en las Operaciones ni entre las Operaciones. Muchas veces ellos se enteraban como estaban cuando íbamos a reuniones en conjunto. Ahí creo, era falta de compromiso, porque a nivel local, nosotros seguimos, hasta la fecha, el día de hoy, nuestros indicadores los seguimos midiendo como si estuviéramos midiendo Mesoamérica.” – Ministry of Health, Honduras

“For example, the monitoring of indicators, we have been doing that just like Mesoamérica taught us from the first operation to the present day. Between one operation and the next, internally we are still evaluating in the same way. Unfortunately the region, never, at the departmental level, the leadership never asked us for a report, neither during nor between the operations. This, I think, was a lack of commitment on their part, because at the local level, we continue to measure our indicators to this day as if we were measuring for Mesoamérica.” – Ministry of Health, Honduras

Having allies at the local level contributed to the continuity of SMI across staff turnover at the ministry of health and changes in governments. Participants at the local level showed excitement about what they had learned from SMI about quality improvement, the use of information and monitoring tools. They mentioned their intention to expand those learnings to other health facilities or the treatment of other diseases such as chronic diseases. There were changes in the culture of both healthcare providers and the community. The training to the healthcare providers gave them the knowledge to use new equipment, follow protocols, and provide care following the best practices guidelines. On the community side, the work in health education may remain, as healthcare providers reported an increase in treatment adherence for diarrhea and pneumonia as well as attending prenatal care visits early on in the pregnancy. On the other hand, capacity building at the central level seemed to be more variable and related to the degree of personal investment and the leadership of certain individuals.

In the same way, SMI opened new spaces for local teams to express what they are facing in their daily practices and inform the way that the instructions are received from the central ministry of health. Countries where SMI ended last year had uncertainty about what would happen with the technical assistance at the local level, but there is a desire to continue receiving it, to have someone to consult with, someone to lead and someone to look after them. Nevertheless, at the ministry of health level, some participants expressed resistance to international organizations having high influence on the internal country policies.

Independently of the negative comments towards international development aid, the reference to the progress made by IDB during SMI was positive and highly appreciated across audiences. There is a consensus among donors, experts, and ministry of health representatives that IDB was essential for the Initiative to be successful. Participants highlighted the commitment and ownership that the IDB team brought to the Initiative, their knowledge of the region, and the exceptional convergence of skills between highly technical knowledge and political skills. Furthermore, the fact that the team had a long view and many team members stayed with the project for over a decade contributed to accumulating knowledge, commitment, and confidence with other stakeholders.
“So, the role of the IDB, I’d say, has been essential. You take them out of the equation, and then Jenga puzzle falls over. I think they’ve been quite brilliant in executing. (...) They had a degree of ownership of this work and pride in this work that I think propelled it beyond what it would have done otherwise. (...) They internalized and owned what success was to be for this project. It wasn’t there to facilitate, and somebody else to do. I think they very much took on this initiative as if their institutional success or failure was tied to the outcome. Hmm again. That’s not the way that other organizations work. Other regional banks make loans, and once they sign, that’s their business, they get the money out the door. They disperse. (...) [but IDB] was in a support role. They were not the ones delivering care. So, they were as much trying to help steward and support the system as the government counterparts they work with. (...) [And] they kind of understood and own from a technical to a political in a way that many people in development aren’t good at. Either they are good at the top or they are good at the bottom. They’re good at technical, or they good at the political. It’s pretty rare to have people that cut in between these things.” – Donor

When the Initiative started, IDB already had a good reputation for leading health projects in the region and had presence on the ground in all the Mesoamerican countries. This allowed IDB to work closely with all levels of the health system, from the ministry of health to the health facilities and the providers at the facilities. Additionally, IDB went beyond their traditional role as a bank making loans to work hand in hand with the countries. The team invested itself in leading and supporting the countries’ teams to reach the targets. Within IDB, SMI was perceived also as a unique, “boutique” project that required additional effort, but which led to a deeper and bigger impact. IDB adjusted their working style to provide closer follow-up and technical support. Furthermore, SMI was small compared to other portfolios at the bank and having negative results at this project might affect other investments. This risk was alleviated by having an external evaluator.

External evaluation was perceived as a fair and necessary element of the Initiative by all the audiences. They agreed that evaluation and monitoring should be part of the implementation of any intervention from the beginning and part of the daily process. For the countries, being evaluated by an independent partner validated the results obtained as they were perceived as unbiased, consistent, and collected with a high level of technical precision. At the local level, it allowed them to monitor their progress and get recognition for their hard work. From the donor’s perspective, the external evaluation provided transparent, high-quality, reliable information. Even though it was expensive and represented a considerable percentage of the total intervention budget, the confidence and accountability that it generated in all the stakeholders involved made the investment worthwhile. Moreover, participants stated that the highly valuable data collected should not be only used to inform payment incentives, but also should be further utilized by the countries themselves. Likewise, the external evaluation partner, the Institute for Health Metrics and Evaluation, was perceived by respondents as a credible organization whose partners in the region allowed them to navigate data collection challenges in the region, such as reaching areas with high rates of violence and insecurity.
“Debería de ser una práctica realmente de la Secretaría de Salud que venga alguien externo a la Secretaría. No solo el evaluador departamental. Yo creo que eso es lo que debería hacer. Tener una comisión que evalúe todos los servicios de salud del país. Porque como no nos conocemos, no tenemos amistad. Viene con frialdad, sin ganas de hacer perjuicio. Solo a levantar un proceso. Yo creo que debería ser así realmente la medición, porque si no, siempre están las excusas para, ah no, hice esto por esto. Pero realmente debería ser todo o nada. Yo creo que es una práctica adecuada” – Ministry of Health, Honduras

“Having someone external from the Ministry come should really be a practice of the Ministry of Health. Not just a departmental evaluator. I think that is what should be done. Having a commission to evaluate all healthcare services in the country. Because when we don’t know each other, we don’t have any personal connections. They come with impartiality, without prejudice. Just to carry out the process. I really believe that that’s how the measurement should be done, because if not, there will always be the excuses of ‘I did this in exchange for that.’ But really it should be all or nothing. I think it’s an appropriate practice.” – Ministry of Health, Honduras

Finally, SMI was seen as a seed for change and a catalyst, which took a tiny investment and used it to generate change within the health systems. SMI invested in the health system as a whole and the funds were distributed directly to the Ministry of Health. These diverged from other projects, where the investments are focused on a specific building block of the health system, or where the funds go directly to health facilities. SMI aimed to bring new tools and knowledge to the countries to promote changes in national policies and culture of work towards providing high quality healthcare. However, the sustainability of the specific activities and the longevity of the changes achieved will depend on the country’s willingness and the capacity built throughout the years.

“[SMI] cut diagonally in a lot of different ways and covering the systems as well as multiple verticals simultaneously and kind of building with the end in mind as opposed to starting with a few municipalities and saying, let’s get them to 100%, and then figure out how to scale it.” – Donor

Relevance
SMI has generally been well-received by participating countries, as it addresses critical health issues and targets vulnerable populations in the Mesoamerican region. Overall, the Initiative’s work was perceived as relevant by participating countries, donors, and the IDB due to its alignment with national priorities, its data-driven methodology, and its collaborative approach.

Respondents across audiences indicated that SMI interventions aligned with national health priorities and the pre-existing strategies of participating countries. From the beginning, SMI’s focus on maternal and child health was seen to be a natural choice for the intervention’s focus, as most countries in the region already had health systems that prioritized these vulnerable populations. During the negotiation phase when indicator targets were set, countries agreed on targets through a collaborative process with IDB, and respondents did not report feeling that IDB priorities were imposed unilaterally. Donors also indicated that they believed SMI interventions to be in line with country priorities and were pleased with the collaboration between countries and IDB to arrive at ambitious but attainable targets. Together with country representatives, they also indicated that the decision-making process was transparent, and that all stakeholders involved in key conversations.
“Un aspecto clave [es] que los indicadores de medición que estableció la Iniciativa Mesoamérica eran similares a los que tenemos como país, como Ministerio de Salud. Eso es bien importante porque, este, no se le estaba exigiendo más al recurso humano de lo que ya estábamos trabajando. No era un plus. Sino que eran los indicadores que ya teníamos.” – Health care provider, El Salvador, SMI municipality

“A key aspect is that the measurement indicators that the Mesoamérica Initiative established were similar to those that we have as a country, as a Ministry of Health. This is very important because it does not add an additional burden to the healthcare workforce, it did not require more than they were already doing. It wasn’t extra work. Rather they were indicators that we already had in place.” – Health care provider, El Salvador, SMI municipality

Countries were able to negotiate for targets appropriate for their unique local situations, which was evidenced by establishing different sets of indicators for countries across the Initiative, and customized targets based on country-specific baseline measurements. While at times some country representatives felt that the initial targets seemed too ambitious, both ministry representatives and health care providers found these targets to be motivating, and progress towards the goals inspired further intra-country collaboration. They recognized that decision making involved compromise, and when there was disagreement, all parties tried to focus on evidence-based interventions to guide their decision-making process.

"Creo yo que el trabajo que se desarrolló con los países fue bastante importante…Pero no, no fue un proyecto que simplemente dijeron 'Es por aquí donde hay que hacerlo', sino se construyó con los países. Yo sé que hubo participación fuerte de los países, cada cual daba sus preferencias, por supuesto que había líneas, pero los manuales operativos se construyeron con los países y eso permitió que también de acuerdo a las necesidades y características de cada país, ¿verdad? No era una receta de igual para todo, sino hubo particularidades trabajadas…Creo que empezamos a trabajar como región en un proceso de pensar en que tenemos que cumplir con un resultado, en que tenemos que irnos por unas metas, por unos hitos, más que pensar en el dinero que nos estaban dando." – Ministry of Health, Costa Rica

“I think that the work that was developed with the countries was quite significant…But no, it wasn't a project that simply said, 'This is what needs to be done,' rather it was built together with the countries. I know that there was strong participation from the countries, each one gave their preferences. Of course, there were general guidelines, but the operation manuals were built with the countries and this meant that they were also aligned with the necessities and characteristics of each country, right? It wasn’t a one-size-fits-all approach; rather, there were tailored approaches…I think we started working as a region in a process of thinking about achieving certain outcomes, reaching certain goals and milestones, rather than solely focusing on the funding we were receiving.” – Ministry of Health, Costa Rica

The case of Costa Rica is an illustrative example of the collaborative nature of indicator selection and target setting. According to respondents, at the start of the Initiative the Costa Rican Ministry of Health felt that the country had already successfully addressed the issue of maternal and child mortality but were eager to address the growing issue of adolescent pregnancy. In collaboration with IDB, the ministry of health presented evidence to push for interventions that would address this need, and specific indicators were developed for Costa Rica that allowed them to focus on these specific challenges, thus aligning directly with the country’s priorities.
"We had data, provided justifications, we said to [IDB]...‘Here in Costa Rica, we have studies on neonatal and maternal health, neonatal and maternal mortality... we have this data, we just did this survey of Sexual and Reproductive Health’... We conducted studies, even before considering it as a prerequisite to start the project, we worked with the Interinstitutional Council for Adolescent Mothers... and in the end, it was indeed a negotiation to tailor the Initiative to the needs of the country.” – Ministry of Health, Costa Rica

In addition to target setting, participants reported close collaboration between countries and IDB during the provision of technical assistance. IDB’s role was seen as largely advisory, giving advice and helping to identify gaps where the countries could improve. Respondents highlighted the respectful and collaborative attitudes of the consultants that provided technical assistance, indicating that consultants were able to make recommendations, but that countries were able to decide on the specifics of implementation. It was also important that IDB adapted to pre-existing structures. Not only did this promote buy-in from the countries, but also contributed to the sustainability of the interventions. Due to the positive nature of these interactions, country representatives also expressed a desire for continued collaboration with IDB beyond the end of the Initiative. Representatives from IDB agreed that the technical assistance was a collaborative process that was aligned with country priorities, and distinguished SMI from other initiatives that provide TA without close collaboration with local stakeholders.

"Many organizations come with a package that is already premade of what would be delivered as part of the technical assistance... and many times it’s already contracted when they start the discussion with the country. So they have already one of the big consulting firms that will come and give this assistance. In our case it’s not there before we discuss it. We first look at the problem and actually look at the target. If we want to increase the unmet need for contraception by ten percentage points, then we walk back and say, okay, why? Why are women not using the methods? What is needed?... So it’s a very different approach also in terms of how the technical assistance is provided.” - IDB

Some respondents did recognize that changing political landscapes can represent challenges for alignment with country priorities; what may be prioritized under one administration may be downplayed in another, and as such interventions agreed on with a given administration may come into conflict with the next. While political turnover did represent a barrier to implementation at times, in terms of alignment this was not considered to be a significant obstacle, as the open lines of communication and frequent collaboration between IDB, the countries, and the donors meant that changing priorities could be addressed during the negotiation stages.

Effectiveness (changes in the health system)

The SMI theory of change recognizes that a series of evidence-based interventions targeting health system inputs and processes together with catalysts such as results-based financing and continuous monitoring and evaluation can yield changes in overall system performance and population health. The WHO Health Systems Framework identifies six key building blocks that contribute to resilient systems
and improved health outcomes: service delivery, health workforce, health information systems, access to essential medicines, financing, and leadership/governance. Together these building blocks contribute to systems that are responsive to the needs of the population, efficient in their delivery of service, and effective at improving health outcomes both in terms of coverage and quality. This evaluation of SMI interventions focused mainly on four of these building blocks (service delivery, human resources, use of information, and leadership and governance) which contributed to changes in the health system that respondents perceive as positive, and which have contributed to the perception that SMI achieved its goal of reducing inequities in maternal and child health.

Service delivery

The first building block, service delivery, focuses on the quality and availability of health services that are both timely and efficient. This focus on quality was recurrent throughout interviews across audiences, as respondents identified ways that SMI encouraged HCPs to develop continuous quality improvement strategies. These strategies resulted in the formation of quality improvement teams and taskforces whose function was to review and update quality standards and ensure compliance across levels of care. Quality improvement efforts spanned the continuum of care and demonstrated a focus on atención integral, where health interventions are viewed holistically. Vaccination, contraception, prenatal care, maternal care, postpartum care, etc., all come together in an integrated approach to healthcare, which allows for a transition away from purely curative care towards preventative care and health promotion. Importantly, spillover effects were noted as well, as the success of quality improvement strategies led to their adoption outside of SMI intervention areas.

"Yo diría que el elemento más importante [de SMI] aquí es que el país decidió crear una Unidad de Calidad. Y en base a esa Unidad, poder implementar la estrategia de la mejora continua de la calidad en los hospitales de la población objetivo, pero también, en centros de salud, pero también en aquellos, en el resto del país que no estaban incluidos. Entonces, el país lo que hizo fue tomar, si se compró la importancia de tener a un equipo de calidad específico, exclusivamente para esa labor." – IDB

"I would say that the most important element [of SMI] here is that the country decided to create a Quality Improvement Team. And through this team, they were able to implement continuous quality improvement strategies in the hospitals for the target population, but also in health centers in the parts of the country that weren’t included. So, what the country did was it realized the importance of having a specific team for quality improvement and built a team exclusively for that task." – IDB

“Con Mesoamérica, nosotros estamos implementando un instrumento...que es lo de la hoja filtro, pero también esta vez, agregando lo de la citología para la, como se llama, para la detección temprana del cáncer cervical uterino en estas mujeres, en mujeres en edad fértil. Algunos son elaborados por técnicos de la Secretaría y otros, pues, por compañeros que trabajan en las regiones sanitarias. Y como en este caso, el compañero que colaboró con la iniciativa Mesoamérica que elaboró esa hoja filtro que de hecho nosotros no estamos con la iniciativa, pero siempre utilizamos esta, comenzamos a implementar el formato.” - Health care provider, Honduras, non-SMI municipality

“With Mesoamérica, we were implementing an instrument...the hoja filtro, but also recently, we added a question about cytology for the early detection of cervical cancer in these women, women of child-bearing age. Some were created by technicians at the Ministry and others, well, by colleagues working in others health regions. In fact, we are not part of Mesoamerica project, but a colleague that collaborated with the Initiative developed the screening sheet here and we began implementing it. - Health care provider, Honduras, non-SMI municipality
Quality interventions often focused on responding to the "three delays" that prevent individuals from receiving care: the decision to seek care, the ability to reach a health facility, and the availability of both skilled health personnel adequate supplies that allow for the provision of quality and timely treatment. SMI interventions focused on each of these delays in different ways. For example, to address the need to seek care, health literacy programs were implemented to ensure that women could recognize complications and make the decision to seek care with sufficient time to receive adequate treatment. Cultural adaptation and sensitivity were also important. In areas where community members expressed skepticism about institutional delivery and preferred to deliver at home with traditional birth attendants, work was done to allow for a greater participation of traditional birth attendants in the referral process. Changes in norms at hospitals also allowed for a focus on *porto humanizado*, where women were allowed a more active role in the birthing process, choosing their preferred birthing position and allowing for family members to be present during the birth. Knowing that traditional cultural practices would be respected alleviated some of the hesitancy towards seeking institutional care.

"Mira la sensibilización que se hizo...de que las parteras tengan la posibilidad de remitir con toda confianza a ciertos hospitales...Se habló de la referencia contra referencia...la importancia de la seguridad de la partera de tener ubicado un lugar en caso de una emergencia acudir porque el problema estaba en que había, estaban rodeados de hospitales o de clínicas, pero no en todas se atendían...Después que terminó la encuesta y toda la intervención se detectaron algunos lugares donde se podía atender." – Expert

“Look, the awareness campaign that was done, so that the midwives have the possibility of referring to certain hospitals...we spoke of referrals and counter referrals, the importance of the safety of the midwife, of having located a place to go in case of emergencies, because the problem was that they were surrounded by hospitals or clinics, but they couldn’t practice in all of them...After the survey and the whole intervention was completed some places where they could practice were identified.” – Expert

To address barriers to access to health facilities, interventions were implemented to provide transportation services and offset transportation costs. Knowing that transportation costs would not be prohibitive contributed to an increased willingness by community members to travel to health facilities, even if those facilities were far away. The use of *casas maternas* also addressed the second delay, providing women a space where they could stay after travel while they waited for delivery. To encourage attendance and postpartum care visits, incentive programs were developed. In Honduras, for example, women were offered diaper bags filled with supplies for their newborn if they attended antenatal and postpartum care visits and delivered in a hospital.
"Porque con la Iniciativa Salud Mesoamérica, cómo aumentamos los partos institucionales...le dábamos un incentivo a la partera que nos traía la embarazada, a parir a la clínica, a la parturienta por venir a parir. En vez de cobrarse el tiempo que pasaban, pues le estábamos dando. Y una de las estrategias que más funcionó fue el incentivo de la pañalera a las mujeres que iban a tener su bebé, a las embarazadas. Entonces nosotros, los criterios eran que, si se recibía su primer control antes de las 12 semanas, su parto era institucional, cumplía con sus cinco atenciones y sus controles prenatales, todo, le dábamos la pañalera. Y les mostrábamos que traía la pañalera. Entonces todo el mundo no nos ocultaba...la mayoría venía y decía yo estoy embarazada o yo creo que estoy embarazada. Entonces ellos nos mostrábamos la prueba. Igual les enseñábamos la prueba. Igual le enseñábamos la pañalera, bueno, ya cumpliste uno de los requisitos. Sí, cumplís los otros o los otros cuatro requisitos, digamos, entonces cuando ya vengas a tu puerperio, te vamos a entregar la pañalera. Entonces ellas se motivaban con eso porque aquí tenemos zona de muy bajos recursos. Y contar con una pañalera que traía muchas cosas para el bebé, entonces era un regalo muy importante para ellas. Entonces así pudimos lograr." – Health care provider, Honduras, SMI municipality

“The third delay, the need for adequate treatment, was addressed by ensuring adherence to norms, procedures, and protocols. Following norms and “best practices” allows for accurate detection of maternal complications and improved quality of maternal and neonatal care. Regardless of how thorough norms and protocols may be, however, there is a recognition that they alone are not enough to ensure quality: norms can only be effective when the necessary supplies are available and when health care providers have the necessary training to use available supplies and follow procedures. This emerges as a focus on integral, systemic change to the healthcare system, in which management, supplies, logistics, and training came together with norms and protocols at the national level to provide an increased quality of care.

"With the Salud Mesoamérica Initiative, to increase institutional delivery...we gave incentives to the midwives that brought pregnant women to give birth in the clinics, that brought women in labor to give birth in the clinic. Instead of charging them, we were giving them something. And one of the most effective strategies was the diaper bag incentive that we gave to the women that were going to have their baby, to the pregnant women. So, we, the criteria were that, if they had their first checkup before 12 weeks, if they gave birth in the clinic, if they had their 5 visits and their prenatal checkups, everything, we gave them a diaper bag. And we showed them what it had. So then everyone stopped hiding from us...most came and said, ‘I’m pregnant’ or ‘I think I’m pregnant.’ So, we gave them a pregnancy test. And we showed them the diaper bag, ‘Good, you met one of the requirements. Yes, if you complete the others, the other four requirements, let’s say, then when you come to your postpartum care visit, we’ll give you the diaper bag.’ So, they were motivated by this, because this is a low-resource area. And having a diaper bag that had a lot of things for the baby, it was an important gift for them. So that’s how we did it.” – Health care provider, Honduras, SMI municipality
“Entonces, una de las mejoras era lograr el cumplimiento de la normativa, que la embarazada se le pudiera identificar cualquier riesgo que al final contribuyera a disminuir la mortalidad materno neonatal en los servicios de salud, verdad. Entonces, ahí se evaluaban todos los aspectos, no solo de la atención sino toda la parte de gestión, de insumos, de logística. Era en forma integral para ir disminuyendo la brecha e ir haciendo la mejora continua, sobre todo en las mujeres embarazadas que llegan a los servicios de salud.” – Health care provider, Guatemala, SMI municipality

This focus on quality across the continuum of care translated to increased community satisfaction with the health system. Increased availability of services and equipment was reported to have increased the trust of community members in the health services. Specific supplies and equipment mentioned included vehicles, ultrasounds, medicines, ventilators, incubators, scales, micronutrients, refrigerators, air conditioners, lamps, and stretchers. Respondents indicated that when they see new services being offered and the continued availability of critical supplies, they are more likely to seek health services. Improvements in health infrastructure like the remodeling of facilities, the improvement of waiting areas, and the purchase of fans, chairs, and air conditioners also improved working conditions of HCPs, allowing them to provide higher-quality care.

“Sí, uno de los cambios, como ahora se siguen protocolos, verdad, uno de los aportes que nos vino a dar la Iniciativa, [es] aprender a seguir protocolos. Y en eso, por ejemplo, porque paciente que se capta, se le da el seguimiento. Las personas cuando ven que la institución tiene interés en ellas, regresan. Entonces ahorita lo que hemos visto es que hay una más apertura de las personas a querer asistir a la institución.” – Health care provider, Guatemala, SMI municipality

Finally, respondents also suggested that an unintended consequence of quality improvement strategies is that they are self-sustaining; in other words, sustainability is built into the design. When community members experience quality service, they are more likely to demand it, placing pressure on health authorities to maintain funding streams and quality improvement strategies. This contributed to a recurrent belief that out of all the SMI interventions, those that focused on quality improvement are those that are most likely to be sustainable.
"Yo creo que el elemento [clave] fue la introducción del concepto de aseguramiento de la calidad, porque digámoslo así, cuando los centros de salud adoptaban el concepto y lo ponían en práctica, ese concepto era como autosostenible o se reforzaba. O sea, la gente ya sabía cómo se hacía, ya veía el beneficio, ya incorporó la metodología de la mejora continua. Entonces revisaban los casos, veían qué fue lo que se falló, trataban de resolver de acuerdo a las capacidades que ellos mismos tenían, y eso fue algo como que se fue extendiendo. Antes, antes de eso, la calidad no formaba parte tan claramente de la atención de los servicios de salud, sino que era más bien el volumen o la cobertura. Creo que ese fue un factor determinante para los resultados." – IDB

"I think that a key element was the introduction of the concept of quality assurance, because, let’s put it this way, when the health centers adopted the concept and put it into practice, this concept became self-sustaining and reinforced itself. I mean, people knew how it worked, they saw the benefits, and they incorporated the methodology of continuous improvement. So, they reviewed cases, they saw what had gone wrong, they tried to resolve it using the abilities that they had, and this was something that kept expanding. Before, before this, quality didn’t form such a clear part of the attention of the health services, instead the focus was on volume or coverage. For me, this was a determining factor in the results." – IDB

Human resources
The second building block of effective health systems relates to the health workforce and investment in human resources, in terms of both the availability of personnel and ensuring that personnel are adequately trained. Interview questions aimed to determine the perception of respondents regarding how SMI influenced the availability of health professionals and how SMI contributed to investments in capacity building so that health care providers would be better prepared to provide quality care. In terms of availability, respondents indicated that SMI allowed for the expansion of the health workforce, particularly in regard to the availability of specialists (e.g., epidemiologists, gynecologists, auxiliary nurses). Having specialists available allowed for the expansion of services offered at local clinics and reduced the need for referring patients to far-away hospitals. Sometimes the expansion of the health workforce led to unexpected changes at the administrative level. For example, the implementation of quality improvement teams in Belize was so well received that when the intervention ended, the government redirected funding to maintain staffing levels.

"Se mejoró la atención en el área materna contratando médicos especialistas. Anteriormente teníamos un médico especialista cada dos tres días, pero, el resto de los días era un médico general. Entonces, a veces había que referir a las pacientes y era cuando se complicaba porque no había un especialista en los servicios que las atendiera. Se mejoró la atención contratando médicos especialistas para cada turno." – Health care provider, Guatemala, SMI municipality

"Maternal care was improved by hiring specialists. Before we had a specialist every two or three days, and the rest of the time it was a general doctor. So, sometimes it was necessary to refer patients, and that’s when complications arise, because there wasn’t a specialist available in the health centers to attend to them. The care was improved by hiring specialists for each shift." – Health care provider, Guatemala, SMI municipality

According to respondents, training and capacity building played a fundamental role in the reduction of maternal mortality. A consistent response across audiences indicated that trainings on adherence to norms and protocols were instrumental in creating a health workforce capable of achieving quality standards. These trainings were both the result of technical assistance provided by IDB and investment...
by the ministries of health. The training that health care providers reported receiving was varied and included capacitation across the continuum of care. For example, trainings on maternal and neonatal complications were frequently cited by health care professionals, which allowed them to better identify complications and to treat them more effectively when complications did arise.

“There has been a reduction in maternal mortality for us as a country, comparing where we were before to where we are now after they offer the Initiative. But I think one of the more significant achievements in the fact that our maternal complications were at the point where patients are being identified as at risk for specific complication and the management is being started in a timely manner, which feeds into the decrease in the maternal mortality that we have seen. So I think the fact that the staff is now trained, that they're now more aware of possible complications and the correct management...I think that's one of the most significant changes that we've had during the project, the time frame of the project.” – Ministry of Health, Belize

Other trainings included adherence to norms, the use of newly available equipment as a result of SMI interventions (e.g., infusion pumps, mechanical ventilators), neonatal reanimation, cervical cancer screenings, the use of informational systems as countries began transitioning to electronic medical record keeping, and the insertion of IUDs. As a concrete example, in Belize respondents mentioned training in the use of triage kits to deal with maternal hemorrhage as part of their quality improvement plans. These kits were designed to have all the necessary equipment and medication readily available so that it could be accessed immediately in case of a complication. All these trainings relate directly to addressing the "third delay", discussed previously, which recognizes the importance of quality care in the improvement of health outcomes.

"Sí, la Iniciativa Mesoamérica lo que, de los municipios estaban, algunos fueron capacitados, claro que sí, para la colocación de DIU. Fueron capacitados dentro del marco de la Iniciativa Mesoamérica, fueron capacitados varios recursos en la inserción de DIU y certificado por ginecólogos, siempre en el marco de la Iniciativa Mesoamérica. También estuvo el diplomado Amanece y también otro diplomado de vacunas que era para fortalecer la capacidad instalada de recursos humanos en el conocimiento y manejo de vacunas y de la atención materno. Y eso fueron de varios niveles, no solamente de nivel local, sino que también de nivel región. En su debido momento.” – Health care provider, El Salvador, SMI municipality

“Yes, the Mesoamérica Initiative, in the municipalities that were in it, some people were trained, of course, to insert IUDs. They were trained within the framework of the Mesoamérica Initiative, many people were trained for IUD insertion and were certified by gynecologists, always within the framework of the Mesoamérica Initiative. There was also the Amanece certification, and another vaccination certification that was to strengthen human resource capacities regarding the knowledge and management of vaccinations and maternal care. Those certifications were both at local and regional level.” – Health care provider, El Salvador, SMI municipality

An additional component of human resource development entailed the empowerment of local actors traditionally outside the health care system to provide important health services within their communities. A significant intervention was the training of community health workers deployed in communities across the intervention municipalities to increase the capacity of the health care system. These CHWs served essential functions such as providing basic curative services, leading educational workshops for community members, and referring people to health facilities when their health concerns
were outside of their capacities. CHW were also trained in the recognition of danger signs in newborns and children, how to effectively treat diarrhea, the importance of institutional delivery, especially for complicated deliveries, and in the promotion of breastfeeding and cervical cancer screenings.

"The stakeholders were way different compared with what we were before [and] had to do with persons like community leaders. So, before a lot of what we did for help was directed towards the nurse doing the health promotion, the doctor doing the health promotion to help the education, the orientation. But when we started to do the community platform part of the project, we turned to all the, for example, the pastors in the community, the people who are natural leaders in their community, and we were able to use them to provide health education, information and orientation in regard to topics related to maternal and child health." – Ministry of Health, Belize

These CHW worked hand-in-hand with clinics to form an integral approach to community care, which reflects a more general strategy of a collaborative approach to health care that respondents perceived as a result of SMI interventions. There was a consensus that training was distributed across stakeholders at different levels of care. For example, in Honduras training was conducted with health administrators, who then provided training to hospital and clinic personnel, who then provided trainings to community health workers. Lines of communication were opened between CHW and HCP, which allowed for greater expansion of the referral network and the ability of providers at different institutional levels to treat patients effectively. This collaboration between actors across institutional levels fostered an attitude of teamwork and encouraged different individuals to work together towards a common goal. While the targets set by the Initiative were considered ambitious, respondents found this to be motivating, and demonstrated a recognition that the targets could only be achieved through multisectoral collaboration. Monitoring over the course of the Initiative also increased motivation, as HCP were able to see concrete progress towards their goals. This collaboration was perceived to be fundamental to the goal of meeting and maintaining quality standards.

"La unidad de calidad realmente abrió el abanico de participación a nivel local de un equipo conformado solamente por médicos y enfermeras, a un equipo conformado ahora por todas las disciplinas que hay en el hospital que apoyan la salud materno infantil. Por ejemplo, está el jefe de servicios médicos, la jefa de enfermería, las enfermeras que dan atención a las mujeres en el, las enfermeras obstetras. Están las enfermeras de atención primaria representadas ahí, laboratorio, farmacia. Y ahora, cuando uno hace las visitas de terreno, es realmente sorprendente cómo se expresan en términos de calidad. Se expresan en cómo ellos están contribuyendo con la calidad de los servicios. Se ve más trabajo en equipo. Y se ve un equipo multidisciplinario. No solamente los que están brindando la atención clínica." – Ministry of Health, Belize

“The quality improvement team really opened up the range of participation at the local level, from a team that was comprised only of doctors and nurses, to a team comprised of people from all the disciplines in the hospital that support maternal and child health. For example, there’s the chief of medical services, the head nurse, the nurses that care for the women in the...the obstetric nurses. The primary care nurses are represented there, the lab, the pharmacy. And now, when you do site visits, it’s really surprising how they express themselves in terms of quality. They convey how they are contributing to the quality of services. You see more teamwork and you see an interdisciplinary team. It’s not just those that are providing care in the clinic.” – Ministry of Health, Belize
Building a network of community health workers was also an important part of increasing the cultural competence of health care providers and recognizing the importance of adapting health services to the unique cultural practices of diverse communities. Sensibility trainings were offered to increase knowledge and awareness of cultural differences, including training in parto humanizado, which allowed women from indigenous communities to take a more active role in decision making throughout the birthing process. For example, when possible, women were allowed to choose their birthing position, and family members and traditional birth attendants were allowed to accompany women during birth. Training in these strategies helped to address the first delay, because women who knew that their cultural practices would be respected were more likely to make the decision to seek care.

"Todas las actividades que se hacen, incluso las normas de atención tienen los ejes de pertinencia cultural y de género. Entiendo que son temas que a la vez se vuelven complejos en lo local, pero cuando uno lo logra interpretar, también dentro de ello hay acciones sencillas, verdad. Como por ejemplo uno de los indicadores que siempre se ha hablado, que es, por ejemplo, el acompañamiento de la señora en su prenatal, en su parto, el acompañamiento de la comadrona, poder tratarla como persona con su nombre, el poder brindarle pues, bebidas caseras como normalmente se ha promovido. Creo yo que ese ha sido un tema importante, que sí se tomó en cuenta. Seguramente. Y se insiste en ese tema. De tal cuenta que hoy tenemos mucho, mucho personal...no solo que está sensibilizado, [sino] que conoce el tema de la interculturalidad y la pertinencia de los servicios, la adecuación de los servicios." – Ministry of Health, Guatemala

“All of the activities that are done, including the norms of care, revolve around culture and gender. I understand that these are topics that can become complicated at the local level, but when you break them down, they are really comprised of simple actions, right? Like for example one of the indicators that has always been talked about, for example, the midwife being able to accompany the women to her prenatal care, the accompaniment of the midwife during the birth, being able to treat women as people, using their names, being able to provide them with natural drinks that have normally been promoted. I think that this has been a really important topic, and it has been taken into account. Certainly. It’s insisted upon. To such an extent that today we have many, many employees that are not only aware of these topics, but rather they embrace the topic of interculturality in the provision of healthcare and the adaptation of services." – Ministry of Health, Guatemala

An additional component important to the strengthening of the health workforce was HCP job satisfaction. Respondents indicated that improvements to health infrastructure like critical repairs in clinics and hospitals and the increased availability of supplies improved working conditions and morale of health care providers. This had a spillover effect on community satisfaction with the healthcare system: workers who are satisfied in their responsibilities and work environments are better able to provide quality care, which leads to increased trust and confidence in the health care system.
“Mejora la presentación del hospital, mejora el entusiasmo del personal de estar trabajando en un lugar, pues, cómo, hasta el personal de enfermería se siente mejor porque la gente ya no le reclama a ellos. La gente no sabe quién es el responsable de algo que no esté bien y como enfermería está ahí a la mano, con ellos reclaman. Entonces el personal de enfermería se siente bien porque las personas no reclaman, que no hay luz en este lado o que no hay agua en este chorro, verdad.” – Health care provider, Guatemala, SMI municipality

“When the conditions of the hospital improve, the enthusiasm of the people working there also improves, because when they’re comfortable, even the nursing staff feels better, because people stop complaining to them. People don’t know who is responsible for something not being right, and since the nursing staff is right there, they complain to them. So, the nursing staff feels better because people don’t complain that there’s no light over here or no water over there, right?” – Health care provider, Guatemala, SMI municipality

Finally, capacity building of the health workforce was identified as a key component in the sustainability of the results achieved by SMI. While staff turnover was frequently identified as a barrier to sustainability, both the training of health workers and updates to norms and procedures at an institutional level helped to create institutional knowledge that could be sustained through governmental transitions. Respondents also recognized that the effects of turnover in the health ministries could be mitigated by capacity building at the local level. Health care professionals on the ground who are trained in quality standards can pass the skills and knowledge that they acquired to new generations of HCPs and can also bolster the case for the need to maintain quality policies to health authorities.

“Pero yo creo que la Iniciativa fue buena. Trajo un impulso a la ley de servicios. Deja capacidad instalada que al final es lo que más nos interesa. Que los mismos equipos fortalecidos gestionen, presionen el sistema. Y eso sucede, sucede y también es como la gota que abarca esas aros de depresión hacia las orillas. Entonces promueven participación de la comunidad. Entonces eso es bueno. El país lo necesita.” – Ministry of Health, Guatemala

“I believe that the Initiative was good. It brought momentum to the law of services. It built capacity, which is what most interests us at the end of the day. The same teams that have been strengthened put pressure on the system. And when this happens it’s also like a drop that sends out ripples towards the shore. So, they promote community participation. This is good. The country needs it.” – Ministry of Health, Guatemala

Health information systems

The third building block of effective health systems addressed by SMI is the use of information and the expansion of health information systems. Many respondents indicated that data collection and management was significantly improved through the transition to electronic medical record keeping, which allowed improvements in the quality of care because health care providers could more easily monitor the progression of a patient over time. Electronic record keeping also facilitated communication between health centers. For example, a representative from the Salvadoran Ministry of Health indicated that by building on the success of electronic records in Nicaragua, El Salvador was able to achieve connectivity of 98% of their health facilities to an electronic referral network.
"Something that is like a side effect of these interventions are the improvements in the information systems that we could see over time. I mean, in several countries when we started working there, there was like no electronic information system. At some point there was an information system, but nobody used it. And in the final stages it was way more used and it was in place. So I think this is like a positive effect also of the intervention." - Expert

Efforts to improve record keeping resulted in the creation of several innovations including quality checklists to ensure that appropriate checks were performed and medications were administered, vaccination logs at health centers, monitoring sheets for prenatal care, family planning tracking, and periodic evaluations of partograms. Checklists were particularly helpful for improving treatment while women were still in the hospital. For example, in the case of maternal complications, checklists of procedures and medicines were reviewed as soon as the patient was stabilized, and any deviations from the norm could be corrected immediately. This change in the management of complications was noted as a significant improvement compared to the time before the Initiative, when complications were sometimes not reviewed until weeks or months later.

"Creo que el cambio más valioso son los procesos de atención. Y uno que nos introdujo la iniciativa es el monitoreo de la atención de la mujer o el niño con complicaciones. Porque antes lo que se hacía era, se atendía la complicación, evaluábamos ese expediente clínico un mes después o al final del mes. Ahora lo que estamos empujando es que ese monitoreo se haga cuando la mujer está dentro del hospital todavía. Entonces, sucede una complicación obstétrica, el personal se dedica a estabilizar a la paciente. Una vez que la paciente está estabilizada, tenemos una lista de chequeo que se pasa inmediatamente después de la estabilización y permite identificar algún proceso que se omitió y se corrije en ese momento. Entonces ya no estamos esperando hasta la auditoría que se hace a nivel mensual. Lo que se pueda corregir en ese momento, se corrije. Lo que tiene que esperar a la reunión mensual, espera la reunión mensual. Pero nos está dando muy buen resultado. Porque así el personal puede ver inmediatamente el nivel de cumplimiento con cada uno de los pasos en el manejo de esa complicación." – Ministry of Health, Belize

"I think that the most valuable change has been in the processes of care. One that the Initiative introduced to us is the monitoring of care of women and children with complications. Previously, what we used to do was treat the complication, and evaluated the clinical file a month later, or at the end of the month. Now what we’re doing is pushing for this monitoring to happen when the women are still in the hospital. So, when there’s an obstetric complication, the staff focuses on stabilizing the patient. And once the patient is stable, we have a checklist that we review right after the patient is stabilized, which allows us to identify if any processes were missed, and we can correct it in the moment. So we’re no longer waiting until the monthly audit. What can be corrected in the moment is corrected. What needs to wait until the monthly meeting waits until the meeting. But it’s giving us good results. Because now the staff can see immediately the level of compliance with each step in managing complications.” – Ministry of Health, Belize

Other particularly effective innovations included the hoja filtro, which was used to improve the identification and monitoring of pregnant women, and the libro del niño which was developed in El Salvador to comprehensively track births, vaccinations, deworming, micronutrients, distribution of ORS and zinc, and diarrhea monitoring. The information collected in the booklet allowed health facilities to develop their monthly outreach strategies more effectively because they could focus on reaching
children who were most in need of services. The tool was so successful that it was later adopted in Honduras as well, and in El Salvador some of the information collected in the booklet was eventually added to the medical record form used in hospitals. Some respondents indicated that new zero-paper policies were threatening the sustainability of the tool, but there was hope that the data collection would continue in some form given the success of the program and its widespread acceptance and use across facilities.

"En ese momento, como muchos de los esfuerzos que se llevaban, se tenían en papeles, en libros precisamente donde se definían un conjunto de variables que se tenían que recoger de cada atención para garantizar la trazabilidad de esos niños, garantizar el cumplimiento de la normativa, garantizar las actividades que contemplaba la Iniciativa, darle seguimiento y poder tener información al día. Ahí, a través de esos libros. Esos libros ahora son parte del expediente clínico electrónico en los que se ha desarrollado la historia clínica perinatal, en el que ya se atienden de forma digital las gráficas y todo lo que se le da en un control a un niño. Entonces, obviamente ya tenemos prácticamente las variables de ese libro ahora en expediente clínico electrónico. Ahora ya se tienen estos formatos, pero obviamente inició a través de esto, de esta modalidad o de estos formatos antiguos en papel. Pues se desarrolló los esbozos a través de la Iniciativa." – Ministry of Health, El Salvador

“At that time, a lot of what was done was done on paper, in booklets that laid out a series of variables that had to be collected during each visit to guarantee that these children could be tracked, to guarantee adherence to the norm, to guarantee the activities that the Initiative was considering, to follow up and have up-to-date information. It was through these booklets. Now these booklets are part of the electronic medical record which now includes the perinatal clinical history, which now includes digital graphs and everything that is done during a child’s checkup. So, obviously we have practically all of the variables from these booklets as part of the electronic medical record. Now we have them in this format, but obviously it began through that old paper format. And these drafts were developed through the initiative.” – Ministry of Health, El Salvador

Another fundamental component of improved use of information was monitoring and evaluation strategies. This was particularly relevant in terms of meeting the targets set by SMI, which reflected a shift away from process indicators to results based indicators. To meet these indicators, quality improvement teams were organized at health facilities who were responsible for identifying gaps and tracking improvement. These teams held frequent meetings with providers and medical directors to review cases and identify areas for improvement, following a workflow of evaluation, execution, and reevaluation. Salas situacionales were also conducted to allow for review of complications and to determine what could be done in the future to improve outcomes. These monitoring and evaluation strategies allowed for continuous feedback and improvement, and also helped countries prepare for external evaluation. For example, health facilities would conduct their own internal evaluations, and IDB also organized smaller independent evaluations to track countries’ progress towards indicator targets. Respondents shared that at times the results from the external evaluations were quite different than what internal monitoring was reporting, but that seeing these results and discrepancies led to closer adherence to norms and protocols to narrow the gap between internal monitoring and external evaluation.
"Eso creo que es uno de los valores agregados de, de Salud Mesoamérica. Todo el tema de la información que se genera y las mediciones y la visualización que no se tiene en otros proyectos, ¿no? de los ministerios. No se puede decir cómo va este indicador, si ha logrado o no, y con mediciones claras ¿no? Entonces, creo que acá se encontraron con bastante información que se podía demostrar y, y esas gráficas de: ‘Mire cómo ha avanzado esto’, lo que creaba como conciencia de que era un buen proyecto." – IDB

That I think is one of the value-adds of Salud Mesoamérica. The whole issue of the information that is generated and the measurements and visualizations that don’t exist in the Ministry’s other projects. You can’t say how an indicator is going or if it’s been achieved or not without clear measurements, no? So, I think that here they came upon a lot of information and could demonstrate with graphs: ‘Look how this has advanced, look how this has advanced.’ And this created the sense that it was a good project.” – IDB

The use of data dashboards was also identified as a key innovation of SMI interventions. Similar to the strategies discussed above, data dashboards allowed for information sharing across the country and allowed stakeholders to track progress towards indicators, identify successes and areas for improvement. Seeing the progress towards the indicators visually also served as a source of motivation for HCP, who were able to visualize the effects of the quality improvement strategies that they were implementing. While data dashboards were considered helpful, respondents did identify some barriers that prevented their full implementation. For example, some HCP found them to be unintuitive to use, and the learning curve was steep. A generalized cultural resistance to change was also identified as a barrier to implementation.

"Yo creo que ahí tener [los tableros] con la facilidad de entrar los datos y manipular y visualizar, fue una gran ayuda, no? Porque el espíritu de la iniciativa era resultados e indicadores y datos. Y ahí se facilitaba todos los aspectos del procesamiento, no? Era más rápido. Se reducía los errores. Vamos a decir, recordando, manipulando en papel, entrando los datos después. Con los tableros, pues todos los beneficios que sabemos que proporciona esta metodología, no. Y, permitía monitorear mucho más ágilmente, más fácilmente, darle feedback a los servicios, indicarles dónde estaban fallando, qué indicadores estaban quedando cortos." – IDB

“I think that having [the dashboards], with the ease of entering the data and manipulating and visualizing it, was a huge help, no? Because the essence of the Initiative was results, indicators, and data. And that facilitated all aspects of the process, no? It was faster. There were less errors. Let’s say, having to remember information, handling papers, entering it later. With the dashboards came all the benefits that we know this methodology provides, no? It allowed for monitoring more quickly, more easily, giving feedback to the health centers, letting them know where they were falling behind, what indicators were coming up short.” – IDB

Relatedly, improvements regarding the use of information also involved opening new lines of communication between different levels of health care. This was particularly important in improving the referral networks and adherence to follow-up appointments. For example, to improve postpartum care in El Salvador, CHW would visit area hospitals and obtain the delivery logs to determine which women in their communities had given birth, and then follow up with these women to ensure that they attended their postpartum care visits 3 and 7 days after delivery. Similarly, in Belize CHW reported changes in documentation requirements over the course of the Initiative and more rigorous referral strategies. For instance, to improve prenatal care coverage, CHW were trained to refer women to clinics within two months of their last menstruation, compared to six months prior to the Initiative. WhatsApp also became an important tool, particularly during the pandemic, to facilitate communication between HCP.
Providers across the continuum of care created WhatsApp groups to inform facilities about women that had been referred.

"Something that happens that is associated to continuity of care is that unfortunately they're not very formal channels. For instance, like referrals, if they have a woman at the local level that they want to refer for a delivery or a follow up, or if she’s having some complications to a higher level, what usually happens...if this woman is referred to a certain higher level, that woman might go and someone might receive her, maybe not, and then they send her back...and that might end there. But with the Initiative, several lines of communication started, and usually there were WhatsApp where the people wanted to make sure that the woman was seen. So they texted the people from the hospital and say like, hey, I have this woman that has these complications. Can you see [her]?...So [I] have this woman with complications. Could you see her?...Okay, I’m going to send [her] to you, etcetera, etcetera." - IDB

"I see that there are things that, like today I’m learning a lot, because before when I started it was different. Filling the books in the clinic and everything was more relaxed, a lot different. Now we have to document things in three or four books, because the reason for the consultation varies a lot, sometimes those that need family planning come, people with diabetes, people with blood pressure issues that want to be checked. So, we have to do a little bit of everything and everything goes in a different book. Even the visits that they do, when they give the pregnant women a date, now that’s documented...It’s very different now to fill out those papers, those books, but in my opinion it’s good because that way people don’t pile up and they come in order and it gives you time to document everything in the book. There are things that we are still learning now because we had stopped going, with COVID we stopped going. And now it’s all different. It’s not like what we learned at first, now it’s different and we’re learning more things.” – Community health worker, Belize

Improvements in data management also led to improvements in the supply chain process. Stockouts of critical medicines negatively impact the ability of health facilities to provide quality care. Quality improvement programs led to improvements in the tracking of medical supplies and the ability of health facilities to procure critical supplies. Verification systems were implemented so that providers could determine current stock levels and plan well in advance if orders were needed. Similar improvements were made for equipment supplies, so that broken equipment could be replaced or repaired without significant implications for treatment. As one example of supply chain improvements, in Belize, emergency procurement programs were implemented which allowed for health care providers to quickly obtain medicines that dropped below critical levels. Respondents indicated that supply chain
logistics continue to be an area where improvement is needed, but support from SMI funding was perceived as contributing to more effective procurement strategies.

“We’re, we’re still having issues where [logistics] is concerned, but due to the Initiative...if the hospital has a dire need...then they’re able to do like emergency procurements now...whereas that didn’t really exist before. So now, the country still has issues with their supply and their supply chain because it’s a constant, it’s a constant battle. But now, if, I’ve been asking, for example, for magnesium sulfate, and...it’s not being done. And if I basically am running out and I have an emergency, I can ask for an emergency procurement because of the Mesoamérica program. So, it’s really helped. When we have a dire, something dire occurs…it’s really helpful that it’s there.” – Health care provider, Belize, SMI municipality

The focus on data, monitoring, and external measurement was a hallmark of the SMI, intended to help identify gaps and operationalize continuous quality improvement. However, access to information was not guaranteed at the HCP level. Some providers reported in their interviews toward the close of data collection that they had not received the results of the third operation measurement.

"Y no nos sentimos, le diré, en lo personal como equipo, no nos sentíamos bien, no sabemos los resultados ahorita del tercer tramo no sabemos si logramos pasarnos o no logramos pasar porque eso, pues, todavía no lo han socializado. Pero, con el nivel de compromiso que nosotros trabajábamos el primero, el segundo tramo, sentimos que no fue el mismo compromiso con el tercer tramo. No porque no quisimos, sino porque tuvimos la pandemia encima y todo, muchas cosas cambiaron, verdad, y que hasta ahorita las estamos retomando. Entonces nosotros sentimos como como un poco de decepción, le diré, de que pucha, no le pusimos el mismo empeño a la Meso hoy...
Todo el mundo dice la Meso ya no sigue o la Meso aquí, pero nosotros todavía, al punto de hoy, trabajamos como la Mesoamérica nos vino a enseñar.
... hay muchas cosas que nos ayudaron a ser mejores en nuestro trabajo.” – Medical director, Honduras

"And we don’t feel, I’ll tell you, personally as a team, we didn’t feel good, we don’t know the results right now of the third stage, we don’t know if we managed to pass or we didn’t manage to pass because that, well, they still haven’t been publicized. But, with the level of commitment that we worked on the first, the second stage, we feel that it was not the same commitment with the third stage. Not because we didn’t want to, but because we had the pandemic on us and everything, many things have changed, right, and until now we are resuming them So we felt a little disappointed, I’ll tell you, what the heck, we didn’t put the same effort into the Meso today...
Everybody says the Meso no longer follows or the Meso here, but we still, to the point of today, work as Mesoamerica came to teach us. ... there are many things that helped us to be better in our work.” – Medical director, Honduras

Improvements in data collection contribute to the sustainability of the Initiative. By building the capacity of HCP and health authorities to develop and deploy monitoring and evaluation strategies, health systems were perceived as better able to determine where gaps in coverage are and to focus their strategies on closing these gaps. This also came up in reference to the COVID-19 pandemic. While not directly a result of SMI, the increased functionality of health information systems that were developed as part of the Initiative were able to be used during the pandemic.
Leadership/governance

Finally, respondents were asked a series of questions that sought to determine the extent to which SMI interventions led to changes in leadership and governance at the institutional and national levels. Leadership and governance are known to be important components of effective health systems and can be measured both in terms of the policies and protocols that leadership implements and the extent to which adherence to these policies is tracked and enforced. Questions explored changes in administration, communication styles, the management of the health system, and how different levels of the health system relate to one another.

Related to the changes in the use of information described previously, increased access to data has allowed ministries of health to make more timely and targeted decisions, and also to involve providers at the regional and local level in the decision making process. In Belize, for example, the availability of electronic data meant that regional administrators were able to collaborate more closely and tailor protocols to local realities based on available data. This resulted in a shift away from a top-down leadership style to an approach where providers at the primary and secondary levels of care can be involved in the decisions that have implications for their communities.

"Before the Ministry, the minister would ask for reports from the region in regards to how they're performing and certain things, and that report would be provided to them and then it would be shared and they would make whatever necessary decision based on that. But with the Initiative, when everything went digital, the Ministry now has access to a Dashboard that is updated on an hourly basis...so it allowed them to make sometimes more timely decisions. Because before they would have to ask and then somebody would have to prepare the report and then send it to them...But now with the electronic aspect that allows them to have that immediate access to information where needed. Now a lot of the meetings that are held with including the regional heads...to see how whatever decision that's going to be made is going to impact those specific regions. And they also reach out a lot to the staff to see if it's feasible rather than just implementing something and saying, okay, everybody has to do this there. They always leave that space for this stops response in regards to what or how it would affect if it's something that's doable given the different conditions that everybody works in." - Expert

Funding from the Initiative also allowed for greater collaboration between local providers and central leadership. For example, some respondents observed that prior to the Initiative, ministers and other health authorities often did not have adequate funding to be able to visit distant municipalities and as such had limited information as to the reality on the ground. SMI allowed for increased opportunities for leadership site visits, which not only allowed for a greater understanding of local challenges at the central level, but also demonstrated to local providers that health authorities cared about their work. This collaboration further opened lines of communication where providers could convey their challenges, needs, and achievements.
“Um, like I was saying, on one hand, directly related to the Initiative, the fact that we were measuring the indicators in such a way that if they targets weren’t being met, or if the right activities weren’t being done, the necessary steps were taken to guarantee that the indicators were met. It seems to me that the reallocation of the budget, the reallocation of resources to strengthen certain areas for the development of the project, also led to decisions that guaranteed having the necessary supplies and everything necessary for carrying out program activities. The indicator evaluation led to the reorganization of health services and it was part of the utility of the evaluations that were done. So different adjustments or activities or assignments that were done because of the analysis of the initiative that was done and with the goal of guaranteeing meeting the targets and the activities that led to meeting the targets.” – Ministry of Health, El Salvador

Also related to the use of information, the ability to monitor progress towards indicators in real time allowed ministries to make timely decisions. Respondents indicated that this was a positive change in health leadership, where problems and obstacles could be identified quickly and changes in policies, at both the local and national level, could be implemented to keep countries on track to meet their targets. Additionally, some ministry representatives expressed that rather than create totally new workflows, SMI interventions helped health ministries to improve and streamline workflows that were already in place.

“A policy doesn’t have to be something written in a book or in a document at the ministry level. A policy can be a change in an SOP in the health facilities. That’s also policy. And to be able to improve quality of care and provision of certain, I think, services, that means you have a change in policies. Some of the examples is the casa materna. If you were to build extra facilities or to build facilities that provide delivery in a certain way based on cultural preferences, that for me is already a change in policy. So it doesn’t have to be a written document to be a policy if you practice it, that’s already a policy.” - Expert

"Lo que hizo la Iniciativa nos apoya; como implementar lo que nosotros ya manejábamos, salas situacionales, el análisis, toma de decisiones. Siempre hay orientación que se tomaba de la Iniciativa, pero se fue como mejorando esto y logrando que se sistematizara a nivel de estos, de estos establecimientos." – Ministry of Health, El Salvador

"A policy doesn’t have to be something written in a book or in a document at the ministry level. A policy can be a change in an SOP in the health facilities. That’s also policy. And to be able to improve quality of care and provision of certain, I think, services, that means you have a change in policies. Some of the examples is the casa materna. If you were to build extra facilities or to build facilities that provide delivery in a certain way based on cultural preferences, that for me is already a change in policy. So it doesn’t have to be a written document to be a policy if you practice it, that’s already a policy.” - Expert
The perceived success of some SMI interventions also led ministries of health to implement successful programs and services in other parts of the country. For example, in Costa Rica, the success of programs targeted at the reduction of adolescent pregnancy in intervention municipalities led to decisions at the national level to institutionalize the programs and implement them in other areas. This, too, contributed to the sustainability of the Initiative, as the institutionalization of programs increases the likelihood that they will continue after program funding ends.

"Yo creo que eso permitió a nosotros, realmente, en esos contextos, poder generar esos cambios y cambios más sostenibles. Porque no era solo venir y montar algo ad hoc, que pudiera dar algún resultado en el corto plazo. Era trabajar con el sistema, generando las coordinaciones que eran necesarios y promoviendo esa institucionalidad de las acciones que se estaban cambiando para que pudieran tener más chance, más chance de mantenerse en el largo plazo. Muchas de esas prácticas tenían que ser parte de una nueva cultura de atención y eso solo se logra con tiempo y persistencia y presencia. Entonces, eso creo que fue, lo que la Iniciativa logró, implementar y logró, en esos ámbitos, vinculando a un enfoque de intervención, que era muy importante, un enfoque realmente integrado y sistémico." - IDB

"I think that this allowed us to, in these contexts, generate these changes and more sustainable changes. Because it wasn’t just coming in and setting something up ad hoc, that might achieve something in the short term. Rather it was working with the system, facilitating the coordination that was necessary and pushing for the institutionalization of the actions that were changing so that there was more of a chance of them being maintained in the long run. Many of these practices had to be part of a new culture of care, and this is only achieved with time and persistence and presence. So, this was I think, what the Initiative succeeded in implementing in these environments, connecting an intervention focus with an integral and systemic focus, that was really important.” - IDB

Policy changes were also reported as a result of the SMI’s financing model. Experts emphasized the importance of framing monetary incentives as compensation for costs instead of demand incentives. They cited the example of Nicaragua, which was successful in implementing a transportation voucher program by framing it as compensation for out-of-pocket transportation costs, and Panama, where the voucher was unsuccessful because it was framed as cash incentive to seek services. According to respondents, the success of this program in Nicaragua allowed for greater openness to the idea of cash incentives, which were once considered taboo.

"Y creo que el Ministerio de Salud le perdió el tabú a este tema de poder entregar un incentivo monetario, no como incentivo de, te pago por hacer esto, sino como compensación costos directos, que encuentras al buscar la atención de salud. Bien diferente. En la operación de Panamá quisieron importar, replicar esa experiencia de los vales. Y, fracasaron. Porque precisamente no tuvieron la constancia de presentárselo así, no como incentivo a la demanda, sino como una compensación en costo directo. Que igual es necesario acá." – IDB

“I think that the Ministry of Health shed the taboo of offering a monetary incentive, not an incentive of ‘I’ll pay you for doing this,’ but rather as a compensation for direct costs that are incurred when deciding to seek care. It’s very different. In the Panama operation they tried to import, or to replicate the experience with the vouchers. But it failed. Precisely because they didn’t have the resolve to present it not as a demand incentive, but as a compensation for direct costs. Which is also necessary here.” – IDB
Some respondents did indicate skepticism regarding the impact of SMI on institutional change. Turnover due to changes in administrations can be a barrier to maintaining institutional knowledge and the continuation of program activities. This means that even if changes are institutionalized at the lower levels of care, changes at the administrative level may be more susceptible to changing political environments. As one example, implementation of the Ley Nacer con Cariño in El Salvador meant that certain procedures implemented during SMI would need to be revised. This example illustrates that the institutionalization of effective policies should remain a priority so that health systems can sustain improvements in coverage and quality of care even as administrations change.

"Ya el instrumento de supervisión de Mesoamérica ya es diferente que el que se tiene ahora. Al que se tenía en 2016 ya no concuerda, porque ahora ya tenemos la Ley Nacer con Cariño, ustedes. Un ejemplo bien claro es que antes monitoreábamos cinco controles prenatales y ahora ya son más porque la Ley Nacer con Cariño pide siete, verdad. Entonces, como ha ido cambiando, ahí es donde vemos que ya de ahí está esa incongruencia. Pero en ese momento, pues ese esfuerzo de la Iniciativa, pues, contribuyó a que mejoraran pues, los indicadores nacionales." – Health care provider, El Salvador, SMI municipality

“‘The supervisory instrument that we had during Mesoamérica is different from the one that we have now. The one that we had in 2016 is out of date, because now we have the Nacer con Cariño law, and it follows the protocols of the Nacer con Cariño law, right? A very clear example is that before we tracked five prenatal checkups and now there are more, because the Nacer con Cariño law requires seven, right? So, as it’s been changing and it could be seen as an inconsistency. But right now, the work of the Initiative, well, it contributed to the improvement of the national indicators.’” – Health care provider, El Salvador, SMI municipality

Overall, respondents identified important changes in service delivery, the use of information, human resources, and leadership and governance that resulted from SMI interventions. There was broad agreement across participants that interventions have contributed to important improvements in the health system, particularly in terms of the data that is available for decision making and the ways that the increased availability of information allowed for increased collaboration between providers at different levels of care. Across these four areas, important barriers were also identified, largely stemming from uncertainty relating to the sustainability of these changes over time.

Barriers and threats to SMI

SMI faced a variety of barriers to success, including the onset of the COVID-19 pandemic described in the next section. The political context of each country played a role, with many countries facing regular regime changes over the course of the Initiative. In the case that positions within the ministry of health were related to the political party in power, respondents noted that there was difficulty in maintaining continuity with the Initiative despite the turnover in these positions, given the shifting of priority areas, the loss of knowledge of SMI and setbacks with explaining and understanding SMI, negotiating targets and interventions, and implementing SMI activities. These setbacks occasionally extended the timelines necessary to negotiate or re-negotiate indicators and implement activities.

“There's not a single country over these 12 years where you have the same people in the ministry that you had at the beginning. The rotation was there, but in some countries, rotation was way more frequent than in others. I think that's a barrier for, for the implementation.” - Expert
“Por ejemplo, se tuvo en el año 2019 el cambio de gobierno. Siempre, siempre ese, siempre esa transición, el hecho de que vengan nuevas personas y empezar el proceso de sensibilización, es un proceso que a veces puede generar retrasos. Porque no pienso que el nuevo equipo haya tenido rechazo. Pero en todo el proceso, cuando la gente viene, se está empapando o tiene otras ideas en mente a desarrollar, el hecho de garantizar ese compromiso que ya se había logrado, a lo mejor con determinado equipo, puede ser una limitante.” – Ministry of Health, El Salvador

“In the case of Guatemala, we weren’t able to advance very much. Guatemala had the same problem that El Salvador had, different quality initiatives. And we couldn’t, we couldn’t help them because there was no quality improvement team and there still isn’t one. I think that now they are proposing to make one, and we’ve helped to organize the maternal and child health processes for the whole country. Through initiative, because the vice minister is something that knows the Initiative well and wanted to do it. But it’s being done through the Viceministry of Health Services, not through a quality improvement team.” – IDB

Other problems with turnover also affected SMI, especially when it came to the regular change of positions in health facilities. Respondents noted that the doctors and nurses who may have been included in the training and quality improvement interventions of the Initiative regularly left those positions for a variety of reasons, causing the loss of relevant knowledge and experience with the Initiative’s interventions. Without a stronger institutionalization of these changes, turnover causes serious setbacks, while in contrast, countries where there was greater continuity at the operational level struggled less with political setbacks or loss of buy-in.

“The countries where the health systems are weaker. The transitions are much more impactful. …There is a lot of more, political decision making into the technical areas of the ministries … in [country], even though we’ve seen like a massive super like a massive change from one government to the next. And that also meant changes within the ministry and the people making decisions as the heads of the ministry. Even though this was a really important change. The, the ministry’s technical capacity and the people that make decisions are very good at following with previous commitments. And continue implementing implementation of evidence based technically sound interventions. So they can pick up from what the other ones left. …In other places like [country], bringing a new team means restarting. You have to go and see it with the teams. And build again from zero. So that of course, every time there is a change, it requires a lot more time and effort to pull things up. So of course, when the context is like
that, it takes much more time and effort to support the implementation and to give continuity to the interventions. Then when they are able to pick it up and continue.” – IDB

Respondents also noted that political unrest and criminal activities affected the Initiative in several ways. Political instability, violence, and conflict led to the disruption of healthcare services, making it difficult for healthcare providers to deliver essential services and for people to access them. Increased risks to the safety of healthcare providers may have contributed to the decision to leave the affected areas, increasing turnover, reducing retention, and causing shortages of trained professionals. Strikes and protests at times affected both the ability for facilities to provide services, as well as struggles with the disruption to the supply chain and access to communities in the case that highways were closed. These issues of political unrest have also affected donors’ perceptions of the efficacy of their investments in some participating countries.

“El contexto social para el país también fue una limitante en su momento. Ahora se maneja pues que los índices de violencia han disminuido, pero en el momento en que se desarrolló la Iniciativa era el momento de auge de las de las pandillas en el país. Y muchos de los equipos tuvieron limitantes para poder tener acercamiento comunitario porque sencillamente no se les permitía el acceso. Y a pesar de que algunos a través de gestiones hacían los esfuerzos para garantizar la prestación de servicios, no siempre se ponía, ni se podía e incluso en algunos momentos se ponía en riesgo a los equipos de salud. Entonces esa era una limitante social.” – Ministry of Health, El Salvador

“The social context for the country was also a limitation at the time. Now the indices of violence have decreased, but the time that the Initiative was being carried out was at the peak of gang violence in the country. And many of the teams were limited in their ability to enter the communities simply because they were not given access. And even though some tried to guarantee access to services, it wasn’t always possible and in some cases the healthcare providers were put at risk. So this was a social limitation.” – Ministry of Health, El Salvador

“Ahora México, Chiapas es un Estado muy complicado de ejecutar proyectos. Es, es, tiene mucha más capacidad, es muy politizado. Tienen por ejemplo muchas huelgas que no permitían por ejemplo, la movilización.” – IDB

“Now Mexico, Chiapas is a very complicated state in which to carry out projects. It has a lot of capacity, but it’s very politicized. They had a lot of strikes, for example, that didn’t allow people to move around.” – IDB

Another barrier to the timely implementation of SMI activities was the complexity of managing a program with overlapping layers of legal, administrative, financial, political, and fiduciary elements, which in part explain why an initiative that was intended to end in 2015 was drawn out until 2022. Respondents noted, for example, that execution of funds can be quite difficult given the bureaucratic structures at play for country governments. A delay in disbursing these funds led to difficulty with acquiring necessary inputs for the Initiative, as well as trouble supporting the human resources involved in the Initiative.
“In my opinion there were more strengths than barriers, I think. One of the barriers may have been the late disbursements of the payments. It could have been a barrier. Staff turnover also, and another barrier is that, even though the payments were late, the financing for the administrative unit, the administrator said that it was really quite small and insufficient.” – Ministry of Health, Honduras

“I think that one thing, I think that there’s a structural problem that needs to be fixed and that the Initiative experienced firsthand: the fiduciary obstacles. I mean, moving one dollar in the public system takes a ton of time. There are many obstacles that make it so hard for initiatives like these to disburse the money. It causes huge problems. The money cannot be used. I mean, there are countries that no longer receive money. Even Costa Rica, Costa Rica says, “If you’re giving me a donation, great, but do NOT give me money, give me goods, I can’t work with money.” Honduras, Guatemala. We have been trying to buy a motorcycle for two years, two years ago we bought it, but we can’t deliver it to the end user. So, there’s a paralysis of public red tape that affects all these projects and which is trying to be dealt with but for which there still isn’t a solution.” – IDB

“Another one was execution and time. Our staff at the ministry is very small. So I feel, you know, when you have a project, you have a financial officer that’s only for that project, a procurement officer that’s only for that project and so forth. But because the staff that the Ministry has is very small, you’re our project officer and our project coordinator was specific for the project. But some of the items, the other staff had multiple activities that they were responsible for. So there was a challenge when it came to execution and procurement. There was a little bit of delay every now and again.” – Ministry of Health, Belize

Respondents also mentioned that the originally proposed timelines for the Initiative, at times reinforced by the expectations of donors, were not always realistic. Delays in negotiations, legal contracting, funds transfers, approvals by all involved parties, procurement, and more elements in this complex project all contributed to delays. Furthermore, indicator results were expected after implementation periods of only 18-24 months, which many participants expressed was an unrealistically short period given the outcomes-level nature of many performance indicators.
“I mean, anyone really should have said, Wait, wait a second, this is not achievable. It’s not that you guys donors approve the transfer and tomorrow the money is there. So I think there was an underestimation of the, in part of the I would say on the technical side of the, how much it would have taken to really bring the countries on board in this way new way of doing things and the communication towards the donor saying, guys, this is not just writing a check on February 1st and getting spent or disbursed by March 1st. ... it took about 18 months to two years, I would say, to really align expectations and to reduce that friction, to say what you told me that by, uh, by month 24th, we would already have had the first assessment. By month 21st, we were barely starting the first phase and that is normal. I mean, that’s, in hindsight is normal... So I think that is the lessons learned and then things got immensely better.” – IDB

“I would say that it was a bit frustrating at the beginning... it took almost two years to really define all this work that was done locally, government by government in looking at their financial structure, the governance process, which I don’t really know if that was of significant, significant value for the remaining process. I think it was part of their protocol or what they thought that they had to have all this, let’s say, let’s call it like compliance of this different administrative, financial and normative components that they reviewed and all this interaction that it was with the ministers of finance, with ministers of health and a number of elements that they were asked in order to have a I would say, a confident counterpart. But I think it took too much time. I would say that there were moments that we felt a bit like we’re losing. We’re losing the objective of what we’re intending... we know that we have to make sure that we have to do it right and we have to do it the right way. But there’s a lot of time invested in in the legal and in the frameworks. So I think we could learn about that too, for other projects.” - Donor

Another barrier noted by a few participants was the difficulty with addressing certain health areas given the multifaceted nature of addressing different kinds of health problems. For example, childhood malnutrition and anemia were mentioned as topics that are affected by social and economic injustice, rather than exclusively by health service quality and access. Other health topics, such as cervical cancer screening, were introduced to the Initiative later, which was commendable as it demonstrated alignment with country health priorities, but would have required more than one operation to see the desired results.

“Yo creo que el tema de anemia, ese tema era un tema demasiado complicado. Es que la anemia es multicausal, no es un tema solo de la parte de salud, es un tema social. ¿Anemia, la desnutrición, no? Y creo que fue, fue muy ambicioso el proyecto. Digo, fue correcto en la aspiración.” – IDB

“I think that the anemia indicator, this indicator was too complicated. Because anemia is multicausal, it’s not just a health issue, it’s a social issue. Anemia and malnutrition, no? And I think the project was very ambitious, even though the intention was correct.” – IDB
“Pero los temas de desnutrición eran muy complejos. Ósea, creo que sobre sobrepasaban las capacidades de la iniciativa.... Por qué. ¿Eh? Vamos a ver los déficits nutricionales. La mayoría de las veces son el resultado de una falla económica ... Que no hay suficiente alimentación ni en la calidad ni en la cantidad que el niño necesita. Y la solución que podía manejar la iniciativa por tema de costos, y esto, era otorgar micronutrientes. Pero los micronutrientes son un paliativo, son ... Ósea, no es lo mismo que una comida de verdad.” – IDB

“Y creo que en cáncer cérvico uterino llegamos muy tarde. Ahí necesitábamos las tres operaciones y la incorporamos en la última operación. Entonces creo que llegamos tarde. Sin embargo, logramos cosas importantes, por ejemplo, organizar los procesos de atención, disminuir los tiempos .... Lograron algunas cosas, pero creo que llegamos un poco tarde.” – IDB

“I think that we came to cervical cancer too late. We needed three operations but we incorporated it in the last operation. So, we came to it too late. However, we did achieve some important things, like organizing care procedures and reducing times, for example...They achieved some things, but I think that we came to it too late.” – IDB

COVID-19
The COVID-19 pandemic overwhelmed health systems worldwide, leading to shortages of critical resources such as human resources, medicines, and hospital beds. It posed unprecedented challenges and strain on health systems, and governments were forced to redirect their resources to prioritize the pandemic response. Most preventive services and non-urgent medical appointments were postponed or canceled, resulting in delayed diagnoses and treatment for most non-COVID diseases. Additionally, the pandemic exacerbated existing health inequalities. Marginalized communities, including those with limited access to healthcare, those with socio-economic disadvantages, and racial or ethnic minorities have all been disproportionately affected.

Even though SMI was not intended to be a pandemic preparedness program, it was designed to strengthen the health systems of the participant countries. Strong and resilient systems should be able to adequately respond to crises while ensuring the delivery of essential services, such as maternal and neonatal care services. Given that the third operation of the Salud Mesoamérica Initiative took place during the COVID-19 pandemic, several factors related to the pandemic could have impacted the Initiative’s performance outcomes.

“I think we have also identified challenges. For instance, on the positive side, I would say that the pandemic came to prove that if things were in place and if the structures were in place and had the resilience, I would say to support such a demanding activity, and there's still a positive outcome, I think it also has demonstrated that the Initiative has a positive outcome. Even though we have, we had the
challenge of dealing with the pandemic at this at the final stages of the intervention. So, I think it’s a positive aspect as a challenge to the results within the Initiative.” – Donor

All participants acknowledged that the pandemic has posed significant implementation challenges and potentially had a negative effect on the achievements made so far. Patients’ ability to reach health facilities decreased significantly during the pandemic due to limited transportation, lockdowns, service closures, and the reduction of community trust in health services, in addition to a decrease in the number of community outreach activities conducted by the health facilities with the help of community health workers and midwives. These factors resulted in reduced access to prenatal care, skilled birth attendants, and emergency obstetric care, leading to increased maternal and neonatal mortality rates in some areas. Likewise, routine immunization programs were also disrupted, leading to a decline in vaccination coverage. However, for patients that reached the health facilities, they received care in accordance with established procedures as far as the availability of resources allowed. For instance, management of maternal and neonatal complications remained in place, although the facilities faced a shortage of human resources and supply chain disruptions.

“Definitely after COVID-19. The task was way harder. Anything you wanted to do was more difficult than before. And even I think at some point the evaluation I hope is able to capture that, it’s not how things were working before. It’s now how things can work in the new context and how they could, even in terms of such an adverse environment, do some success. So, I think it was totally expected that with the COVID context, the whole information, the whole health systems were under stress not only in Mesoamerica but all around the world. And like any success or even maintaining the situation was good. So, I think we should take that into account. It is not totally reasonable to expect the same level of success that before COVID.” – Expert

While most participants did not observe direct evidence of SMI lessons being applied to improve the pandemic response, some participants highlighted potential spillover benefits. For example, the experience gained from improving vaccination coverage in children built capacities in areas such as maintaining a cold chain, community outreach, and administering multiple doses. Additionally, there were indications of capacity building in interinstitutional collaboration. In Costa Rica, SMI emphasizes intersectoral collaboration and partnership with various organizations, both within and outside the health sector. During the pandemic, the communication channels and the trust built during SMI implementation facilitated collaboration to address the pandemic. Nevertheless, most of the regional efforts and knowledge transfer mentioned occurred independently of SMI. For instance, COMISCA played a role in facilitating centralized purchase of COVID-19 vaccines for the region.
“Y eso, digamos, que fue una práctica, que fue ayudando a ir resolviendo los temas y que fue utilizado después en el COVID. Ósea, no necesariamente fue que dijeron vamos a coger esto que están haciendo acá, pero por lo menos ya había esa experiencia a nivel de los sistemas de salud, sobre todo en las zonas rurales, de montar un toldo, de hacer una campaña, de comenzar a montar listados y comenzar a saber a quién le faltaba. El tema este de los carnets de vacunación, se había recuperado bastante el carné de vacunación. Entonces, a mí me parece que de alguna forma eso ayudó. Cuando ya se montó las campañas del COVID, mucha gente ya tenía experiencia en cómo reactivar campañas de vacunación y cómo hacerlo bien. Y que terminó ayudando, claro.” – IDB

While some responses signaled that providers were not aware of the results from the third operation, implementation teams do not expect outstanding results as in previous rounds, despite the effort invested. IDB representatives and country respondents agreed that the pandemic placed additional strains on the ambitious nature of the SMI targets within an already short timeline. As a result, the implementation teams had to prioritize their efforts and focus on achieving some targets over others. Likewise, the rules for the incentive performance payment were modified. Previously, reaching 80% of the targets was required to receive the full incentive payment. However, given the unprecedented circumstances, the rules were adjusted to a proportional payment based on the targets reached. Additionally, the external evaluation accounts for the pandemic’s disruptive effect and splits the evaluation period to pre-COVID and COVID-19 periods. These modifications have been met with approval from the participating countries, as they will receive some payment to acknowledge their significant efforts during the pandemic.
“Bien, número uno, lo más crítico se tomó la decisión de cerrar centros de salud. Entonces, al cerrar centros de salud no hay producción en el indicador. Todas las visitas de campo se anularon. Ya no se podía visitar la comunidad, ya no podíamos hacer visitas casa a casa. Entonces, ¿dónde se vio el cambio? En planificación familiar. Las mujeres dejaron de planificar y por ende se embarazaron y como se embarazaron, vinieron tardíamente. El parto institucional fue el único componente, de todos los indicadores de Mesoamérica, que hoy por hoy se sostuvo. El parto institucional. Pero atención prenatal temprana disminuyó, planificación familiar, disminuyó. Las visitas domiciliarias y los seguimientos nutricionales dejaron de hacerse. Tuvimos en el 2020 muertes por diarrea que se habían disminuido o desaparecido. Entonces, todo este componente comunitario impactó que los indicadores retrocedieron.” – Ministry of Health, Honduras

“...The fact that SMI was such a little amount of money meant that countries were able to see that it’s not about huge amounts of money coming from outside to be able to make a change. The other part that I think was either intelligently planned or unexpected consequence is having the countries provide certain services and take certain actions that later on cannot stop because the funding stopped. Because once you start providing something to your community or your population, it’s difficult to explain why you stopped it and it becomes part of what you’re doing. And I think the more important factor is the change of the culture in the health system because of SMI. When we think of culture, we think of something that is deeply embedded and repetitive. Which makes it hard to break. The fact that SMI took such a long time in its implementation, that meant that for a tiny amount of sustained money, countries were forced to repeatedly provide certain services over long period of time, creating a new culture or changing the culture. And once you have a certain culture, that’s very difficult to change. So if you let to the culture of providing services in certain quality at certain level, it would be very difficult, even if the funding stopped to stop those actions or behaviors...” - Expert

Overall, the COVID-19 pandemic and its impact on the health system and healthcare provision could have significantly impacted the Salud Mesoamérica Initiative’s outcomes, making it crucial to adapt and respond to these challenges to ensure the continued effectiveness of interventions and the accurate assessment of the Initiative's impact.

Sustainability

Respondents noted that the early design of SMI did not necessarily include a heavy focus on sustainability strategies or exit plans. Despite this, many examples for the sustainability of SMI were given by donors, experts, ministries of health, and healthcare providers.
Perspectives on the prospects for sustainability of SMI are mixed and depend on the angle from which the notion of sustainability is approached. In terms of maintained positive outcomes, while some promising results distinguishing intervention from comparison areas were seen during the second operation measurement of SMI, these tended to fade by the third operation measurement.

“Well, the benefits that aren’t going to be lost, it’s that, essentially, we were able to mobilize the promotion of certain services… and these women that received the benefit of quality care, more convenient care, with qualified personnel, in a clean environment, no? All of this is a benefit that can’t be taken away from these women. I think that also, what can’t be taken away is that these practices have now been established.” – IDB

Despite this, strong themes of changing the culture around quality of health provision arose frequently, with participants indicating that long-term gains include behavior change among health providers, who changed the way they work to give higher quality care to women in intervention areas. The ways ministries of health operate may have changed as well, with some participants mentioning new uses of incentives for good work at health facilities. These incentives, for example the provision new items like water dispensers for high performing facilities, are seen as inspired by SMI and a powerful way to affect positive change with minimal resources available from the ministries. In another creative example that highlighted the empowerment and motivation of local actors and solutions coming from within, healthcare providers were encouraged to submit their quality improvement projects to a competition to be considered for a prize such as computers for winning teams. This openness to evaluation for quality improvement activities is seen as another long-lasting legacy of SMI.

“In fact, for example, we were just discussing the quality project, with the implementation of best practices to promote continuous quality improvement, people can participate and register their projects, and there’s competition among these projects and they receive certain incentives, just now they were telling me that they gave computers to the teams. I mean, the ability to participate in these evaluation exercises, in competition, or in evaluation, it motivates people to implement quality improvement projects and enroll them in these evaluations. So, in one form or another, to a greater or lesser extent, I think that this can be done again, this is a lesson that the Initiative left us with.” - Ministry of Health, El Salvador
“[Y]o creo que eso permitió a nosotros, realmente, en esos contextos, poder generar esos cambios y cambios más sostenibles. Porque no era solo venir y montar algo ad hoc, que pudiera dar algún resultado en el corto plazo. Era trabajar con el sistema, generando las coordinaciones que eran necesarios y promoviendo esa institucionalidad de las acciones que se estaban cambiando para que pudieran tener más chance, más chance de mantenerse en el largo plazo. Muchas de esas prácticas tenían que ser parte de una nueva cultura de atención y eso solo se logra con tiempo y persistencia y presencia. Entonces, eso creo que fue, lo que la Iniciativa logró, implementar y logró, en esos ámbitos, vinculando a un enfoque de intervención, que era muy importante, un enfoque realmente integrado y sistémico.” – IDB

“I think that this allowed us, in these contexts, to generate these changes and more sustainable changes. Because it wasn’t just coming in and setting something up ad hoc, that might achieve something in the short term. Rather it was working with the system, facilitating the coordination that was necessary and pushing for the institutionalization of the actions that were changing so that there was more of a chance of them being maintained in the long run. Many of these practices had to be part of a new culture of care, and this is only achieved with time and persistence and presence. So this was, I think, what the Initiative succeeded in implementing, and succeeded, in these environments, connecting to a focus on intervention, that was really important, an integral and systemic focus.” – IDB

Another change enacted with hopes for sustainability was the focus the Initiative brought on the use of data and monitoring activities to bring about a culture of continuous quality improvement. While respondents noted that the use of dashboards and data for decision-making and quality improvement plans was widespread due to SMI, this change was even further institutionalized, for example in the form of the establishment of new positions within the health system for continuous quality improvement officers in Belize. Other respondents also explained that SMI supported them in establishing processes for reviewing medical records to evaluate quality of care and of record-keeping themselves (for example, medical records related to preconception visits, antenatal care visits, and adolescent care). This effort was scaled up, beginning in Initiative intervention areas, and eventually covering the whole country. The nationwide institutionalization of this program is noted as a strong indicator of sustainability.
“El Ministerio de Salud está apoyando esta estrategia y ya sometimos al Ministerio de Finanzas, la creación de los puestos para estos médicos que se van a dedicar a tiempo completo para el mejoramiento continuo de la calidad. Y hemos observado a través de los años que los indicadores que dependen del personal de enfermería se logran y se mantienen. En el caso de indicadores donde intervienen o dependen de los médicos, pues esos nos han costado un poco más. Por eso es que decidimos como país, que nuestro equipo estaría conformado solamente por personal médico. Porque es el grupo más, más difícil, pues, de lograr cambios en esa cultura de mejoramiento continuo de la calidad.” - Ministry of Health, Belize

“Si, creo que sí [son beneficios que vayan a permanecer o que van a ser de largo plazo]. Incluso el más débil de todos, la parte de la cultura de calidad en los servicios, pero, creo que sí se ganó una mejoría en tener una visión de medir la calidad y poder buscar procesos de mejora continua ya con una cultura más enraizada en los en los proveedores de servicios de salud.” – IDB

“Meanwhile, SMI’s policy dialogue model brought about many updates to norms, policies, and protocols which will remain in effect regardless of programmatic or financial continuity. These changes ranged from new tools (such as the frequently mentioned hoja filtro to identify and provide antenatal care for patients who might be pregnant earlier in their pregnancies), guides, and manuals for healthcare provision in facilities to new national norms around, for example, the treatment of diarrhea or malnutrition in children.

“The Ministry of Health is supporting this strategy and we already proposed to the Ministry of Finance the creation of positions for these doctors that will be dedicated full time to continuous quality improvement. We have observed through the years that the indicators that depend on nursing personnel are achieved and maintained. In the case of the indicators that depend on the doctors, it’s been a little more difficult. It’s for this reason that we decided as a country, that our team would be comprised only of doctors. Because it’s the most difficult group, in terms of achieving these changes in the culture of continuous quality improvement.” - Ministry of Health, Belize

“Yes, I think that [they are benefits that will be maintained in the long run]. Even the weakest one, the part of the culture of quality services, but, I think that we achieved an improvement in terms of having an idea of measuring quality and being able to look for quality improvement processes and with a culture more rooted in the health care providers.” – IDB
Respondents did mention many aspects of integration of SMI elements into the health system, noting that instilling changes in the health system at the local level through behavior and culture change among providers had the effect of insulating the gains through the Initiative against loss due to governmental changes.

“Entonces ahí más bien hubo una época en que me acuerdo yo que un cambio de gobierno alguien mencionó que la hoja filtro no iba y alguien a nivel local me dice primero me matan que quitarme esto, si con esto resolví yo muchísimos problemas de cobertura [Risas]. Entonces pasan cosas como esas que uno le decía a la nueva autoridad mire, está pasando esto, y ellos iban y lo observaban, y la gente a nivel local lo defendía. Pero eso más de lo que te dije de hacerlo con enfoque sistémico, creo que permitió que los cambios de gobierno no nos provocaran mayores problemas, aunque sí los hubieron, pero fueron superados.” – IDB

“So I remember at one point there had been a change of government, and someone mentioned that we weren’t going to have the hoja filtro anymore, and someone at the local level said to me, ‘If they want to take that from me, they’ll have to kill me first, because with that I was able to solve a lot of coverage problems’ [laughs]. So, there are things like that you say to the new administration, ‘Look, here’s what’s happening,’ and they went and observed, and the people at the local level defended it. And this, even more than what I was saying about a systemic focus, I think prevented the government from causing too many problems. Of course there were some, but we were able to overcome them.” – IDB

One unexpected outcome and an example of the lessons learned from SMI extending into the future is the establishment of the new Regional Malaria Elimination Initiative (RMEI), which takes the most important elements of SMI and adapts them to face the problem of malaria elimination. While SMI’s regional design was a motivator for competition and cross-pollination of learning between countries, RMEI applies this regional element to a health problem that must, due to its infectious nature, be addressed collectively.
“So, what we are saying about the way that this impact of the IDB was an unintended consequence, and there’s an array of how this thing... you know, working in Paraguay, moving, using the lessons to the malaria elimination project, that actually that whole project was an unintended partial consequence to this. Continuation of the same work in Guatemala, even though the operations ended. These are all, they were never the design. They’re unintended, but they’re all positive. They’re all positive spillover effects. [Negative] unintended consequences, I would be surprised if there weren’t any, but I can’t think of any of that, kind of rose to the level of concern that I can’t think of right now.” - Donor

In terms of fiscal sustainability, it was mentioned that SMI was able to open new space in country budgets for maternal and child health through the commitment of counterpart funding by ministries of finance. Even so, the end of external financing for SMI is seen as a threat to the continuation of some of its key programmatic interventions as well as to the retention of staff whose positions had been supported by SMI resources. For example, after a well-received and well-utilized implementation of maternal waiting homes and transportation vouchers for antenatal, delivery, and postpartum care during the second operation in some countries, these programs faced uncertainty about whether continued domestic financial support would allow their continuation.

“I expect that, just like in all the countries given the fiscal-economic crisis, it may be difficult to maintain the follow-up, for example, of the changes to the norm that were done, like for example the close monitoring of oxytocin administration, the active management of the third stage of labor or even the vouchers, I wouldn’t be able to say if the intention is there, but on the other hand, the fiscal space to sustain them, I don’t know, I don’t know. When I was there, we were still working explicitly on finding a series of sustainability options for the Maternal Waiting Home operation. That I can tell you we were making good progress because we were able to lobby the municipal governments. We had a lot of success in translating a lot, I mean, given the good results in terms of maternal health, of the Maternal Waiting Homes, we were able to convince the municipal governments to guarantee a good portion of the recurring costs of the Maternal Waiting Home operation. In that sense, for example, part of the value of the Maternal Waiting Home was that sustainability was worked in from the beginning.” – IDB
“Había también limitantes económicas, porque si bien la Iniciativa aporta y refuerza, el ser un país, como le digo que le toca hacer esfuerzos por estirar su presupuesto, a veces limita asumir la contraparte de país en los compromisos de la Iniciativa. Porque a veces a lo mejor el compromiso del país era la contratación de recursos humanos, porque la Iniciativa no lo contemplaba y el país estaba con la dificultad de garantizar la contraparte de absorber al personal que se había contratado en algún momento de forma temporal.” – Ministry of Health, El Salvador

“There were also economic limitations, because even if the Initiative supports and reinforces, the country, as I was saying, has to stretch its budget, sometimes it’s limiting to take on the expense in terms of the requirements of the Initiative. Many times the countries’ commitment was to contract human resources, because the Initiative didn’t take it into account, and the country had the difficulty to absorb the people that had been hired as temporary at the time.” – Ministry of Health, El Salvador

In interviews conducted after the conclusion of SMI activities, respondents cited shortages of basic child care inputs and lack of funding to maintain transportation for community programs. These discontinuities provide evidence that certain programs supported by the Initiative have not been absorbed into routine health spending.

"Ah, sí, pues sí, las enfermeras, cuando ellas vienen, siempre le dan a los niños desparasitante, la vitamina A. Y, siempre sí, daban zinc, daban el zinc y el oral salts. Sí. Y incaparina, sí daban, pero como ahora ya tiene unos cuantos meses que no, parece que no hay a incaparina... Casi como el mes pasado, que yo fui, que preguntamos si tenía zinc y esas cosas, que la gente pedía porque lo necesitábamos. Nos dijeron que en el hospital no había." – Community Health Worker, Belize

"Ah, yes, well yes, the nurses, when they come, they always give the children dewormer, vitamin A. And, always yes, they gave zinc, they gave zinc and oral salts. Yes. And incaparina, they used to give it, but since it hasn’t been for a few months now, it seems that there is no incaparina... Almost like last month, when I went, we asked if they had zinc and those things, that people asked because we needed it. They told us that there was none in the hospital." – Community Health Worker, Belize

"Bueno, la motocicleta que yo tengo es, es de la Iniciativa Mesoamérica. ¿Pero qué pasa ahora? Se me arruinó y ya tengo tres meses que no me la han reparado, el Ministerio. Y yo no la reparo porque son más de 100 dólares. Entonces, eh, cuando era menos, yo, yo la arreglo... Pero ahora sí, ya, ya se elevó un poquito el gasto y pues no puedo, verdad." – Community Health Worker, El Salvador

"Well, the motorcycle that I have is, it’s from the Mesoamerica Initiative. But what happens now? It’s ruined and I’ve already had three months since they repaired it, the Ministry. And I don’t repair it because it’s over 100 dollars. So, uh, when it was less, I, I fixed it... But now yes, now, the expense has risen a little and well, I can’t, right." – Community Health Worker, El Salvador

Despite these mixed results when it comes to the prospects for sustainability of SMI, when asked what they would change about its design, most respondents had little to say beyond wishing that they could have anticipated in advance the particular threats and barriers that the Initiative eventually faced. Given that this would not have been possible and given the Initiative’s continuous adaptation to changing...
circumstances (which represents yet another facet of sustainability for health programs), participants tended to be pleased with many aspects of how SMI unfolded.

“Interviewer: I mean, if you go back in time, what would you have done differently?
Participant: It’s going to sound very arrogant, but nothing. But the answer has to be qualified with the fact that the reality was that I was a very, very, very low, low, low individual in a chain going all the way to the two richest men in the world in 2009.” - Donor
Chapter 4: Discussion and conclusions

Discussion

Overall, most stakeholders interviewed had positive impressions of SMI, though the limitations of the Initiative and threats to its sustainability were also raised during interviews. Respondents noted that the Initiative was ambitious and innovative, and many of its lessons, elaborated on in later sections, could be applied to other health projects in the future. SMI proved that it was possible to obtain commitment and collaboration from participating countries, and to negotiate targets and intervention packages that reflected national health priorities. Indeed, this was achieved by a qualified IDB team from the region comprised of talented professionals with experience in different positions in the region. The technical staff not only shared a language and culture with the participating countries and were deeply familiar with potential challenges, they devised inclusive plans with country health authorities to address challenges. They delivered technical assistance with understanding of the barriers and the culture. Many respondents praised the technical support and the scientific staff that IDB hired.

There are several advantages that SMI brought into operation from its decision and implementation. First, SMI focuses on the most vulnerable populations, ensuring that resources are allocated to those with the greatest needs. Second, the Initiative brings together multiple stakeholders, including governments, international organizations, and private partners, enabling better coordination and pooling of resources. Third, SMI uses results-based financing mechanisms to incentivize improvements in health systems and service delivery, ensuring that funds are used effectively and efficiently. Fourth, the Initiative emphasizes the collection and use of robust data to monitor progress, evaluate impact, and inform decision-making. Fifth, SMI supports the development of local capacity through training and technical assistance, empowering communities to take ownership of their health. Finally, the Initiative fosters innovation by encouraging the development and implementation of new strategies and technologies to address health challenges.

On the other hand, there are several disadvantages that need to be acknowledged. First, SMI focuses on specific health issues and geographic areas, which may leave other important health challenges unaddressed. Second, the Initiative relies in part on external funding and partnerships, and some respondents noted that monetary support for key community programs had ceased after the close of SMI. This evidence indicates that gains may not be sustainable in the long term, jeopardizing the continuity of programs and risking dependency on international aid, rather than fostering self-sufficiency and resilience in local health systems. Third, the complex nature of public-private partnerships and the involvement of multiple stakeholders can lead to challenges in coordination and implementation, resulting in delays. Fourth, despite demonstrated progress between the baseline and second operation on many performance indicators, in particular coverage indicators for obstetric care, Chiapas and Guatemala were not funded to continue to the third operation and Panama and Costa Rica also were not continued. This reflects poorly on SMI to have stopped work in four countries (Chiapas, Guatemala, Costa Rica, and Panama) after so much effort and progress in the first and second operations. It is important to note here that the four remaining countries met only about half their targets and had mixed findings at the third operation (details can be found in the accompanying mixed methods report on the Final Evaluation of the Salud Mesoamérica Initiative).

Finally, Salud Mesoamérica 2015 began in the early 2010s with impressive momentum, through historic first-time investments in the Central American region by the Bill & Melinda Gates Foundation and the Carlos Slim Foundation (outside of Mexico) and high-profile support by the Mexican presidency and the Council of Ministers of Health of Central America and the Dominican Republic (COMISCA). The Initiative
had the region’s full attention, yet it was plagued with delays starting very early on. It took time to carry out baseline planning, negotiation, and measurement activities, and two years were invested in simply building traction, with little to show towards the original timeline of target verification every 18 months. Though SMI adapted to plan for longer time lags between measurements, delays compounded over time, making depreciation of the award amounts and ongoing overhead costs into important factors for the effectiveness of the investment. Inevitably, there were changes in personnel at various levels of the collaboration, which, combined with long waits for the work to come to fruition, led to a loss of inertia.

The delay in the completion of the Salud Mesoamérica Initiative has a variety of potential effects. The delays might cause the participating countries to lose trust in IDB, leading to skepticism about the effectiveness of programs like SMI. Countries might also feel that the funds allocated for the Initiative could have been used for other pressing needs in the country over its long implementation timelines. This could affect their interest in projects like SMI, as the delayed realization of results might make them question the value of such financing mechanisms. Additionally, due to inflation and changing economic conditions, the committed funds do not hold the same value when given after 12 years compared to 2-3 years. Despite these potential negative effects, governments still saw value in using this financing mechanism for SMI.

Sustainability past the funded period is always a challenging goal for an intervention, and particularly for RBF projects. We explored sustainability extensively in the midpoint Salud Mesoamérica Initiative Process Evaluation Report prepared by IHME. We focused in our final evaluation qualitative interviews on sustainability and whether the original SMI plans considered sustainability. It was not affirmative or clear what plans were put in place to ensure sustainability. Many of our respondents did not elaborate and in fact some said they would not have done anything differently. That said, we found that healthcare norm, policy, and protocol changes due to SMI may be a lasting legacy of the Initiative. Other potentially sustainable changes include increased accountability, strengthened communication, enhanced cultures of continuous quality improvement in health care provision, and greater data monitoring and information use at the local level, though these improvements are unlikely to persist without ongoing support and attention from health authorities.

While SMI’s RBF model was novel, it provided a modest investment through a traditional channel for development aid. It attempted to prioritize the poor and reduce inequity within the conventional neoliberal framework of multilateral and non-governmental organization (NGO) assistance, a framework built through more than a century of imperialist and elitist tendencies in international development. This aid ecosystem does not facilitate truly improving the material conditions of the populations with the fewest resources. While SMI’s interventions did seek to go beyond the narrowly-defined technocratic solutions (e.g., supplies, training) typical of colonial and post-colonial international public health, the initiative’s reach was limited to the public health service system. It did not address root causes of inequality or poverty nor the social determinants of health. As long as the target community fundamentally lacks resources to meet its basic needs, training clinicians and even improving the culture of healthcare are unlikely to achieve population-level impact, absent strategies to address the underlying causes of poor health. True pro-poor policy beyond the reaches of the Salud Mesoamerica Initiative will be required to guarantee health as a human right for each citizen of Panama, Costa Rica, Nicaragua, Honduras, El Salvador, Guatemala, Belize, and Chiapas.

Nevertheless, the models involved in SMI have potential for application elsewhere if the lessons learned here are considered and if the limitations of such a technical and sector-specific strategy are acknowledged. The approach of engagement and negotiation with countries has strong potential, as
does the accompaniment model of technical assistance carried out by partners with deep ties to the region, but future projects should seek to avoid the pitfalls of time delays. Though the Initiative was designed collaboratively with the participating Ministries of Health, the affected communities and the ground-level health professionals who serve them were not necessarily engaged in planning and decision-making. Working with communities and beneficiaries could have helped to generate greater demand for high-quality health services and improved the results of SMI. Additionally, through the experience of the Initiative over many years, multiple investment priorities stood out that were beyond the scope of SMI, but likely could have enhanced effectiveness and sustainability. These include broader training partnerships to include the education of students preparing to enter health professions for the first time and perhaps more importantly, investment in improving patient recordkeeping and health information systems.

In conclusion, the Salud Mesoamérica Initiative was viewed by the majority of our respondents as a great attempt to address health inequalities in the Mesoamerican region, particularly in the areas of maternal and child health. The qualitative evaluation revealed that respondents had mixed perspectives on SMI's relevance, effectiveness, and potential for sustainability. Interviews revealed that SMI’s focus on collaboration, adaptability, and investment in health system strengthening engaged and motivated health personnel and contributed to improving certain outcomes, though the approach also faced many challenges and its sustainability is uncertain. Understanding the factors that built momentum for SMI and where it fell short in its ambitious objective to eliminate inequities is crucial for the global health community to ensure efficient use of resources and continued progress in addressing health inequalities worldwide. Applications of the lessons learned from SMI are detailed below.

Study limitations

This study has few limitations. First, despite IHME completing the targeted sample with representation among all informant groups, the available budget requiring a modest sample size distributed across the 8 participating countries has always been a limiting factor that has affected our ability to fully explore all aspects of the evaluation questions. Additionally, despite IDB’s facilitation of the authorization process for the study, approval from participating countries to conduct interviews with ministry of health respondents, healthcare providers, and community health workers/traditional birth attendants was never given in Panama, Costa Rica, and Nicaragua. These formal approvals were delayed for Honduras, Belize, Chiapas, El Salvador, and Guatemala, shortening the timeframe to contact respondents and further limiting the team’s ability to interview health care providers and CHWs/TBAs, since contacting service providers necessitated leveraging connections with initial ministry of health respondents to gather contact information and encourage participation, extending the time necessary to collect this data.

Furthermore, this evaluation’s data collection efforts focused largely on individuals with direct experience with the Salud Mesoamérica Initiative. While we would have liked to examine the Initiative’s strengths and weaknesses from additional angles, interviewing additional experts in health and development from non-involved organizations to make outside comparisons with SMI, this was not possible, and we recommend further examination of this topic.

It is important to keep in mind that selection bias likely impacted both the identification of potential respondents, and the likelihood that a given respondent accepted an interview. Furthermore, despite the anonymous nature of participation and encouragement by interviewers to speak freely, respondents may have felt compelled to avoid criticism of SMI to improve chances of future funding, avoid perceived
risk of retaliation, or avoid jeopardizing relationships. They may also have been influenced by social desirability bias; because key informants were aware that the information collected is for the evaluation of the Initiative, and although many reported limitations and problems of the Initiative, some may have placed greater emphasis on the positive aspects.

Lessons learned from SMI: replicability and scalability

While we propose recommendations based on this summative evaluation for different audiences in our mixed methods report on the Final Evaluation of the Salud Mesoamérica Initiative,20 we present here our findings on the replicability and scalability of the SMI model in other contexts.

SMI showed that a small amount of funding can engage countries and encourage them to set targets and work toward positive population-level outcomes. Respondents emphasized that SMI harnessed local expertise via country authorities taking ownership of intervention implementation supported by technical accompaniment from experts who are from the region, with experience in the region, who care about the region, and who understand the barriers to any project in Central America.

The key components of the model used by the Salud Mesoamérica Initiative can be applied to other regions and contexts around the world, with some adaptations to address the specific needs and challenges in other locations. Key components of the SMI model that could be transferable to other settings include:

1. **Regional model:** Harnessing multiple geographies with shared linguistic and cultural characteristics allows for knowledge sharing, efficiency in technical assistance, a motivating sense of friendly competition, and centralized, affordable procurement of health supplies.

2. **Prioritizing vulnerable populations:** Focusing on serving the most vulnerable and marginalized populations ensures that interventions address health inequities and have the greatest potential impact. That said, the institutionalization of successful interventions allows beneficial spillover throughout participating countries.

3. **Technical assistance for health system strengthening:** Providing training and coaching to health workers, managers, and policymakers strengthens local health systems, makes space for cultures of accountability in healthcare, and empowers ministries of health and providers to maintain ownership of quality care provision.

4. **Data-driven approach:** Emphasizing data collection, monitoring, and evaluation supports target setting, progress tracking, and measuring the impact of interventions. Improved generation and use of information in the health system allows for informed decision-making and supports continuous quality improvement processes.

5. **Emphasis on policy:** Supporting countries in developing and implementing updated norms, policies, and protocols based on the latest evidence in health instills positive changes in the health system that are more resilient to changes in government or staff turnover. Integrating the initiative with existing national health policies and strategies can help ensure that interventions are relevant, sustainable, and supported by local stakeholders.

6. **Results-based financing:** SMI’s financing model, which requires country investment via counterpart funding, as well as allowing for unrestricted spending of incentive funds in the health sector, engages governments and makes even relatively small performance incentives more motivating. Linking funding to the achievement of specific health outcomes rather than
outputs encourages comprehensive planning for results over time and system-wide rather than siloed changes.

When applying lessons learned from SMI in other contexts, it is crucial to consider the specific cultural, social, economic, and political factors that may influence the success of the model. This may require adapting the chosen financial instruments, decision-making and governance structures, interventions, implementation strategies, and monitoring and evaluation frameworks to suit the local context. Before applying any element of the Salud Mesoamérica Initiative model in other contexts, several factors should be considered to ensure the success of such a project.

Firstly, it is crucial to conduct a comprehensive needs assessment specific to the target setting. By understanding the context-specific health needs, challenges, and priorities, implementation plans can be tailored to address the most pressing issues effectively. This assessment should consider the local context, including cultural beliefs, social norms, and practices that may influence the acceptance and uptake of health services. Additionally, the disease burden of the target setting must be accounted for. For example, communicable diseases such as malaria, HIV/AIDS, and tuberculosis are more prevalent in some settings than in others. A focus on using data to identify the most relevant communicable and non-communicable diseases is important.

Community ownership, as well as cultural sensitivity, plays a vital role in successful interventions. Therefore, adapting interventions to account for local cultural and social considerations is essential. Engaging local communities, including religious and traditional leaders, throughout the design and implementation process fosters a sense of ownership and ensures that interventions are relevant to the population’s values and preferences, which can in turn increase uptake and coverage of health services. Along these lines, collaboration with local organizations, such as community-based organizations, academic institutions, and cultural organizations, can be highly beneficial. These organizations possess valuable experience and an in-depth understanding of the local context. By establishing partnerships, implementation agencies can leverage this expertise to navigate the complexities of target setting, effectively engage communities, and ensure the successful implementation of interventions.

To develop strong health systems in lower-resource settings, it is crucial to identify and address capacity gaps. Tailored capacity-building programs should be developed to strengthen health infrastructure, improve supply chain management, and enhance human resources, both in terms of quantity (by training new health professionals and retaining existing ones) and quality (by investing in the skills and training of health workers). The coaching-oriented approach taken by IDB in its technical assistance for SMI sets it apart from more common hierarchical models; in adapting this model to other settings, ensure that innovation and solutions arise from country participants and allow for cross-pollination of ideas between participating geographies. This approach will increase engagement among ministries of health and healthcare providers and allow for greater sustainability of behavior and culture change in this group.

Lastly, a robust monitoring and evaluation framework is crucial for continuous improvement and learning. Given the data limitations often faced in lower-resource settings, it is important to establish an evaluation system that is sensitive to these challenges. By incorporating feedback from local stakeholders, sharing best practices, and fostering a culture of learning and adaptation, implementation agencies can adjust the monitoring and evaluation activities to maximize their efficacy in measuring successes and weaknesses in the health system.
Given these adaptations and recommendations, elements of the Salud Mesoamérica Initiative hold great promise for replication and scale-up. The lessons learned over a decade of negotiations, intervention, and monitoring and evaluation for this project should be applied to maximum effect in future programs.
References

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Appendix A: Topic Guides

Funders

1. The Initiative
   a. From your experience, what were the goals and visions of SMI?
   b. Do you feel the Initiative achieved its goals and visions? How did it do this?
   c. How do you compare your experience with this initiative to other initiatives financed by your organization? What was different? What was challenging? What was the most satisfying?
   d. What was the role of BMGF and CSF in decision-making for the Initiative? Did they influence decision-making for participating governments?
      i. Who was consulted during decision-making processes for SMI? Who had the last word for big decisions?
   e. Considering the distinct elements of SMI, including areas like governance, monitoring and evaluation, organization, financing model, and others: What aspects of the SMI model were the most significant, and why? How would you consider these aspects to be similar or unique compared to other health projects?
      i. What effect did this model have on the successes and failures of the project?
      ii. What is the value of external evaluation for SMI?
   f. What is the role of the Inter-American Development Bank in SMI?
      i. (Probe about the management of funds, negotiations with countries, accompaniment, and technical assistance.)
      ii. In your opinion, what, if anything, would have been different if IDB had not participated?
   g. How did the political context of the countries influence their participation in the Initiative and the negotiations that took place? Has this changed over time?
      i. How did the Initiative adapt to changing circumstances in each country over the 10 years of its implementation?
   h. What do you consider to be the most significant interventions of SMI?
      i. How were the Initiative’s activities adapted to local contexts?

2. Results
   a. In your opinion, were the expected outputs (quality of care, access, equity) of SMI achieved? Why? Can you give an example?
   b. What have been your reactions to the results of the Initiative? Did any of the results surprise you? If so, which, and why?
   c. In your opinion, to what extent can these results be attributed to SMI?
      i. What components of SMI most influenced results achieved- or not achieved?

3. Sustainability
   a. How are the achievements of SMI at different levels (regional, national, State) sustainable? (probe about financial and programmatic sustainability and organizational change)
      i. What exit plans are in place to sustain the results achieved through SMI?
ii. What are some risks to the sustainability of gains made through SMI?
b. What could be done differently to ensure the sustainability of the gains and changes achieved through SMI?

4. COVID-19 and the economic crisis
a. What were the biggest challenge(s) for maternal and child health during the pandemic?
   i. Has this changed?
   ii. What has been the effect of the economic crisis and inflation on maternal and child health?
b. How did the COVID-19 pandemic and the economic crisis affect the activities of the Initiative? Do you have any examples?
   i. Did this have any effect on the financing model of the Initiative? If so, what? What is your opinion about this?
c. Based on your experience, do you think that the Initiative provided tools or learning that helped countries in their response to and/or recovery from the pandemic? Do you have any examples?
d. Was there any collaboration between participating countries in response to the pandemic? If yes, can you describe how it worked?

5. Unique elements of SMI
a. Do you remember what themes were being discussed as part of the public policy agenda when the Initiative started? Has SMI created new discussions around policies or changed the conversation around policies?
b. What are the advantages and disadvantages of a regional model? Do you have any examples?
c. What were the implications of using outcome indicators instead of process indicators for the Initiative? How did this affect the results?
   i. How realistic were the targets to attain?
   ii. To what extent were indicators aligned with country health priorities?
d. What was unique about the SMI financing model compared to other health investments in low- and middle-income countries?
   i. How did this contribute to the results of SMI?
e. In what ways have SMI interventions been operationalized/integrated into country health systems?
f. In your opinion, were SMI funds used efficiently? Why or why not?
   i. Do you think the funds would have made a bigger impact for health if they were invested differently? If yes, how should they have been invested instead?
g. In your opinion, does the financing model of SMI and the resulting investments made in the health system empower local actors and benefit the intended recipients? Why?

6. Unintended consequences and future perspectives
a. What are the unintended consequences of SMI?
   i. Do you have any positive examples of this? Any negative ones?
b. In your opinion, what might be the future of investments for development by your organization in this or other regions?
Health Care Providers, SMI municipalities

1. Initiative
   a. Have you heard of the Salud Mesoamérica Initiative? If yes, can you describe it for us?
   b. Has there been any change in your daily work due to the Initiative?
      Of the following 4 questions, choose a maximum of 2 to probe about due to time limitations.
      i. How has care for pregnant women changed?
         Explore changes to the early identification of pregnant women to initiate antenatal care, protocols for delivery care and management of obstetric and neonatal complications, and postpartum follow-up.
      ii. How did family planning services change?
      iii. How did under-5 vaccination change?
      iv. How did the diagnosis and treatment of anemia change?
         This includes treatment for malnutrition such as the administration of micronutrients, treatment of diarrhea with zinc and oral rehydration solution, among others.
   c. Can you tell me about any program or activity specifically that you recall?
      i. In your experience, how did the community receive this program or change?
         Question related to the acceptance of a new service, for example, the incorporation of the contraceptive implant for family planning or how maternal waiting homes helped reduce transportation costs and facilitated access to institutionalized delivery care. Related to the effect of new services on the demand for services.
      ii. What do you think will happen with this program/change?
         In the countries with only 2 operations, ask in the past tense.
         - If the program/change will continue: What do you think permitted the continuation of the program/change?
         - If the program/change did not continue: What would have been necessary to continue this program/change?

2. Results
   a. In your opinion, did the changes you mentioned help to improve health in your community?
   b. Of the activities that we just talked about, how was the implementation?
      Explore: how did the change occur? What barriers and facilitators were present?
c. Do you think there has been a change in how people in the community relate to health services? EXPLAIN

This question refers to care seeking behaviors, continuity of care, and adherence to treatment.

3. Impact of COVID-19

a. The pandemic caused the closure of many health services and, moreover, people were afraid to seek care for fear of infection. In your experience, do you think that the provision of services and the number of patients has returned to (or exceeded) pre-pandemic levels (2019)?

b. The Initiative supported the strengthening of medical stock, vaccination protocols for children and early identification of pregnant women to provide clinical care on time. In your experience, did any of the lessons learned from these activities help in the response to the pandemic?

4. Use of indicators and targets

The intention of this section is to know how the pay-for-performance model affected the behavior of the participants. How did being evaluated change their motivation or the focus on the indicators vs. other health priorities? In addition, we want to know what their opinion is about the external evaluation. If the person does not know anything about performance indicators or evaluation, please DO NOT ask.

a. For the Initiative, 10 performance indicators around health were negotiated for each operation in order to evaluate progress. Are you familiar with what was measured for these indicators?

i. If they are aware of the indicators: What was the planning to meet these targets? How was progress toward achieving them monitored?

ii. What happened when monitoring efforts showed that the expected progress toward achieving the indicators was not made? Who was responsible? What changes were implemented?

iii. What do you think about the indicators and how they were measured?

iv. What were the obstacles to reaching the goals?

b. After each operation, an external agency measured country progress on these indicators. Internal measurements of the country to track progress, and these external measurements were not necessarily performed or calculated the same way. For example, the external evaluator made surprise visits to the health centers to verify that they had the necessary supplies. What do you think of this?

The intent of this question is to get perspective on external evaluators, problems with internal evaluation, or cases of trying to cheat to pass the test.
5. **Contribution in the health system**

We anticipate that some of the topics included in this section will be covered in previous sections, so please ONLY PROBE ON TOPICS NOT FULLY COVERED BEFORE: health service management, quality improvement, supply chain, training/human resources, use of information.

a. How did the Initiative affect the ways this health facility is run?

   We are referring to the ways in which things are communicated and activities are organized in the health center.

b. What measures have been adopted to improve the quality of care in this center?
   
   i. Are there internal meetings to review statistics or areas for improvement in health service provision, such as the management of mortality cases?
   
   ii. Are midwives and community health workers part of the care team at this center?
       
       - If yes, what is their role?
       
       - What factors have influenced success in working with them?
       
       - If no, why not?
       
       - Do you feel that they have a role in health care?
       
       - If yes, what would it take to get them involved?
   
   iii. Are there culturally adapted services in this facility to respond to patients’ needs?
       
       For example, care in indigenous languages, care in alignment with traditional practices or beliefs about family planning. Cultural relevance is identified by the Initiative as an important need to improve care for vulnerable and indigenous populations.

   iv. In general, do you think that the community is satisfied with the health services and care provided by this facility?
       
       - What does this satisfaction depend on?
       
       - What is missing?

c. Have there been changes in the supply chain or stock of medical equipment or medicines due to the Initiative?
   
   i. Have new equipment and tools been introduced to your health facility due to SMI?
      
      - Can you give an example?
      
      - How has the process of integrating this gone?
   
   ii. Has the availability of different medical products changed as a result of SMI?
      
      - Can you give an example?
   
   iii. Has the change in supply of different medical products affected the demand for services at your facility?

d. Has there been a change in trainings received at this facility as a result of SMI?
   
   i. Have there been any changes in the use or availability of clinical management guidelines?

e. Has there been any change in the way information is collected, managed, and used at this health center compared to before the Initiative?
i. If yes, how?

   In case it is not mentioned, ask about:
   - Changes in the storage of medical records
   - Changes in the monitoring of outpatients
   - Changes in tracking quality improvement statistics

ii. In your opinion, which of these changes occurred because of the Initiative?

6. Future perspectives
   
a. In your opinion, what are the greatest needs in terms of health in your community?
      i. What would be necessary to improve health in your community?

Health care providers, non-SMI municipalities

1. Initiative
   
a. Have you heard of the Salud Mesoamérica Initiative? If yes, can you describe it for us?
   b. Has there been any change in your daily work in the last 10 years?

   If so, of the following 4 questions, choose a maximum of 2 to probe about due to time limitations. Explore how the implementation of the changes was carried out, was there training? New drugs or medical instruments? new protocols?
   In the countries where we know that the activities of the Initiative were scaled up at the national level, it would be interesting how these changes were integrated and if the interviewee associates these changes with SMI. For example, the introduction of the subdermal implant in Costa Rica for family planning and continuous quality improvement processes in Belize.

   i. How has care for pregnant women changed?

      Explore changes to the early identification of pregnant women to initiate antenatal care, protocols for delivery care and management of obstetric and neonatal complications, and postpartum follow-up.

   ii. How did family planning services change?
   iii. How did under-5 vaccination change?
   iv. How did the diagnosis and treatment of anemia change?

      This includes treatment for malnutrition such as the administration of micronutrients, treatment of diarrhea with zinc and oral rehydration solution, among others.

   c. What caused these changes?
   d. In your opinion, did the changes you mentioned help to improve health in your community?

      Explore: how did the change occur? What barriers and facilitators were present?
e. Do you think there has been a change in how people in the community relate to health services? EXPLAIN

This question refers to care seeking behaviors, continuity of care, and adherence to treatment.

f. Has there been any change in the policies and protocols in this health center in the last 10 years?

By policies and protocols, we mean any written rules or documents that govern the ways you practice health care at this facility.

2. Impact of COVID-19

a. The pandemic caused the closure of many health services and, moreover, people were afraid to seek care for fear of infection.
   i. What strategies were used in this health center or at the national level to continue maternal and child health care?
   ii. In your experience, do you think that the provision of services and the number of patients has returned to (or exceeded) pre-pandemic levels (2019)?

3. Use of indicators and targets

a. Are there internal meetings to review statistics or areas for improvement in health service provision, such as the management of maternal mortality cases, or the number of children vaccinated vs the number planned to be vaccinated?
   i. Do you feel this would be an important thing to do? Why?

   If they do have quality improvement meetings:
   - What do you do when monitoring shows you have not made the expected progress?
   - Does someone at the departmental or national level monitor these indicators? If so, who?

4. Contribution in the health system

We anticipate that some of the topics included in this section will be covered in previous sections, so please ONLY PROBE ON TOPICS NOT FULLY COVERED BEFORE: health service management, quality improvement, supply chain, training/human resources, use of information.

a. Can you note any changes in the ways this health facility is run over the last 10 years?

   We are referring to the ways in which things are communicated and activities are organized in the health center.

b. What measures have been adopted to improve the quality of care in this center?
   i. Are midwives and community health workers part of the care team at this center?
      - If yes, what is their role?
      - What factors have influenced success in working with them?
      - If no, why not?
      - Do you feel that they have a role in health care?
- If yes, what would it take to get them involved?

ii. Are there culturally adapted services in this facility to respond to patients’ needs?

For example, care in indigenous languages, care in alignment with traditional practices or beliefs about family planning. Cultural relevance is identified by the Initiative as an important need to improve care for vulnerable and indigenous populations.

iii. In general, do you think that the community is satisfied with the health services and care provided by this facility?

- What does this satisfaction depend on?
- What is missing?

c. Have there been changes in the supply chain or stock of medical equipment or medicines due to the Salud Mesoamérica Initiative?

i. Have new equipment and tools been introduced to your health facility in the last 10 years?

- Can you give an example?
- How has the process of integrating this gone?

ii. Has the availability of different medical products changed in the last 10 years?

- Can you give an example?

iii. Has the change in supply of different medical products affected the demand for services at your facility?

d. Has there been a change in trainings received at this facility in the last 10 years?

i. Have there been any changes in the use or availability of clinical management guidelines?

e. Has there been any change in the way information is collected, managed, and used at this health center compared to before the Initiative?

i. If yes, how?

In case it is not mentioned, ask about:
- Changes in the storage of medical records
- Changes in the monitoring of outpatients
- Changes in tracking quality improvement statistics

ii. In your opinion, are any of these changes here related to the Initiative?

5. Future perspectives

a. In your opinion, what are the greatest needs in terms of health in your community?

i. What would be necessary to improve health in your community?

Ministry of Health

1. Initiative

a. From your experience, what were the goals and visions of SMI?

b. Do you feel the Initiative achieved its goals and visions?
i. How did it do this?

Who was consulted during decision-making processes for SMI? Who had the last word for big decisions?

d. What aspects of the SMI model were the most significant, and why? (In case it is helpful, mention: distinct elements of SMI include themes like monitoring and evaluation, having indicators, payment incentives for performance, technical accompaniment, etc.)

i. How did the Ministry use data generated by the monitoring and evaluation? Did it continue with the collection and use of data to support health system performance?

e. What is the role of the InterAmerican Development Bank in SMI? (in case the respondent does not refer to these themes, mention the Bank’s role in managing funds, negotiations with the countries, and accompaniment during technical assistance.)

i. What was the difference between the financing involved in the Initiative compared with other development projects financed by IDB or the World Bank?

ii. In your opinion, what, if anything, would have been different if IDB had not participated?

f. What was the strategy (if there was one) within the Ministry to continue with the Initiative despite changes in government and turnover in the Ministry?

g. What do you consider to be the most significant interventions of SMI?

i. How were the Initiative's activities adapted to local contexts?

2. Results

a. In your opinion, were the expected outputs of SMI achieved? Why?

i. Can you give an example? (The intention is to have concrete examples to respond to “In what way did SMI contribute to improving the provision of maternal and child health services?”)

ii. Have the results been shared with you? How? (Can apply to any of the 3 operations)

b. In your opinion, do the results reflect the effort invested in SMI? Do the evaluation results seem aligned with the changes you’ve observed?

i. What is your opinion about the use of results to make decisions about the disbursement of incentive payments?

3. Sustainability

a. In your opinion, are the gains of SMI sustainable? (Probe about financial sustainability as well as continuations of Initiative programs and cultural/institutional changes made.)

i. To what extent, and why?

ii. Are there long-term benefits for the community? What are they?

b. Which SMI interventions will continue? Which SMI interventions will not? What will be the funding source for those that continue?

i. In your opinion, what would have been necessary to continue with the activities and lessons involved in the Initiative?

4. The impact of COVID-19: PROBE ABOUT THE LESSONS AND PROCESSES OF SMI APPLYING TO PANDEMIC RESPONSE AND RECOVERY IN OTHER SECTIONS AS WELL IF THE PANDEMIC IS MENTIONED

a. How did the pandemic affect SMI activities? Do you have any examples?
i. The Initiative was not designed to respond to the pandemic, but in your opinion, were SMI’s lessons around the distribution of vaccines, continuous quality improvement, or the use of information and indicators useful to respond to the pandemic?

ii. Has the healthcare system recovered, or are there long-term negative effects due to COVID?

5. Use of information, indicators, and targets
   a. To what extent were targets and indicators aligned with country health priorities?
      i. Do you feel that the focus on achieving performance targets distracted from other priority health areas?
   b. How realistic were the targets to attain?
      i. What were the biggest barriers to attaining the targets?

6. Regarding the regional model:
   a. How was the experience of participating in an initiative that involved 7 other countries?
   b. Do you know of any program that was designed or implemented first in one of the 8 countries and later introduced to another? Could you give an example and tell us how the process went?

7. Technical assistance
   a. Can you briefly describe how the technical assistance or the accompaniment of IDB worked in SMI? Do you have any examples?
      i. How was your experience working this way with the IDB? (For example, were the activities introduced appropriate for the country context and aligned with your experience and expectations? Was it collaborative? Was the ministry respected in the process?)
      ii. After the end of the last operation, what happened with the accompaniment of IDB?
      iii. Of the tools and processes brought to the table during IDB’s technical assistance/accompaniment, which do you feel the ministry of health has the capacity to maintain without the external support of IDB?

8. Implementation
   a. Do you feel that the Initiative empowered local actors?
   b. What were the facilitators for implementation of Initiative activities?
   c. What were the barriers for implementation of Initiative activities?

9. The contribution of SMI in the health system
   a. Did SMI affect the ways the ministry of health makes decisions? How?
   b. What norms, policies, and protocols for maternal and child health changed due to the Initiative?
   c. How did the Initiative affect continuous quality improvement processes? Were these changes you mentioned maintained over time?
      i. How did the Initiative affect the referral and counter-referral system?
      ii. How did the Initiative affect the follow-up of patients and the continuity of health care? (For example, follow patients when they are referred to another more complex hospital, such as during a high-risk delivery, and then continue postpartum care services at less complex clinics.)
iii. Was there any change in the policies or norms around the involvement of midwives or community health workers? What factors influence their participation?

d. What are the changes that happened to stock and procurement due to SMI?
e. What are the changes that happened to service provision due to SMI?
f. Once the Initiative ended, were the changes you mentioned maintained? Which ones?

i. Has availability of culturally responsive services changed, for example, attention aligned with traditional practices or local customs?

10. Unintended consequences and future perspectives

a. What are the unintended consequences of SMI?

i. Do you have any positive examples of this? Any negative ones?

b. In your opinion, what might be the next aim for the country/region to strengthen the health system and improve the population health?

IDB

1. The Initiative

a. From your experience, what were the goals and visions of SMI?

b. Do you feel the Initiative achieved its goals and visions? How did it do this?

i. Did implementation vary over time?

c. How do you compare your experience with this initiative to other initiatives financed by your organization?

d. What aspects of the SMI model were the most significant, and why? How would you consider these aspects to be similar or unique compared to other health projects?

i. What effect did this model have on the successes and failures of the project?

ii. What is the value of external evaluation for SMI?

e. What is the role of the Inter-American Development Bank in SMI?

i. In your opinion, what, if anything, would have been different if IDB had not participated?

f. What learnings from SMI might be transferable to other initiatives in the future?

g. How did the political context of the countries influence their participation in the Initiative and the negotiations that took place?

h. What do you consider to be the most significant interventions of SMI?

i. How were the Initiative’s activities adapted to local contexts?

i. To what extent were the activities contained in SMI’s plan implemented as planned?

11. Results

a. In your opinion, were the expected outputs (quality of care, access, equity) of SMI achieved?

b. What have been your reactions to the results of the Initiative? Did any of the results surprise you?

c. In your opinion, to what extent can these results be attributed to SMI?

i. What components of SMI most influenced results achieved or not achieved?

12. Sustainability
a. How are the achievements of SMI at different levels (regional, national, State) sustainable?
   i. What exit plans are in place to sustain the results achieved through SMI?
   ii. Which SMI interventions will continue? Which will not?
   iii. What are some risks to the sustainability of gains made through SMI?
b. What capacities within the health system were built or developed through SMI?
c. What could be done differently to ensure the sustainability of the gains and changes achieved through SMI?

13. COVID-19 and the economic crisis
   a. What were the biggest challenge(s) for maternal and child health during the pandemic?
      i. Has this changed or gotten better?
      ii. What has been the effect of the economic crisis and inflation on maternal and child health?
b. How did the COVID-19 pandemic and the economic crisis affect the activities of the Initiative?
   i. Did this have any effect on the financing model of the Initiative or its incentive structure? If so, what? What is your opinion on this?
c. Based on your experience, do you think that the Initiative provided tools or learning that helped countries in their response to and/or recovery from the pandemic?
d. Was there any collaboration between participating countries in response to the pandemic?

14. Unique elements of SMI
   a. What individuals or organizations held power during decision-making processes for the Initiative over time? Who had the last word for big decisions?
b. Do you remember what themes were being discussed as part of the public policy agenda when the Initiative started? Has SMI created new discussions around policies or changed the conversation around policies?
c. What are the advantages and disadvantages of a regional model?
d. What were the implications of using outcome indicators instead of process indicators for the Initiative?
   i. To what extent were indicators aligned with country health priorities?
e. What was unique about the SMI financing model compared to other health investments in low- and middle-income countries?
   i. How did this contribute to the results of SMI?
f. In what ways have SMI interventions been operationalized/integrated into country health systems?
g. In your opinion, were SMI funds used efficiently? Why or why not?
   i. Do you think the funds would have made a bigger impact for health if they were invested differently?
h. In your opinion, does the financing model of SMI and the resulting investments made in the health system empower local actors and benefit the intended recipients? Why?

15. Unintended consequences and future perspectives
   a. What are the unintended consequences, positive or negative, of SMI?
b. In your opinion, what might be the future of partnerships for health in the region?

Community health workers/Traditional birth attendants

1. Introduction
   a. How long have you been doing this work?
   b. Do you provide care in collaboration with any healthcare center?
      i. If so, how would you describe your relationship with this center?
         In other words, they are hired by the healthcare center, the healthcare center refers or puts them in contact with patients, or they send patients to the healthcare center. Explore how the communication is.
      ii. Have you received any training on maternal or neonatal health?
         If the interviewee is a community health worker, ask about training on health promotion and prevention, specifically which topics and for which populations.
         a. If yes, who provided this training?
         b. If not, would you like to? What topics interest you?
      iii. Are there any difficulties in collaborating with the health center?
         a. What are they?
   c. Has there been any change in your daily practice in the last 10 years?
   d. Have you heard about the Salud Mesoamérica Initiative [SMI]?
      i. If yes, could you tell me what you know, please?
      ii. If not:
         Explain what it consisted of (a description is in the box below), and then ask if anything mentioned sounds familiar or if they have heard of it before.

The Mesoamerica Health Initiative (ISM) was a collaboration between the Ministry of Health and Wellness and international donors with the objective of improving maternal, child, and neonatal health in the most vulnerable populations of the country. Various programs were implemented, such as maternal waiting homes, transportation vouchers, distribution of micronutrients, and strengthening of processes within hospitals to improve early identification of pregnant women, provide continuous follow-up throughout pregnancy, and enhance childbirth and postpartum care. (This may vary depending on which program the community health worker is more familiar with, for example, to include information about what was done in family planning).

   iii. 2. [If the respondent has heard something related to the description above, what do they know?]
iv. In your opinion, has there been any change in the care provided by the health center in the last 10 years?

Explore how the changes affected the way people feel they are being cared for (satisfaction) when seeking attention, the frequency of care seeking, and adherence to treatments.

2. Contribution in the health System

Here are 5 major topics, please explore them within the time constraints: maternal care, care for children under 5 years (vaccination, treatment for diarrhea, and micronutrients), reduction of access barriers (transportation vouchers, maternity homes), family planning, general access to/satisfaction with the system.

a. When women or children are sick in your community, who do they turn to for help? Where do they go to get treated?

b. Do you think local health centers can take good care of women and children who come there for help?
   i. Do health centers have what it takes to provide the care that women and children need? EXPLAIN
      - If not, what is missing? Or what are the barriers?

c. Are there any obstacles that prevent people from going to the local health center if they want to?

Explore how the need to travel from distant communities and the associated costs impact access to healthcare. Also, discuss the role of transportation vouchers and maternal waiting homes in alleviating these barriers.

d. What do people in your community do to ensure their children are healthy?
   i. Does the health center have the resources to prevent children from getting sick?
   ii. In your experience, do all children under 5 have their vaccines up to date?
   iii. When a child has diarrhea, or stomach problems, how do people usually handle this? Do they take the child to the doctor or treat them at home?
      - Do you know if they are given oral rehydration salts and Zinc treatment?
   iv. Some time ago, the health center gave some micronutrients to strengthen the nutrition of children under 5. It was a powder that was put in food. Do you remember hearing about this?
      - If yes, do you know anyone who gave this to their children? Could you tell me about the experience?
e. What do women in your community do when they find out they are pregnant?

An important part of the Initiative was to reduce the time between a woman becoming pregnant and seeking medical care. To achieve this, tools were developed for screening purposes, allowing healthcare centers to identify women who could potentially be pregnant using a simple questionnaire administered to all women visiting the centers (e.g. Do you have a partner? If yes, Was your last menstrual period more than a month ago? If yes, you could be pregnant, test). After initiating prenatal care, the Initiative aimed to improve treatment continuity by monitoring women throughout their pregnancies and enhancing the systems for referral and counter-referral to ensure follow-up care after childbirth.

i. In your experience, would women go for prenatal check-ups? EXPLAIN

ii. During childbirth, in your opinion, what is the care like?

How is the relationship between healthcare professionals and pregnant women? Are they listened to? Is a safe space provided for them?

iii. After the woman has given birth and is discharged, what is the follow-up like?

f. What do women in your community do when they do not want to get pregnant?

i. Do you know if there are new family planning methods available at the health center?

ii. What are the obstacles that prevent women from accessing family planning methods?

For example, someone in her family (mother, father, husband) may not want her to use contraception, or she may be very young, unmarried, or face distrust or lack of knowledge about family planning methods.

g. Do you think the community is satisfied with the health facility? What does their satisfaction depend on?

i. Has the availability of care in indigenous languages or the integration of traditional practices changed? (Only for Chiapas, Panama, and Guatemala)

3. Impact of COVID-19

a. In your opinion, what were the main challenges for maternal and child health during the pandemic?

i. How did your work as a midwife (or community health worker) change during the pandemic?

4. Unexpected consequences and future perspectives

a. In your opinion, what are the most urgent health needs in your community?

b. What would be necessary to strengthen the participation of community health workers/midwives in your community?
Appendix B: Codebook

- **Activities**: Description of SMI specific activities not mentioned in another code

- **Changes in the health system**: Influence of SMI on the operation of the health system
  - **Human resources**: Influence of SMI on availability of health professional and staff needed to provide health services in MNCH
  - **Leadership and governance**: Mentions of changes in administration, communication, and management in the health system
  - **Service delivery**: Description of the effect of SMI on any service provision (quality, availability of services, new services, timeliness, efficiency, approachability, acceptability, continuity, etc...)
  - **Use of information**: Influence of SMI on the collection, management, and use of information including information on supplies and referral and counter-referral system

- **Country**: Country-specific mentions
  - **Belize**
  - **Chiapas**
  - **Costa Rica**
  - **El Salvador**
  - **Guatemala**
  - **Honduras**
  - **Nicaragua**
  - **Panama**

- **COVID-19**: COVID-19 impacts on healthcare and SMI
  - **COVID affecting healthcare provision**: Effects of the COVID-19 pandemic on the provision of health services
  - **COVID affecting SMI**: How did COVID impact SMI: changes in funding, engagement, or implementation
  - **SMI learnings applied to COVID**: Description of learnings from SMI with a potential use in the pandemic response and recovery

- **Equity and justice**: Cultural adaptiveness, prioritization of the poor, justice in funding and empowerment of local actors, empowerment of participating countries

- **External evaluation**: Description of the relevance of external evaluation

- **Funding**: Description or perspectives about the funding; includes efficiency and use of the investment, discussion of the financial instrument (loans vs grants)

- **Great quote**: Tagged for consideration for final reports and presentations

- **Policies, protocols, and norms**: Description of how SMI impacts policy at different levels. Description of what topics were in the agenda and what SMI brings to the table. Description of
how SMI impacts decision making in health in the countries. For instance, new voices included in the discussion, using evidence-base interventions, using monitoring and evaluation strategies

- **Regional model**: Description of how the regional model contributes to SMI outcomes, including examples, advantages and disadvantages; Mentions of country-country relationships

- **Relationships**: How were the relationships among different stakeholders?
  - **Collaboration**: Influence of SMI on multisectoral collaboration at the regional, national and subnational level
  - **Donors-countries**: How was the relationship between donors and country representatives
  - **IDB-countries**: How was the relationship between IDB and country representatives
  - **IDB-donors**: How was the relationship between IDB and donors representatives

- **Result based funding**: How did RBF impact results achievement

- **Results**: Perspectives on the results achieved by SMI

- **Satisfaction**: Influence of SMI on patience satisfaction with the care and availability of healthcare services on MNCH

- **SMI**: Description of SMI in general as a project
  - **Alignment**: Description of SMI alignment with the countries/regional priorities, needs or programs
  - **Goals**: Description of the goals and vision of SMI
  - **Local/community representation**: Mentions of Initiative or evaluation involving local expertise, for example in the case of Technical Assistance, working directly with the local healthcare workers in order to adapt to the reality in the field; Mention of community participation to manage their own health needs
  - **SMI barrier**: Description of SMI major barriers
  - **SMI operation**: Description of how SMI works and how the team was conformed
  - **SMI lessons/learnings for other initiatives**: What is special about SMI that can be applied to other initiatives? What are the takeaways?
  - **SMI design**: Description of SMI design phase
  - **SMI uniqueness**: Description of SMI characteristics which influence the results. What made SMI work? “What’s the secret in the sauce of SMI”? What does it mean to be successful?
  - **SMI weakness**: Mentions of shortcomings, weaknesses, failures, and missed opportunities for SMI; critiques of SMI

- **Stakeholders**: Comments or description of the relevance of different stakeholders’ involvement on the initiative
  - **Donors**: Importance of the involvement of BMGF, CSF, AECID, GAC from other stakeholders’ perspective
  - **IDB**: Importance of the involvement of IDB from other stakeholders’ perspective
IHME: Importance of the involvement of IHME from other stakeholders’ perspective

**Sustainability:** Sustainability of SMI
- **Adaptation/evolution:** Activities adapted to local context or changing over time to adapt to contextual change
- **Barrier/threats to sustainability:** Any threat to sustainability (could also include turnover in health professionals, administrative staff, or political change)
- **Capacity building:** Did SMI contribute to capacity building in the region at the individual, organizational and/or system levels?
- **Continued program activities:** Have (or will) activities continue after external funding ceases?
- **Financial continuity:** Description of the available funds to continue the interventions or the reasons for insufficient future funds
- **Maintenance of behavior change:** Whether behavior changes related to SMI have been sustained at the provider level or at any other institutional level

**Target system:** Description of the relevance of targets on achieving results
**Technical assistance:** Description of the relevance of the technical assistance on SMI
**Unintended consequences:** Description of unintended consequences
This report on the Final Evaluation of the Salud Mesoamérica Initiative (SMI) was produced in agreement with the Inter-American Development Bank (IDB). All Analyses and writing were conducted by the Institute for Health Metrics and Evaluation (IHME) and the University of Washington.

About IHME
The Institute for Health Metrics and Evaluation (IHME) is an independent research center at the University of Washington, dedicated to making high-quality information on population health accessible. IHME’s internationally renowned researchers collect and analyze data on health indicators and trends and conduct rigorous evaluations of health programs and initiatives. The Institute’s goal is to improve the health of the world’s populations by providing the best information on population health, thereby informing decision makers as they strategically fund, design, and implement programs to improve health outcomes from the local to the global level.

This report was prepared by:

**Lead authors:**
Matt Dearstyne, MS
Data Analyst, IHME

Yenny Guzman, MD, MPH
Data Analyst, IHME

Ali H. Mokdad, PhD, *Principal Investigator*
*Professor, IHME*

Alex Schaefer, MPA
Evaluation Scientist, IHME

**Contributing authors:**
Joseph Camarda, BA
Research Manager, IHME

Amanda Deen, MPH
Senior Research Manager, IHME

Katie Panhorst Harris, MPA
Lead Evaluation Scientist, IHME

Bernardo Hernandez, MS, DSc
Professor, IHME

Casey Johanns, MPH
Senior Research Manager, IHME

Haaris Saqib, MA
Data Analyst, IHME

Max Thom, BS
Data Specialist, IHME
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