iniciativa salud mesoamérica

SALUD MESOAMERICA INITIATIVE

FINAL REPORT

Design and implementation summary 2010-2025

MARCH 2025

Fundación Carlos Slim · Cooperación Española · Canadian International Development Agency · IDB · Gates Foundation

Summary of Project Information

Project name: Salud Mesoamerica Initiative
Project number: GN-2530 / 5328

Donors Liaison Officers:
Ethan Wong (BMGF)
Ricardo Mujica (CSF)
Camille Fortin (GoC)

Operations at in country level end date: December 2022

Grant amount:	**USD 131.22m**
CSF:	USD 54.30m
BMGF:	USD 57.95m
Government of Spain (GoS):	USD 14.0.m
Government of Canada (GoC):	USD 4.97m

Individual operations net funding allocation per country

Country	USD
El Salvador	12,092,523
Guatemala	8,355,330
Panama	2,206,485
Belize	1,293,130
Costa Rica	3,386,148
Honduras	13,623,007
Nicaragua	9,733,640
Mexico (Chiapas)	6,282,696

Reporting period: 2011-2023

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Acronyms

ACRONYM	FULL FORM
SMI	Salud Mesoamerica Initiative
IDB	Inter-American Development Bank
BMGF	Bill & Melinda Gates Foundation
CSF	Carlos Slim Foundation
GoC	Government of Canada
GoS	Government of Spain
HNP	Health, Nutrition, and Population
IHME	Institute for Health Metrics and Evaluation
MHF	Mesoamerican Health Facility
USAID	United States Agency for International Development
UNFPA	United Nations Population Fund
LAC	Latin America and Caribbean
CCT	Conditional Cash Transfer
SMSP	Mesoamerican System of Public Health
SINAVISA	National Automated Health Surveillance System
EDUS	Unified Electronic Health File
SIAC	Identification / Agendas / Appointments System
SIES	Integrated Health Records System
SIFA	Pharmacy System
PANI	Patronato Nacional de la Infancia
PIAD	Informatics Program for High Performance
UCL	Local Coordination Units
UCN	National-Level Management Structure
UCR	Regional-Level Management Structure
EBAIS	Basic Comprehensive Health Care Teams
CCSS	Costa Rican Social Security Fund
COMISCA	Council of Health Ministers of Central America and the Dominican Republic
RBA	Results-Based Aid
DBS	Dried Blood Spot
MDG	Millennium Development Goals

Executive Summary

The Salud Mesoamerica Initiative (SMI) was a public-private regional partnership aimed at reducing inequities in access to and the quality of reproductive, maternal, neonatal, and child health (RMNCH) services in eight countries across Central America and Mexico. This initiative was a collaboration between the governments of these countries, the Bill Gates Foundation, the Carlos Slim Foundation, the governments of Canada and Spain, and the Inter-American Development Bank (IDB), which acted as the general administrator of the trust fund. The program sought to strengthen public health systems by employing a results-based financing (RBF) model while also providing technical assistance to improve RMNCH services, with Ministries of Health (MoHs) taking the lead in implementation through their existing personnel and infrastructure.

SMI leveraged approximately $175 million from donor and national resources, organizing its operations into two- to three-year phases in each country. The model involved setting ten indicators and targets for each phase, with agreed-upon interventions funded through a combination of national and donor contributions. Ministries of Health were eligible to receive financial incentives amounting to about 50% of their initial investment if they met their targets, which were independently verified through household and health facility surveys conducted by the Institute for Health Metrics and Evaluation at the University of Washington. While the donor funds were catalytic, contributing less than 1% of the annual health budgets of participating nations, they played a crucial role in initiating and guiding interventions. The program's indicators and targets evolved in complexity over time, beginning with improvements in health system readiness—such as updating clinical guidelines and ensuring the availability of essential supplies—before progressing to more ambitious goals related to clinical quality, service coverage, and effective health intervention implementation.

The broader aims of SMI extended beyond improving health equity and outcomes for vulnerable populations. The initiative also sought to generate knowledge on healthcare provision for the poor, increase national financing for RMNCH, strengthen health systems, and provide evidence to support the development of pro-poor policies at both national and international levels. A core principle underlying the initiative was the alignment of goals with measurable targets, supported by incentives and a robust monitoring system. This approach allowed donors to take a step back while enabling local governments to implement and adapt the program according to their specific needs. The IDB played a crucial role in facilitating discussions with governments, determining necessary interventions, and ensuring implementation strategies were aligned with each country's development goals.

Across its operations, SMI established 213 targets, with an average success rate of 65.7% across all countries. During the first phase, 69% of targets were met, increasing slightly to 70% in the second phase. However, the third phase saw a decline, with only 50% of targets achieved, likely due to the impact of the COVID-19 pandemic. A detailed breakdown of performance variations across countries and operational phases is available in the program's performance framework. The initiative's final evaluation, conducted by NORC at the University of Chicago, highlighted variations in impact across different countries and indicators, reflecting the diverse local contexts in which SMI was implemented. Initially driven by RBF incentives, stakeholder motivation in some countries later became the primary driver for improving maternal, neonatal, and child health outcomes.

According to the external final evaluation conducted by NORC at the University of Chicago, the initiative significantly enhanced healthcare quality by improving antenatal care, the quality of care during delivery, newborn care, and the management of obstetric and neonatal complications. These improvements were achieved through comprehensive training, the adoption of standardized procedures, improved organization of workspaces, and the implementation of structured protocols using checklists and standardized forms to ensure consistency. One of SMI's strengths was its provision of direct technical assistance, which is not always included in similar global health initiatives. Additionally, the IDB played a key role in coordinating efforts and administering the program. While sustainability varied across countries, SMI's focus on process improvement contributed to the long-term institutionalization of better healthcare practices.

The evaluation finds that a crucial aspect of SMI's impact was its initial resource mobilization, which helped improve healthcare quality through investments in essential equipment, supplies, medications, and capacity-building efforts. However, sustaining these improvements proved challenging due to inconsistencies in resource availability and difficulties in aligning these efforts with long-term financial and institutional sustainability. Health coverage indicators showed mixed results across countries. For instance, Honduras demonstrated notable progress in timely antenatal care access and completion rates, whereas Panama reported persistently low levels. Guatemala, despite making improvements in comparison to control areas by the end of the second operational phase, still had the lowest antenatal care levels in the region.

NORC concludes that the initiative made a significant contribution to improving RMNCH outcomes among Mesoameri-

Executive Summary

ca's poorest populations despite the modest level of investment involved. The initiative also provided valuable lessons for future global health programs, particularly in demonstrating the effectiveness of (1) the RBF model with clear targets and performance tracking, (2) direct technical assistance, (3) resource mobilization to enhance health system readiness, and (4) the IDB's coordination and oversight role. Ultimately, national ownership and sustained government commitment were key factors determining success, emphasizing the importance of integrating long-term sustainability considerations into global health initiatives.

Furthermore, an impact evaluation conducted in Costa Rica assessed the effect of a large-scale intervention designed to reduce adolescent pregnancy in the poorest districts by integrating reproductive health services into the national health system through an intersectoral approach. Using a difference-in-differences methodology and district-level vital records from 2000-2019, the evaluation found a significant 11.3% reduction in adolescent fertility rates among those aged 10 to 19, with an even greater 24% reduction among girls aged 10 to 14. These findings highlight the effectiveness of integrating reproductive health services within broader health system frameworks to address complex public health challenges.

Following its conclusion, SMI developed a sustainability roadmap outlining strategies for integrating sustainability planning within broader national and regional health frameworks. The groundwork for sustainability was laid early in the initiative's design phase, allowing for the institutionalization of key processes during implementation. The sustainability assessment conducted at the program's end helped identify strengths and weaknesses, facilitating the development of targeted sustainability plans aimed at ensuring the longevity and scalability of SMI's interventions.

SMI prioritized knowledge sharing by systematizing its experiences and findings, making them accessible for application in new contexts and challenges. Recognizing the importance of outreach, the initiative launched a Facebook page in 2012, which grew to over 7,500 followers, serving as a hub for disseminating content, videos, and event updates. Its Twitter (X) account, with over 1,440 followers, further promoted key insights and discussions related to health initiatives. The SMI model has been recognized as a best practice and included in a learning MOOC developed by the IDB in collaboration with the UN Sustainable Development Solutions Network (SDSN), showcasing successful methodologies for partnerships in sustainable development.

Externally, SMI actively participated in international events to share its insights and promote systemic change. Notably, on February 28, 2020, SMI's Executive Secretary, Emma Iriarte, presented the initiative at an event in Germany hosted by the Robert Koch Institute in Berlin, where the SMI model was analyzed as a transformative approach to strengthening health systems. The initiative's findings and impact have been shared through academic and technical publications. To date, SMI's research has been cited in 537 academic manuscripts, with an average of 12 citations per publication, even for recent articles that have had limited time for citation accumulation. The initiative has produced a total of 44 publications, all of which have been published in high-impact health journals, reinforcing SMI's role as a key contributor to global health knowledge.

The Initiative concluded with multiple lessons to improve the effectiveness of global health and development programs. SMI faced several challenges, including data verification delays and disruptions caused by the COVID-19 pandemic, which hindered the implementation of some health interventions. Nonetheless, adaptive strategies, such as remote monitoring and flexibility in funding, mitigated many obstacles. The initiative's emphasis on local ownership, evidence-based practices, and rigorous evaluation proved crucial for maintaining

The Salud Mesoamerica Initiative stands as a landmark effort in reducing health disparities in Mesoamerica. By mobilizing substantial resources and fostering collaborative efforts among diverse stakeholders, SMI delivered measurable health improvements and established a robust model for results-based healthcare interventions. The initiative's success in implementing sustainable, scalable solutions provides a blueprint for future health equity programs in low- and middle-income settings. As the final convening takes place in 2025, the lessons learned from SMI will continue to shape global health strategies and practices.

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Administrator IDB

Salud Mesoamerica Design

Introduction

The Mesoamerican Health Facility (the "MHF") was created in 2009 as a partnership between public and private sector actors to improve the health of the poor in the Mesoamerica region. The juncture - 5 years out from the Millennium Development Goals in 2015 (and later the Sustainable Development Gorals by 2030) - provided a unique opportunity to accelerate progress towards the health MDG in Mesoamerica via targeted performance-driven investments to increase the coverage of proven efficacious or promising health interventions among the poorest populations. The MHF original priority areas were nutrition; reproductive, maternal, and neonatal health; immunization and vaccinations; malaria and dengue as well as regional epidemiological surveillance and institutional capacity in the health sector.

The Inter-American Development Bank entered in discussions with the Bill and Melinda Gates Foundation (BMGF) about the possibility of financing the MHF, foreseeing an anticipated initial contribution of US$50 million that would be used to leverage additional commitments totaling US$240 million. As a multi-million-dollar results-oriented regional health partnership, the MHF was designed to be a catalyst for improving the health landscape in the region as well as a source of evidence-based inputs into the debate on global health aid architecture. The MHF would help harmonize donor efforts around selected key health interventions to contribute to the reduction of the maternal and under five mortality (including neonatal) as well as moving towards reaching universal access to reproductive services, especially family planning.by creating global partnerships for development providing sustainable outcomes for poor and vulnerable populations.

The implementation of operations financed through the MHF would be coordinated by a

dedicated Secretariat (the Coordination Unit). The Bank was expected to contribute technical expertise to the MHF in two main areas: (i) project origination, preparation, monitoring, execution, and evaluation; and (ii) financial and fiduciary administration and management of donor contributions.

The financing of proposals was decided to be agreed by a Donors Committee before their approval by Bank management. The Bank was best placed as a multilateral institution to create and implement the proposed MHF with its track record working with poor populations; a growing knowledge of results-based operations; strong and ongoing relationships with each beneficiary country; a unique regional perspective; and proven financial systems and fiduciary experience. By its leadership with the MHF the Bank would participate in a high-profile regional initiative designed to have measurable impacts on poverty in a priority Bank region. In addition, the MHF would provide inputs for the Bank to contribute substantially to the debate about global development partnerships, particularly global health structures.

The MHF represented a unique opportunity for the Bank to fulfill its mandate to support the economic and social development of the Latin American and Caribbean Region while strengthening its core knowledge function.

So that, the Salud Mesoamerica Initiative (SMI) is a public-private partnership between the Bill & Melinda Gates Foundation, the Carlos Slim Foundation, the Government of Spain, the Inter-American Development Bank (IDB), the countries of Central America, and the state of Chiapas, Mexico. SMI aims to reduce maternal and child health inequalities through a results-based aid model (RBA), according to priorities established by the governments of the region. Among the poor in Mesoamerica, only 5 out of every 10 pregnant women were attended during childbirth by skilled birth personnel; the mortality rate among children in poverty was twice the regional average; and that at age 5, a child from the poorest 20% was 6 cm shorter than a child from the richest 20%.[1]

The SMI model is based on four basic concepts: 1) Countries have to work within the poorest 20% of their populations, selected based on Poverty Incidence Data; 2) SMI funds can only finance evidence-based, cost-effective and promissory interventions for maternal and child health; 3) All projects are co-financed by SMI and countries (50% average cost-sharing) and must be executed using the SMI results based aid model; and 4) All results are externally verified by an independent third party through both household and health facility surveys. If countries meet 80% of their goals, they receive 50% of their original investment to use freely within the health sector. In the region, SMI interventions are directly benefiting 1.8 million women of reproductive age and children less than 5 years of age. Indirectly 4.5 million people living in the poorest areas are also benefitting from these interventions.

[1] SMI Proposal, 2009

Foundational Rationale

Despite the progress on average in health issues in Mesoamerica, the poor continue to fare substantially worse and gain less from basic health care than the better-off in the sub region. Social gradients in health have been documented in Central America and worldwide[2]. These socio-economic inequalities are demonstrated by uneven patterns of disease, injuries, and health behaviors across socio-economic groups.

Inequalities are termed inequities when these inequalities are deemed to be unfair and avoidable. They represent needless human suffering and lost productivity; they also have significant consequences for the economy[3]. Health status inequities – related to preventable conditions -- are pronounced in Central America. In Nicaragua (2006/7), for example, stunting affects only 6.1% of children at the national level, but 11% of children in the poorest 20% of the wealth distribution. In Honduras (2005), overall stunting is high at 25% of children at the national level and a shocking 43% of children among the bottom 20%. Given that the literature suggests that improved nutrition in early childhood leads to better adult human capital including larger body size, improved physical work capacity, more schooling, better cognitive skills and higher earnings as an adult, the implications of these health status inequalities for development are substantial.

[4]Inequities in health status are driven in part by inequities in access to basic public health interventions, especially comparting differences between the worst-off and the best-off 20 percent with respect to coverage of antenatal care, attended births, births in health facilities, immunization[5], treatment of acute respiratory illness (ARI), and treatment of diarrhea. In Guatemala, for example, only 20% of poor women give birth in a health facility under the supervision of trained personnel, a factor which is likely linked to poor outcomes for both mothers and newborns. Further, new problems such as dengue and influenza A, and old problems such as maternal mortality and soil-transmitted helminths remain prevalent and represent a substantial component of the burden of disease, with implications for broader development goals.

It is critical first to understand the reasons behind low coverage and disappointing health results among the poor in the sub-region up to now: i) Low absolute levels and equitable distribution of public spending on health; ii) Demand-side barriers to access for the poor; iii) Institutional incentives which do not facilitate improving health outcomes among the poor: input-focused, hierarchical bureaucracies and rigid public sector management practices contribute to diffuse accountability and limited performance incentives.; iv) Poor quality of care; logistic and communication failures; v) Policy, information and management issues; vi) Limited regional cooperation in health to date.

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[2] Colston J. Dengue and malaria in Mesoamerica: epidemiology, strategies and challenges. Unpublished manuscript. Inter-American Development Bank, 2009

[3] Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M: Introduction. In Challenging Inequities in Health. From Ethics to Action. Edited by: Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M. New York: Oxford University Press; 2001:3-11.

Gakidou E, King G. 2009.

[4] Wilkinson RG: Unhealthy Societies. In The Afflictions of Inequality. London and New York: Routledge; 1996.

[5] Of the interventions studied, full immunization for age is a service that appears to consistently favor the poor and the wealthy equally. However, the absolute level in both groups is sub-optimal.

Original Objectives and Principles

The purpose of the MHF is to finance quality cost-effective or promising interventions to improve the health of poor and indigenous populations in the Mesoamerican region, with a focus on reproductive, maternal, and neonatal health, immunization, nutrition, malaria and dengue, health information system strengthening, evaluation, and public health capacity-building. The principles governing these actions include: (i) Equity: a focus on improving health inequities; (ii) Performance focus: MHF is a short-term, results orientated program; (iii) Measurement and Evaluation: Independent evaluation of effects will be used; (iv) Transparency and Accountability: all data will be made publicly available; (v) Additionality: the funding provided to Executing Agencies shall not substitute for domestic financing in public health priority areas to increase sustainability; (vi) Ownership of countries and alignment with national and regional health policies; (vii) Donor coordination; and (viii) Integration with
the existing health systems.

Main goals

1. Reduce inequities via achievement of MDG 1, 4 & 5 in targeted poor communities.
2. Contribute to MDG 6 via progress towards the elimination of malaria and control of dengue.

Objectives

1. Develop and implement an efficient, country owned model of governance for MHI management.
2. Implement effective integrated programs in RMNH, nutrition, vaccination, malaria, and dengue.
3. Develop and implement results-based financing mechanisms and impact evaluations.
4. Support a favorable policy environment that contributes to program implementation and sustainability. 4.1 Policy dialogue with national governments and regional bodies and 4.2 Communicate strategically and effectively.

Main SMI Features

Results Based Financing Model

The RBA challenged donors and aid-recipient countries to rethink the traditional approach of financing inputs and instead place emphasis on achieving results. There was sufficient evidence in public health regarding what worked, but not necessarily how solutions should be implemented, especially in hard-to-reach areas. The program's theory of change established that the combination of financial and reputational incentives, evidence from external performance monitoring, and additional resources allocated to the poor would create a scenario of high effort to motivate the adoption of evidence-based interventions and policies that increased demand and supply of health services. In some cases, this meant testing "operational innovations" to allow biomedical interventions to reach target populations. In turn, this supply-and-demand cycle improved health outcomes in the poorest populations in Mesoamerica.

The Initiative's RBA model considered different measures to mitigate the risk of perverse incentives. To prevent governments from focusing on some indicators while ignoring others, a minimum score of 0.8 was established for the disbursement of the performance tranche. Results indicators and life-cycle approaches were taken into account to ensure the program focused on improving health. An evaluation in comparison areas was performed to ensure funds were not transferred from some areas to others. A shared set of 40 indicators, the SMI Results Framework, was measured in all countries, not just performance indicators.

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

The Initiative's RBF model was also accompanied by several components that strengthened the institutional capacity of the health sector. SMI included a strong component of policy dialogue activities, which proved effective during the first phases, working with decision-makers in each country to approve evidence-based policies, incorporate changes into their systems, and increase the allocation of funding to the poorest areas. Countries developed policy dialogue plans, including fiscal, technical, and operational policy changes.

In terms of learning, the SMI found effective ways of managing the tension between exploring new ways of accomplishing its mission through encouraging creative discussion and exploiting existing practices by systematizing them throughout the Initiative. A framework and tools were implemented to facilitate inter-organizational learning and knowledge sharing, synthesizing lessons learned from implementation, evidence arising from the M&E plan, and data from country dashboards and supervision missions. The SMI learning framework approach shortened feedback loop cycles, creating opportunities for experimentation, learning, and strategic adjustments. In this process, it was important to purposefully create spaces for reflection on performance, sharing both positive and negative experiences, and incorporating findings into decision-making.

Targeting the 20% poorest

SMI focused on the poorest areas to bridge healthcare coverage and quality gaps for the most disadvantaged populations. This was achieved by reducing the funding disparity between poorer and wealthier regions and ensuring that high-quality interventions reached those most in need. To sustain these efforts, SMI's donations and counterpart financing were intended to be incorporated into the Ministry of Health's regular budget, securing continued investment in healthcare services.

By geographically targeting the poorest areas, SMI adopted a network-based approach, strengthening entire health systems rather than just individual facilities or patients. This approach had significant implications. From a coverage perspective, it required health facilities to expand services across their catchment areas, ensuring public health initiatives reached the entire population. Organizationally, it fostered better integration between ambulatory and hospital care, clarifying responsibilities and streamlining referral and counter-referral processes.

Country operations were directed toward geographical areas or populations classified as extremely poor and/or indigenous, based on national definitions[6]. Additionally, interventions targeting malaria and dengue were planned according to epidemiological criteria. However, due to a lack of available funding, this component was ultimately excluded from the design.

[6] Each beneficiary country may have its own national definition of poverty level based on GDP.

SALUD MESOAMERICA DESIGN /

Main SMI Features

Outcome and Impact-level targets

The 2nd and 3rd operations of the SMI included indicators and targets at the outcome (coverage and quality) and impact levels. This was a significant distinction, as many programs focused only on the activity or product levels. Although lower-level results were easier to achieve and were directly controllable by Ministries of Health, they were often based on preexisting assumptions about what was needed and might not have addressed all bottlenecks and barriers along the chain of effects necessary for improving healthcare coverage, quality, and well-being.

By including outcome and impact-level indicators and targets, SMI required countries to address the entire chain of effects and test assumptions to ensure they led to actual improvements.

External measurement

All phases of SMI were measured by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, which was not involved in funding, the design or implementation of interventions. Initially, this independent measurement reassured donors that the results were genuine and not manipulated.

Additionally, the external measurements provided countries with objective metrics for progress and benchmarking. The data collected also served as a comparison point for indicators gathered through health information systems, offering strong evidence that results had been achieved. This evidence helped Ministry of Health program managers gain support from decision-makers within their respective countries.

Planning for results

Planning for results in SMI encompasses not only SMI funding, but all funding sources needed to achieve targets (including national funds and other external sources). This approach is based on a collective action framework to achieve results with a single aim, single set of metrics and single plan. It is different from traditional approaches where health programs only track activities funded directly with the program's funds and only commit to the results directly linked to those activities. In SMI, given that the results are outcome based, a wider set of combined activities is required to achieve them.

Plans were developed thinking about results first and then planning backwards to establish what was needed. For instance, they could have included activities funded by SMI (such as training, equipment, infrastructure enhancements, expert recommendations to strengthen guidelines and protocols, designing and printing new communication materials, etc.), activities funded by regular national funds (such as procurement and distribution of supplies, monitoring and supervision, etc.) and technical activities (such as reviewing guidelines and protocols, meetings for decision-making, etc.). This approach ensured that everything that was needed to achieve results took place, preventing or solving bottlenecks from activities not directly funded by SMI.

Direct Technical Assistance

Results-Based Financing (RBF) models are designed to be hands-off, where targets are agreed upon at the outset and compliance is verified at the end, with the assumption that incentives will help overcome performance bottlenecks.

In contrast, the SMI model followed a hands-on approach, operating under the assumption that while countries knew what was needed to improve maternal and child health, the means of overcoming barriers and bottlenecks were less clear. Thus, SMI provided direct technical assistance, primarily through the SMI Coordination Unit, though external technical assistance was contracted for specific purposes during the initial operation.

The IDB provided assistance through tailored capacity-building activities to develop guidelines and toolkits for implementing novel strategies in hard-to-reach areas, conducting results-based supervision, and taking corrective actions during implementation based on process analysis. Additionally, efforts were made to scale up some of the innovations. The assistance included support for implementing results-based financing models at subnational levels, developing norms, guidelines, and implementation tools, designing integrated community health service provision platforms, adolescent risk management models, quality improvement approaches, and demand-side interventions, among others. As part of the technical assistance funded by the Initiative, experts also worked with countries on supply chain and procurement plans to ensure the availability of inputs for maternal and childcare.

Managerial assistance for planning, procurement processes, and lower-level supervision was also provided to enable all countries to satisfactorily complete their activities and reach their targets. All this additional support contributed to increasing local capacity.

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The SMI technical assistance approach focused on coaching and mentorship, rather than solution-based recommendations, emphasizing that "ideas come from inside, not only from outside." This approach also fostered ownership. It aimed to address capacity-building needs identified through a systemic process, not just immediate or emergent needs, ensuring that technical assistance was linked and synchronized with other related processes.

Cost Effective and Promissory Interventions

Operations financed proven cost-effective and promissory interventions related to the MHF objectives, mainly those described in the 2009 working group master plans[7] and the Disease Control Priorities Project[8]. Based on evidence, reality of the implementation and in agreement with countries, interventions to be financed were modified over time to meet the ongoing dynamics and needs. Intervention may have been already partly implemented in a country but had not fully reached the poorest areas due to different barriers and bottlenecks. SMI addressed these problems through innovations considering the service delivery platforms and operational approaches.

Country Allocation rules

Eight countries were eligible to receive a Country Allocation from the MHF: State of Chiapas, Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama. Allocation of funds for Country Operations were based on need. Need was defined as the average gap in the coverage of key MHF interventions, as previously agreed with the Donors Committee. The following steps were taken.

a- Calculate a country coverage gap score. The country score is the sum of the number of annual interventions necessary to bring the relevant coverage rates of the Target Population to the following levels.

i. Coverage of existing Expanded Program on Immunization (EPI) vaccines to 95%
ii. Coverage of new vaccines (Hib3, Rotavirus, Pneumococcal) to national EPI average
iii. Coverage of folic acid, iron and Vitamin A supplementation reaches to national average
iv. Coverage of institutional delivery or skilled birth attendance to 50% increase
v. Coverage of post-natal care to 50% increase.

b- The allocation of funds by country was determined by dividing the country score by the sum of the country scores for all eligible countries as follows:
Country Share = Country Score ÷ Sum of Country Scores for all eligible countries.

The country allocation for each country was computed as the product of the country share multiplied by the total amount of MHF resources available for Country Operations:

Country Initial Allocation = Country Share x MHF resources available for Country Operations.

This formula was set to ensure that the countries needing the most assistance to close their country coverage gap would receive the most funding. Additional available -after initial application of this formula- may be allocated to the countries in proportion to their country shares.

The country initial allocation was equal to the total amount available for the country's Investment Tranche (IT) and Performance Tranche (PT). As each Country Operation was approved, the amount corresponding to that operation will be deducted from the country's total funding allocation.

c- Once the total country allocation was determined, the amount of counterpart (CP) financing necessary was determined. The lower the country's GDP, the less CP financing required. The sum of the CP and the IT is equal to the total country cost. The total country cost described total cost of reaching the selected targets from the Performance Framework. The Performance Framework in its entirety, which is an integrated package considering all the MHF priorities, is preferred, however, countries –together with MHF- will decide on the

[7] In 2009, the Gates Foundation and the Government of Mexico funded or supported the creation of master plans containing cost-effective interventions and policy change recommendations for the region, based on best practices in scientific literature in the MHI Priority Areas.

[8] The Disease Control Priorities Project (DCPP) is an ongoing effort to assess disease control priorities and inform health policymaking in developing countries (see www.dcp2.org).

Main SMI Features

strategic approach, as it may not be financially possible to cover all activities in the Performance Framework.

d- The Performance Tranche (PT) is equal to 50% of the CP. If the country meets the goals associated with the PT, the country will be reimbursed 50% of the CP.

Operational Model

Introduction of the RBF model based on an incentive at national level is an innovation in itself in Mesoamerica; the program required a lot of evidence during the preparation phase, not only to introduce planning and monitoring for results, but also to design new platforms for service delivery for hard-to-reach areas, or "innovations" to increase demand (i.e. incentives at individual level, use of social networks to change behaviors).

SMI was also timed to start at a critical moment in the region. Countries were eager to reach the Millennium Development Goals (after 2015, the Sustainable Development Goals) and Governments of the region had signed on a series of Master Plans detailing a list of cost-effective interventions to be supported for maternal and child health. Each country team of the eight participant countries was armed with data and a required innovative spirit. A series of country level quantitative and qualitative analyses were conducted including barriers identification and epidemiologic analysis to provide specific data about the target population.

Eligible operations financed by the resources mobilized by the MHF had specific goals and measurable results. The development effectiveness of eligible operations was measured in accordance with a system incorporating best practices with respect to: (a) outcome indicators, disbursement speed, degree of innovation, ability to disseminate lessons learned, and execution performance; (b) a framework for the impact evaluation of operations on an individual and group basis; and (c) public dissemination of results. Enhanced donor coordination promoted by the partnership was intended to focus resources on critical health challenges of the region. In addition, the MHF would allow the design and evaluation of new models for performance-based financing, flexible and transparent governance and decision-making structures that would provide evidence-based inputs into the debate on the global health aid architecture.

Each SMI project has its own cost-effective/cost-benefit analysis. For example, in Belize, the effects of the SMI were estimated at 24,780 DALYs and 320 deaths averted over the five years of implementation. Besides country analyses, studies were conducted using the Spectrum System of Policy Models and the Lives Saved Tool (LiST). Findings suggest reduction in mortality would be substantial if the package was scaled up nationally. Under a realistic scenario, rates of reduction in infant mortality between 9 and 20 percent could be possible. Applying these assumptions to the region, a 15-percentage point increase in coverage of interventions supported by SMI could save the lives of 15,000 children and mothers by scaling up cost-effective interventions like ORS and Zinc and Exclusive breast-feeding.

To design the projects, countries also utilized data from the surveys and are using dashboards to monitor progress towards health goals and targets at different levels to provide short-term data for decision-making. Dashboards harness data from routine health information system (proxy Indicators to monitor progress on the ground) without creating a parallel system. Quarterly supervision missions entail systematic procedures and data collection instruments to identify bottlenecks, best practices and lessons learned. Data collected are vital inputs for policy dialogue and learning.

During preparation and supervision visits, risks are identified, categorized, and analyzed according to their probability of occurrence and impact, and mitigation strategies are decided. The main risks identified for all first phases include: long procurement procedures; limitations in abilities and capacities of execution teams of the Ministries of Health; barriers to the implementation of interventions in hard-to-reach geographical areas; and weak supply chains.

To mitigate the fiduciary and execution risks, the IDB is providing technical assistance to assist countries in their administrative, procurement, technical, monitoring and planning processes[9]. All plans are reviewed in detail by IDB specialists together with the execution teams of the Ministries of Health.

IDB and countries have developed the following set of tools: theories of change for each project, Supervision Mission Guide and Results-based Project Execu-

[9] A five-person team hired to assist the countries in their administrative, procurement and planning processes.

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tion Plan (PEP) Guide, proxy indicators to monitor progress of country projects (technical and financial data), disbursements and key milestones for each payment indicator, standards and indicators for management and clinical performance.

Regional Approach

At the X Summit of the Heads of State of the Tuxtla Mechanism, in Villahermosa, Mexico, June 2008, the Presidents of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama agreed to transition the Plan Puebla Panama to the Mesoamerica Project. The Mesoamerica Project (PM – Proyecto Mesoamerica) is the mechanism established by the nine Mesoamerican countries to facilitate the design, financing, and execution of regional integration projects, including health and social development. The Mesoamerica Project has been able to build consensus among participants to attract resources for regional priorities. It has also created a new policy based on cooperation under the principle of responsibility which allows to identify and focus on the common problems and their solutions in a joint manner. The health component of the PM is known as the Mesoamerican System of Public Health (SMSP). Since the creation of the SMSP, coordination mechanism, the Government of Mexico has initiated and coordinated policy dialogue on key health priorities with the governments of the region, COMISCA and the donor community. It was foreseen that the SMSP coordination mechanism would support the organization of regional events by the SICA/COMISCA, the regional group, to provide input regarding the strategic direction of MHF, assure coordination of regional efforts, and give feedback on proposed and on-going operations, amongst others. Such events would discuss the MHF contribution to the development of sustainable regional public goods, and the measures required to sustain the results achieved, amongst other issues, and would build on the SMSP coordination mechanism under development by participating countries.

Since coalitions are often needed to move big issues, SMI collaborated with other organizations at the regional level provided that the benefits and contributions are clear. The SMI/IDB worked with the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), and the Latin America and Caribbean (LAC) Forum to facilitate the uninterrupted availability of critical supplies and medicines for maternal and child health care (especially micronutrients, zinc and family planning methods). Coordinated work with the Mesoamerican Project, the Council of Health Ministers (COMISCA), Presidential Commissioners and the Ministers of Finance helped keep SMI goals a priority in the regional and country health agendas as well as supporting mechanisms for regional procurement which helps achieve regional public goods and benefits from economies of scale.

IDB as the administrator of the Mesoamerican Health Facility

The Bank was the best placed international institution to support the creation of the MHF and of the public-private partnership. It has a long track record working with poor and indigenous and afro-descendent communities in the region who are the intended beneficiaries of MHF operations. This record was based on the preparation, financing, and evaluation of Conditional Cash Transfer (CCT) programs and on health and nutrition programs tailored to the poor, mainly in the area of maternal and child health. The Bank experience also extends to work with poverty-focused social investment funds as well as regional development programs targeting the Indigenous populations of the Guatemalan highlands as well as the afro-descendent communities of the Honduran and Nicaraguan Caribbean Coast.

A second factor positioning the Bank as the MHF administrator was its accumulating knowledge regarding results-based operations. The design and execution of performance driven loans –three in the health sector—was one source of expertise. The Bank's overall results-orientated environment consequently lends itself to the development and operationalization of the performance-based project design and execution at the heart of the MHF.

Another important consideration was the Bank's strong, close, and ongoing relationship with each beneficiary country, constituted by policy dialogues, jointly developed country strategies and significant loan and technical cooperation portfolios. The health portfolio in Mesoamerica included at that time, 24 lending projects totaling US$1.9 billion and 32 technical assistance projects for US$13.1 million. A critical enabling factor was the Bank's physical presence through its country representations. This office infrastructure housed the MHF Secretariat, thereby mobilizing the Bank's substantial and critical technical and programmatic capacity behind the identification, preparation, monitoring, execution and evaluation of MHF operations.

The Bank's unique regional perspective was also a major asset. This accumulated from specific support provided to important regional health programs, namely the Mesoamerica Epidemiological Surveillance Program for dengue, for Influenza AH1N1. In addition, the Bank's overall

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accompaniment of regional initiatives such as the Plan Puebla Panama and the follow-up Mesoamerica Project places it in a key position to convoke the support of those regional technical and policy actors critical to the successful implementation of the MHF.

Finally, the Bank's financial systems and fiduciary experience was an institutional expertise that would be applied to the administration of the public and private financial resources expected to fund the MHF and its constituent activities. The objectives of the MHF are consistent with the Bank's Public Health Policies and Sector Frameworks.

Policy dialogue

SMI created opportunities for ongoing policy dialogue with participating countries. At the national level, IDB supervision visits, which traditionally focused on financial execution, were adapted to incorporate technical discussions. These discussions engaged not only decision-makers and technical staff from the central offices of Ministries of Health but also operational personnel from regional offices and representatives of health service providers. This approach strengthened accountability and fostered internal dialogue within the Ministries of Health.

At the regional level, continuous policy dialogue took place through COMISCA (the Council of Health Ministers of Central America) and the Mesoamerica Project, involving executive leaders from all participating countries. These platforms elevated SMI onto the policy agenda, facilitating high-level discussions on critical issues relevant to all member states.

The following objectives were considered for SMI's policy dialogue:

i. Prioritization of the poor in health agendas to achieve the MDGs and beyond in the Mesoamerican region.
ii. Recognition of the impact of improved health on poverty reduction, leading to policies that address the social determinants of health for the poorest 20 percent of the region.
iii. Integration of evidence-based, cost-effective health and nutrition interventions into national norms across the SMI region.
iv. Incorporation of evidence generated during SMI's implementation into national and regional health agendas.
v. Consideration of local-level realities in decision-making processes, ensuring their reflection in national policies.
vi. Strengthened partnerships between participating countries, the IDB, and the Donors' Committee.

SMI engaged in policy dialogue at both national and regional levels to influence policy changes aimed at creating long-term improvements in the health conditions of the poorest 20 percent. To achieve this, SMI actively shaped fiscal, technical, and operational policy dialogues with country and regional actors, both within and beyond the IDB framework. Policy dialogue considered three pillars: fiscal policy dialogue, technical policy dialogue, and operational policy dialogue.

Fiscal Policy Dialogue focused on the allocation of resources. It sought to ensure adequate financial support from Ministries of Finance (MOF) to Ministries of Health (MOH) for primary healthcare services targeting the poor. Additionally, it addressed the equitable distribution of resources within MOH, emphasizing investment in underserved areas despite access barriers. SMI demonstrated that expanding healthcare services to marginalized populations was both necessary and cost-effective. Without such investments, achieving the MDGs and SMI's objectives would have been unattainable.

Technical Policy Dialogue centered on scaling up effective interventions. It aimed to integrate new evidence-based practices into national health norms and guidelines. Examples included introducing zinc supplementation for diarrhea treatment and providing micronutrient powders to children aged 6–23 months to prevent and treat anemia. These updates aligned national policies with the latest academic and programmatic research.

Operational Policy Dialogue addressed the implementation of scaled-up interventions. It focused on the practical measures required to translate technical policies into action, including guidelines, instruments, and best practices. Since operational evidence was not always systematically documented, experiential knowledge played a crucial role in shaping discussions. Key topics included incentivizing community health workers, establishing effective monitoring and evaluation frameworks, task-shifting strategies, and strengthening community health platforms. For instance, one policy change allowed community health workers to distribute contraceptives and nutritional supplements, thereby improving access to family planning and nutrition services.

Through these policy dialogues, SMI aimed to directly influence political and technical decision-makers within Ministries of Health and Finance. Such engagement was a core function of the IDB, which, based on a 2010 McKinsey & Company analysis, identified policy analysis and direct interaction with

Main SMI Features

policymakers as key areas of influence. Traditional policy analysis included developing policy briefs and shaping policy agendas, while direct engagement involved face-to-face discussions and building strong relationships with high-level decision-makers and their teams.

By leveraging these approaches, SMI contributed to shaping health policies that improved healthcare access, quality, and outcomes for the region's most vulnerable populations.

Advantages for the Participating Countries and for IDB

The proposed Mesoamerican Health Facility would harmonize donor efforts around selected key health interventions to generate significant and sustained direct benefits for poor people in participating countries. The mix of priority activities was expected to produce health and development results contributing to the achievement of 3 key MDG (later the Sustained Development Goals SDG by 2023).

Through the MHF's facilitation of pooled purchasing was expected for procurement of some critical/innovative supplies, implementation of interventions and other benefits would include health systems strengthened by the application of a results-based focus and other capacity-building efforts.

Benefits are also expected to accrue to the Bank. In overall terms, a leadership role in a high-profile regional initiative designed to have measurable impacts on poverty and to contribute to the debate about global development partnerships, particularly global health structures will enhance the Bank's reputation as an innovative institution seeking creative responses to enduring development problems. In more specific term, for example, the design and testing of performance driven financing represents a unique opportunity for the Bank to generate key learning that would contribute towards the Bank transformation into a knowledge-based institution.

The MHF provided the Bank the mechanism to pool significant resources from private foundations and other donors to address critical development problems of a group of its member countries, thereby avoiding the proliferation of approaches and interventions when agencies act independently. Such collaboration reduced transaction costs for beneficiaries while enhancing the opportunity to finance interventions of a scale with the potential to make a sustainable difference. The Mesoamerican Health Facility has provided the Bank with the lessons learned and first-hand experience that is essential to any deliberation around the application and replication of the MHF approach in other parts of the Latin America and Caribbean region. Through its experience with the Mesoamerican Health Facility, the Bank is well placed to develop a pipeline of new health sector lending operations.

The Governance Structure of the Mesoamerican Health Facility

The MHF's governance arrangements sought to improve on current global health governance structures,[10] by introducing an accountable and transparent decision-making structure that ensures not only the technical quality of performance driven grant operations but also robust programming, result-based disbursements, and high standards of reporting to key stakeholders.

The Bank under the MHF provided technical services in: (i) the origination, preparation, monitoring, execution, and evaluation of eligible operations, and (ii) the administration of the financial resources supporting the MHF. The Terms and Conditions provided for the establishment of a Donors Committee and a Secretariat. The contributing donors and the Bank shall developed the Operating Regulations to detail such matters as eligible and priority operations, their project cycle (origination, preparation, approval, monitoring, evaluation and execution procedures).

The **Donors' Committee** was comprised of representatives of each donor contributing to the MHF. A designated IDB staff member attended Donors Committee meetings as an observer, with voice but no vote, while the Executive Secretary of the Secretariat would act as secretary to the Donors Committee. The Donors Committee: (i) established MHF strategies and priorities; (ii) considered proposals of eligible operations and determined whether it agrees to their financing with the resources of the MHF; (iii) participated in the selection of the Executive Secretary and provide feedback on his/her performance; (iv)oversaw the implementation of the eligible operations financed with the resources of the MHF; and (v) approved and amended the Operating Regulations, with the agreement of the Bank.

The **Secretariat** was created to provide technical and administrative support to the MHF and consisted of an Executive Secretary and professional and administrative personnel. The Bank selected and contracted the personnel of the Secretariat. The personnel of the Secretariat reported to the Bank. The Secretariat resided in Panama, a Bank member country in the Mesoamerican region. The Secretariat (i) coordinated and provided support to the preparation, execution, supervision, and evaluation of eligible operations, in cooperation with the appropriate Bank offices; (ii) provided support to regional coordination activities; (iii) provided secretariat services to the Donors Committee.

[10] See for example analyses carried out as part of the International Health Partnership led by the UK government at http://www.internationalhealthpartnership.net/ as well as Eichler R, Glassman A. Health systems strengthening via performance-based aid: creating incentives to perform and to measure results. Washington, DC: Brookings Institution, September 2008.

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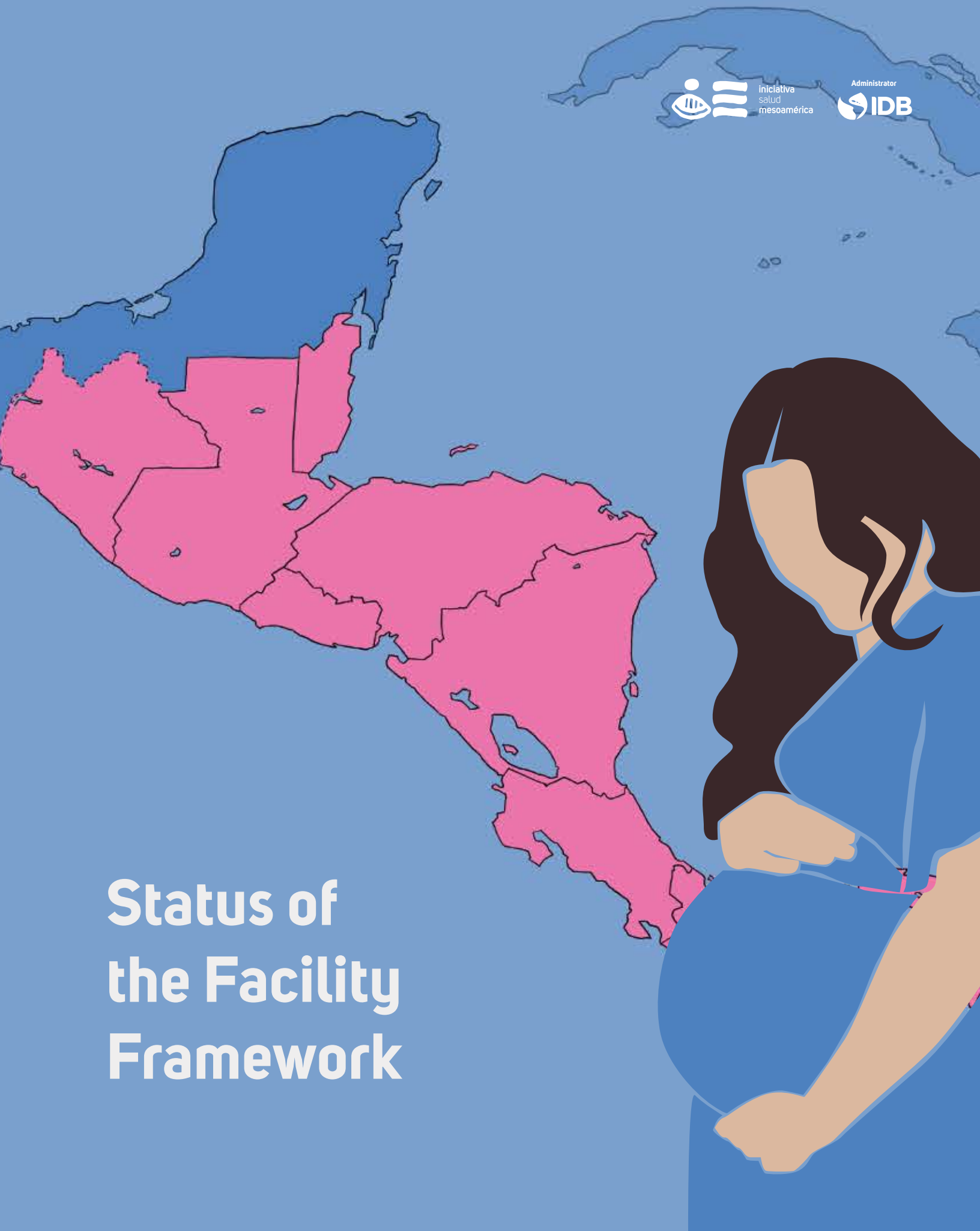

Status of the Facility Framework

Table 1. Status of SMI Facility Framework

Primary Outcome	Objective	Milestone	Definition	Status
Reduce inequities in maternal, neonatal, and child health in Mesoamerica within the poorest 20%	**Objective 1 Programmatic:** To monitor the disbursement rate and technical advances of Third Operations execution and verify results in Belize, El Salvador, Honduras, Nicaragua.	1.1 Four out of four countries with less than 25% variation in planned vs. actual technical progress during each quarter of execution, as reported by the PEP	Number of countries with programmed - actual physical progress with 25% or less variation at the end of each quarter, per the PEP/total number of countries	
	Objective 2 Program Monitoring and Risk Mitigation: To monitor operations to identify bottlenecks and mitigate risks during execution.	2.1 Quarterly country supervision mission reports collected by CU/SPH	Quarterly reports-aide memoires of each supervision mission	
		2.3 Four risk matrices updated biannually	Four matrixes updated in the ISM annual workplan in 2022	
	Objective 3: Legal Requirements: To comply with the legal requirements established in the Letters of Agreement and Operating Regulations (ORs)	3.1 SMI Annual Report, Work Plan & Budget submitted to Donors' Committee for approval	SMI Final Report sent to Donors' Committee by August 31st, 2023, for approval	
		3.2 Annual progress reported to other relevant actors (SMSP, COMISCA, Regional Working Group to reduce maternal mortality-GTR, Neonatal Regional Alliance)	SMI will participate, in person, in two COMISCA meetings and at least one working group meeting by December 31st, every year	
Contribute to the political and financial commitment within the Mesoamerican region to close the health equity gap, Increase the availability and use of evidence for pro-poor health policies & share best practices and lessons learned in future development and results-based aid programs	**Objective 4 Learning, Policy Dialogue and Communication:** To systematize and disseminate lessons learned during the execution of SMI	4.2 SMI third learning convening's TOR and scope prepared and approved by the DC	A regional learning convening to share lessons learned and a final convening to share results and SMI final evaluation in the last trimester of 2023	

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External Final Evaluation Results

NORC at the University of Chicago (NORC) conducted the final evaluation of the Salud Mesoamerica Initiative (SMI). NORC's mixed methods approach includes a quantitative analysis of all SMI phases (operations 1 to 3) using data collected by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, supplemented by an analysis of endline (post COVID-19 extension) primary qualitative data collected by NORC in 2024 in Belize, Honduras, and El Salvador. NORC prepared a full report that is available online.[11]

The Final Evaluation of the Salud Mesoamerica Initiative focuses on six Evaluation Questions (EQs).

- EQ 1: 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?
- EQ 2: How did SMI influence changes in coverage, quality of care, and health systems performance?
- EQ 3: What are the prospects for sustainability of SMI interventions and results?
- EQ 4: What components of SMI influenced whether outcomes were achieved or not according to stakeholders?
- EQ 5: What was the effect of COVID-19 on coverage and quality of MNCH services in the poorest regions?
- EQ 6: What was the role of the IDB as a change agent supporting health systems and health service provision improvement?

[11] NORC Global. 2024. Final Evaluation of the Salud Mesoamerica Initiative. Final Report. NORC at the University of Chicago. https://www.norc.org/content/dam/norc-org/pdf2025/smi-final-evaluation.pdf

Data and Methodology

NORC employs a mixed methods approach that integrates both quantitative and qualitative data to provide a comprehensive understanding of the research questions. This approach helped NORC analyze how specific SMI elements may have contributed to documented outcomes and identify contextual factors that influenced the effectiveness of SMI components in achieving intended results in Belize, El Salvador, and Honduras. While quantitative data capture the outcomes ("the what"), qualitative research provides insights into the mechanisms and processes behind these changes ("the how"). The qualitative inquiry also explores conditions affecting access and quality for local recipients ("for whom"), sustainability challenges, and lessons learned or best practices within SMI.

The final evaluation of the SMI program utilized secondary quantitative data and primary qualitative data. Quantitative data were collected by the Institute for Health Metrics and Evaluation (IHME) from the eight countries participating in SMI for the baseline and each operation: 2013 (baseline), 2015, 2017-18, and 2021-22 (only for Nicaragua, Honduras, El Salvador, and Belize). These data, gathered from households and health facilities, were used to assess progress toward outcome targets. Comparison data were also collected in Chiapas (Mexico), Guatemala, Honduras, and Nicaragua. The Institute for Health Metrics and Evaluation (IHME) at the University of Washington designed data collection protocols and provided data to NORC via the IDB.

In addition to quantitative data, NORC conducted qualitative research in Belize, El Salvador, and Honduras in 2024, including 69 key informant interviews (KIIs) with government and health sector representatives, as well as 27 focus group discussions (FGDs) with community health workers, midwives, and families. These interviews examined coverage, quality of care, sustainability, the impact of COVID-19, and the role of the IDB. FGDs focused on service quality, pandemic effects, and recommendations for SMI improvements.

Quantitative methodology

NORC used data from four countries—Nicaragua, Honduras, Guatemala, and Chiapas (Mexico)—where comparison data were collected to estimate the impact of SMI. In these countries, treatment assignment was based on poverty and other well-being indicators, selecting the poorest 20 percent of municipalities for treatment, while comparison municipalities were generally chosen from the second poorest quintile. NORC conducted a difference-in-differences (DID) analysis to evaluate SMI's impact.

Additionally, NORC explored pooling data from multiple countries in a single regression to increase sample size, though this approach assumed uniform program impacts across countries, reducing flexibility compared to country-specific analyses.

NORC also analyzed whether SMI had different effects across population groups, such as larger improvements in complete vaccination schedules among the poorest children. The sample was stratified by poverty level, and regressions were estimated for each stratum.

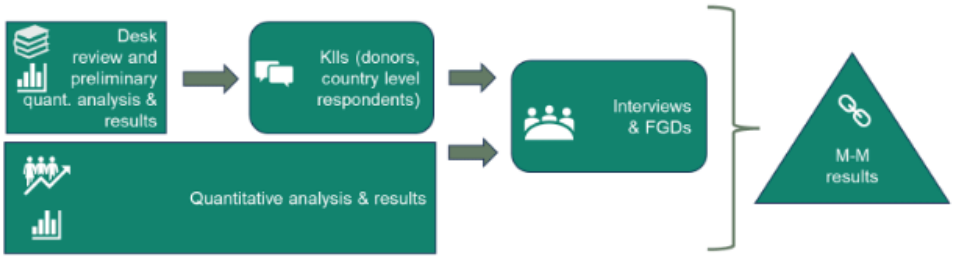
Comparison group contamination was also assessed, particularly in Chiapas and Nicaragua, where some comparison areas received treatment due to the referral of patients from comparison municipalities to treated Basic or Complete health facilities. To evaluate the sensitivity of impact evaluation results to this contamination, NORC estimated regressions excluding these affected municipalities.

Qualitative Analysis and Mixed Methods

NORC conducted the evaluation using a convergent mixed-methods approach (see Figure 1 Convergent Mixed-Methods (M-M) Approach), integrating qualitative and quantitative data to enhance findings. The process began with a review of SMI documentation, discussions with country staff to understand interventions, and preliminary quantitative analysis. These steps informed the design of qualitative protocols for key informant interviews (KIIs) and focus group discussions (FGDs). After collecting and analyzing qualitative data, NORC finalized the quantitative analysis and used a mixed-methods approach to triangulate findings.

Data and Methodology

Figure 1. Convergent Mixed-Methods Approach



Adapted from Creswell, J. W., & Clark, V. P. (2017).
Source: NORC Global. 2024. *Final Evaluation of the Salud Mesoamerica Initiative.* Final Report. NORC at the University of Chicago.
https://www.norc.org/content/dam/norc-org/pdf2025/smi-final-evaluation.pdf

Qualitative data helped explain how quantitative results materialized and for whom, considering country-specific variations in interventions. In Belize, Honduras, and El Salvador, qualitative protocols were tailored to reflect each country's specific interventions. This mixed-methods approach strengthened the explanatory power of quantitative findings.

To understand the influence of SMI in changes on health systems performance, NORC applied two mixed-methods approaches: the Context-Mechanism-Outcome (CMO) framework and directed content analysis. The CMO framework examined how specific SMI interventions influenced mechanisms of maternal, newborn, and child health (MNCH) to achieve intended outcomes. In Belize and Honduras, NORC conducted CMO configuration analysis, focusing on delivery care quality in hospitals (Belize) and antenatal care coverage and quality (Honduras).

Directed content analysis, a deductive method, was used to deepen the understanding of the magnitude of outcomes by organizing qualitative data based on pre-determined categories derived from program logic, theories of change, or social science frameworks. Quantitative outcomes and SMI document reviews helped define these categories. To mitigate bias, NORC gathered data from multiple sources and triangulated findings.

Finally, to assessed the role of the IDB as a change agent in health systems and care services, NORC employed conventional content analysis, an inductive approach. Unlike directed content analysis, this method did not rely on pre-determined categories, allowing for open inquiry into experiences, processes, and lessons learned.

Findings

Pregnancy

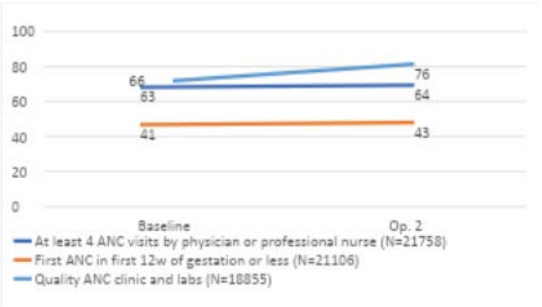
Overall, SMI interventions positively impacted antenatal care (ANC) outcomes, though challenges remained. Antenatal care (ANC) is crucial for maternal and fetal health, with early initiation and quality of care playing a key role in preventing complications. Improvements in women who had their first visit within the first 12 weeks of pregnancy (early ANC), completion of four ANC visits, and ANC with essential laboratory tests and clinical measurements (ANC quality) were observed across different countries, with varying degrees of success influenced by local contexts, cultural factors, and systemic healthcare barriers.

While small improvements were observed between baseline and operation 2, the most notable was a 10-percentage-point increase in ANC quality. In the four countries where operation 3 was conducted, ANC with quality and early ANC visits continued to improve, but there was a slight decline in the number of women completing at least four ANC visits, possibly due to the COVID-19 pandemic (see Figure 2. Antenatal care in SMI areas).

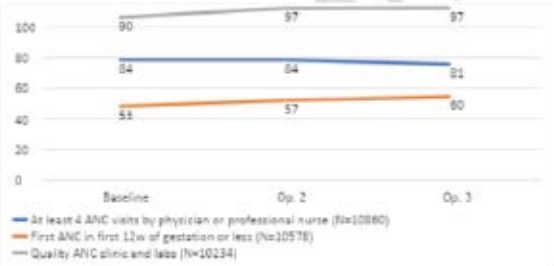
The impact evaluation results varied across countries. In Guatemala, SMI areas showed a 12-percentage-point increase in the likelihood of women completing at least four ANC visits. Early ANC visits improved in both Guatemala and Honduras during operation 2, with an 8-percentage-point increase in Guatemala and a 10-percentage-point increase in Honduras, though no effect was found in Honduras during operation 3. ANC quality saw a 14-percentage-point improvement in Chiapas, and pooled data from all four countries showed a statistically significant 6-percentage-point increase. However, some comparison areas in Chiapas and Nicaragua were partially treated, likely diluting the treatment effect.

Figure 2. Antenatal care in SMI areas

A- Pooled results for Belize, Guatemala, Honduras, Nicaragua, Chiapas (Mexico), Panama and El Salvador



B- Pooled results for Belize, Honduras, Nicaragua, and El Salvador



Note: Household data. Results correspond to the average of each (unweighted) country-specific mean. Ante-natal care with quality defined as a binary indicator for having conducted lab tests (urine and blood) and clinical tests (measurements of blood pressure, weight, fundal pressure and fetus heartbeat). ANC with quality is calculated for women that had at least once ante-natal care visit. Belize data are available for the indicator on at least 4 visits only.
Source: NORC Global. 2024. Final Evaluation of the Salud Mesoamerica Initiative. Final Report. NORC at the University of Chicago.
https://www.norc.org/content/dam/norc-org/pdf2025/smi-final-evaluation.pdf

The SMI intervention in Honduras had a positive impact on the pregnancy life cycle, achieving varying levels of success across different aspects of maternal healthcare. One significant improvement was in the proportion of pregnant women receiving their first antenatal care (ANC) visit within the first 12 weeks of gestation, which increased from 50.4% to 63.9%. This progress was partially attributed to the introduction of community health worker (CHW) incentives and the use of a diagnostic form (hoja filtro) to facilitate early pregnancy detection.

The quality of ANC services also saw an improvement, as evidenced by an increase in the provision of quality ANC clinic and lab tests from 89.4% to 98.6%. This progress was largely driven by training programs on rapid tests for CHWs, local health committees, and

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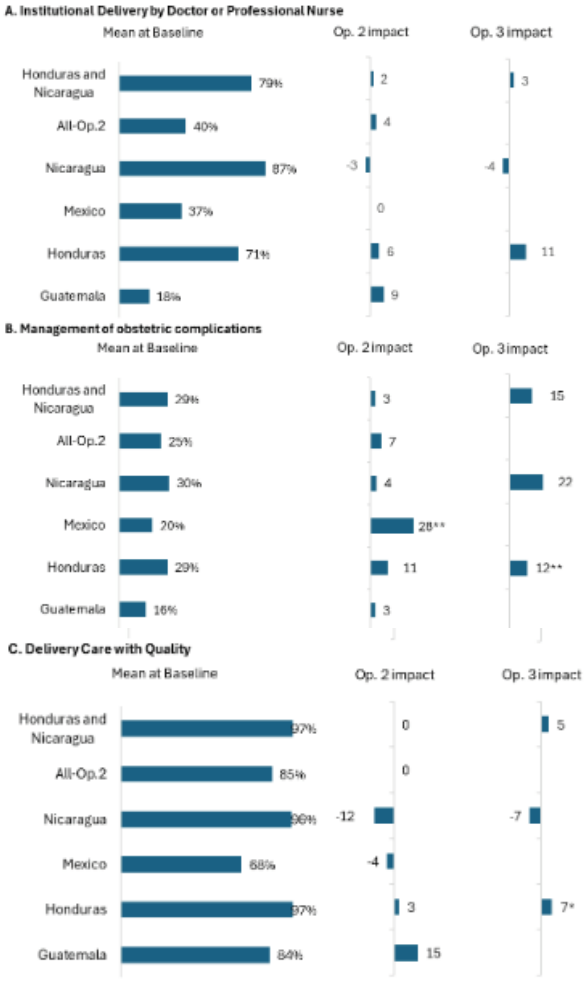
community volunteers, who valued their newly acquired skills and the role they could play in their communities.

Overall, the SMI intervention contributed significantly to improving ANC accessibility and quality in Honduras. However, cultural resistance, logistical challenges, and financial constraints for CHWs limited the full success of some initiatives. Tailoring interventions to community-specific needs and ensuring sustainable resource allocation could further enhance the effectiveness of maternal health programs in similar contexts.

Delivery

No statistically significant improvement was detected for institutional delivery by qualitied provider. The SMI intervention had a positive impact in Mexico, where women with obstetric complications in SMI areas were 28 percentage points more likely to receive care that adhered to established medical norms than those in comparison areas (see Figure 3. Impact of SMI – Delivery outcomes . This effect was observed during operation 2, the only follow-up conducted in the country. In Honduras, the point estimates for operations 2 and 3 were positive and relatively large, though not statistically significant.

Figure 3. Impact of SMI – Delivery outcomes



Notes: (A) Institutional Delivery by a doctor or professional nurse (HH data): Linear probability models controlling for mother's characteristics (i.e., age group, education, employment status, health insurance status, and marital status), household characteristics (i.e., whether it has piped water, a toilet, uses gas or electricity exclusively to cook, asset Index, owns a vehicle, someone smokes, beneficiaries of a social program and quintiles for household expenditures) and municipality and operation fixed effects. (B) Management of obstetric complications (HF data): Linear probability models controlling for mother's characteristics (i.e., age group, literacy, and marital status), complication type, and facility fixed effects. For regressions that include data from operation 3 (columns 6-8) we do not include facility fixed effects because facility identifiers were not available for the that operation. Instead, we included a treatment indicator. (C) Delivery Care with Quality (HF data): Linear probability models controlling for mother's characteristics (i.e., age group, literacy, and marital status) and health facility classification. * p<0.05 ** p<0.01 *** p<0.001

Adapted from: NORC Global. 2024. Final Evaluation of the Salud Mesoamerica Initiative. Final Report. NORC at the University of Chicago.
https://www.norc.org/content/dam/norc-org/pdf2025/smi-final-evaluation.pdf

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Training on protocols and guidelines under SMI significantly improved maternal and child healthcare, particularly in Belize and Honduras. In both countries, the proportion of obstetric complications managed according to medical norms increased by more than 30 percentage points following training, protocol updates, and incentives for institutional deliveries. Hospitals in Honduras SMI areas introduced new practices, such as ensuring a medical professional visited the patient within 30 minutes after childbirth to prevent complications. In El Salvador, adherence to updated protocols improved delivery care quality before the pandemic. However, respondents in both SMI and non-SMI areas agreed that the "Born with Love Act" (Ley Nacer con Cariño), passed by the Salvadorian Assembly in 2021, became the primary driver of quality improvements in delivery care.

Community visits by CHWs and midwives played an essential role in raising awareness about potential birth complications and promoting hospital deliveries, especially in Belize and Honduras. In Honduras, the proportion of institutional deliveries increased from 77% to 94%, with women and their partners often deciding to give birth in healthcare facilities due to medical conditions requiring advanced care, such as cesarean sections or anemia treatment.

The adoption of Active Management of the Third Stage of Labor (AMTSL), significantly improved delivery care in Belize, El Salvador, and Honduras. In Belize, for example, the proportion of deliveries meeting quality standards increased from 34% to 95% following the implementation of targeted training and technical assistance for obstetrics staff. This widespread adoption of AMTSL contributed to safer deliveries and improved maternal health outcomes in these countries.

Overall, the management of obstetric complications improved across Belize, El Salvador, and Honduras due to increased training and better infrastructure. Between baseline and operation 3, Belize improved specialist management of complications from 22% to 56%, while Honduras saw an increase from 36% to 65%. These improvements underscore the effectiveness of the SMI interventions in strengthening maternal healthcare systems and enhancing the quality of care for women experiencing obstetric complications.

Postpartum Care

SMI interventions led to improvements in immediate postpartum care quality across several countries, with varying degrees of success. In Mexico, during operation 2, women delivering in SMI locations were 37 percentage points more likely to receive immediate postpartum care that adhered to established norms than those in comparison areas. Guatemala saw a statistically significant increase of 9 percentage points in postpartum contraceptive counseling and a 14 percentage point increase in postpartum check-ups within seven days, while other countries showed no significant change in these indicators. In Belize, quantitative data indicated improvements in postpartum care quality from baseline to operation 3, whereas Honduras showed significant gains between baseline and operation 2 but a decline between operations 2 and 3. El Salvador experienced a significant drop in postpartum care quality, though qualitative data suggested improvements across SMI locations in Belize, Honduras, and El Salvador due to the implementation of new guidelines.

Several factors influenced postpartum coverage in different SMI locations. In Belize, stronger partnerships between nurses, CHWs, and midwives, along with educational outreach efforts that included brochures on danger signs and home visits to new mothers, contributed to better postpartum care. In El Salvador, a local health department developed a list of women who had given birth in hospitals to ensure that CHWs could schedule postpartum appointments at home or health centers. In Honduras, hospital staff linked the increase in postpartum check-ups within the first seven days to the introduction of control cards with appointment dates and monthly coordination meetings to enhance continuity of care.

Monitoring mothers every 15 minutes after delivery was a key practice introduced in SMI locations across all three countries, helping to enhance the quality of postpartum care. Standardized clinical formats and checklists were introduced to guide healthcare providers in tracking vital signs, uterine contractions, bleeding, and overall patient condition more consistently. In Belize, traditional beliefs and social norms initially discouraged some women from seeking postpartum care within the first week, but structured appointment times and counseling by LHC staff encouraged more women to receive postpartum check-ups. In contrast, respondents in non-SMI locations in El Salvador generally did not report any significant changes in postpartum care quality.

Neonatal care

The SMI intervention led to significant improvements in neonatal care across multiple countries, particularly in Honduras and Nicaragua (see Figure 4. Impact of SMI – Neonatal care outcomes . In Honduras, the proportion of infant records

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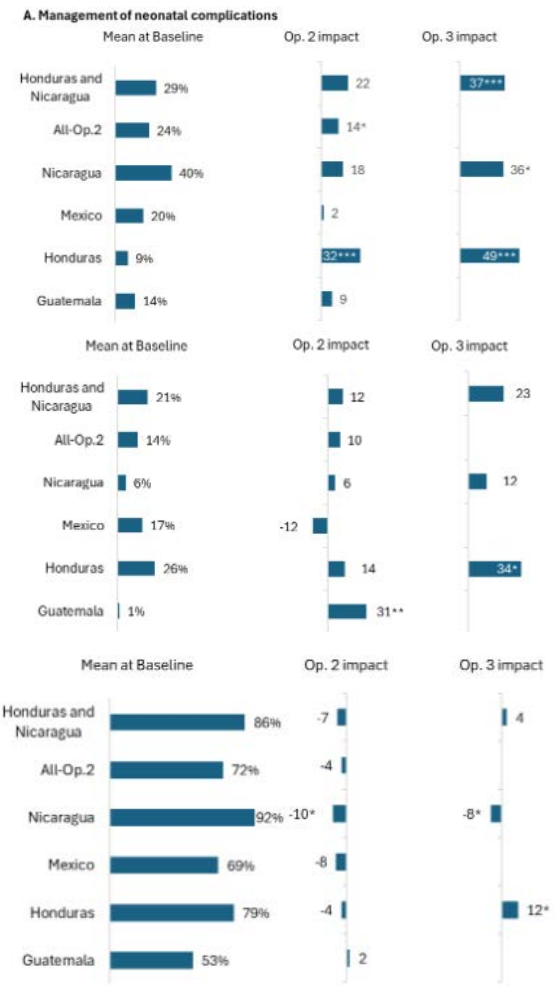
with neonatal complications receiving treatment according to established standards increased by 32 percentage points in operation 2 and by another 49 percentage points in operation 3. Nicaragua also showed a significant positive impact of 36 percentage points in operation 3. When pooling data from all four countries, operation 2 showed a significant positive impact of 14 percentage points, while pooling Honduras and Nicaragua results indicated a 22-percentage point increase in operation 2 and another 37-percentage point increase in operation 3.

Figure 4. Impact of SMI – Neonatal care outcomes



Notes: (A) Management of neonatal complications (HF data): Linear probability models controlling for mother's characteristics (i.e., age group, literacy, and marital status), complication type, and facility fixed effects. For regressions that include data from operation 3 (columns 6-8) we do not include facility fixed effects because facility identifiers were not available for the that operation. Instead, we included a treatment indicator. (B) Routine Newborn Care with Quality (HF data): Linear probability models controlling for mother's characteristics (i.e., age group, literacy, and marital status) and health facility classification. (C) First Birth Check-up for Baby within 7 days (HH data): Linear probability models controlling for mother's characteristics (i.e., age group, education, employment status, health insurance status, and marital status), household characteristics (i.e., whether it has piped water, a toilet, uses gas or electricity exclusively to cook, asset Index, owns a vehicle, someone smokes, beneficiaries of a social program and quintiles for household expenditures), and municipality and operation fixed effects. Standard errors in parentheses. HH data: Standard errors are clustered at the Gestor level for Honduras and the municipality level for the other three countries. HF data: Standard errors are clustered at the facility level for regressions that do not include operation 3, and the facility-year level for regressions that include operation 3. * p<0.05 ** p<0.01 *** p<0.001
Adapted from: NORC Global. 2024. Final Evaluation of the Salud Mesoamerica Initiative. Final Report. NORC at the University of Chicago.
https://www.norc.org/content/dam/norc-org/pdf2025/smi-final-evaluation.pdf

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Routine newborn care quality also improved across several countries. In operation 2, Guatemala showed a significant positive impact of 31 percentage points, while Honduras recorded a 34-percentage point increase in operation 3. The proportion of babies receiving a first postpartum check-up within seven days improved significantly in Honduras, increasing by 12 percentage points in operation 3. However, Nicaragua experienced a decline of 10 percentage points in operation 2 and another small decline of 8 percentage points in operation 3.

Health facility surveys indicated an overall increase in neonatal complications being managed according to established guidelines in Belize, Honduras, and El Salvador. In Belize, the proportion of neonatal complications handled according to norms rose from 24% to 56%, driven by awareness campaigns, community visits, and educational sessions led by CHWs, who encouraged new mothers to seek care at local health centers. In El Salvador and Honduras, training local health committees (LHCs) and CHWs to identify risk symptoms such as fever, labored breathing, lethargy, and refusal to breastfeed helped prevent fatal risks in newborns, such as sepsis. Honduras saw a dramatic increase in neonatal complications handled according to guidelines, from 11% to 70%, due to the introduction of national guidelines, staff scheduling changes to ensure weekend coverage, and a reduced timeframe for the first newborn check-up. However, hospitals and LHC staff faced challenges such as temporary shortages of neonatal care supplies like antibiotics and incubators, which affected their ability to provide optimal care.

Routine newborn care quality improved significantly in Belize, where the proportion of newborns receiving immediate neonatal postpartum care from medical professionals increased from 30% at baseline to 90% by the end of operation 2. However, this rate later declined to 48% by the end of operation 3, likely due to COVID-19-related restrictions. Despite this, health professionals noted that several care practices became standardized, helping prevent missed neonatal health issues. In Honduras, surveys reported an increase from 22% to 75% in the proportion of newborns receiving immediate postpartum care according to standards from medical personnel between baseline and operation 2, with a further increase to 79% by the end of operation 3. The improvements in Honduras were largely attributed to the adoption of the hoja H1C (H1C form) across hospitals and local health centers, as well as training and management changes implemented during the SMI program.

Children Health

The SMI intervention had positive effects on micronutrient consumption and deworming treatment for children in Guatemala and Honduras. In operation 2, children in SMI areas in Guatemala were 9 percentage points more likely to have consumed at least 50 micronutrient sachets in the past six months compared to those in comparison areas, while the increase in Honduras was 27 percentage points. These improvements are particularly notable given the low baseline values. However, no significant impacts were observed in Chiapas or Nicaragua. Pooled results were significant but only for operation 2. Deworming treatment also showed positive outcomes in Guatemala, where children were 16 percentage points more likely to receive at least two doses in the last 12 months. In contrast, MMR vaccination rates did not show significant positive impacts, with a slight negative coefficient (-6 percentage points) in Honduras during operation 2. This was due to a high baseline vaccination rate of 86% in SMI areas, which increased to 90% by operation 2, while comparison areas closed the initial gap. Results for before and after-effects are shown in Figure 5. Children's access to health in SMI areas.

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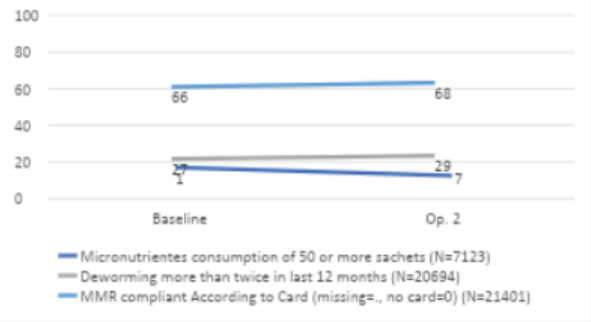
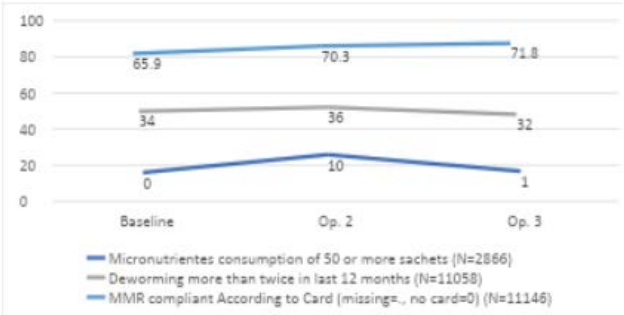
Figure 5. Children's access to health in SMI areas

A- Pooled results for Belize, Guatemala, Honduras, Nicaragua, Chiapas (Mexico), Panama and El Salvador



B- Pooled results for Belize, Honduras, Nicaragua, and El Salvador



Note: Results correspond to the average of each (unweighted) country-specific mean. Micronutrients consumption is defined for children 6-23 months old that consumed at least 50 sachets of micronutrients in the last 6 months. Deworming is defined for children between 1 and 6 years old that received at least two doses of medication in the last 12 months. MMR compliance is defined for children between 1 and 6 years old that had received their MMR vaccinations (measles, mumps and rubella) according to their vaccination card.
Adapted from: NORC Global. 2024. Final Evaluation of the Salud Mesoamerica Initiative. Final Report. NORC at the University of Chicago. https://www.norc.org/content/dam/norc-org/pdf2025/smi-final-evaluation.pdf

During operation 2, both SMI and non-SMI communities in Honduras, Belize, and El Salvador experienced overall improvements in micronutrient distribution for children. In Honduras, SMI communities benefited from increased awareness and home visits by CHWs, while non-SMI areas received support from the World Food Program but faced occasional shortages. By operation 3, the difference between SMI and non-SMI areas had diminished. In El Salvador, new protocols, training, and educational workshops in SMI communities improved children's health, particularly in weight gain and maternal awareness. Belize also saw increased micronutrient consumption, but household data indicated that no child in the sample consumed at least 50 sachets, highlighting challenges in supplement administration. While SMI areas generally implemented more structured programs, non-SMI areas also benefited from steady supplies and educational initiatives, though occasional shortages and resistance from mothers remained challenges.

Vaccination rates remained high in Honduras, with hospital staff in SMI areas reporting no significant changes during operation 2. In El Salvador, SMI areas experienced stable vaccine supplies, with health units and hospitals offering vaccines upon maternal request. However, non-SMI areas occasionally faced vaccine shortages and a lack of coordination between primary and secondary care levels. Vaccine hesitancy among mothers was reported in El Salvador, where some feared adverse effects, and in Belize, where social norms limited babies' exposure to people outside the family. Belize's health staff emphasized that continuous outreach and communication were crucial to ensuring proper vaccine documentation. Household survey data showed an increase in MMR vaccination rates from 47% to 57% between baseline and the end of operation 2.

Additionally, qualitative data on anemia and diarrhea treatment with oral rehydration salts (ORS) and zinc indicated that SMI communities were better equipped to manage childhood diarrhea due to structured care systems and consistent resources. In contrast, non-SMI areas struggled with supply chain issues and follow-up care, highlighting disparities in access to essential child health interventions.

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Effects of COVID-19 on Life Cycle Services

The COVID-19 pandemic significantly impacted maternal and child health-seeking behaviors across Mesoamerica, primarily due to restrictions, limited access to health facilities, and fear of contracting the virus. Many individuals avoided healthcare centers unless absolutely necessary, leading to delays in antenatal care and interruptions in immunization services. In response, healthcare staff in various regions had to adapt by implementing new strategies and increasing outreach efforts to maintain service access.

In Belize, mothers reported that COVID-19 disrupted their decision-making regarding antenatal care, citing concerns about hygiene, sanitation, and social distancing in local health centers. Similar effects were observed in Honduras and El Salvador. Initially, some patients resisted home visits from healthcare workers due to fears of infection. However, hospital staff in El Salvador eventually began conducting home visits and deliveries to compensate for lost maternal and neonatal care services. In Honduras, CHWs noted that recruiting pregnant women for care actually increased during the pandemic, as women were more likely to stay home and were easier to reach.

Vaccination rates also declined during the pandemic, particularly in Honduras, where MMR immunization rates dropped significantly from 90% at the end of operation 2 to 74.1% by the end of operation 3. El Salvador also saw a slight decline of about 3 percentage points. However, Belize managed to continue increasing its MMR vaccination rates despite the challenges posed by the pandemic.

Hospital services were also affected, particularly in Honduras, where staff reported difficulties in providing high-quality newborn care due to shortages in medical supplies and essential medicines. The pandemic underscored the fragility of healthcare systems and the need for adaptive strategies to maintain maternal and child health services during public health crises.

SMI Components

Result-Based Financing

The SMI initiative initially relied on national incentives to motivate and coordinate actions, but over time, outcomes and goals became the main drivers for mobilizing stakeholders. In Honduras, a decentralized health service management model already incorporated local incentives focused on coverage and quality. The SMI introduced national-level incentives, aligning local services with broader national goals through a performance-based framework linked to monetary rewards. While these financial incentives were not substantial enough to be the sole motivator, they strengthened existing systems by enabling the purchase of essential medical equipment like ambulances and ultrasounds, significantly improving service delivery.

Non-financial motivators, such as reputation and recognition, also played a crucial role, despite being harder to measure. Donor partners acknowledged that incentives created a more serious and competitive environment between countries, driving the achievement of goals. While there were no punitive measures for failing to meet targets, the possibility of missing out on incentives acted as a motivator. The flexibility in how incentive funds could be used made them particularly valuable, as they were not as restrictive as other large, earmarked budgets. Additionally, transparency and external evaluations from the start enhanced credibility and objectivity, contributing to long-term project success.

Country authorities generally received the incentive system positively, recognizing its role in boosting motivation. However, a major challenge was measuring whether indicators were met, particularly in rural areas with limited human resources. In some cases, NGOs or external institutions were hired to assist with monitoring. Some incentive funds trickled down to hospitals and health centers, improving working conditions and efficiency by purchasing equipment such as laptops, refrigerators, and microwaves, as well as vehicles to improve access to remote communities.

Despite these benefits, incentives were less effective in countries with high political instability and frequent changes in Ministry of Health leadership. After the SMI ended, incentive programs were discontinued across all participating countries. Belize integrated some incentives into its National Health Insurance program, while El Salvador struggled to maintain the system due to limited financial resources. However, in El Salvador, some low-cost recognition efforts, such as awarding diplomas for outstanding work, continue as a form of motivation.

External Verification and Monitoring

Results-based financing is a funding approach in which payments are contingent on meeting predefined, verifiable targets, making external measurement and verification essential to the SMI initiative. However, interviews with Ministry of Health (MoH), local health departments and hospital staff revealed that many respondents were unclear about who conducted these evaluations. This confusion likely stemmed from the fact that these assessments were not explicitly identified as external or linked to SMI.

Despite this, some respondents recalled that early challenges in accessing certain communities were mitigated with the help of community health workers (CHWs), who played a crucial role in building trust. Additionally, some health staff reported that outcome measurements are still ongoing in specific areas, particularly in hospitals in El Salvador and local health departments in Honduras. Although these evaluations are now conducted internally, some local health departments continue to monitor trends using templates provided by the SMI technical support team

Resource Mobilization and System readiness

Phase 1 of the SMI initiative was widely recognized as crucial in establishing a baseline and foundational structures for future operations across participating countries. However, opinions varied regarding the ideal duration for this phase, with timelines ranging between 18 and 24 months. While some found this period sufficient, others, particularly donors, believed more time was needed to ensure a smoother transition into Phase 2.

Donors provided overwhelmingly positive feedback on Phase 1, emphasizing its role in structuring teams, setting metrics, and securing support from multiple organizations, including health ministries, foundations, and the IDB. They viewed it as instrumental in building a framework for seriousness and long-term sustainability. In El Salvador, Phase 1 was particularly important in strengthening maternal and neonatal healthcare, including the hiring of 121 healthcare professionals to support community health teams and improve policy implementation, such as anemia treatment. Similarly, in Honduras, respondents credited Phase 1 with reducing maternal and infant mortality by expanding healthcare personnel for maternal and neonatal services. The Local Health Department (LHD) regarded it as essential to the project's success. In Belize, the phase facilitated negotiations for increased investments in contraceptives and the procurement of essential medical equipment, laying the groundwork for future healthcare services.

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While Honduras respondents felt they had adequate time for Phase 1, they acknowledged a learning curve due to the initiative's regional scope. In El Salvador, some officials believed the timeline was sufficient for first-level operations, but others argued that more time would have allowed for a deeper analysis of population needs. In Belize, officials expressed a stronger need for an extended Phase 1 to fully implement policies and ensure long-term success.

Direct Technical Assistance and Training

The feedback on technical assistance (TA) provided by the SMI initiative varied across respondents and countries. While some recalled extensive and impactful TA, others found it inadequate or inconsistent. IDB staff generally viewed the TA as intensive, broad, and valuable, with some officials in Belize noting that they continue to apply SMI processes in their work and still receive TA as part of a two-year extension. In Honduras, local health center staff credited the Coaching and Management Diploma with improving communication and teamwork, though this program was introduced after SMI's third operation and was not part of the evaluation's intended outcomes. Other healthcare workers also reported improvements in patient interactions and symptom recognition for neonatal health issues.

The initiative played a significant role in fostering a culture of quality improvement (QI), with tailored approaches implemented in different countries to enhance healthcare performance. In El Salvador, new hospital policies developed through SMI introduced essential quality standards, such as postpartum monitoring every 15 minutes and ensuring delivery rooms were equipped with designated emergency carts. In Honduras, regular QI meetings and self-monitoring processes contributed to reduced maternal and neonatal mortality. Death reviews now involve not only hospital staff but also community representatives to identify and address systemic gaps in care.

Despite challenges such as staff turnover and resource limitations, the SMI initiative left a lasting impact on quality improvement in healthcare systems. Belize's National Health Insurance program has since integrated QI practices, focusing on ten maternal and child health indicators, ensuring the continued application of structured healthcare improvements initiated under SMI.

Regional Model

The SMI regional model had a significant impact, fostering cross-country collaboration and competition to improve health system performance. A donor respondent highlighted that SMI's public dashboards, which displayed each country's progress toward performance targets, unintentionally created a competitive environment where countries aimed to outperform each other. This "virtuous cycle" led to continuous improvements and enhanced the initiative's effectiveness. A government official in Honduras noted that SMI has influenced the IDB to propose a similar initiative with regional targets, currently under discussion at the country level.

Role if the Inter-American Development Bank

There was broad consensus among respondents on the positive impact, effective management, and coordination demonstrated by the IDB in strengthening health systems in Mesoamerica. While IDB staff acknowledged early challenges, particularly regarding institutional buy-in and a learning curve for some teams, their ability to provide direct technical assistance quickly was seen as a significant strength. Some suggestions for improvement included simplifying information systems and maintaining flexibility in timelines and processes.

IDB staff described their roles in the Salud Mesoamerica Initiative (SMI) in various ways, including designing the initiative, monitoring progress, supporting implementation, and managing funds. In El Salvador, IDB staff focused on consulting for monitoring, oversight, and conducting local impact evaluations. In Honduras, they were responsible for designing, supervising, and coordinating technical support, while in Belize, they primarily managed the banking structure and payment planning. In Honduras, IDB officials and the Ministry of Health met twice a year for portfolio reviews to assess resource use and progress, a practice confirmed by local health department staff.

Donor organizations and Ministry of Health officials in El Salvador praised the IDB's role in negotiating indicators and engaging stakeholders. Respondents highlighted how the IDB used analytics to set clear targets, structure evaluations, and ensure accountability. Donor representatives expressed high satisfaction with the IDB's leadership, describing the negotiation process as "extraordinary" and emphasizing the bank's success in establishing an incentive mechanism that has since become a reference for similar initiatives. The IDB's experience, reputation, and relationships helped facilitate SMI's execution, ensuring a smooth collaboration with participating countries.

Officials in Belize appreciated how the IDB balanced leadership with respect for national decision-making, guiding rather than imposing policies. Multiple respon-

SMI Components

dents noted the IDB's ability to integrate into local contexts, foster relationships, and facilitate communication among key stakeholders. Overall, the IDB's contributions were viewed positively, with participants expressing satisfaction with the structured, well-executed support provided by the bank in advancing health initiatives across Mesoamerica.

Sustainability

Sustainability was a primary concern among donors, with some viewing it as the weakest element of the Salud Mesoamerica Initiative (SMI). One donor expressed disappointment, stating that while discussions on sustainability took place, they were never fully realized. A key concern was the continued dependence on external resources, exemplified by a community in Guatemala that, when asked about future plans post-SMI, hoped for another donor to step in. Despite this, some countries institutionalized regulatory changes and extended SMI practices beyond the initial target municipalities, offering hope for long-term impact.

Looking back, some donors suggested that maintaining a strong community engagement component—abandoned when some funding fell through—could have enhanced sustainability. IDB staff assisting Belize noted that sustainability takes time, with long-standing practices (8-9 years) more likely to persist than newer interventions like preconception care and digital health. In El Salvador, officials emphasized that quality procedures that became habitual continued, while financial incentives proved harder to sustain. Belize continues to implement most SMI components except for quarterly external evaluations due to staffing limitations. A key recommendation was to establish a Quality Improvement (QI) Unit from the start, as Belize only introduced one at the end of SMI, with staff who lacked full program exposure.

Key challenges to sustainability included limited financial resources for equipment, medications, and personnel (pediatricians, obstetricians, nurses), along with staff turnover and migration, particularly in Belize. Equipment shortages, such as doppler ultrasound machines and neonatal scales, were also reported. Additionally, procedural inefficiencies, such as requiring hospitals to use duplicative obstetric triage forms, created administrative burdens. In El Salvador, decreased ORS supply and outdated anemia screening equipment were barriers. In Honduras, one respondent suggested that sustainability could have been easier if the initiative had focused on just 2-3 key issues rather than a broad set of interventions.

Lessons learned from SMI included the success of QI policies, process documentation, and indicator tracking. In Belize, QI has expanded beyond maternal, neonatal, and child health (MNCH) into the broader health system. In El Salvador, the practice of providing cancer test results within eight weeks has continued beyond SMI. In Honduras, sustained improvements in antenatal visits were credited to concentrated efforts in training, process development, and measurement. Ultimately, a key takeaway was that without strong commitment from the beginning, sustaining initiatives like SMI is challenging, as long-term success depends on financial, institutional, and human resource stability.

Conclusions

The Salud Mesoamerica Initiative (SMI) was an ambitious multi-country, Results-Based Financing (RBF) initiative that achieved varying levels of impact across different countries and health indicators, reflecting the diverse contexts in which it was implemented. By emphasizing clearly defined targets and measurable outcomes, SMI initially relied on RBF incentives to drive improvements, but in some countries, stakeholder motivation to improve Maternal, Neonatal, and Child Health (MNCH) outcomes eventually became the primary driver of engagement.

Overall, SMI significantly enhanced the quality of healthcare across participating countries. Data indicates improvements in antenatal care (ANC), quality of care during delivery, newborn care, and the management of obstetric and neonatal complications. These gains were driven by comprehensive training, standardized procedures, improved workspace organization, and the implementation of well-defined protocols using checklists and structured forms to ensure consistency. A key strength of SMI was its direct technical assistance, a component not always included in similar global health initiatives, and the leadership of the IDB in coordinating and administering the program. While the sustainability of these improvements varied, SMI's focus on process improvement facilitated long-term institutionalization of quality healthcare practices.

The mobilization of resources during SMI's first phase was critical in improving healthcare quality, with investments in essential equipment, supplies, medications, and capacity building. However, challenges arose in maintaining consistent resource availability and aligning these efforts with long-term sustainability. Health coverage indicators varied significantly by country, with Honduras showing notable improvements in timely ANC access and completion rates, while Panama continued to report low levels. Guatemala saw progress compared to control areas by the end of operation 2, but its ANC levels remained the lowest in the region.

Several structural and cultural barriers affected program outcomes. Privacy concerns led some women to delay seeking ANC, financial constraints limited access to health facilities, and security issues created additional obstacles in certain countries. Additionally, the shortage and high turnover rates of Community Health Workers (CHWs) hindered progress. While some of these challenges could be mitigated through targeted interventions, broader structural issues—such as security concerns—were beyond the scope of SMI's influence.

Despite these challenges, SMI made a meaningful contribution to improving MNCH outcomes among the poorest populations in Mesoamerica, particularly given the modest investment involved. The initiative provides valuable lessons for future global health programs, particularly in its key design features: (1) the RBF model with clear targets and measurements, (2) direct technical assistance, (3) resource mobilization to strengthen health system preparedness, and (4) the IDB's role in coordination and oversight. Ultimately, country ownership and sustained commitment were essential factors that influenced the likelihood of success, demonstrating the importance of integrating long-term sustainability considerations into global health initiatives.

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Administrator IDB

Impact Evaluation of Salud Mesoamerica in Costa Rica

In Costa Rica, the SMI focused on addressing adolescent sexual and reproductive health, particularly in the poorest areas, due to persistently high teenage pregnancy rates. Despite significant reductions in general fertility rates among women aged 20–44 between 1980 and 2010, adolescent fertility rates (ages 15–19) declined at a much slower pace. In response, SMI collaborated with key Costa Rican institutions, including the Costa Rican Social Security Fund (CCSS), the Ministry of Education, and the National Child Welfare Agency (PANI), to design and implement a comprehensive reproductive health care model for adolescents. The intervention aimed to reduce adolescent fertility while also supporting adolescent mothers' reintegration into school and providing services for at-risk youth.

The model was based on adolescent-focused primary care and an intersectoral approach. The keystone of the intervention was a comprehensive preventive care visit in primary health centers, where adolescents received sexual and reproductive health education, a physical examination, and a risk assessment. Those classified as medium or high risk received additional counseling and were offered contraceptive methods. However, all adolescents, regardless of risk classification, could access contraception free of charge through CCSS. Primary care facilities in target districts adapted their services by extending consultation times, training healthcare providers in adolescent communication, ensuring privacy, and improving contraceptive availability. Modern contraceptive methods, including long-acting reversible contraceptives, were made accessible through policy adjustments.

An impact evaluation was conducted by the IDB[12]. The evaluation of the intervention used a difference-in-differences (DID) approach, comparing targeted and non-targeted districts before and after implementation. A panel dataset covering 2000–2019 was constructed using administrative and census data. The primary outcome was the female adolescent fertility rate (ages 10–19). The analysis included only fully intervened districts, amounting to 44 districts in the treatment group. Key indicators measured service coverage, including the percentage of adolescents who received a comprehensive visit, a sexual and reproductive risk assessment, or contraception. Data from SINA, an information system created for the intervention, was used to track services provided between 2015 and 2018.

Results showed that approximately 82% of adolescents in targeted districts received a comprehensive visit, 39% underwent a risk assessment, and 21% received contraception, with significantly higher coverage among females. Among those assessed for sexual and reproductive risk, 19% were classified as low risk, 10% as medium risk, and 11% as high risk. The receipt of contraceptives increased with risk level, with 70.5% of high-risk adolescents receiving contraception, compared to only 8.9% of those classified as having no risk. Female adolescents had higher contraceptive uptake than males, with 43% of medium- and high-risk females choosing long-acting reversible contraceptives.

Regarding impact, adolescent fertility rates declined significantly during the full implementation phase (2018–2019). A dynamic DID analysis confirmed parallel trends between treatment and comparison districts before the intervention. The intervention reduced adolescent fertility by an estimated 5.14 births per 1,000 females (a 11.3% decrease from pre-intervention levels). The largest impact was observed among younger adolescents (ages 10–14), where fertility dropped by 1.4 births per 1,000 (a 24.4% reduction). The effect on the 15–19 age group, while negative, was not statistically significant. Importantly, reductions in fertility did not appear during the preparation phase (2012–2014) when only structural changes, such as provider training and privacy improvements, were implemented. Instead, fertility declined significantly only after the full model was operational and achieved high coverage.

The study highlights the effectiveness of a systemic, multi-sectoral approach to adolescent reproductive health. The model successfully reached vulnerable groups by targeting the poorest districts and ensuring high service coverage among adolescent girls and those at high sexual and reproductive risk. The structured risk assessment and follow-up counseling were key to increasing contraceptive uptake. The observed reductions in fertility among younger

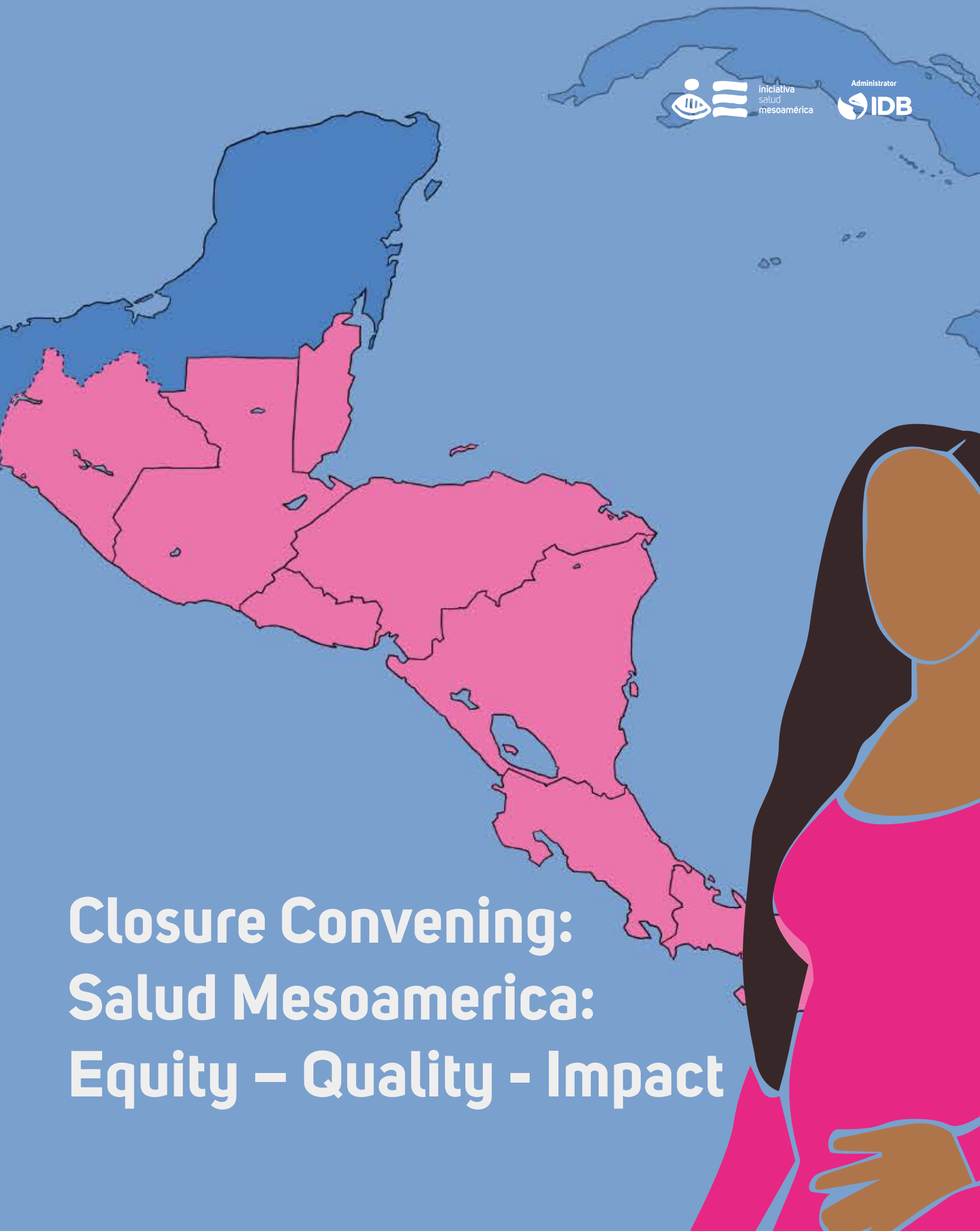
[12] Bernal et al. 2024. Impact Evaluation of Salud Mesoamerica Initiative on Adolescent Fertility in Costa Rica. Inter-American Development Bank. Discussion Paper. No. IDB-DP- 01077. DOI: http://dx.doi.org/10.18235/0013228

adolescents (ages 10–14) suggest that the intervention reached particularly hard-to-access populations.

Although the study could not disentangle the effects of SMI's results-based financing (RBF) model, qualitative evidence suggests that financial incentives played a role in accelerating performance and fostering accountability. The findings contribute to the limited evidence on integrating adolescent reproductive health interventions into national health systems. The Costa Rican model demonstrates how a coordinated, intersectoral approach—with clearly defined roles, performance metrics, and implementation strategies—can effectively address adolescent fertility in underserved regions. The lessons learned may inform similar initiatives in other low- and middle-income countries seeking to reduce teenage pregnancy through systemic, evidence-based approaches.

iniciativa salud mesoamérica

Administrator IDB



Closure Convening: Salud Mesoamerica: Equity – Quality - Impact

With the initiative's closure on February 13–14, 2025, we had the privilege of gathering in Washington, D.C., with IDB-SMI 162 guests among country representatives, partners/donors, health ministers, senior officials, multilateral institutions, regional entities, and technical experts in a space for dialogue and ideas exchange. The goal was to strengthen health systems in Belize, Costa Rica, El Salvador, Guatemala, Honduras, the state of Chiapas (Mexico), and Panama—reflecting on the progress achieved and exploring conditions for sustainability.

During the event, we presented videos highlighting human stories that showcase the progress and challenges of the work done by the Initiative. With the help of UFacilitate, an expert facilitation firm, ten working sessions were held over two days of discussions with our guests, and we had the reflections of the President of the Inter-American Development Bank and our donors.

"The Salud Mesoamerica Initiative not only improved access to healthcare, but also the quality of healthcare delivered to some of the most vulnerable in Central America," said IDB President Ilan Goldfajn. "That has included not just improving maternal and neonatal care but doing it at twice the typical pace of improvement in low- and middle-income countries."

"The development of positive incentives and the measurement of results have been fundamental to ensure that this model not only achieves its goals, but that it is sustainable and replicable," said Marco Antonio Slim Domit, from the Carlos Slim Foundation. "In fact, Salud Mesoamerica has inspired other successful initiatives, such as the Malaria Elimination Initiative."

"Mesoamerica reminds us that development gains are fragile, unless they are intentional, equity-focused, and sustained," said Christopher J. Elias, president of Global Development at the Gates Foundation. "And the Salud Mesoamerica Initiative has demonstrated a different path forward."

The Inter-American Development Bank (IDB), together with SMI donors, organized this international meeting to share, consolidate, and disseminate the key results that constitute the legacy of the past decade.

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

Building the SMI Meeting: the Planning Experience

For eight months, the IDB and UFacilitate teams worked hand in hand in the planning of the SMI closing event, ensuring a comprehensive preparation aligned with the established objectives. Initially scheduled for October 2024, the event was rescheduled for February 2025, which required organizational adjustments and an extension of the collaborative work. In this process, 20 meetings were held between both parties and 27 coaching sessions were key to preparing the moderators and panelists, helping them to focus the key messages of their experiences and build a cohesive narrative aligned to the eco-cycle throughout both days of the event.

From its conception, the nature of the event was to share lessons learned, findings and achievements of the 12 years of the Salud Mesoamerica Initiative, bringing together donors, implementers and beneficiaries from the countries that were part of this experience. Within this framework, planning focused on ensuring that each session reflected a clear and structured narrative, facilitating the exchange of perspectives and promoting strategic reflections among participants.

Collaboration between teams allowed us to maintain a constant flow of information and ensure access to key materials, facilitating logistical management and content production. For coordination, multiple communication channels were used, including emails, WhatsApp and virtual meetings in Zoom and Teams, supported by minutes and recordings that facilitated the follow-up of agreements and tasks. The use of technological tools, such as Artificial Intelligence for transcriptions, optimized access to information and activity tracking.

The experience highlighted the importance of clearly defining decision-making processes and delegation of responsibilities from the outset, as well as establishing structured mechanisms to optimize communication and change management in planning. Thanks to the flexibility and commitment of the teams, progress was made at each stage, ensuring that the event had a clear and strategic narrative to guide the conversations and reflections of the participants.

Narratives that Connect: Executing the SMI Closing Event

Over two days, the SMI's closing event brought together donors, implementers and beneficiaries to share learnings and achievements from the 12 years of the initiative. Its execution combined structured planning with operational adaptability, ensuring that every logistical, technical and content element worked in a synchronized manner to provide a seamless and enriching experience for attendees.

The 27 pre-event coaching sessions were instrumental in preparing moderators and panelists, helping them to focus the key messages of their experiences and build a cohesive narrative aligned with the eco-cycle of the event. During the sessions, it became clear that within the initiative there are many more stories to be told and many more questions to be answered, which opened the door to new reflections and recognition of the value of each shared experience.

The presentations, together with the stories conveyed by the speakers, made it possible to capture the achievements, challenges and lessons learned from the initiative, not only sharing data, but also highlighting its significance and the impact it has had on the communities involved. At the logistical level, the integration of technological tools was key to the fluidity of the event, and the synchronization of screen projections continues to be an essential aspect to ensure a clearer and more dynamic experience for attendees.

Graphic harvesting, or graphic drawing, played a central role in summarizing and conveying the key ideas of the event. Beyond being a visual resource, it became a tangible reflection of the participants' voices, allowing their thoughts, experiences and learning to be captured in a creative and inspiring way. Undoubtedly, it was an element that remained in the memory and hearts of those who saw their comments reflected, functioning as a bridge between the conversations on stage and the emotions of the audience.

The execution of the SMI event reflected the commitment and professionalism of the teams involved, allowing for an enriching experience for the attendees. The diversity of voices, the value of the stories shared and the visual impact of the graphic drawing highlighted the depth of the work done in these 12 years, leaving the door open to future conversations that continue to build on this legacy, and even consolidating new opportunities to give continuity to the initiative.

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

Session by Session: the SMI Event Highlights

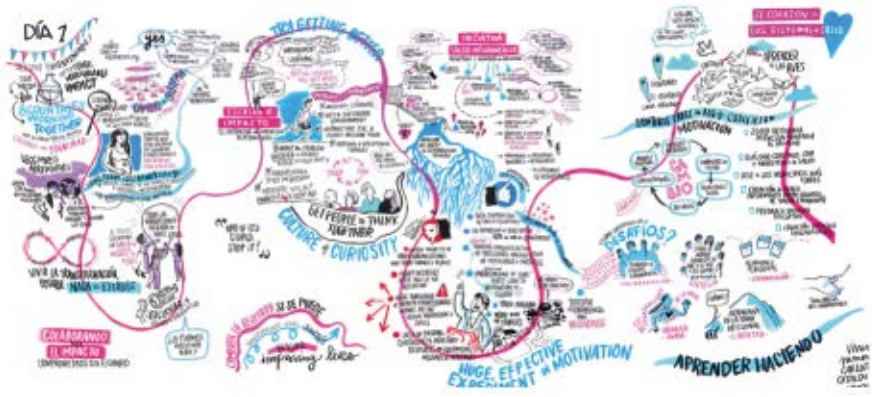
Day 1

Session 1: Strategic Conversation: Collaborating for Impact: Committed to Change

The session highlighted the impact of the Salud Mesoamerica Initiative (SMI) in improving health systems, benefiting more than 2 million women, adolescents and children. The innovative results-based financing model, which optimized resources and ensured tangible improvements in maternal and child care, was highlighted. Emphasis was also placed on collaboration between governments, donors and communities to ensure the sustainability of progress.

From the donors' perspective, key lessons were identified to strengthen future public health interventions. Flexibility was critical to respond to changing contexts, such as the Covid-19 pandemic. Public-private partnerships were essential to achieve large-scale impact, along with local capacity building and national leadership. The importance of rigorous measurement of results to promote accountability and ensure the efficient use of resources for the benefit of vulnerable populations was also highlighted.

The panel emphasized that addressing health inequalities requires strong partnerships, the involvement of key stakeholders and innovative approaches. It was stressed that leadership is the driver of change: without clear direction, even the best resources do not generate significant transformations. SMI has served as a model for driving structural change, highlighting local ownership as a key to success.



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Despite progress, challenges remain, such as reaching underserved populations and consolidating achievements. The SMI is presented as a benchmark for addressing complex programs and generating sustainable public health impacts.

Highlighted Phrases

"If you don't measure it, then question why you do it. The power of using measurement to improve outcomes in primary health care is very important." - Tracey McNeill, Director of Primary Health Care, Gates Foundation

"The initiative made it possible to institutionalize many of the actions, ensuring that people really took ownership of them with catalytic funds, which was key to their sustainability." - Alejandra Acuña, Executive Secretary, COMISCA

"What made this achievement possible was that Salud Mesoamerica reimagined the traditional donor-led model. Instead of small-scale pilot projects, we designed for impact and scale from the start." - Roberto Tapia Conyer, General Director, Carlos Slim Foundation

"Lasting change happens when local governments and people really get involved in the program." - Ana María Ibáñez, Vice President of Sectors and Knowledge, IDB

"The success of this initiative was based on clear ideas, experience and the need to find alternatives to achieve a real impact at the local level." - Jaime Sepúlveda, Professor Emeritus of Epidemiology and Global Health, UCSF

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

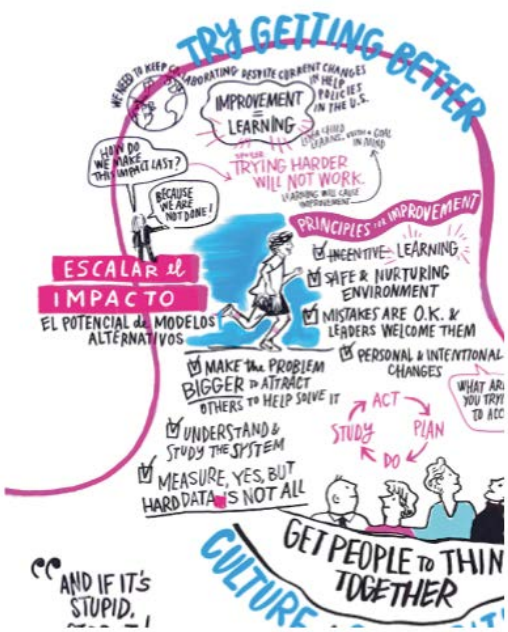
Session 2: Scaling the Impact of the Salud Mesoamerica Initiative: Lessons Learned and Sustainability

The Salud Mesoamerica Initiative has been recognized as an innovative model for improving health systems, benefiting women and children living in poverty. During the session, it was pointed out that, despite the progress made, challenges persist, such as inequity in access to services, avoidable hospitalizations and high rates of teenage pregnancy.

Donald Berwick underscored that the success of the initiative depends not only on financial incentives or individual efforts, but on building an environment that fosters continuous learning and systematic improvement. By applying the continuous improvement model (Plan-Do-Study-Act), it has been demonstrated that intentional and well-structured changes generate a sustainable impact on health systems.

It was emphasized that system transformation is only possible through a structured learning process. Rigorous measurement of results, such as the evaluation conducted by NORC, has been key to documenting progress and making the stakeholders protagonists in the improvement process.

To guarantee program sustainability, the importance of government leadership supported by public-private partnerships was highlighted. Flexibility to adapt technical knowledge to local contexts is key to the success of any intervention.



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Featured Quotes from Donald Berwick, Co-Founder and President Emeritus, Institute for Healthcare Improvement

This is probably one of the most ambitious multinational health system improvement projects in history.".

"Achieving impact and scale means creating comprehensive health systems that can continuously improve the quality and coverage of both preventive and curative services."

"Partnerships are useful, but relationships are much more important than transactions. You won't be able to write contracts to scale impact -that won't work- but you can build relationships for expansion that facilitate knowledge sharing."

"If you don't like the outcomes -mortality rates, infection rates, dissatisfaction, maternal mortality outcomes- you're going to have to change the system in which people work."

"Instead of saying 'Did you read the manual?,' the leader should say 'How can we adapt this to make it work locally?'"

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

Session 3: Evaluation and Lessons Learned from the Salud Mesoamerica Initiative: Impact, Challenges and Sustainability

The evaluation of the Salud Mesoamérica Initiative (ISM) showed improvements in the quality of maternal and child care in countries such as Belize, Honduras and El Salvador. Key factors in this progress were the training of health personnel, the implementation of standardized protocols and the reorganization of work spaces.
In Belize, coverage of quality delivery care increased from 35% to 95% thanks to the application of improved obstetric guidelines. However, challenges in prenatal care coverage persist, especially in Honduras, Nicaragua and El Salvador, due to cultural barriers, financial constraints and shortages of trained personnel.

Results-based financing (RBF) proved to be an effective strategy, encouraging improvements in quality and optimization of resources. Its impact was noteworthy in Belize and Honduras, where it facilitated the mobilization of funds and compliance with standards. However, the sustainability of this progress was limited by the lack of continuity of incentives and the variable commitment of local governments.

The SMI adopted a flexible approach, allowing strategies to be adapted to each context. To consolidate its achievements, it recommended strengthening technical capacity, institutionalizing good practices and establishing sustainable financing. The initiative made it clear that structural change in health requires more than financial investment: it demands a culture of learning, adaptation and continuous commitment.

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Highlighted Phrases

"Not only do we talk about why we should invest more in primary care, but the SMI really faces the challenge of how to do it." - Emma Iriarte, Executive Secretary, SMI/RMEI, IDB

"The SMI works from outcomes to problems, identifying root causes that hinder improvement in service delivery and quality of care." - Emma Iriarte, Executive Secretary, SMI/RMEI, IDB

"The average finding is approximately $2 million per country per year. I'm not going to minimize how much $2 million is, but in the context of health systems, it's not a huge investment." - Alicia Menendez, Professor, University of Chicago and Senior Researcher, NORC

"We found that people were very grateful to have the money, but they also wanted to do better because they wanted to achieve better outcomes [...] Building trust with the communities was very important. They needed to know that they were part of the process.". — Alicia Menendez, Professor, University of Chicago and Senior Researcher, NORC

"Solutions and technical assistance should strengthen certain capacities of the health system, making sure not to overshadow the role of the Ministry of Health. Sometimes this happens, leading to short-term success at the expense of sustainability and scalability." - Gary Darmstadt, Associate Dean of Maternal and Child Health, Stanford University

Sessions and Reflections from the Event

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Session 4: The Heart of Health Systems: An In-Depth Analysis of Honduras and El Salvador

The session analyzed progress in the health systems of Honduras and El Salvador, exploring how strategic interventions have improved performance through accountability, learning and motivation in health teams.
In El Salvador, a randomized controlled trial implemented team-based incentives, while in Honduras a coaching program for managers and primary care was developed. These experiences demonstrated that success depends not only on resources and training, but also on changes in organizational dynamics and health leadership.

In this context, Wolfgang Munar presented the detailed analysis "Learning from the SMI in El Salvador and Honduras" (2025), in which he assessed innovations in performance management in health systems between 2016 and 2024. Applying a theory-based evaluation (TBE) and using IDB data, the study identified two key interventions: external performance verification and results-based financing.

In El Salvador, the 2009 health reform provided an favorable policy environment that strengthened team autonomy, supervision, and continuous learning. However, the Covid-19 pandemic undermined this progress by dismantling primary care teams, generating staff burnout, and affecting the quality of supervision. In Honduras, the Coaching for Quality Improvement (C4QI) program improved coordination and quality processes, but faced difficulties in sustainability due to funding uncertainty, payment delays and high staff turnover.
These findings highlight the need to align incentives at different levels of the system to guarantee sustainable improvements. It was emphasized that transforming health not only implies improving clinical indicators, but also modifying organizational structures and institutional dynamics.

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Highlighted Phrases

"When talking about the SMI's results, the first thing we must say is that the environment was highly favorable, and that is not magic. That was done by human actors who made a decision to focus a little bit on urban hospital care and go to the poorest municipalities. There was a very strong coincidence with the interest of the donors and the Bank, and this alignment was fundamental to increase the ownership of this program by the programs, with all the challenges that existed". - Wolfgang Munar, Director, Gill-Lebovic Center for Community Health, George Washington University

"We have to change the mental model from work harder to work smarter: we are going to work by learning and put an end to these punitive supervisions that serve no purpose, or these contracts that only measure indicators. This is not a business of indicators; we need indicators and targets, but we are not in that business". - Wolfgang Munar, Director, Gill-Lebovic Center for Community Health, George Washington University

"We turned the SMI into a community strategy, revived programs and reoriented the role of the midwife. It was a change in mindset and model." - Karla Perla, Gestor Hombro a Hombro Coordinator, Honduras

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"It's not just about indicators and statistics; it's about documenting and making visible actions that really have an impact on the community. - Rocío Sáenz Madrigal, academic, former Minister of Health, Executive Director of Red de las Américas para la Equidad en Salud (RAES)

"Changes in health systems do not happen only with policies and financing, but with ownership, motivation and human connection." - Pedro Bernal, senior sector specialist, HNP Division, IDB

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Session 5: The Salud Mesoamerica Model: Beyond Conventional Approaches

The Salud Mesoamerica model has proven to be an innovative initiative that combines results-based financing (RBF), independent verification and flexibility in implementation to improve health care in the region. Since its origin in 2009-2010, it has integrated principles of national ownership, harmonization and rigorous evaluation, aligning with international commitments such as the Paris Agreements.

A key aspect has been the measurement of service quality, enabling health systems to adjust their strategies based on verifiable data. In addition, it has exemplified multi-sector collaboration, involving governments, multilateral organizations and private foundations such as the Carlos Slim Foundation and the Gates Foundation.

Among the key lessons learned, independent verification not only ensures transparency and accountability, but also acts as a learning mechanism for health systems. Flexibility in technical assistance has allowed the program to be tailored to each country, strengthening the capacity of ministries of health. However, financial sustainability continues to be a challenge, recommending more flexible and lasting mechanisms to avoid discontinuity in the progress achieved.

Highlighted Phrases

"One of the biggest successes of this project is the degree of country ownership, local innovation and the links they have established with their local clinics and communities." - William Savedoff, Senior Partner, Social Insight

"Quality health care is measurable if we have standards, if we define processes." - Natalia Beer, Maternal and Child Health Technical Advisor, Ministry of Health and Wellness, Belize

"The real learning is recognizing that funding, technical assistance and data are important, but they are only supplementary supports: the real core of the system is the people who deliver care every day." - Ethan Wong, Deputy Director of Primary Health Care, Gates Foundation

"It takes intentionality, integrity, comprehensiveness and intensity to make a program like this work." - Ignez Tristao, Country Representative in Guatemala, IDB

"Flexibility was key. We received technical assistance based on gaps that were not foreseen, but were necessary to achieve results." - Ricardo Mújica, Executive Director, Carlos Slim Foundation

"Making health politically and socially relevant is an important ingredient that we often overlook." - Ethan Wong, Deputy Director of Primary Health Care, Gates Foundation

"The learnings from the SMI serve us at the Carlos Slim Foundation to implement anti-poverty initiatives in Mexico. Intentionality, systematization and bottom-up communication are key elements for

Sessions and Reflections from the Event

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successful replication". - Ricardo Mújica, Executive Director, Carlos Slim Foundation

Closing Remarks - Day 1

The closing session highlighted the achievements and challenges faced over more than a decade of work in the health systems of Honduras and El Salvador. The impact of the initiative in transforming the IDB's approach to health was recognized, highlighting the role of results-based financing (RBF) in improving accountability and quality of service.

The session summarized how the effectiveness of these interventions, including performance-based incentives and coaching programs, which have brought about structural changes in the way governments, donors and technicians collaborate in the health sector, was discussed throughout the day. It was emphasized that the sustainability and expansion of this progress depends on continued investments, staff training and alignment with national policies.

It was noted that the lessons learned from the SMI have transcended the health sector, influencing the design of results-based financing mechanisms in other areas, such as climate adaptation. In addition, the importance of real-time measurement and use of data to improve decision making and ensure long-term impacts was underscored.

La clave para el éxito de las reformas en salud no radica solo en introducir nuevas estrategias, sino en asegurar que sean viables, escalables y sostenibles, con un fuerte compromiso de los gobiernos. De cara al futuro, el BID y sus socios continúan comprometidos con la expansión de estos enfoques, explorando cómo garantizar la apropiación gubernamental más allá del financiamiento de donantes y consolidar políticas basadas en evidencia para maximizar el impacto y la escala de estos esfuerzos transformadores.

Highlighted Phrases by Ferdinando Regalia, Social Sector Manager, IDB

"This initiative has really changed the way we work in the sector, but not only in the sector. It has transformed the way we conceive our interventions, how we engage with governments and how we integrate different actors in the pursuit of sustainable results."

"Results-based financing has been a powerful tool that has allowed us to focus on well-defined goals. Some of those goals we successfully achieved, some we did not, but most importantly, it has forced us to be more accountable and transparent, to teams, donors and governments alike."

"We have seen clear examples of how this approach has improved maternal and child care and pushed health workers to adopt new practices. However, we know that the real challenge is to guarantee that these improvements are not temporary, but are consolidated over time beyond the initiative."

"Reforms in health systems are not achieved simply by introducing new methodologies or models. It is required to ensure that these strategies are viable in the local context, that they can be successfully scaled and, above all, that they have strong institutional backing and are aligned with national priorities so that their impact is lasting."

"The impact of this initiative is not limited to its immediate achievements. It has provided us with a real model for achieving change on a large scale and with measurable results, which has directly influenced the IDB's institutional strategy. The organization's commitment is to continue applying these lessons in new projects to maximize the impact and sustainability of our interventions."

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

Day 2

Opening remarks - Day 2

The second day of the event began with an inspiring message, highlighting that this meeting is not only a commemoration, but also a new beginning to continue transforming lives in the region. The speaker, Tomás Bermúdez, General Manager, Regional Department for Central America, Haiti, Mexico, Panama and the Dominican Republic; and IDB Representative in Panama, highlighted the importance of the event, sharing his experience in countries such as Honduras and El Salvador before deciding to attend in Washington due to the significant impact of the initiative.

During the session, key achievements in various countries were highlighted: in Costa Rica, the reduction of adolescent pregnancy by 11.3% in the poorest areas; in El Salvador, the closing of gaps to guarantee deliveries in health centers; and in Mexico, the increase of 37 percentage points in immediate postpartum care with quality.

In addition, key lessons were shared, such as the importance of defining clear and measurable results, the strategic use of catalytic funds to drive change and the relevance of a regional perspective for scaling up interventions. These insights have inspired new initiatives, such as the America at the Center program, focused on economic integration, climate resilience and youth social development, with the aim of addressing common challenges in the region, including migration and gender equity.

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Tomás Bermúdez concluded with a call to action, emphasizing that the success of the Salud Mesoamerica Initiative has laid the groundwork for further strengthening health systems and social protection.

Highlighted Phrases by Tomás Bermúdez, General Manager, Central America, Haiti, Mexico, Panama and Dominican Republic Regional Department, IDB

"More than a closing, I think this is a celebration of the excellent results that we have been able to achieve together over all these years. And more than numbers, what we are talking about here are really lives: lives that have been saved, lives that have been improved, and especially in the most vulnerable populations in the region."

"Implementing an innovative initiative like the Salud Mesoamerica Initiative, a public-private partnership with a results-based financing model at the regional level and with such robust external verification mechanisms, has really been a very positive challenge for the bank."

"The lessons learned and the successes we have achieved in the initiative inspired us to design a new regional initiative, America at the Center, which seeks to address cross-border challenges in productivity, climate adaptation and youth social development."

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

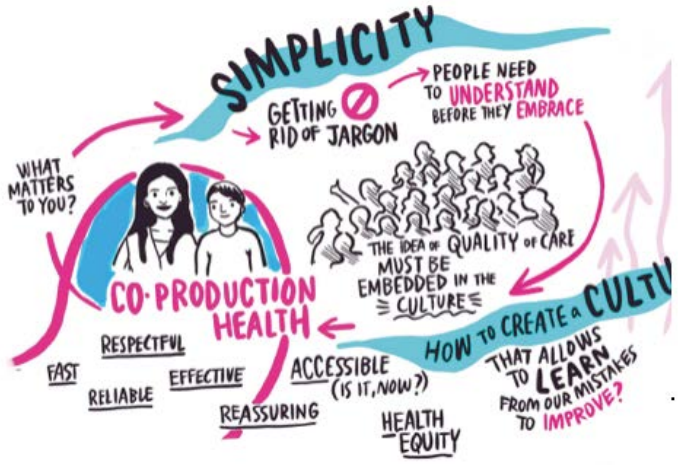
Session 6: Systemic Perspective and Quality of Care - a Strategic Dialogue

The session highlighted the importance of quality in healthcare from a systemic perspective, emphasizing that access alone does not guarantee good outcomes, but that quality and patient safety must be at the core of healthcare systems. Dr. Rashad Massoud shared his experience in more than 100 countries and presented a concrete case in which effective coordination and preparedness of health personnel saved the life of a mother with postpartum hemorrhage.

It was emphasized that continuous improvement in health does not follow a single formula, as each context is different, and that health systems must evolve according to their own needs and capacities. A key point was the importance of converting data into useful information, as health systems are often "data-rich but information-poor", which impedes evidence-based decision making.

To achieve sustainable improvements, the need for strong and committed leadership that fosters a culture of continuous learning and change was highlighted. Furthermore, health systems must break down silos and promote integration and collaboration between different levels, from frontline providers to ministries of health. It was emphasized that success depends on strategic management that involves both health professionals and patients and their families, ensuring that solutions are inclusive and sustainable over time.

Finally, the role of public trust in the health system was addressed. Transparency, patient participation and accountability were identified as key elements to strengthen the legitimacy and effectiveness of improvement initiatives. The session concluded with a call to action for system actors to continue to collaborate and evolve in their approach to quality healthcare.



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Highlighted Phrases

""Quality improvement is not about large investments in technology, it is not exclusive to large specialty hospitals and it can happen everywhere. Today we are going to talk about how to do these things and other much more complex things, not in one health unit but in the whole health system" - Diego Ríos Zertuche, Monitoring and Evaluation Officer, SMI/RMEI, IDB.

"The key to improving quality in health systems is not only to apply good medical practices, but to combine that knowledge with systems and process management. This is not a technical issue, it is a matter of culture." - Rashad Massoud, Visiting Professor at Harvard Medical School; Founder and CEO, Rashad Massoud Associates

"It's not just about knowing what to do, it's about bridging the gap between knowledge and action. It is critical to create an environment that facilitates change, that motivates and incentivizes healthcare teams to continuously improve." - Pedro Bernal, Senior Sector Specialist, IDB

"For change to happen and last, we can't keep building parallel structures that disappear when the funding runs out. Improvement must be integrated within the system from the beginning." - Jafet Arrieta, Vice President, Institute for Healthcare Improvement

Sessions and Reflections from the Event

Report prepared by The UFacilitate Team

"The problem is not a lack of data, but that we have a 'data-rich, but information-poor' system. We need to transform data into useful tools for decision making and quality improvement." - Heidi Adilia Morales, Ministry of Health, former director of USCF San Cristóbal, paracentral zone; currently at SIBASI, El Salvador

"If we want to improve health systems, we must move from supervision based on compliance with standards to supervision that truly fosters continuous quality improvement." - Emma Iriarte, Executive Secretary, SMI/RMEI, IDB

Session 7: Sustaining the Achievements of the Salud Mesoamerica Initiative

The session addressed the challenges of sustaining the progress achieved in the region. It was emphasized that the key to sustainability lies in the integration of innovations within national health systems, reducing donor dependency. The continuity of health policies, independently of changes in government, is essential to avoid setbacks. Likewise, efficiency and transparency in the use of resources play a fundamental role in ensuring long-term financial support. Costa Rica's experience shows that multi-party agreements can guarantee the permanence of health policies beyond political cycles.

To sustain these achievements, several key factors were identified: committed leadership at all levels (national, subnational and local), trust in institutions, and a strong focus on strategic planning and impact measurement. In addition, public-private financing, such as that involving the Gates Foundation and the Slim Foundation, has been a successful model of investment conditioned on the achievement of results.

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The initiative has also shown that community participation is essential for the resilience of the system, ensuring that beneficiaries are part of the process and not just recipients of interventions. Finally, the importance of maintaining dialogue with the ministries of health and finance to ensure the institutionalization of the improvements achieved was emphasized.

Highlighted Phrases

"No one convinces a Finance Minister to channel resources if he does not demonstrate that he is doing his job well, no matter the sector; but in health specifically, not spending money has a cost, and that cost is in human lives." - Rocío Sáenz Madrigal, Former Minister of Health, Costa Rica

"Victory has 100 parents and defeat is an orphan. The initiative started 'top-down', but ended up being 'bottom-up', empowering local teams." - Jaime Sepulveda, Professor Emeritus of Epidemiology and Global Health, UCSF

"It doesn't matter where the money comes from, what matters is to clearly understand what the national goal is and how we can support it from all levels." - Emma Iriarte, Executive Secretary, SMI/RMEI, IDB

"Sustainability is achieved when learning is transferred to the institutionalization of health systems, empowering health personnel to take ownership of the goals."- Rocío Sáenz Madrigal, Former Minister of Health, Costa Rica

"Is the Salud Mesoamerica model export-

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able? The answer is probably yes, but knowing how to do it is the real challenge." - Jaime Sepúlveda, Professor Emeritus of Epidemiology and Global Health, UCSF

"Translating national and international commitments into concrete goals that health workers carry with them makes the objectives become real and personal." - Emma Iriarte, Executive Secretary, SMI/RMEI, IDB

"A key aspect is to recognize that we cannot achieve sustainability without directly involving communities." - Rocío Sáenz Madrigal, Former Minister of Health, Costa Rica

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Session 8: Opening the Black Box to Deliver Quality Services: the SMI-driven Approach

The Salud Mesoamerica Initiative has developed a comprehensive approach to improve the quality of care for vulnerable populations, implementing evidence-based strategies, collaborative learning and continuous improvement. In this session, experiences from different countries in the application of public health innovations were presented, highlighting both achievements and challenges. The importance of rapid learning cycles and iterative feedback to strengthen the capacity of health systems and ensure the sustainability of improvements was emphasized.

Dr. Alvaro Gonzalez Marmol contextualized the SMI intervention framework, emphasizing strategic planning, continuous monitoring and scalability of innovations. Dana Lawrence (Belize) presented the use of data in maternal care, demonstrating how the identification of gaps improved service quality. Karla Perla (Honduras) shared her experience in decentralization of management, achieving progress in cervical cancer screening despite logistical constraints. Natalia Meza (Paraguay) presented the application of Continuous Quality Improvement (CQI), consolidating the standardization of processes and strengthening leadership in priority hospitals.

Ana Mylena Aguilar (IDB) stressed the need to consolidate an organizational culture focused on quality and the sustainability of these strategies. The importance of data analysis, decentralization and local leadership to strengthen health systems in the region was emphasized.

The session made it possible to identify key lessons learned for the improvement of health quality in the region. The integration of data analysis, decentralization of management, strengthening of local leadership and collaborative learning were fundamental aspects in the implementation of these strategies. In addition, the importance of ensuring the sustainability of innovations through political support and institutionalization of the processes was highlighted. The results shared in this session contribute to the formulation of more effective strategies to strengthen the quality of care in Mesoamerica, promoting more resilient and equitable health systems.

Highlighted Phrases

"The systemic approach can be used in all areas of life, from changing the structure of a Ministry of Health to implementing a strategy. [...] We approached it from a process management perspective". - Álvaro González Mármol, Operations

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Advisor, SMI/RMEI, IDB

"Along the way we discussed sustainability from a strategic perspective, but sustainability is experienced in a different way at the local level. Nobody is going to make the decision to scale something without evidence that it works". - Álvaro González Mármol, Operations Advisor, SMI/RMEI, IDB

"We have to be managers and leaders at the same time, a perfect combination. [...] If I am demanding the team to fulfill something, I have to start with myself". - Karla Perla, Gestor Hombro a Hombro Coordinator, Honduras

"It's one thing to know what empathy means, it's another to truly put yourself in other people's shoes." - "It's one thing to know what empathy means, it's another to truly put yourself in other people's shoes." - Karla Perla, Gestor Hombro a Hombro Coordinator, Honduras

"Quality is no longer just about access and coverage, it is in how things are done, in the day to day." - Natalia Meza, Director, Directorate of Quality, Ministry of Health, Paraguay

"To me, the heat map showed green and red. Until Karla trained us and told us that each red dot represented the tears of mothers who did not receive quality care. From that day on, my team doesn't want to see a single red dot in our records."- Dana Lawrence, Emergency and Outpatient Supervisor, Western Regional Hospital, Belize

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Session 9: Making Change Stick: Cross-sectoral Approach: Preventing Teenage Pregnancy

The session focused on the prevention of teenage pregnancy in Costa Rica, highlighting the importance of an intersectoral approach that integrates health, education and social protection. A powerful testimony was presented that highlighted the difficulties faced by many young women in accessing basic services, which prompted the development of an initiative based on the experience of the adolescents themselves.
Through the "sentinel user" methodology, service failures were identified and collective responsibility for improving care was promoted. The strategy overcame institutional resistance and expanded its scope beyond pregnant adolescents, focusing on the entire youth population to strengthen prevention.
Among the main changes implemented, the medical consultation time for adolescents was extended and personnel were trained in sensitivity and specialized care. In addition, differentiated schedules were established in health centers to guarantee privacy and trust. Thanks to these efforts, the adolescent pregnancy rate in the Brunca region and nationally was significantly reduced, reaching 9.2% in 2024.

The key to success lay in the creation of a community of practice and three fundamental principles: believing in the change, wanting to implement it, and trusting the process. The importance of sexual health education and the use of the "dual method" was emphasized, ensuring that adolescents made informed decisions.

In closing, Francisco Javier Urra, IDB Representative, Costa Rica, emphasized that teenage pregnancy is a key factor in

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the perpetuation of poverty, affecting the economic and educational opportunities of young women. He called for reinforcing financial and sexual education and strengthening collaboration with public and private institutions to address this problem in a comprehensive manner. Finally, he emphasized that these efforts must be sustained over the long term to consolidate structural change and ensure equity in access to opportunities.

Highlighted Phrases

"When we asked the different departments whose responsibility it is that Johana, 20 years old and with three children, has not been satisfactorily attended, health said 'not mine', and education said 'uy, not mine either', and special protection said 'I didn't know'. The invitation of the initiative was: What if it is everyone's responsibility and together we are going to look for those, which are the most difficult cases?" - Patricia Jara, Sector Specialist, SPL Division, IDB

"We had two or three hours where there were only adolescent patients. So the kids would talk to each other. We didn't have the neighborhood gossip, you didn't have the aunt, the cousin who heard things or saw you going out with a contraceptive method." - Dr. Pablo Baeza, Costa Rican Social Security Fund (CCSS)

"Communication has to be vertical and horizontal. Instruction has to come in cascade, but then at each level it has to have a mass effect. When you don't communicate, people say, 'something is going on, why don't you tell me what happened with the indicator?'" - Dr. Tannia Rivas, Ministry of Health, Costa Rica

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"We don't have to get used to counterproductive behaviors with adolescents. There are people who fall into learned hopelessness because the system makes us fall there." - Dr. Tannia Rivas, Ministry of Health, Costa Rica

"I have not seen professionals here, even though you are very professional; I have seen committed people. [...] This heart that beats in this human group is really not the most common thing." - Francisco Javier Urra, IDB Representative, Costa Rica

Session 10: Group Dynamics

The intention of the last dynamic of the event was to promote new connections and future collaborations among the participants. Everyone in the audience had knowledge, expertise and experience that could serve to foster future collaborations and new connections.

Unfortunately, we overestimated the interest of the audience to have those kinds of conversations at that point, after two long days of the event. It was also a very drastic change in dynamics from the rest of the event. That is why when we started the dynamic, half of the audience left the room for coffee. For this reason, the facilitator changed the times radically in order to shorten them and bring back all the participants for the formal closing of the event.

That said, in the reflection of the group dynamics there were several positive appreciations of having shared that group moment and the connections that were generated, and it was even shared that in those 15 minutes it was possible to talk about an initial agreement for a project between the IDB and Colombia.

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Closing Session - Day 2: SMI Salud Mesoamerica Initiative Event Final Reflection

The Salud Mesoamerica Initiative event concluded with an in-depth reflection on the achievements made and the challenges that still persist in the region. The importance of the last panel, the only one with a programmatic focus, was emphasized, highlighting the particular case of Costa Rica, whose leadership in the project required a different evaluation from that of other countries.

Throughout the 12 to 15 years of the initiative, there have been moments of success and satisfaction, but also moments of frustration and difficulties. However, the commitment of IDB teams, donors and participating countries has been key to overcoming obstacles and continuing to make progress in improving health services in Mesoamerica.

One of the most moving moments of the day was the remembrance of the story of Iranelda, a pregnant teenager who lost her baby and nearly lost her own life due to lack of access to timely medical care. Her story is a reminder of the reason for this initiative and the urgency of continuing to work for the most vulnerable populations.

Beyond a closing, this event represented a starting point for new actions, consolidating agreements with countries such as Colombia, the Dominican Republic, Paraguay, El Salvador and Honduras. It was emphasized that no one was talking about ending the project, but rather about how to move forward with innovative and sustainable strategies.

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In addition, recognition was given to the leadership and dedication of the IDB teams, the catalytic unit and the facilitators who have accompanied the process over the years. Mutual learning and the capacity to adapt to continue innovating in the implementation of health policies were highlighted. The day closed with special thanks to the community workers, health promoters and beneficiaries, who are the driving force behind this initiative. With the same passion and determination that has guided these years of work, the commitment remains firm: to continue strengthening health in Mesoamerica and to ensure that every effort has a real and lasting impact on people's lives.

Highlighted Phrases of Emma Iriarte, Executive Secretary, SMI/RMEI, IDB

"Quality and equity are our current frontiers; that is where we must focus our efforts."

"No one here has said 'we're done,' we're all asking 'what's next?'"

"The agreements established these days with Colombia, Dominican Republic, Paraguay, El Salvador and Honduras clearly show our commitment going forward."

Creativity, regional collaboration and continuous learning will be our key tools for the coming years."

CLOSURE CONVENING /

Sessions and Reflections from the Event

Find the links to see the sessions

Opening Remarks – "Salud Mesoamerica: Equity - Quality - Impact"

Speakers: Ilan Goldfajn, President, Inter-American Development Bank (IDB); Marco Antonio Slim Domit, Carlos Slim Foundation; Christopher J. Elias, President of Global Development, Gates Foundation

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Session 1: Strategic Conversation – Collaborating for Impact: Committed to Change

Participants: Ana María Ibáñez, Vice President of Sectors and Knowledge, IDB; Alejandra Acuña, Executive Secretary, COMISCA; Roberto Tapia, General Director, Carlos Slim Foundation; Traceey McNeill, Director of Primary Health Care, Gates Foundation; Eva Buendía, Political Advisor, Embassy of Spain in the U.S.

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Session 2: Scaling Up Impact – The Potential of Alternative Models

Participants: Amanda Glassman, Executive Advisor to the President, IDB; Donald Berwick, Co-Founder and President, Institute for Healthcare Improvement

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Session 3: Salud Mesoamerica Initiative – Results and Evaluation Findings

Participants: Emma Iriarte, Executive Secretary, SMI/IREM; Alicia Menéndez, Professor, University of Chicago & Principal Investigator, NORC; Gary Darmstadt, Associate Dean of Maternal and Child Health & Professor of Neonatal and Developmental Medicine; Sebastián Bauhoff, Senior Health Economist, IDB

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Session 4: The Heart of Health Systems – In-Depth Analysis of Honduras and El Salvador

Participants: Rocío Sáenz Madrigal, Former Minister of Health, Executive Director, RAES; Leslie Curry, Professor of Public Health and Management, Yale School of Public Health; Heidi Adilia Morales, Ministry of Health, El Salvador; Karla Perla, NGO Coordinator, Shoulder to Shoulder, Honduras; Wolfgang Munar, Director, Gill-Lebovic Center for Community Health, George Washington University

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Session 5: The Salud Mesoamerica Initiative Model – Beyond Conventional Approaches

Participants: Ricardo Mújica, Executive Director, Carlos Slim Foundation; Natalia Beer, Maternal and Child Health Advisor, Ministry of Health and Welfare, Belize; Ethan Wong, Deputy Director of Primary Health Care, Gates Foundation; Ignez Tristao, IDB Country Representative in Guatemala; William Savedoff, Senior Partner & Economist, Social Insight

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Closing Remarks (Day 1) & Lessons Learned

Speaker: Ferdinando Regalia, Social Sector Manager, IDB

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Reflection (Day 2)

Speaker: Tomás Bermúdez, General Manager, Regional Department for Central America, Haiti, Mexico, Panama, and the Dominican Republic; IDB Representative in Panama

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Session 6: Systemic Perspective and Quality of Care – A Strategic Dialogue

Participants: Rashad Massoud, Visiting Professor, Harvard Medical School; Jafet Arrieta, Vice President, Institute for Healthcare Improvement; Pedro Bernal, Senior Sector Specialist, IDB; Diego Ríos Zertuche, Senior Monitoring and Evaluation Officer, MHI

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Reflection: Sustaining Achievements

Speaker: Ferdinando Regalia, Social Sector Manager, IDB

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Sessions and Reflections from the Event

Session 7: Sustaining the Achievements of the Salud Mesoamerica Initiative

Participants: Rocío Sáenz Madrigal, Emma Iriarte, Jaime Sepúlveda, Gustau Alegret (Moderator)

CLICK HERE

Final Reflection (Day 2) – Salud Mesoamerica Initiative Event

Speaker: Emma Iriarte, Executive Secretary, SMI/IREM

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CLOSURE CONVENING /

Convening Communication Strategy

For the international gathering "Salud Mesoamérica: Equity - Quality - Impact," the ISM Communications Team worked in coordination with the IDB Events Office to ensure that all necessary conditions at IDB headquarters were met to facilitate the best possible convening.

Below are some key communication elements developed before and after the event to highlight its impact:

Coordination with the audiovisual company Cabo Films for the filming of the event and interviews with speakers and guests for communication pieces such as the event summary video.

CLICK HERE

Preparation of the press release on the ISM results, in coordination with the IDB communication team and donor partners.

CLICK HERE

Coordination with the photography team for the creation of a mosaic of 50 photographs during the event.

CLICK HERE

Dissemination of event-related content on social media to expand the messages of lessons learned and results.

CLICK HERE

Preparation of a newsletter compiling all the ISM results and event session content.
Filming of working sessions and reflection speeches (Links available in section A).

Development of a satisfaction survey to gather participant feedback for a report on lessons learned.

CLICK HERE

Creation of communication materials:
educational brochure on the initiative's results,
event agenda design

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Logistical guides
On-site event banners
Audiovisual resources projected for panelists.
Development of a QR code for generating questions and discussions during event panels.

Development of videos featuring human stories and the results of the ISM:

SMI: The Story of Olga, a mother benefited from the Initiative

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Systemic Changes

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Salud Mesoamerica Initiative – A Decade of Work

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CLOSURE CONVENING /

Convening Communication Strategy

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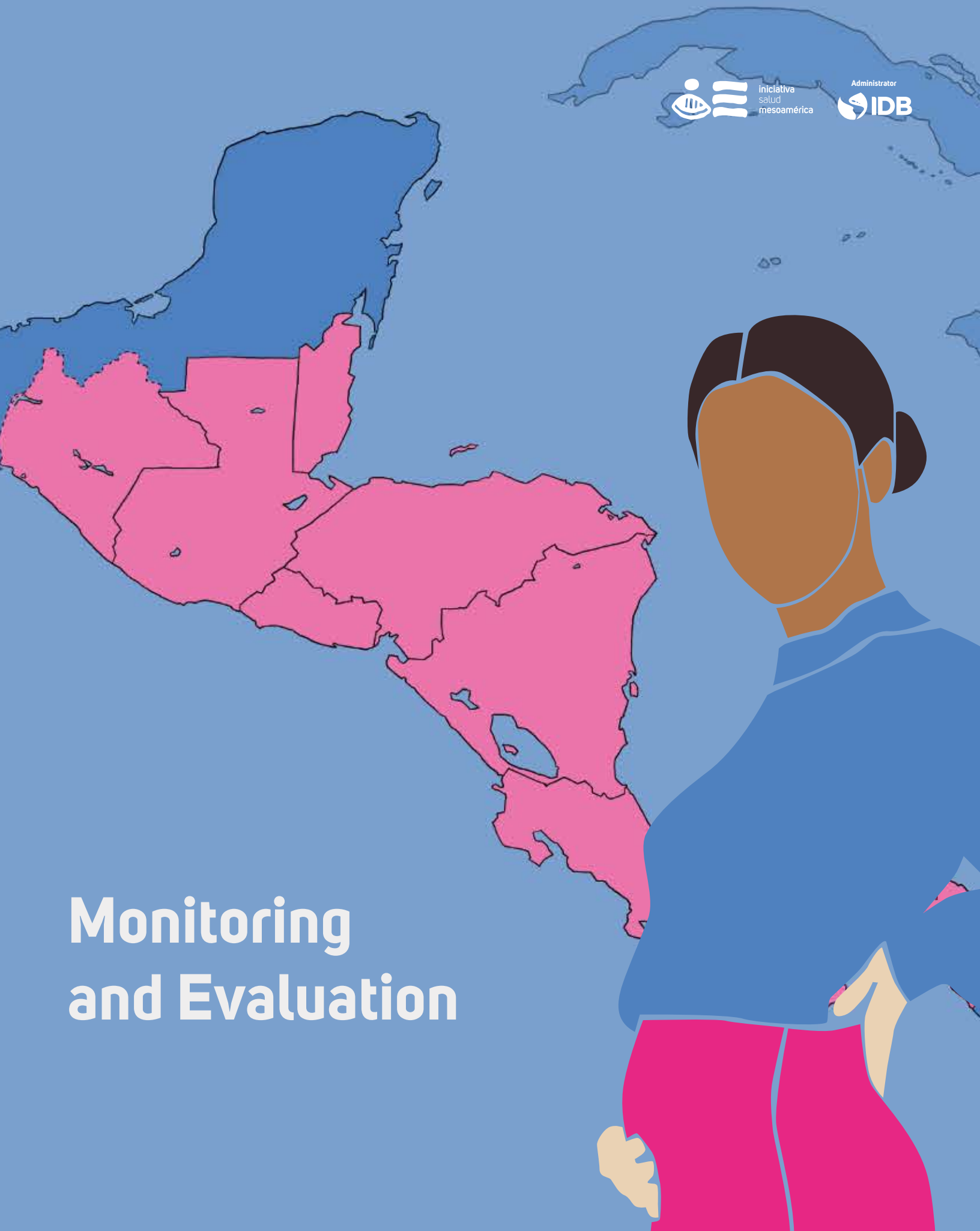


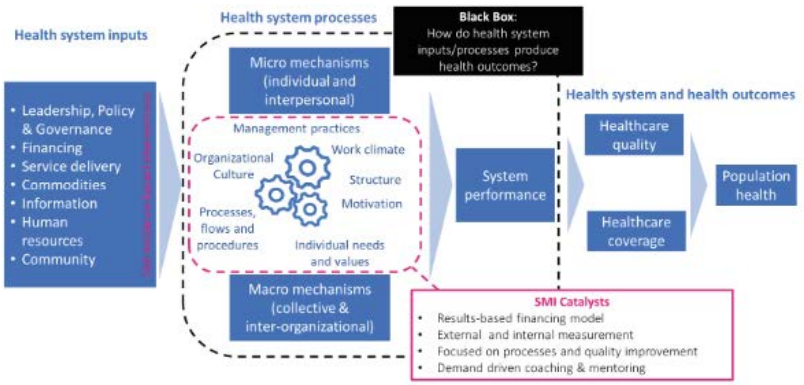
Monitoring and Evaluation

Program Theory

Through the SMI Coordination Unit, the IDB initially developed a theory of change, followed by a theory of action, and finally, a program theory for SMI, which evolved over time. The latest program theory aimed to explain how the health system delivered results and how SMI influenced those mechanisms to accelerate improvements in RMNCH. Figure 6. An initial approximation to the Program Theory illustrats the latest approximation to SMI's Program Theory. Health system inputs, which established the building blocks of each health system, were transformed through a black box of health system processes into system performance, producing healthcare quality and coverage and, ultimately, population health. Inside the black box, management practices, work climate, structure, motivation, individual needs and values, processes, flows and procedures, and organizational culture mediated between micro-level (individual and interpersonal) and macro-level (collective and inter-organizational) mechanisms to produce health system outputs.

SMI catalytic elements worked directly on the engine of the health system, transforming how health system processes operated. It improved management practices, motivated leaders and workers, and designed different processes, flows, and procedures. SMI operated both at the individual and interpersonal level as well as at the collective, inter-organizational level.

Figure 6. An initial approximation to the Program Theory



Source: SMI (2019). Adapted from: Munar et al. 2018. Team- and individual-level motivation in complex primary care system change: A realist evaluation of the Salud Mesoamerica Initiative in El Salvador. Gates Open Research. https://doi.org/10.12688/gatesopenres.12878.1

Target Setting Model

The SMI Target Setting Model was developed to align targets with program objectives, ensuring their relevance to strategic goals. Effective target setting goes beyond estimating indicator changes; it must consider their significance in achieving organizational objectives and the feasibility of implementation under the political control of each Ministry of Health. SMI's primary mission was to reduce maternal and child health inequities among populations in extreme poverty. This mission, along with the role of the Ministries of Health as implementing counterparts, shaped the model's key components: Selection of the Target Population, Performance Indicator Selection, Estimation of Targets, Target Negotiation, Performance Evaluation Conditions, and Compliance Criteria.

SMI targeted the poorest 20% of each country's population, using different criteria based on available data and operational requirements. These criteria typically included municipalities with high concentrations of the lowest wealth quintile, indigenous populations, and unmet basic needs. Targeting the most disadvantaged populations helped ensure that efforts focused on leveling up health outcomes rather than merely improving easier-to-reach groups. Performance evaluations used population-representative surveys to mitigate the risk of selectively targeting more accessible groups.

The Performance Indicator Selection process was guided by the SMI logic model, adapted from the Treasury Board of Canada's Results-Based Logic Model. This model linked inputs, activities, outputs, outcomes, and impacts, reflecting the level of control Ministries of Health had at each stage. A General Monitoring & Evaluation (M&E) Plan established a regional framework of indicators to track program performance. Impact-level indicators included infant mortality rate, maternal mortality rate, neonatal mortality rate, and stunting in children under five, while outcome indicators measured coverage and quality of maternal and child health interventions. Indicators at lower levels (outputs, activities, and inputs) mapped the pathway to achieving outcome and impact goals. Selection was informed by Demographic and Health Surveys (DHS), WHO and PAHO reports, and other academic sources. Given weaknesses in health information systems, household and health facility surveys were the primary measurement tools.

The performance framework was designed for a five-year period, with three successive 18-month operational cycles. The first operation included process indicators (inputs, activities, and outputs) to establish readiness, while later operations focused on outcome and impact indicators. Each Ministry of Health negotiated the performance framework with the IDB, using reference values from DHS and other sources to set country-specific baselines. Negotiations considered health sector priorities, national policy contexts, and operational feasibility.

The Estimation of Targets relied on scientific methods to ensure achievability. Different approaches were used depending on data availability and indicator type, including benchmarking, forecasting, regression analysis, expert consultations, and qualitative assessments. The Institute for Health Metrics and Evaluation (IHME) provided trend analysis based on historical data from the Global Burden of Disease Study (2010), helping establish realistic change expectations. Extensive literature reviews of intervention effectiveness informed the expected impact of specific health measures. A cost-benefit economic model estimated the minimum improvement needed to justify intervention costs, valuing gains in terms of Disability-Adjusted Life Years (DALYs). Operational factors, such as fund disbursement capacity, procurement policies, and political conditions, were also incorporated. Statistical power calculations ensured sample sizes were sufficient to detect meaningful changes.

The Target Negotiation process between Ministries of Health and the IDB was essential for securing commitment and aligning targets with national strategies. Governments often proposed ambitious targets, but negotiations ensured they remained achievable within the ranges established by estimation tools. Where baseline data was unavailable, outcome and impact targets were initially set as relative improvements (e.g., increasing a coverage rate by 30 percentage points), while process indicators were assigned absolute performance goals (e.g., 80% or higher coverage). As baseline data became available, some targets were revised accordingly.

Overall, the SMI Target Setting Model provided a structured approach to setting achievable and impactful health targets. By integrating scientific methodologies, intersectoral collaboration, and country-specific considerations, the model ensured that health interventions were both strategic and measurable, contributing to reducing child and maternal health disparities in the region.

External Verification of Targets

Compliance with targets was externally and independently verified by a third party in the poorest geographic areas. For this task, the IDB partnered with the Institute for Health Metrics and Evaluation (IHME) at the University of Washington to conduct surveys. In addition to assessing performance, the surveys provided robust and comparable data on maternal and child health for the poorest 20% of the region's population, allowing for the monitoring of intervention progress and tracking trends in key health indicators, especially those not included in the performance framework.

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

The process of collecting SMI household surveys was comparable to that of demographic and health surveys (DHS). A typical DHS took, on average, 28 months to complete, with the first draft of reports not available until at least four months after the end of data collection.[13] However, SMI was able to complete household surveys in five countries, health facility surveys in six countries, one Knowledge, Attitudes, and Practices (KAP) survey in schools, and one Lot Quality Assurance Sampling (LQAS) survey within approximately 18 months. The data collection effort for the household surveys included a census of more than 420,000 people, interviews with over 22,000 women of reproductive age, and information on more than 20,000 children under five years old—including height and weight measurements and capillary blood samples for many of them. Data from more than 470 health facilities were collected for the health facility survey, and more than 14,000 medical records were reviewed. Additionally, 39 schools were visited, and information was collected from more than 900 teenagers for the KAP survey in Costa Rica. The data represented the poorest 20% of the population in Mesoamerica and the health systems providing them care. Most of these individuals lived in the hardest-to-reach and most remote areas in the region.

[13] USAID (March 2014). Understanding and Using the Demographic and Health Surveys. DHS Curriculum, Facilitator's Guide. Module 4. P. 24. http://dhsprogram.com/publications/publication-dhsc4-dhs-curriculum.cfm

Scoring Rules for Operations

First and Second Operations Rules

For the 1st and 2nd Operations, the Performance Framework for each operation had 8-12 indicators in each country. A target was negotiated for each indicator. If the target was achieved, the indicator received a value of 1. If the target was not achieved, the indicator received a value of 0. All indicators had equal weights. The score was computed as the sum of the values for each indicator over the total number of indicators. According to SMI Operating Regulations, to receive the Performance Tranche, a country had to score 0.8 or above. Depending on the number of indicators in the Performance Framework, the country could miss 1 or 2 targets.

Third Operation Rules and Changes
The Performance Framework for the 3rd operation in each country had 10 indicators. A target was negotiated for each indicator. If the target was achieved, the indicator received a value of 1. If the target was not achieved, the indicator received a value of 0. All indicators had equal weights. The score was computed as the sum of the values for each indicator over the total number of indicators. Considering the impact of the COVID-19

The COVID-19 Pandemic, as well as hurricanes affecting the region, the SMI Donors Committee decided to modify the scoring rule from an all or nothing payment rule based on achieving a score or 0.8 or above, to a proportional payment by indicator with a 0.8 threshold. The following table summarizes the new proportional payment scheme:

Number of indicator targets achieved	Resulting Score achieved	Proportionate share of the performance tranche
0	0	0%
1	0.1	12.5%
2	0.2	25%
3	0.3	37.5%
4	0.4	50%
5	0.5	62.5%
6	0.6	75%
7	0.7	87.5%
8	0.8	100%
9	0.9	100%
10	1.0	100%

It is important to note that the proportional payment scheme continued to pay based on accomplishments (targets met). After the pandemic, no indicators or targets were modified after the pandemic, and no additional funding was provided; only a time extension was granted.

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Administrator IDB

SMI Sustainability

Introduction

Sustainability has been a relevant issue for Salud Mesoamerica Initiative (SMI) since its onset. SMI is a public-private program seeking to reduce the health equity gap in the Mesoamerican region via targeted, performance-driven, investments to scale-up evidence-based interventions among the poorest populations (Regalia et al. 2017). SMI is funded by the Bill & Melinda Gates Foundation, the Carlos Slim Foundation, the Governments of Canada, and Spain, and the eight countries from the Mesoamerica region, and administered by the Inter-American Development Bank (IDB). To be part of SMI, countries had to contribute half of the funding for the program, maintaining the fiscal space and allocations needed in national budgets. The donation and national funding in each country was less than 2% of the national health budget, which showed that with minimum funding but the right triggers it is possible to achieve change.

Under SMI's results-based financing (RBF) model implemented, the IDB and ministries of health agreed to a set of process, outcome and impact level indicators and targets that are externally verified by a third party. Each country receives a donation amount that is matched by country funds to implement evidence-based interventions in the poorest areas. Interventions are implemented in the areas representing the 20% poorest populations in each country. If the country meets the previously agreed Performance Framework targets, half of the country funds initially invested are reimbursed, as an incentive, for unrestricted use within the health sector. The RBF transferred risk and responsibilities to achieve targets in each country, supporting government appropriation and creating conditions for sustainability.

SMI is a complex program with multiple and cross-cutting goals and interventions on health systems. A health intervention is usually defined as the activities undertaken to improve or maintain human health (Smith, Morrow, and Ross 2015). In SMI, we take a broader definition of interventions, considering the activities performed to strengthen the performance of the health system, which include improving health interventions as usually defined, as well as other interventions that impact the culture, organization, as well as other components of health system's operation.

Therefore, to discuss sustainability in SMI, it is first compulsory to define sustainability and the objectives for SMI's sustainability. In other words, did the Initiative seek to sustain:

- Funding for the poorest areas in each country?
- New interventions and practices?
- Health gains?
- Rate of improvement?
- Capacity for scale-up?
- Capacity to learn and adapt?

This document has three objectives: first, to define sustainability for SMI, and describe how the different components of the Initiative may create a capacity for sustainability; second, to describe the methods to develop sustainability plans, supporting the final stretch of SMI regionally and in each country and smoothening the transition to its end; and third, to identify potential areas for evaluation, either through SMI's Final Summative Evaluation or future undertakings.

SMI includes additional funding from the domestic budgets of 8 Mesoamerican Governments that otherwise would not be directed to the poorest 20%. This transfers risk and responsibility of goal achievement to the counterpart, helping to ensure ownership and sustainability.

Furthermore, the amount of funds for the donation and the counterpart for each country program is less than 2% of the annual health budget, demonstrating that with minimal funding but the correct drivers, change is possible.

Additionally, as the IDB Counterparts are the national governments, buy-in generated from successful interventions increases probability that they are adopted and institutionalized. Some large-scale changes have already been adopted based on changes to national norms and protocols. Lessons learned during implementation can be applied to future and additional bi and multilateral interactions. The technical assistance and capacity building provided throughout the Initiative will also remain in country. Based on evidence generated from the impact and midterm evaluations of select interventions, SMI and IDB will continue policy dialogue to secure funding for continuity and scale up.

Defining Sustainability and its Relevance for Health Interventions

In the realm of public health, the imperative to improve population well-being through efficacious interventions is indisputable. The implementation of evidence-based interventions (EBIs) stands as a cornerstone in this pursuit, guided by the tenets of scientific rigor and empirical validation. Such interventions, rooted in the combination of research-derived evidence and established best practices, have the potential to catalyze transformative changes in health outcomes across diverse communities.

A growing appeal for long-term impact of such EBIs has increased interest of sustainability in health programs and interventions (Ali and Bailur 2007; Hailemariam et al. 2019; Luke et al. 2014; Schell et al. 2013). Without the continuation of the program, in the absence of sustainability, the benefits afforded for the organization or people involved would be lost (Pluye, Potvin, and Denis 2004).

Despite this interest, sustainability remains a loosely defined concept, with a lack of consensus for what it entails, and insufficient knowledge of the conditions needed for sustainability (Hailemariam et al. 2019; Lennox, Maher, and Reed 2018; Shelton, Cooper, and Stirman 2018; Walugembe et al. 2019). Most definitions agree with the idea of continuation of the program after the funding ends, usually from external sources (Pluye, Potvin, and Denis 2004; Bacon et al. 2022; El Bcheraoui et al. 2018; Walugembe et al. 2019). Nevertheless, definitions of what program continuation means, and how it can occur, are diverse: from the mere continuation of activities (Pluye, Potvin, and Denis 2004) to the capacity to learn, adapt and continue improving (Lennox, Maher, and Reed 2018; Shelton, Cooper, and Stirman 2018).

Factors Influencing Sustainability

Understanding the factors that affect the sustainability of interventions over time is of vital importance to identify the areas that need to be strengthened if program outcomes are to be maintained. Schell and colleagues (Schell et al. 2013) describe eight core dimensions for this purpose, which were later operationalized by Luke and colleagues (Luke et al. 2014) into an assessment tool for evaluating program capacity for sustainability, the Program Sustainability Assessment Tool (PSAT) which has been widely implemented since its development (Bacon et al. 2022). The authors describe the following dimensions as crucial for assessing sustainability capacity:

- **Political support:** The broader sociopolitical and cultural milieu within which an intervention operates profoundly affects its trajectory. Political will, social acceptance, and alignment with prevailing norms are essential components. The resonance of an intervention with the values and priorities of the community and policymakers catalyzes its integration into existing systems. Furthermore, regulatory frameworks and policy endorsements bolster the intervention's legitimacy, nurturing its long-term viability.

- **Funding stability:** Adequate financial support is pivotal to ensure continuous implementation and refinement. Diversified funding sources, spanning government allocations, philanthropic contributions, and grants from private institutions, serve to mitigate the risks posed by the cessation of a singular funding stream.

- **Partnerships:** Internal and external partnerships fortify the scaffolding of sustainability. Collaborative efforts with stakeholders—ranging from governmental bodies to non-governmental organizations—amplify the intervention's reach and efficacy. Synergistic alliances foster the sharing of resources, knowledge, and expertise, thereby enriching the intervention's impact. A symbiotic relationship with the target community, wherein their needs and perspectives are woven into the fabric of the intervention, engenders ownership and promotes longevity.

- **Organizational capacity:** The competence of the implementing organization, encompassing proficient management and leadership, skilled personnel, and operational infrastructure, is imperative. A robust organizational structure is essential not only for the initial deployment but also for the ongoing evolution and fine-tuning of the intervention in response to changing circumstances.

- **Program evaluation:** Rigorous and continuous assessment of the intervention's outcomes, processes, and impact enables iterative improvements and data-driven decision-making. Monitoring and evaluation mechanisms facilitate the identification of strengths and weaknesses, guiding refinements and adaptations that ensure alignment with the evolving needs of the target population.

- **Program adaptation:** The ability to flexibly modify the intervention in response to contextual shifts, emerging evidence, and changing demographics is integral. A rigid adherence to a static model can engender obsolescence, rendering the intervention irrelevant and ineffective over time. Adapting the program requires a delicate balance between fidelity to the evidence base and responsiveness to the dynamic environments in which interventions operate.

- **Effective communications:** Transparent and compelling dissemination of the intervention's goals, methods, and impact cultivates stakeholder engagement and support. Clear communication strategies, leveraging diverse media and tailored messaging, foster understanding and cultivate an environment of trust.

- **Strategic planning:** A well-conceived long-term strategy, encompassing defined goals, resource needs and a clear financial strategy serves as a roadmap for navigating challenges and capitalizing on opportunities. This plan needs to be communicated and understood by all stakeholders to align expectations.

SMI's Operational Definition of Sustainability for Planning

The approach undertaken by SMI was designed to pursue sustainability across various areas. The concept of channeling national funding towards the most impoverished regions implied that these financial allocations would be challenging for Ministries of Health to retract. Consequently, these investments were poised to become enduring fixtures in the long run. Furthermore, SMI's strategy of capacity-building within Ministries aimed at equipping their staff with the competencies needed to implement interventions and adopt diverse management practices. These enhanced skills and new behaviors are likely to persist in the future, as long as a critical mass of SMI-influenced personnel remains within the Ministries of Health.

Moreover, the initiative encompassed demand-side interventions to encourage the utilization of healthcare services by the population. Some of the population-level behaviors that were instilled are unlikely to diminish in the short term. The ability to sustain the ongoing improvement in health system performance, akin to what SMI achieved, the expansion of interventions, and the capacity to learn and adapt, as demonstrated by SMI, hinges on the continuity of the staff involved in SMI and the political authorities' support to enable this continuity. Consequently, the key question arises: What measures can be taken through a sustainability plan to reinforce the progress already achieved?

To develop these sustainability plans, SMI has embraced a pragmatic definition of sustainability, focusing on the most tangible components. In essence, this entails aiding countries in maintaining the implementation of interventions, identifying priority areas for their efforts, and securing funding accordingly. The expectation is that SMI's long-standing engagement in each country, coupled with the sustained policy dialogue between the IDB and individual countries, has established a robust foundation for the enduring sustainability of SMI.

Designing and Developing Sustainability Plans

Sustainability plans, which encompass strategies for maintaining the continued operation and effectiveness of interventions over time, play a pivotal role in ensuring the long-term success of evidence-based public health initiatives. One of the foremost reasons for formulating sustainability plans lies in the persistent challenges associated with the implementation and maintenance of evidence-based interventions. While the efficacy of such interventions is well-documented, their operationalization within diverse and dynamic socio-economic contexts necessitates a proactive approach to counter potential hurdles (Walugembe et al. 2019). A sustainability plan acts as a roadmap, delineating strategies to preemptively address obstacles, carefully allocate resources, and engage stakeholders effectively (Pluye, Potvin, and Denis 2004). Thus, interventions are continually fine-tuned based on emerging evidence and changing circumstances. By proactively addressing challenges, sustainability plans contribute to the perpetuation of interventions and mitigate the risk of premature discontinuation.

Furthermore, the establishment of sustainability plans enhances the allocation of resources, both financial and human, by fostering efficient resource management (Steckler and Goodman 1989). Resource optimization is paramount, particularly in resource-constrained settings, where the judicious utilization of available resources can significantly amplify the reach and impact of interventions.

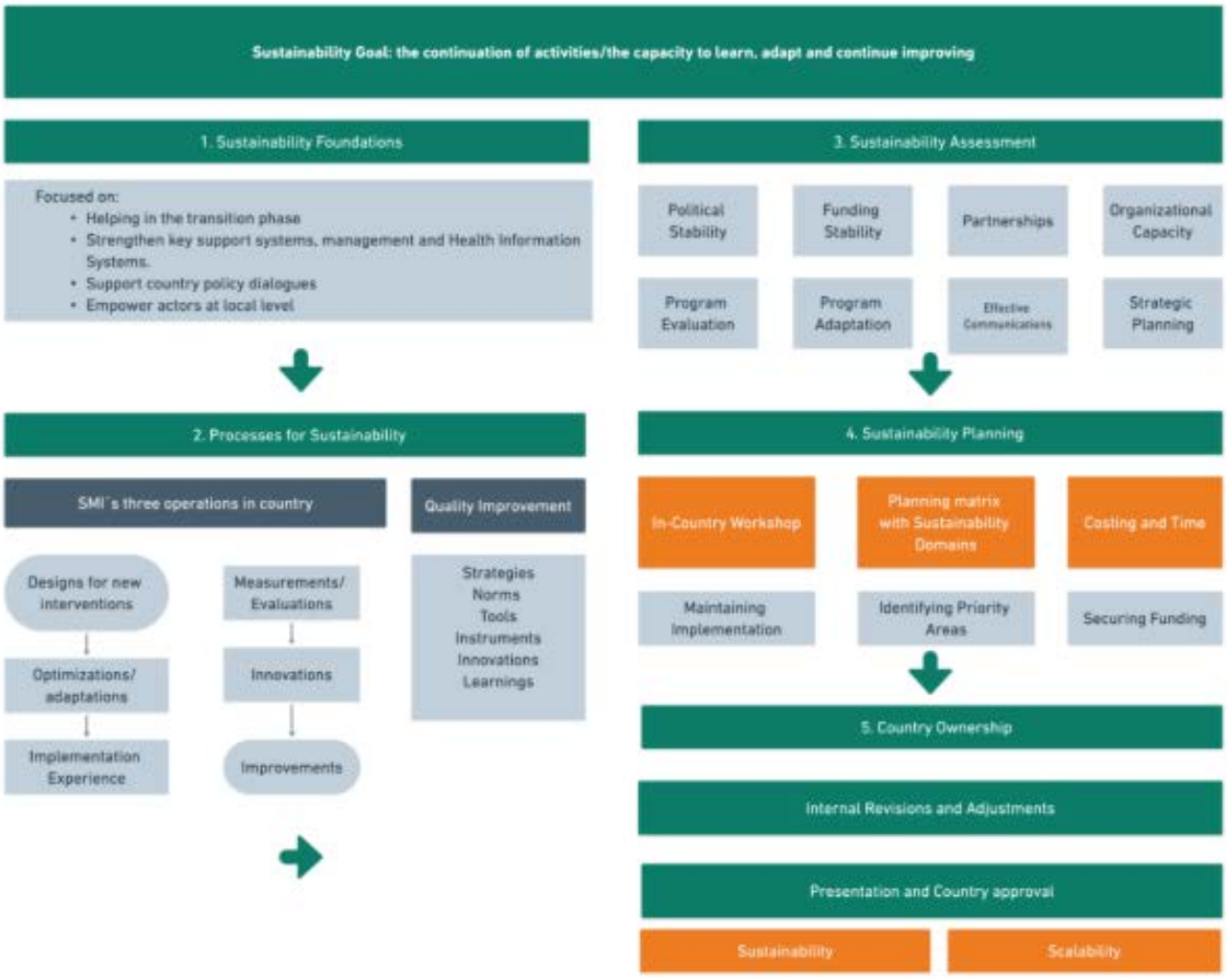
Moreover, sustainability plans bolster stakeholder engagement and collaboration, crucial components in the sustained success of public health interventions (Luke et al. 2014). Stakeholders, ranging from governmental agencies to non-governmental organizations and local communities, play a pivotal role in the implementation and dissemination of evidence-based interventions. A well-structured sustainability plan delineates strategies for maintaining robust stakeholder engagement, facilitating intersectoral collaboration, and nurturing community ownership.

Calhoun et al. (2014) describe the process of evaluating a program´s capacity for sustainability and developing an action plan accordingly. First, they propose using the PSAT to identify which sustainability dimensions need to be addressed to assure the program´s continuance. Once those dimensions have been identified and prioritized, action plans should be developed, including specific action steps for each dimension, and a list of resources and stakeholders required for success and methods for monitoring progress. Later, during the implementation, these plans should be revised and adapted responding to inputs from the stakeholders involved.

SMI has devised a sustainability roadmap that outlines the integration of sustainability planning within the broader sustainability framework (see Figure 7. SMI´s Roadmap for Sustainability). The groundwork for sustainability was laid during the initial design phase of SMI, which facilitated the establishment of appropriate processes during its implementation. The sustainability assessment conducted at the program's conclusion aids in identifying the strengths and weaknesses inherent to SMI's sustainability efforts, thus enabling the development of effective sustainability plans. The execution of these plans will, in turn, promote the sustainability and expandability of SMI interventions.

Designing and Developing Sustainability Plans

Figure 7. SMI´s Roadmap for Sustainability



Country Sustainability Plans

Sustainability is not an outcome achieved overnight; rather, it must be cultivated during the design and operation of a program. Initially, it is essential to delineate the sustainability objectives of the Initiative, encompassing sustaining funding levels for the most impoverished regions, interventions and novel practices, health gains, the pace of improvement, scalability capacity, or the ability to learn and adapt. While achieving an objective such as the ability to learn and adapt may yield greater impact than, for instance, maintaining funding levels, reaching any of these objectives is a noteworthy achievement.

Likewise, within each domain of organizational and contextual capacity for sustainability (Washington University in St. Louis 2023), elements within the Initiative's design and operation that foster the adoption and institutionalization of its interventions and insights can be identified.

To this end, a methodological process has been developed to aid countries in diagnosing the sustainability of the SMI within their respective context and based on this assessment, constructing their Sustainability Plan. The assessment will enable the identification of actions, behaviors, and interventions implemented as part of the SMI. It will determine the current state of implementation and outline actions required to ensure future sustainability. Among these actions, the decision of systematization may also be included. Prioritization of interventions deemed most critical or those necessitating substantial support for sustainability can be informed by the assessment. The Sustainability Plan will facilitate tracking the identified actions for sustaining prioritized interventions during the closure phase of the SMI.

The process of designing and developing sustainability plans has been structured in a five-step process:

- Country sustainability assessments
- Sustainability workshops
- Strategic prioritization
- Developing the sustainability plan
- Systematization of interventions

Country Sustainability Assessments

The objective of this step is to conduct an in-depth analysis of each sustainability domain, ensuring a comprehensive overview, and identifying opportunities during the final stage of the Mesoamerica Health Initiative. Two outcomes were sought:

- Sustainability Diagnosis: A thorough assessment of sustainability status.
- Strategies or actions for inclusion in sustainability plans: Identification of strategies or actions to be integrated into sustainability plans.

In the initial stage of the process, a comprehensive evaluation of the sustainability of the initiative within the country was conducted using the Program Sustainability Assessment Tool (available at https://sustaintool.org/psat/). Facilitated by the University of Washington in St. Louis, this step entailed a 1-hour webinar that served a dual purpose: delivering training and functioning as a platform for data collection. Roughly 10-20 individuals were carefully selected to participate in this diagnostic phase. These individuals were expected to possess a profound understanding of the SMI and its interventions within the country. Moreover, they represented diverse sectors and departments within the Ministry of Health, ensuring a comprehensive viewpoint. Geographical diversity was also sought, spanning central, regional, and, if feasible, local levels.

Sustainability Workshops

The objective for this step involved identifying and analyzing activities or practices that the Initiative had supported, expanding the participant group beyond the initial diagnosis. The following outcomes were generated:

- A comprehensive sustainability matrix for interventions, outlining reasons for sustaining them, their maturity level, financial resource requirements for sustainability, sustainability obstacles, key strategies to address main obstacles, and five-year success indicators.
- A prioritization proposal formulated by the technical teams.

The workshop initiated by acknowledging prior efforts in discussing SMI's sustainability within the country and incorporating relevant inputs, interventions, or practices. Then, the Ecocycle framework (McCandless and Lipmanowicz n.d.) was employed to assess intervention maturity: technical feasibility (definition and progress of technical components), institutionalization (adoption of practices, tools, processes), and current scope (whether pilot or scaled implementation). The workshop facilitator not only recorded the Ecocycle position but also provided reasons for each placement, adhering to the sequence of analysis (Maturity, Birth, Gestation, and Creative Destruction). The rationale for sustaining the intervention was explored, along with critical variables (technical components) and the extent of

Country Sustainability Plans

maturity. Furthermore, anticipating the sustainability's success in three years, potential indicators of achievement were contemplated. During the results of the sustainability assessment were also discussed to identify prospective strategies or actions for incorporation into sustainability plans.

Strategic Prioritization

With the aim of establishing the interventions or practices to be emphasized within the Sustainability Plan, a meeting was convened between the country's authorities and the IDB. The objective of this meeting was to deliberate upon and determine the specific interventions or practices that warranted prioritization within the Sustainability Plan, leveraging the Sustainability Matrix obtained from sustainability workshops. The resulting outcome was a consolidated list of identified prioritized interventions or practices.

Developing the sustainability plan

The objective was to finalize the sustainability plans for SMI, along with its interventions and practices, through the end of 2023 and onwards. Taking into consideration the inputs from the prioritized Sustainability Matrix activities, a plan was formulated. This plan delineated products, activities, timelines, and responsible stakeholders. The finalized plan was then formalized as a commitment within the country's Program Execution Plan (PEP), to be monitored by the IDB health specialist responsible for SMI and IDB's health portfolio in each country.

Systematization of interventions

The objectives of this step encompass generating knowledge through the outcome of a systematic process at the project's end cycle. This pursuit aims to establish guidelines, construct tools, and/or knowledge products to guide the formulation and execution of new projects or subsequent project phases – for instance, a training manual. This involves recreating the implementation experience to extract insights and disseminate them, ultimately enhancing healthcare services, not only for ongoing efforts but also for future undertakings. Critical analysis of the reasons behind the successful experience as a best practice is important, involving identification of contextual characteristics, facilitating and constraining factors, institutional strengths and weaknesses, the criteria designating it as a best practice, assimilated lessons, conclusions, and recommendations for its sustainability and replicability. This systematic reconfiguration, guided by experiential insights and lessons gleaned from the process of systematization, involves a methodological progression: step-by-step rewriting to chronologically order components, stages, or phases, activities within each phase, tools applied per stage or activity, and resultant products and outcomes. The overarching aim is to contribute to the fortification and enhancement of ongoing experiences and serve as a foundational framework for designing and executing novel initiatives.

Leveraging Sustainability through the IDB

Given the IDB's prominent role in the region, it holds a unique position to facilitate the ongoing application of SMI's lessons and insights through its health project portfolio. The IDB has duly recognized the strengths of SMI and its relevance not only in the healthcare sector but also in broader contexts. However, as is the case with any large institution, it is imperative to ensure that outstanding concepts translate into practical action. In simpler terms, ensuring the sustained presence of SMI within the Bank demands a deliberate and purposeful approach.

Consequently, SMI has been actively exploring strategies to integrate itself within the Bank's framework and maximize its influence by informing traditional IDB projects. Currently, SMI is engaged in two noteworthy endeavors: implementing a quality improvement initiative in Paraguay and developing an adolescent health project in Honduras. Additionally, the ongoing Regional Malaria Elimination Initiative serves as a conduit for the continuation of SMI, albeit with a more restricted scope. Nevertheless, it provides a platform for continued operation while the next phase of SMI is envisioned.

Status of the Sustainability Plans

Following the iterative design of SMI´s Sustainability Framework, the following table describes the activities to develop sustainability plans and their current status.

No.	Roadmap Activity	Target	Status
1.	Continuous desk-revisions for sustainability literature, updating the sustainability framework as needed	100% until finalized	80%
2.	Prepare Sustainability Initial Concept note	100%	Completed
3.	Assessment of sustainability capacity with the PSAT	3 diagnoses	Completed
4.	Sustainability Diagnoses country feedback	3 countries	Completed
5.	Sustainability workshops, identifying and prioritizing interventions based on level of maturity (ecocyle), technical and financial feasibility.	3	Completed
6.	Sustainability workplans finalized with interventions, activities, responsibilities, and estimated timeline completed	3	One completed and two 60% advanced
7.	Workplan cost estimations	3	1
8.	Strategic revision and final adjustments to plan prior in-country presentation to authorities	3	1
9.	Country presentation and approval	3	1
10.	Country led continuity/implementation and scale-up	3	1

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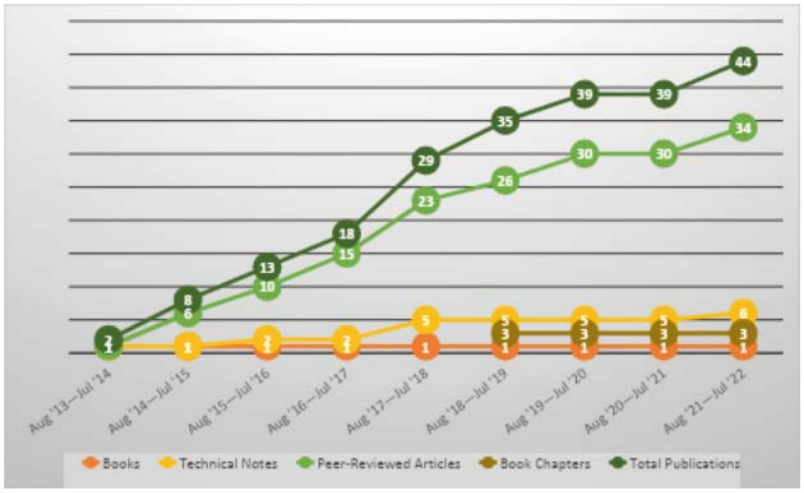
Administrator IDB

Publications

SMI disseminated lessons and findings in academic and technical publications. Publications continued to gear attention, which is reflected in the increasing number of citations. SMI publications have been cited by 537 academic manuscripts. On average, each publication has been cited 12 times –even when counting most recent publications, which are less likely to be cited.

All academic articles disseminated were published in high-impact health journals. To this day, SMI has made available a total of 44 publications (see Figure 7. Publications by type and year). Four additional manuscripts are nearly complete for publication and will be submitted in the coming months. The full list of publications is available in Annex 4: List of Publications.

Figure 8. Publications by type and year



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Communications

Channels

Digital platforms

During its time of execution and recollection of results, the ISM focused on sharing the lessons learned and experiences by systematizing its content and helping to apply them to new contexts and challenges.

To showcase SMI's best practices and lessons learned, the initiative has continued its work on the updated website. The new website presents an interactive platform that illustrates SMI's results, technical experience, country experience, technical toolkits, and other knowledge publications

SEE SALUD MESOAMERICA INITIATIVE

When navigating the website, the ISM team has included a "Results by Country" page that allows visitors to see the main achievements of the initiative in each of the operating areas

SEE SMI RESULTS

The Salud Mesoamerica Initiative (SMI) has compiled a series of toolkits based on its programmatic experience in the region. In collaboration with Ministries of Health and other technical partners, SMI has worked to enhance the quality and accessibility of essential public health services in key areas, including reproductive, maternal, neonatal, and child health (RMNCH) care, maternal and child nutrition, and immunization.

Model Homepage

SMI Results Page - Belize

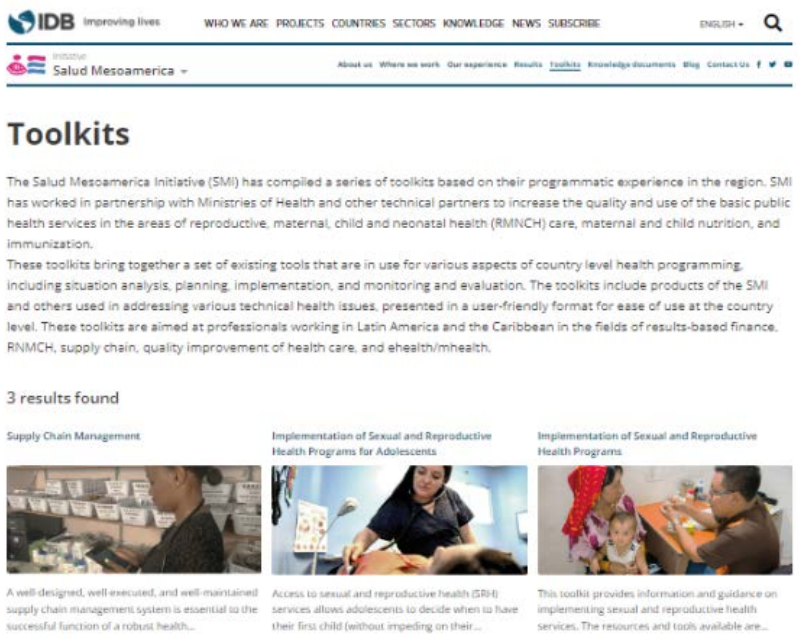
Channels

The Salud Mesoamerica Initiative (SMI) has compiled a series of toolkits based on its programmatic experience in the region. In collaboration with Ministries of Health and other technical partners, SMI has worked to enhance the quality and accessibility of essential public health services in key areas, including reproductive, maternal, neonatal, and child health (RMNCH) care, maternal and child nutrition, and immunization.

These toolkits consolidate a range of existing resources used across different aspects of country-level health programming. They serve as practical guides for conducting situation analysis, planning, implementation, and monitoring and evaluation, supporting policymakers and healthcare professionals in strengthening health systems and improving outcomes

VISIT TOOLKITS

SMI Toolkit Page



Social Media

Regarding the Social Media component, the Salud Mesoamerica Initiative (SMI) focused its communication efforts from 2012 to 2025 on promoting and disseminating the Results-Based Financing (RBF) model and showcasing the results achieved since the initiative's inception in 2012.

SMI has recognized that one of its key ongoing challenges is effectively communicating its success to diverse audiences while demonstrating the impact of the RBF model in addressing inequities in access to quality healthcare for the most vulnerable populations. The model and its results not only provide a valuable reference for other Inter-American Development Bank (IDB) programs but also serve as an example for multilateral development institutions and national governments seeking to improve their healthcare systems.

To amplify its reach, SMI has actively shared its initiatives, progress, and achievements through social media channels such as Facebook, LinkedIn, and X.

Facebook

With over 3 billion users worldwide, Facebook is one of the largest social media platforms ever created. It is also the most widely used platform in Central America, according to iLifeBelt and MAV Marketing Digital.

Recognizing its reach and influence, the ISM launched its Facebook page in 2012, providing a direct channel for engagement with its audience. With more than 7,500 followers, the page serves as a hub for sharing written content, videos, and key updates while also promoting events, conferences, and various activities across the countries where ISM operates. This platform has played a crucial role in fostering interaction and communication with stakeholders.

FACEBOOK PAGE

LinkedIn

LinkedIn is the preferred platform for professionals worldwide to share and discuss topics of interest within the academic and professional communities.

In 2025, to expand the reach of ISM's communication efforts, the initiative launched a LinkedIn account. This platform has enabled ISM to strengthen

Channels

its network by connecting with IDB members, collaborators from participating countries, and stakeholders from both the public and private sectors who are interested in learning more about its work

LINKEDIN PAGE

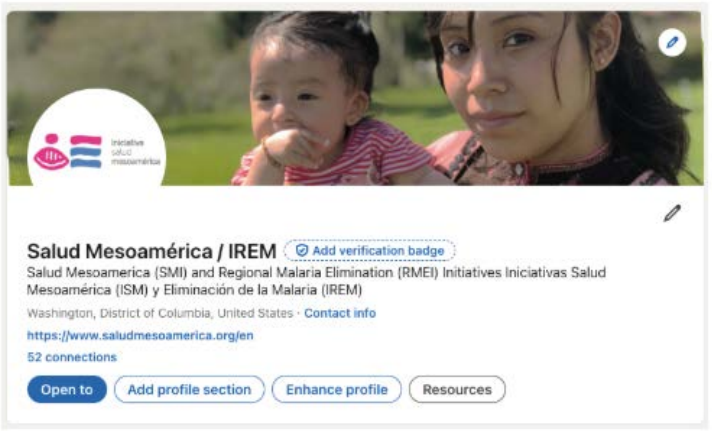
Twitter (X)

With 540 million active monthly users worldwide, this platform serves as one of the most important discussion forums for current topics in the virtual world, including global healthcare.

The ISM page has garnered over 1,440 followers who actively engage with key content shared through this channel, fostering discussions and awareness on critical health initiatives.

Facebook

Linkedin



Twitter (X)

Events and Dissemination

Additionally, the Salud Mesoamerica Initiative (SMI) has played a key role in various internal events at the Inter-American Development Bank (IDB), where it has shared its model and achievements.

The SMI model has been recognized as a best practice and included in a learning MOOC developed by the IDB in collaboration with the UN Sustainable Development Solutions Network (SDSN). This course explores the role of partnerships in sustainable development, showcasing methodologies and success stories for effective implementation.

Externally, SMI has actively participated in international events and presentations. One of the most notable took place on February 28, 2020, when SMI's Executive Secretary, Emma Iriarte, participated in an event in Germany hosted by the Robert Koch Institute in Berlin. During this event, the SMI model was analyzed as a transformative approach to systemic change.

Another significant event was a press conference held in El Salvador on October 22, 2019. During this event, Ethan Wong, representing the Bill & Melinda Gates Foundation (BMGF), and Ana Orellana, El Salvador's Minister of Health, joined SMI to publicly present the country's results following the second round of operations, as well as the expected outcomes for the third phase.

SMI has also participated in key academic and research forums, including the International Health Economics Association (iHEA) conference, where it shared insights on the economic impact of its results-based financing model, and the Public Health Research Congress in Mexico, where it contributed to discussions on innovative strategies for improving healthcare equity in Latin America.

Furthermore, SMI continues to disseminate its lessons and findings through academic and technical publications in high-impact health journals. It also maintains its external communication efforts by distributing a newsletter to a database of more than 1,400 contacts, ensuring ongoing engagement with key stakeholders.

Interviews and media plan

As the Salud Mesoamerica Initiative (SMI) concluded in 2023, a robust communication and media strategy was crucial to raising awareness of the Initiative's achievements, model, and long-term sustainability.

The primary goal of this strategy was to capture attention, foster new collaborations, and ensure transparency and accountability, ultimately strengthening trust among donors, participating countries, and other key stakeholders.

To achieve this, we established three major objectives:

- Communicate SMI's results at both regional and country levels.
- Highlight the uniqueness of the SMI model.
- Enhance the visibility of health public-private partnerships (PPPs) by amplifying the voices of SMI donors and partners.

Following a comprehensive stakeholder mapping and analysis, we identified key media targets along with tailored messages and tools to effectively showcase the results.

COVERAGE	MEDIA	MAIN TOOLS	MAIN MESSAGES
USA, Mesoamerica, International	**USA, regional, and international media** (CNN, Politico, US News and World Report, Forbes Centroamérica, NYT, FT, The Economist)	Interviews Articles, Op-eds Press releases	**SMI Model**: PPP, RBF, independent evaluation, Quality Improvement **Celebrating Success**: significant achievements of SMI over the past decade + compelling stories **Future Vision**: ongoing commitment to improving health in the region and beyond + SMI as a model for health programs regionally and worldwide
	News Agencies (Agencia EFE, Associated Press, Reuters, Agence France-Presse)	EFE: pitch + data + interview Press releases	
	Specialized press (medical journals, Devex)	Scientific / technical articles	
	Specialized podcasts (The Lancet Voice, American Journal of Public Health)	Participation in the podcast	
Other donors' countries	**Spain**: El País **Mexico**: Reforma, Expansión **Canada**: Globe and Mail	Interviews Articles Press releases	**Collaborative Efforts**: importance of partnerships and donors' commitment to close the health gap **SMI Model + Celebrating Success**
Other SMI countries	**Honduras**: La Prensa, La Tribuna **Belize**: Channel 5, The San Pedro Sun **Guatemala**: La Hora, Prensa Libre **El Salvador**: El Mundo, La Prensa Gráfica **Nicaragua**: La Prensa, La Estrella de N. **Costa Rica**: CR Hoy, La Nación **Panama**: La Estrella de Panamá, La Prensa	Interviews Press releases	**Celebrating Success at national level**: significant achievements + compelling stories **Sustaining the Gains** **Further strengthening the national health systems**

Events and Dissemination

As of the submission date of this report, not all interviews have been conducted. So far, we are able to share this interview with the newspaper El País (Spain), conducted with the executive secretary Emma Iriarte (see El Pais: Así se evitaron miles de muertes de madres y niños en una década en México y Centroamérica).

EL PAÍS

América futura

EN COLABORACIÓN CON CAF

MORTALIDAD MATERNA >

Así se evitaron miles de muertes de madres y niños en una década en México y Centroamérica

Una iniciativa regional de salud mejoró la atención materna y neonatal de 1,8 millones de personas de bajos ingresos en siete países centroamericanos y en el Estado mexicano de Chiapas

SEE ARTICLE

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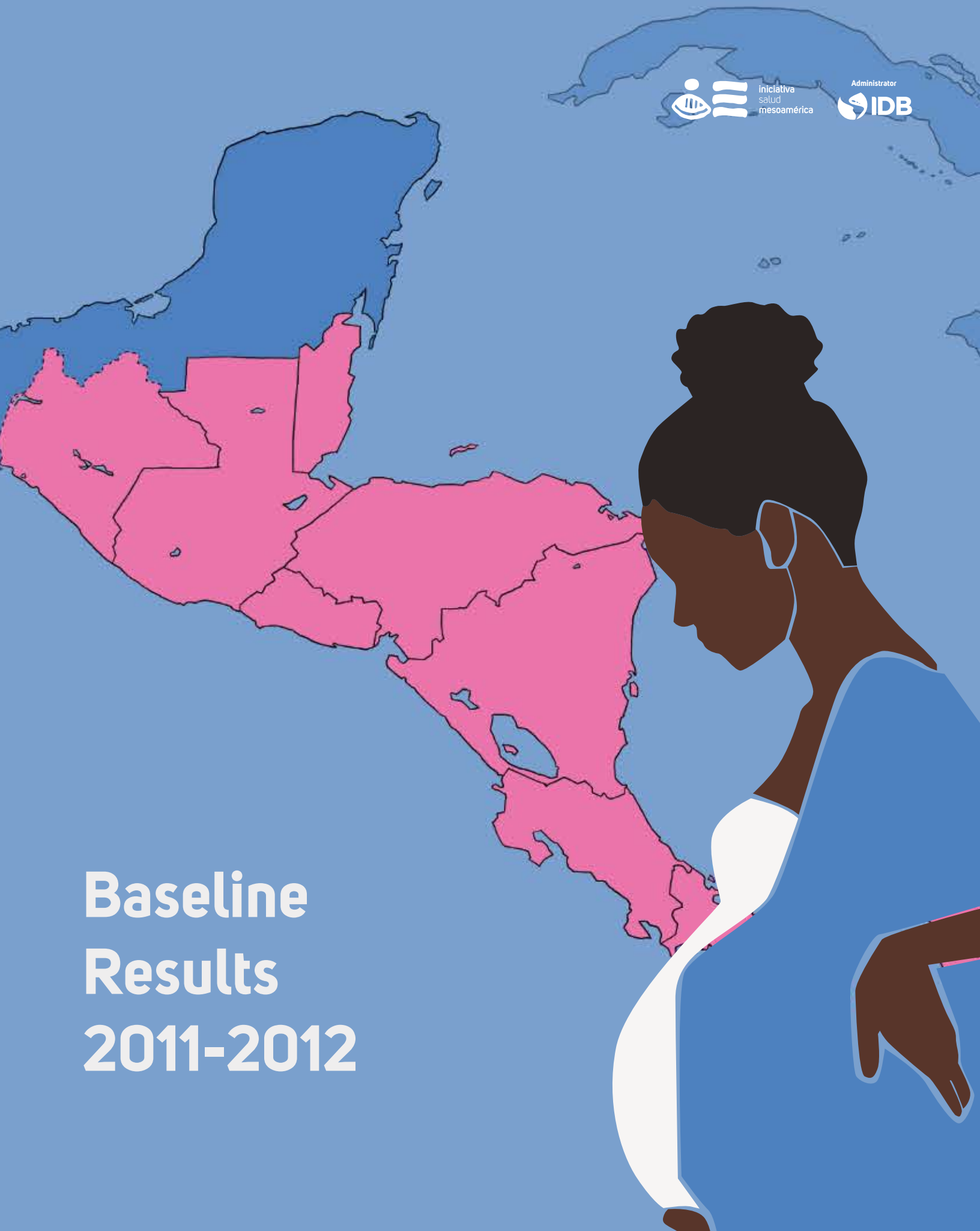
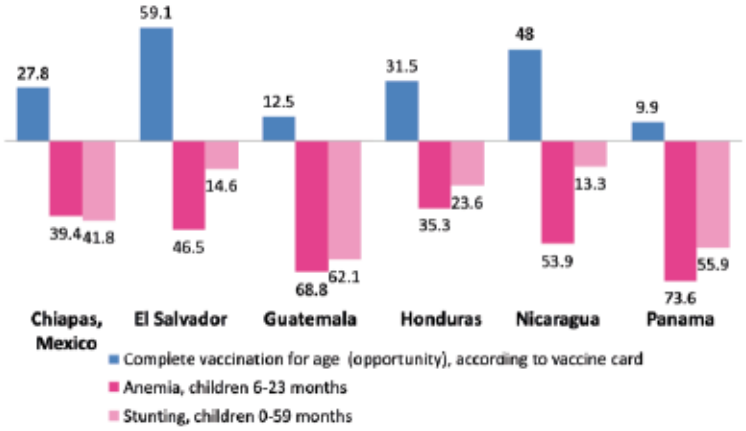
Administrator IDB



Baseline Results 2011-2012

SMI facilitated for the first time ever for countries to have surveys with large samples targeting the poor collected at household and health facilities. The surveys have unveiled inequalities that were earlier hidden by national averages. Important challenges remain to improve intervention coverage and quality of care for these populations: in most countries, less than 1 of every 2 women that do not want to get pregnant are currently using modern family planning methods. The coverage of institutional birth by qualified staff remains particularly low in areas with high indigenous populations[14] where only about 1 in 4 women has access to institutional deliveries by qualified staff.

In some of the poorest provinces[15] in Panama and Guatemala, complete vaccination for age in children younger than 5 is only 9.9 percent and 12.5, percent respectively. The surveys also uncovered high levels of anemia in children living in poverty; almost 1 of every 2 children between 6 and 23 months is anemic. Regarding quality of care, there also important challenges, for instance, in countries such as Belize, El Salvador and Nicaragua, where the coverage of institutional deliveries by qualified staff is high, equipment and supplies to attend obstetric and neonatal complications were not always available in most health facilities that attend birth. Moreover, a medical record review showed that in all countries, less than 15% of obstetric complications were attended according to national norms and protocols.



Source: SMI Baseline Household and Health Facility Surveys 2011-2013 in the 20% poorest areas.

[14] such as the poorest areas of Chiapas and Guatemala

[15] Guna Yala and Embera in Panama and poorest municipalities of Huehuetenango and San Marcos in Guatemala

Results of the SMI Implementation 2011-2022

The primary focus of results-based financing (RBF) projects, particularly within the health sector, is the acquisition of outcomes and impacts. This shift in perspective directs the conversation away from process and outputs, such as the quantity of distributed sachets and purchased vaccines, towards the ultimate objectives, such as the reduction of anemia and increased coverage of fully vaccinated children for their age.

In the context of healthcare, where the imperative is to manage rising costs, enhance service quality, and promote evidence-based and cost-effective interventions, RBF, or pay-for-performance, emerges as a potential tool to achieve these goals. RBF entails a setup in which a principal rewards an agent with financial or other incentives upon verification that the agent has executed a measurable action or attained a performance target agreed upon by both parties[16]. In the health sector, RBF operates within a hierarchical framework involving various actors, such as external donors, governments (at national, state, and local levels), service providers (public, private, group, and individual), and beneficiaries (communities, households, and individuals).

When the Salud Mesoamerica Initiative (SMI) was designed, despite the promise of RBF interventions, there were significant evidence gaps concerning their impact and cost-effectiveness, particularly at the national/health system level. SMI employed an RBF model that utilized financial incentives and independent measurement to alter health-system incentives. This model generated new incentives to address challenges and achieve results, with a portion of donation funds tied to independently verified results through external surveys conducted by the Institute of Health Metrics and Evaluation (IHME). The publication of results provided reputational incentives that were expected to influence practices, while the financial incentives could be utilized by program managers for budget support in their programs.

SMI followed a logic model based on its theory of change. This logic model facilitated the selection of a regional framework of indicators to verify performance, monitor progress, and evaluate the program, spanning impacts, outcomes, outputs, activities, and inputs. Indicators at the impact level encompassed factors like total fertility rate, infant mortality rate, neonatal mortality rate, maternal mortality rate, and stunting in children under 5 years old. These impact-level indicators informed the selection of outcome-level indicators, primarily related to effective coverage (seroprevalence, anemia) and coverage of maternal and child health interventions, as well as the quality of care. This systematic approach extended to outputs, activities, and inputs, representing the critical pathway for desired changes.

The first operation aimed to enhance the health system readiness by incorporating process indicators, while the subsequent two operations focused on healthcare coverage and quality of care indicators. The established targets were designed to be both challenging and attainable, serving as a means to encourage improvements in performance. Across the different operations, there was a progressive increase in the complexity of indicators and targets.

To qualify for the performance tranche, countries were required to meet a minimum of 80% of the targets for the first and second operations. However, in response to the challenges posed by the COVID-19 pandemic, a modification was introduced for the third operation. This alteration involved the implementation of a proportional incentive based on the number of indicator targets achieved. Despite this adjustment, adherence to the targets remained binary—either achieved or not achieved. Consequently, awards were contingent upon the successful attainment of the specified goals, with no recognition or reward for partial progress.

SMI employed a mixed-method approach to establish targets, adapting methodologies based on data availability. While time-series cross-country data, commonly reported in surveys like DHS, informed indicators related to intervention coverage and prevalence of conditions, similar data was lacking for quality of care indicators. Nevertheless, reference points were drawn from quality improvement initiatives and case studies in various countries. The estimation of targets relied on several tools.

[16] Oxman A. and Fretheim A. 2009. Can Paying for Results Help to Achieve the Millennium Development Goals? Overview of the Effectiveness of Results-Based Financing. Journal of Evidence-Based Medicine, 2: 70-83; Musgrove, P. 2011. Rewards for Good Performance or Results: A Short Glossary. Washington, DC: The World Bank.

The Institute for Health Metrics and Evaluation (IHME) conducted trend analyses using data from 187 countries (1970–2010), providing reference points for global prevalence percentiles and changes over time. This helped estimate the minimum change achievable without SM2015 interventions, establishing targets as deviations from existing trends.

A literature review of international experiences, led by IHME and IDB, included randomized-controlled trials and non-experimental evaluations. This comprehensive review summarized interventions, presenting baseline coverage, intervention periods, and expected percentage point changes. These parameters informed the magnitude of changes anticipated from interventions.

A cost-benefit model, developed by Cruz Aguayo & Martínez[17], assessed minimum changes needed for total benefits to exceed costs. Valuing improvements by disability-adjusted life years (DALY) and considering Gross National Income (GNI) per capita, this model provided high-level benchmarks for SMI-funded projects to outweigh costs.

Estimation of targets also considered country-specific operational requirements and expert advice. Operational issues, intervention types, and socio-political factors were analyzed through consultations with government stakeholders, fiduciary, procurement specialists, and technical specialists at the IDB.

Statistical calculations for power and sample size considerations were conducted to detect significant changes. When required sample sizes exceeded regional framework limits, proposals for replacement indicators or target revisions were made.

The information from these tools helped establish the minimum acceptable target and maximum expected improvement, forming a negotiation range with each country. With baseline measurements often unavailable, outcome and impact indicators set relative performance goals. Country-specific values were derived from DHS reports, while process indicators generally adopted a golden standard without requiring a baseline.

While the attainment of targets offers only a partial view into the performance of countries, it does offer an interesting perspective on the RBF components of the SMI. If targets were appropriately established, the number of achieved targets can serve as an initial indicator of the Initiative's success. This holds true even if spillover effects beyond directly incentivized indicators or the specific contribution of the Initiative cannot be thoroughly analyzed.

In total, SMI established 213 targets encompassing all countries and operations. On average, countries achieved 65.7% of these targets. Notably, in the first operation, countries successfully met 69% of the targets, and in the second operation, this figure slightly increased to 70%. However, the third operation witnessed a decline, with countries meeting only 50% of the set targets, which was likely a consequence of the pandemic. For a detailed breakdown of country performance between operations, refer to Table 2. Performance Framework Results by Country for each Operation.

[17] Cruz Aguayo, Yyannu, and Sebastian Martinez. 2016. "Setting Targets for Results-Based Financing Programs: A Simple Cost Benefit Framework." IDB-TN-983. Washington, D.C.: Inter-American Development Bank. https://publications.iadb.org/handle/11319/7581

Table 2. Performance Framework Results by Country for each Operation

	1st Operation (2012-2014)				2nd Operation (2016-2018)				3rd Operation (2018-2022) (COVID-19 Pandemic)			
Countries	**Targets Met**	**Score**	**PI Achieved ?**	**% PI Achieved**	**Targets Met**	**Score**	**PI Achieved ?**	**% PI Achieved**	**Targets Met**	**Score**	**PI Achieved ?**	**% PI Achieved**
Belize	4 / 12	33%	No	0%	10 / 10	100%	Yes	100%	5 / 10	50%	Partial	62.5%
Chiapas, México	2 / 8	25%	No	0%	9 / 10	90%	Yes	100%				
Costa Rica	9 / 11	82%	Yes	100%	8 / 10	80%	Yes	100%				
El Salvador	8 / 10	80%	Yes	100%	9 / 11	82%	Yes	100%	4 / 10	40%	Partial	50.0%
Guatemala	7 / 11	64%	No	0%	7 / 10	70%	No	0%				
Honduras	9 / 10	90%	Yes	100%	10 / 10	100%	Yes	100%	4 / 10	40%	Partial	50.0%
Nicaragua	10 / 11	91%	Yes	100%	8 / 10	80%	Yes	100%	7 / 10	70%	Partial	87.5%
Panama	8 / 10	80%	Yes	100%	2 / 10	20%	No	0%				

Through the different phases of SMI, countries showed notable achievements.

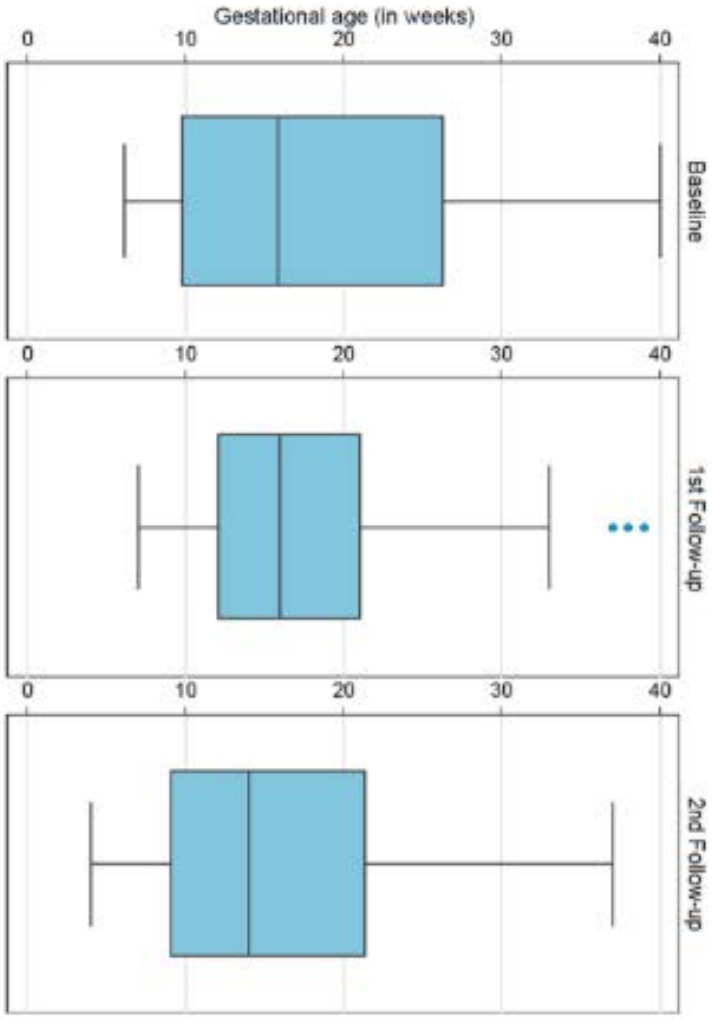
Belize

In Belize, the overall objective of the SMI was to reduce maternal, neonatal, and child mortality in the country's poorest areas, specifically targeting the districts of Corozal, Orange Walk, and Cayo. The aim was to enhance the health of women of childbearing age, mothers, newborns, and children under 5 by improving access, utilization, and quality of health services. Approximately 156,654 people reside in SMI target areas in Belize, constituting 40.4% of the country's total population. Among them, 41,256 are women of reproductive age, and 18,377 are children under 5 years old.

In the second operation, Belize surpassed the targets for all 10 indicators in its Performance Framework by large margins. Indicators demonstrated consistent improvement between operations across the entire continuum of care. This level of widespread improvement within the health system at scale has not been documented previously.

In some instances, the final indicator result did not fully capture the extent of improvements. For example, although a slightly smaller percentage of women attended their first antenatal care visit before 12 weeks of gestation in comparison to the baseline and the first operation, the overall number of women attending antenatal care earlier increased (see Figure 9. Distribution of antenatal care before 12 weeks). In the second operation, not only did the percentage of women attending ANC before 12 weeks increase, but all women attended ANC earlier, signifying improvement across the board.

Figure 9. Distribution of antenatal care before 12 weeks



Improvements in the quality of care were sustained over time and continued to show progress. Neonatal care immediately following birth increased from 30.2% in the baseline to 86.8% in the first operation follow-up and further to 88.7% in the second follow-up. Significant improvements were observed across all individual criteria (see Figure 10 Routine newborn care indicator results and criteria), and these improvements continued in the second operation.

Figure 10 Routine newborn care indicator results and criteria

	Baseline		1st Follow-up		2nd Follow-up	
	N	%	N	%	N	%
The neonate was checked/administered all of the following:	43	30.2	68	86.8	159	88.7
Vitamin K	43	81.4	68	98.5	159	98.1
Application oxytetracycline ophthalmic prophylaxis or chloramphenicol	43	79.1	68	97.1	159	92.5
Apgar score (at 1 or 5 minutes)	43	53.5	68	100	159	98.7
Pulse/heart rate	43	48.8	68	97.1	159	96.2
Respiratory rate	43	46.5	68	94.1	159	97.5
Weight	43	51.2	68	97.1	159	98.1
Height	43	34.9	68	94.1	159	98.7
Head circumference	N/A		68	94.1	159	98.7

Table 3. Statistically significant improvements on strictly comparable indicators

Indicator	Baseline (2013)		2nd Follow-up (2017)		Percentage Point Change
	%	CI	%	CI	
Contraception post-delivery	4.8%	(0 - 24)	90.3%	(83 - 95)	85.5
Postpartum care for woman within 7 days	41.7%	(26 - 59)	75.4%	(64 - 85)	33.7
Neonatal complications	23.7%	(15 - 35)	53.5%	(41 - 65)	29.8
Oxytocin after birth	60.0%	(32 - 84)	98.7%	(95 - 100)	38.7
Newborn care with quality	30.2%	(17 - 46)	88.7%	(83 - 93)	58.5
Child services enrollment within 7 days	25.3%	(17 - 35)	66.5%	(59 - 73)	41.2
Diarrhea treatment with ORS and zinc	20.0%	(1 - 72)	95.3%	(91 - 98)	75.3

When examining strictly comparable indicator formulas and criteria (see Table 3. Statistically significant improvements on strictly comparable indicators), substantial and statistically significant improvements were evident in 7 of the 10 indicators. The confidence intervals of the baseline did not overlap with those of the second operation follow-up, indicating real improvements not related to survey design issues. Additionally, the percentage point improvement exceeded 30 points for several indicators.

In the third operation, Belize made important progress despite the challenges posed by the pandemic. The Ministry of Health and Wellness (MOHW) had to make difficult decisions to refocus their workforce and prioritize interventions. In some cases, indicator definitions were modified to raise the bar for higher performance, or targets were increased considering the high performance of the second operation.

This is exemplified in the management of obstetric complications with quality and the management of neonatal complications with quality, which increased from 34.6% in the second operation to 56.1% at the end of the second operation and from 29.3% to 49.2%, respectively.

Immediate postpartum care, encompassing the evaluation of postpartum women at least every 15 minutes during the first hour and every 30 minutes during the second hour and at discharge, increased from 26.6% to 49.2%.

Chiapas

In the State of Chiapas, the Initiative's objective was to reduce maternal, neonatal, and child morbidity and mortality in the 30 poorest municipalities. The targeted areas in Chiapas, accommodating approximately 1.1 million people, included 281,797 women of reproductive age and 156,291 children under 5 years old. The health services were provided through approximately 301 facilities, consisting of 12 basic and 2 complete facilities offering essential obstetric and neonatal care (EONC).

Throughout the operations, the State achieved significant progress on various indicators, showcasing a dedicated effort to reduce inequalities. Effective coverage of the measles, mumps, and rubella (MMR) vaccine increased, particularly when assessed through dried blood spot (DBS) analysis, indicating improved immunity among children. The analysis revealed a substantial increase in children's antibodies, even among those without a vaccine card. The overall improvement in children with measles antibodies was 19.5 percentage points from baseline to follow-up.

Immediate postpartum care with quality experienced the highest improvement, increasing by 47.8 percentage points. This improvement was attributed to the introduction of frequent postpartum checkups, a new intervention by SMI, requiring hospitals to monitor postpartum women for early signs of complications. Oxytocin administration postpartum also consistently improved, reaching 97.3% at the second operation follow-up.

Indicators related to the management of obstetric and neonatal complications

showed notable improvement, with a focus on better handling of hemorrhage for maternal complications and improved management of low birth weight and sepsis for neonatal complications.

Household surveys indicated significant improvement in the home treatment of diarrhea with oral rehydration salts in children under 5 years old, increasing by about 9 percentage points compared to the baseline.

IHME's analysis of health service utilization revealed that in intervention areas, approximately 75% of the sample population was indigenous, emphasizing a strong focus on improving equity among indigenous populations. Indigenous populations saw improvements in both in-facility delivery by qualified attendants and postpartum care within 7 days of birth. However, these indicators remained unchanged or decreased for non-indigenous populations.

Similar trends were observed in child services utilization, where health-seeking behaviors increased among children with indigenous ethnicity while mostly decreasing for non-indigenous children.

El Salvador: outcome-level results

In certain instances, the final indicator results did not fully capture the extent of improvements. For instance, although home treatment of diarrhea with ORS and zinc increased from 4.5% to 33.7%, a more detailed analysis revealed even more significant progress. Separately examining ORS and zinc usage, the proportion of children treated with ORS increased from 62.7% at baseline to 81.1% in the second operation follow-up, while zinc use increased from 5.6% to 36.3%. This indicates that 4 out of 5 children with diarrhea now receive ORS, and 1 in 4 receive zinc.

A similar pattern is observed for antenatal care with quality. The proportion of medical records missing criteria decreased, and fewer criteria were missed during the second operation follow-up surveys.

One notable improvement is the increase in institutional births attended by qualified personnel. The reduction of home births from 12.3% at baseline to 1% in the follow-up highlights the success of outreach efforts to remote communities.

When looking at the strictly comparable indicator definitions (see Table 4. Statistically significant improvements on strictly comparable indicators), the improvements of several indicators were large and statistically significant.

In the third operation, involving USD $970,000 in donation funds and USD $2,270,000 in domestic resources, El Salvador achieved notable progress. Despite the pandemic, the Ministry of Health accomplished four out of ten indicators in its Performance Framework. These achievements were not confined to a specific life-cycle stage or level of care. Particularly noteworthy is the substantial reduction in anemia prevalence among children aged 6 to 23 months, decreasing by over 30 percentage points. Additionally, despite the challenges posed by the pandemic, cervical cancer screening coverage exceeded 85%.

Guatemala: outcome-level results

In Guatemala, the primary objective of the second operation was to contribute to the reduction of maternal and child morbidity and mortality in 31 of the country's most impoverished municipalities. The targeted areas in Guatemala had a population of approximately 456,788 people, with 248,880 women of reproductive age and 207,908 children under 5 years old.

The institutional birth rate witnessed an increase from 19.3% to 27%, and immediate neonatal care improved from 8.6% to 19.9%. These advancements can be attributed to various factors. The sectorization process involved mapping the population and identifying pregnant women, puerperal mothers, newborns, and children under 2, facilitating better follow-up for these groups. The implementation of the birth plan concept (both individual and community) and the referral/follow-up for high-risk pregnancies were crucial components. Strengthening surveillance and follow-up of maternal deaths, updating/analyzing

Table 4. Statistically significant improvements on strictly comparable indicators

Indicator	Baseline	1st Operation	2nd Operation	Percentage Point Change
Prevalence of family planning	53.9% (51-57)		75.0% (70-79)	+21.1
Antenatal care in first trimester		58.7% (51-66)	74.6% (69-79)	+15.9
Institutional delivery by qualified attendant	85.7% (82-88)		98.3% (96-99)	+12.6
MMR vaccine in children 12-23 months	65.5% (61-70)		91.1% (83-95)	+25.6
Home treatment of diarrhea with ORS and zinc	4.5% (3-7)		33.7% (21-49)	+29.2

situation rooms, and sharing results with community leaders through assemblies, including intercultural dialogues and other activities, further contributed to these positive outcomes.

The Initiative aimed to enhance child health, primarily by reducing the severity and duration of episodes of diarrhea and anemia. In the baseline, around 7 out of every 10 children under 2 suffered from anemia. Oral rehydration salts (ORS) and zinc were utilized to reduce diarrhea, while micronutrients were employed to address anemia. The second measurement indicated a 9.3% increase in the percentage of children receiving ORS and zinc treatment during the last episode of diarrhea in the past two weeks, according to mothers. Notably, the use of zinc could have been further improved, as only 12% of mothers reported receiving it, compared to 52.2% for ORS. Additionally, 37.6% of mothers reported receiving a micronutrient packet in the last six months to combat anemia, marking a 17-percentage-point increase from the baseline. However, the consumption of a single packet was deemed insufficient for reducing anemia, with only 6% of mothers reporting the receipt of 60 micronutrient packets in this period, slightly higher than the baseline of 1.5%.

A Continuous Quality Improvement (CQI) strategy was implemented in hospitals and basic Essential Obstetric and Newborn Care (EONC) health facilities, including permanent care centers (CAPs) and comprehensive maternal/child health centers (CAIMIs). Significant improvements were observed in the quality of delivery care and basic postpartum care. Quality institutional births in CAPs and CAIMIs increased to 96.6%, and quality immediate postpartum care rose from 13.0% to 37.1%. This progress was largely attributed to the establishment of 20 improvement teams and the standardization of processes, measurements, and monthly follow-up. The percentage of institutional births meeting at least two intercultural criteria (birthing position, beverage, language, clothing, accompaniment, etc.) increased to 49.4%.

Honduras: outcome-level results

In Honduras, the Initiative aimed to reduce maternal and child morbidity and mortality in 19 of the country's poorest municipalities. The targeted SMI areas were home to approximately 248,709 people, including 67,624 women of reproductive age and 33,261 children under 5 years old.

As part of its health sector reform, Honduras initiated a gradual decentralization process of financing and health service provision, facilitating the transfer of resources to the local level. In the SMI-intervention areas, six providers were responsible for delivering outpatient and basic obstetrical care services. To enhance interventions at this level, 82 family health teams (ESFAMs or "Equipos de Salud Familiar") were formed, each comprising two health promoters, two nursing assistants, and one physician for every 600 families.

In the second operation, Honduras conducted an external monitoring exercise a year before the measurement. Based on the results, the country reinforced ongoing actions and developed new strategies to enhance intervention quality and coverage. The percentage of women receiving quality prenatal care surged from 23.7% at baseline to 94.1%.

Prenatal care before 12 weeks increased from 59.2% to 89.7%, facilitated by the implementation of a standardized "screening form" introduced by SMI from El Salvador. This form reduced missed opportunities to identify pregnant women by assessing family planning needs, intentions for pregnancy, and menstrual delays. A rapid pregnancy test was administered in case of a delayed period.

Pneumonia management increased from 87% to 95.3%, achieved through active community searches for pneumonia cases. Prescription of rehydration salts and zinc in health services reached 95.3%, partogram use according to standards reached 97.9%, and immediate postpartum care quality after delivery rose from 67.5% to 91.2%.

Institutional deliveries increased from 68.6% to 84.7%, aided by providers reviewing their estimates of expected deliveries through a tool comparing various population sources. Postpartum care in the first seven days rose from 47% to 60.4%. Though this indicator may have recall bias, considering 84.7% had institutional delivery and 91.2% of medical records showed quality postpartum care in the first 48 hours.

Quality management of obstetric complications increased from 39 to 62.7%, and neonatal complications rose from 0% to 46% by the end of the second phase.

During the third phase, amid the onset of the COVID-19 pandemic in March 2020, not all interventions were implemented with expected intensity. Nonetheless, several improvements were achieved.

The availability and use of modern family planning methods strengthened since the first operation, increasing from a baseline of 69.3% to 79.8% in the third operation, meeting the target for this indicator.

Though antenatal care (ANC) with quality

and early capture did not meet the 90% target, there was a significant improvement compared to the baseline, increasing from 12.8% to 63.8% in the third operation.

Similarly, institutional birth did not meet the target but achieved a substantial result of 86.9%, maintaining gains from the second operation despite the challenging environment. Management of neonatal complications with quality reached 68.3%, a significant improvement from the second operation's 41.7%, and routine newborn care achieved 78.8%.

Nicaragua: outcome-level results

In Nicaragua, the primary goal of SMI was to reduce maternal and child morbidity and mortality in 19 of the nation's most impoverished municipalities. The targeted areas of SMI in Nicaragua were inhabited by approximately 553,203 individuals, comprising 364,003 women of reproductive age and 189,200 children under 5 years old.

The second phase of SMI aimed to further integrate the community strategy with neonatal and obstetric care for women. Nicaragua continued to enhance the identification of pregnant women through management censuses and community personnel. Additionally, midwives were equipped with rapid pregnancy tests to promptly identify pregnant women. Consequently, prenatal checkups within the first twelve weeks of gestation increased from 39.6% to 51.7%.

Family planning efforts supported the strengthening of the Community Contraceptive Delivery (ECMAC) strategy, training over 1,400 Brigade members and midwives to serve 491 communities in the first phase. In the second phase, coverage expanded to 1,469 communities, leading to an increase in the percentage of women reporting receipt of family planning information from health community workers—from 7.5% at baseline to 20.5% during follow-up.

The operation also fostered community participation through Social Agreements for Health and Wellbeing between MINSA and the community, involving health committees in 10 communities per municipality. These agreements included indicators and commitments for achieving specific targets in maternal-child health, implementing results-based financing at the local level. The success rate of communities meeting the innovation fund requirements was 77.5%.

As part of community health promotion strategies for children under five, the Community Health and Nutrition Program (PROCOSAN) was implemented in 380 of the 1,495 targeted communities. According to vaccination cards, 73.8% of children aged 12 to 23 months received the MMR vaccine. Based on maternal recall, the MMR vaccination rate was even higher at 88.1%.

In the second operation, Nicaragua also introduced a transport and accommodation voucher mechanism, thereby increasing coverage and admissions into maternity care homes. SMI supported the strengthening of 36 maternity care homes out of a total of 53. The utilization of maternity care homes increased from 12% at baseline to 21% in follow-up. Furthermore, 25,135 transport vouchers were provided, with an 86% redemption rate. The stay in maternity care homes facilitated institutional delivery and postpartum care, with 82.5% of women who had an institutional delivery in the last two years reporting a checkup after delivery or within 10 days.

The percentage of women receiving a postpartum contraceptive method in the last year was 85.6%, surpassing the target of 57%. Quality newborn care increased significantly from 7% to 43.7%. The management of obstetric complications with quality improved from 38.3% at baseline to 44.9% by the end of the second phase. Similarly, the management of neonatal complications with quality increased from 40% to 46%.

In the third operation, Nicaragua continued its efforts to enhance early pregnancy detection, expanding coverage of antenatal care and admissions into maternity care homes despite the challenges posed by the pandemic. Consequently, prenatal checkups in the first twelve weeks of gestation increased by 11.75 percentage points from the results of the second operation (from 51.7% to 63.45%).

Cervical cancer screening was introduced as a new intervention in the third operation. This addition was driven by the recognition that cervical cancer is a leading cause of death in women of reproductive age in the region. Results indicated that 76% of women who received medical care underwent cervical cancer screening in accordance with established norms.

The quality of neonatal complication management exhibited a notable improvement of around 13 percentage points from the results of the second operation (46.3% to 59.5%), and hospitals demonstrated a commendable 93% utilization of information for decision-making.

As part of community health promotion strategies for children under five, the Community Health and Nutrition Program (PROCOSAN) was implement-

ed in 380 of the 1,495 communities targeted during the Second Operation. Complete vaccination for age met the target and showed an improvement from the Second Operation results (46.7% to 52.4%).

Panama: outcome-level results

In Panama, the Initiative aimed to enhance access, coverage, utilization, and quality of healthcare to improve reproductive, maternal, neonatal, and child health and nutrition in the indigenous regions of Guna Yala and Emberá Wounaan. To achieve this goal, the program implemented various strategies, including counseling, communication, and behavior change initiatives for reproductive, maternal, neonatal, and child health and nutrition. It also provided incentives to boost demand for services and established a network for essential obstetric and neonatal health. The targeted population comprised around 8,640 women of reproductive age and 5,379 children under 5 years old residing in SMI target areas, served by approximately 41 health facilities, including 24 ambulatory and 17 basic facilities offering essential obstetric and neonatal care (EONC).

Notably, Panama demonstrated the least progress in outcome level indicators among the SMI countries, and reversals in some cases. Many indicators required a robust community component to enhance intervention coverage and stimulate demand for health services, but this aspect faced challenges in successful implementation.

Unmet need for contraception increased significantly. Almost no sexually active women in the two comarcas who do not want to get pregnant use family planning methods. Although the proportion of women in need of contraception slightly increased from 83.9% to 86.9%, the proportion of women not using methods increased much further from 90% to 98.8%. In the baseline, injectable contraceptives were the most used modern method, used by 8.9% of partnered women; however, by the end of the second operation, only 1.2% women were using this method, and no other method was used instead.

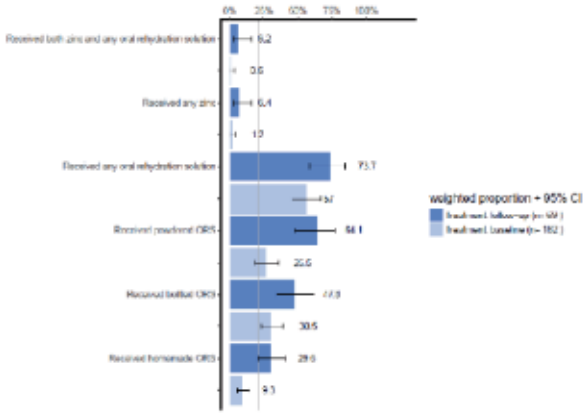
Antenatal care (ANC) coverage also declined, both in the early antenatal care indicator calculated from medical record reviews and the ANC coverage indicator collected in household surveys. The decrease in ANC coverage was not driven by an increase in women receiving at least one ANC visit, as the proportion decreased from 85.5% to 59.5%.

Concerning childbirth attention, the proportion of women receiving oxytocin immediately after birth increased from 78.3% to 85.4%, contributing to a reduction in the risk of excessive bleeding postpartum.

Examining postpartum and newborn care coverage, the proportion of women receiving postpartum care within 48 hours of birth remained almost unchanged from 13.4% in the baseline to 10.9% in the follow-up (not statistically significant). However, newborn care in the same timeframe increased from 10.4% to 16.4%. These indicators encompass healthcare received both at the facility immediately after birth and for women giving birth in their community and receiving care from health staff afterward. In many Mesoamerican and indigenous communities, the belief that women should stay at home for at least 40 days postpartum might explain the differences between the two indicators, as family members may take newborns to a health facility for checkups or vaccines.

Turning to childcare indicators, there was little or no improvement. The proportion of children with at least one deworming treatment increased from 38.6% to 42.2%, and those receiving two deworming treatments rose from 8.7% to 12.9%, falling short of the 38.7% target. Caretakers providing their children with oral rehydration solutions (ORS) and zinc for diarrhea treatment increased from 0.6% to 6.2%. The uptake of ORS alone, without zinc, increased further from 57% to 73.7% (see Figure 11. Treatment of diarrhea with ORS and zinc). Lastly, measles, mumps, and rubella (MMR) vaccine coverage measured by the vaccine card, considered the gold standard, did not improve. However, more caretakers reported that their children had received an MRR vaccine, improving from 61% to 76.6%. When considering both recall and the vaccine card, the overall increase was only 4.7 percentage points.

Figure 11. Treatment of diarrhea with ORS and zinc



Costa Rica: outcome-level results

The SMI program in Costa Rica diverged from others. Recognizing Costa Rica's commendable achievements in maternal and child health, SMI took on the challenge of addressing risky behaviors among adolescents in sexual and reproductive health. The primary objective was to reduce the incidence of adolescent pregnancies through a coordinated effort involving health, education, and social services. SMI embraced an ambitious multisectoral program, fostering collaboration among key stakeholders such as the Social Insurance Health Services (Caja Costarricense del Seguro Social, CCSS), the Ministry of Education, and the Child Protection Fund (PANI). This initiative specifically targeted 11 Health Areas within the Huétar Caribe and Brunca regions, collectively catering to around 90,000 adolescents.

In Costa Rica, the ratio of births in adolescents over total adolescent women per 100 decreased from 4.97% in the baseline (July 2011—June 2012) to 3.26% (in July 2017—June 2018), representing a 34% reduction. The reduction exceeded the target of 28%, with an average annual reduction of 5% observed over seven years.

Furthermore, the ratio of subsequent births to adolescents over the total adolescent women per 1000, it declined from 9.76 (in the July 2011—June 2012 period) to 7.16 (in the July 2017—June 2018 period), a 27% drop, precisely meeting the target (27%). Adolescents who were pregnant or already mothers and remained in the education system, exceeded 90% in 2018, well above the target of 60%.

Approximately 81.3% of adolescents in 2018 received a birth control method within the first 42 days after giving birth. Furthermore, adolescents treated in a comprehensive checkup for the first time during the period of 2015—2018 surpassed 75%, totaling 72,926 adolescents, which exceeded the targeted threshold of 70%. According to the Health Information System, 47,772 adolescents were registered in 2018 alone, with approximately 80% of them registered in the CCSS, and 35% in the information system of the Ministry of Education. In the same year, CCSS reported that 25,891 adolescents received at least one comprehensive checkup, with a total of 42,000 checkups conducted.

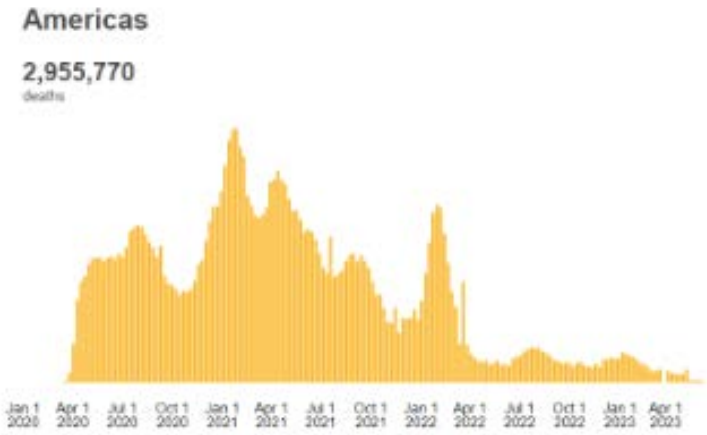
In 2018, 14,184 risk assessments were conducted, with approximately 77.6% classified as no risk, 13.7% as medium risk, and 8.7% as high risk (1243 adolescents). Notably, about 80.9% of these high-risk adolescents were actively tracked by the PANI and the CCSS.

Additionally, in 2018, around 88.6% of adolescents reported receiving information on HIV in high school, and 79.4% received such information in health services. These figures represent substantial increases from baseline values of 57.3% in health facilities and 73.1% in high schools.

Summary of Results of Countries with Three Operations

Between May 2020 and April 2023, nearly 3 million COVID-19 deaths were documented in the Americas (see Figure 12. COVID-19 Deaths in the Americas (2020-2023)). It's crucial to recognize that this figure is a lagging indicator due to the extended period between illness onset and eventual fatalities. While there were slight variations in the number of infection waves by country, the overall situation broadly reflects the emergency across nations and, more importantly, the prevailing sentiments during that period. The pandemic profoundly influenced government priorities, shifting their focus from the initial need for ventilators to a pressing requirement for vaccines. Unfortunately, the enthusiasm for improving maternal and child health was limited, even though COVID-19 had direct and indirect impacts on maternal mortality.

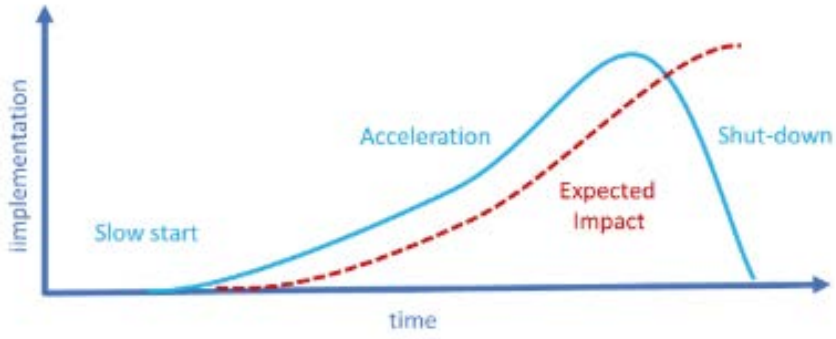
Figure 12. COVID-19 Deaths in the Americas (2020-2023)



Source: WHO (June 2023). WHO Coronavirus (COVID-19) Dashboard. World Health Organization. Situation by WHO Region, Americas, deaths. Accessed July 21, 2023. https://covid19.who.int/

How did the pandemic affect project implementation? Understanding the typical project implementation may offer some lights. In the implementation timeline, there is commonly a slow initial phase, sometimes extending like a long tail, which is typical in governments were budget approvals and procurement processes take time. Subsequently, the pace of activities accelerates rapidly once the bottlenecks are resolved and the designs are completed (see Figure 13. Typical Project Implementation Timeline). After reaching its maximum speed, the majority of the project tasks are completed, and the pace rapidly deaccelerates marking the project's closure. Between the moment of full implementation of programmatic activities, there is usually a time lag to observe the expected impact of the project. For instance, considering a project seeking to improve antenatal care coverage. The project initiates with the procurement of essential supplies such as rapid HIV tests and vitamins, as well as the acquisition of necessary equipment. This is followed by improvements in counseling materials and record-keeping systems, the design of behavior change communication campaigns, and the training of healthcare providers. Ultimately, all these components come together, leading to pregnant women engaging in discussions with one another, their families, and friends, consequently increasing demand for these services. Hence, the full effect of the project would only be visible when people's attitudes towards antenatal care change, and a critical mass of women attend antenatal care.

Figure 13. Typical Project Implementation Timeline



Now, let's look at the timeline of SMI 3rd Operations. By March 2020, most projects had completed between 14 to 18 months and were about to enter the final implementation phase. However, due to the crisis, the project timeline was extended by an additional two years. It's important to note that this extension was purely a matter of extending time for implementation, without any additional funding being allocated. Figure 14. Countries Timeline Original and after the COVID-19 Time Extension compares the timeline in each project before and after the COVID-19 extension.

Figure 14. Countries Timeline Original and after the COVID-19 Time Extension

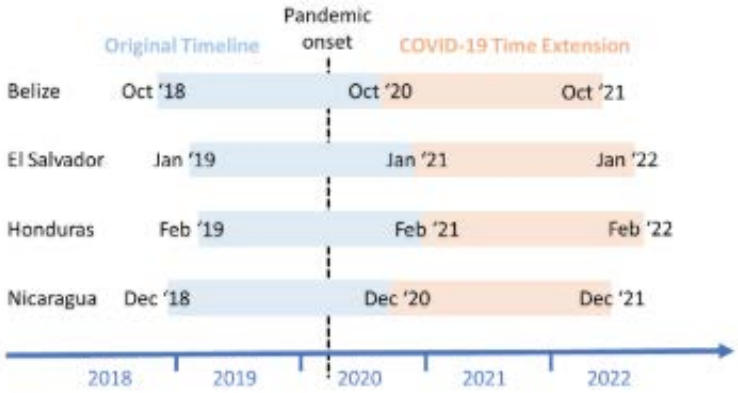


Figure 15. SMI 3rd Operations Timelines, Typical Timelines and COVID-19 Deaths in the Americas (2019-2023)

Note: The yellow vertical bars depict the daily number of COVID-19 deaths in the Americas. The light blue horizontal lines correspond to the originally planned project implementation timelines for SMI operations in each country. The light red horizontal lines signify the time extensions granted for operations in each country due to the COVID-19 pandemic. The blue line illustrates the anticipated course of SMI project implementation in the absence of the pandemic, highlighting the critical moment when it occurred. The red dashed line represents the theoretically expected impact of SMI if the project had been executed as originally planned.

Source: WHO (June 2023). WHO Coronavirus (COVID-19) Dashboard. World Health Organization. Situation by WHO Region, Americas, deaths. Accessed July 21, 2023. https://covid19.who.int/

Why is this important? The pandemic affected SMI project implementation at a critical juncture. Countries had reached the accelerated implementation phase, where interventions begin having an effect in the field. This is the phase where everything comes together to achieve the expected impact. Unfortunately, the COVID-19 pandemic began at this essential implementation point. This situation is clear in Figure 15, which shows the country timeline compared with the project implementation timeline in each country and the number of COVID-19 cases in the Americas. On the other hand, another critical issue is that the pandemic did not end and go away. The pandemic continued having and important impact even after the end of the last operation.

In this difficult context, third operations aimed to consolidate previous gains, increase effective coverage, and ensure sustainability, including things such as reducing anemia, utilizing data for decision-making, and strengthening coverage and quality interventions. After the success of the second operation, the indicators and targets in performance frameworks were reviewed.

In general, the indicators and targets negotiated for the third operation performance frameworks were more ambitious than for any previous operations. For some targets, the magnitude negotiated was higher. Such as 20 percentage point improvement now considered feasible within a short timeframe, compared to the initial 10 percentage point target in the second operation. Indicator criteria also became more stringent. For instance, antenatal care within the first trimester, previously a separate indicator, was integrated into the criteria for quality antenatal care. New interventions were introduced, such as cervical cancer

screening and preconception care coverage and quality. Consequently, timelines became more aggressive, compressing what was originally intended to happen over four years into the two years of the third phase.

The pandemic further complicated matters, as its impact on health systems was not limited to the immediate crisis in 2020, where hospitals were overwhelmed by unprecedented demand for acute care, it also had several ramifications to other areas of care expanding well beyond the initial months. A few examples include: a change in population health behaviors, where people stopped seeking care, in particular for preventive services, due to fear of getting infected (which not only meant a sudden decrease in intervention coverage, but also a potential future increase of certain conditions, such as cervical cancer, and a future need to increase capacity, such as to vaccinate children who missed their appointments); loss of high-skilled personnel due to illness or death, with COVID-19 disproportionally affecting medical personnel; a shift in priorities, first towards hospital care and later towards COVID-19 vaccination coverage, to name a few.

Before the pandemic, these targets were designed to be challenging yet attainable. Without COVID-19, countries were expected to make modest healthcare improvements without SMI, and accelerated performance with SMI. However, the pandemic caused a downturn, meaning that rather than improving, indicators retracted. Consequently, after the onset of the pandemic targets became more demanding, necessitating a balance of risks shared between countries and donors.

Various options were considered and discussed with the SMI Donors Committee to modify the rules of the Initiative's results-based financing model. Ultimately, the decision was made to adjust the payment rule, as it was deemed the most feasible option that wouldn't disrupt the RBF model entirely. On recommendation by the SMI CU, SMI Donors Committee decided to modify the scoring rule from an all or nothing payment rule based on achieving a score or 0.8 or above, to a proportional payment by indicator with a 0.8 threshold. Table 5 summarizes the new proportional payment scheme.

The proportional payment scheme continued to pay based on achievements (targets met). After the onset of the pandemic, no indicators or targets were modified in any country.

In the third phase, all countries received a partial award. Nicaragua achieved 7 out of 10 targets, Belize met 5 out of 10 targets, and both El Salvador and Honduras accomplished 4 out of 10 targets. Without changes to the rules, no country would have qualified for the Performance Incentive. While fewer targets were achieved, the accomplishment should not be depreciated.

The target verification process was performed in accordance with SMI Operating Regulations, which state that the verification of indicators must be performed independently. All indicators for the second operation were measured using independent health facility surveys performed by the Institute for Health Metrics and Evaluation (IHME). Baseline health facility surveys were collected by IHME in 2012-2013, for the first operation follow-up surveys in 2014, and for the second operation in 2017. For the third operation, follow-up surveys were collected in August—December 2022. IHME computed and provided the indicator values for most performance indicators; for a couple indicators, where a deep review was required, this role was executed by external experts.

Nicaragua met 7 of the ten targets. The Second and Third SMI operations reinforced the integration of the community strategy and neonatal and obstetric care for women. Nicaragua strengthened the active search for pregnant women through management censuses and community personnel. Additionally, midwives were trained on and supplied with rapid pregnancy tests to identify

Table 5. Payment scheme after the pandemic with proportional payments by indicator

Number of indicator targets achieved	Resulting Score achieved	Proportionate share of the performance tranche
0	0	0%
1	0.1	12.5%
2	0.2	25%
3	0.3	37.5%
4	0.4	50%
5	0.5	62.5%
6	0.6	75%
7	0.7	87.5%
8	0.8	100%
9	0.9	100%
10	1.0	100%

pregnant women promptly. In addition, it implemented the transport for ANC, delivery, and accommodation voucher mechanism in the First and Second Operations. This increased coverage of ANC and admission into maternity care homes. As a result of these and other actions, prenatal checkups in the first twelve weeks of gestation rose by 11.75 PP from the Second Operation's results. (It increases from 51.7% in the Second Operation to 63.45% in the Third Operation).

Belize achieved a score of 0.5 on the Performance Framework for the third operation, achieving targets for half of the committed indicators. This is important progress in light of the pandemic, where Belize's Ministry of Health and Wellness had to make difficult decisions to refocus their workforce and prioritize interventions. For some of the indicators for which targets that were not achieved, a deeper look at the criteria shows promising results. All the indicator targets achieved surpassed the targe, some by a considerable level. While most of the indicator targets achieved were at the hospital level, the majority of indicator targets not achieved relied on the ambulatory level, which was also the most affected by the pandemic, and most were indicators in new intervention areas.

In Belize, four of the five indicator targets that were not achieved were concerned with ambulatory care, and three of those were related to preventive services. In other words, more than half of the indicator targets that were not achieved were in the areas most affected by the pandemic. Nevertheless, for some indicators, when looking at the specific criteria individually, results are more optimistic. Only a few criteria lagged behind, and improvements are visible for others. In addition, for most indicators, there were not huge drops in coverage.

El Salvador made significant progress in meeting the targets of its Performance Framework, achieving four out of ten targets. The indicators for which targets were attained covered diverse topics and were not restricted to a specific life-cycle stage or level of care. Of particular interest is the remarkable reduction in anemia prevalence among children aged 6 to 23 months, which has decreased by over 30 percentage points since the latest measurement. Moreover, despite the substantial reduction in cervical cancer screening caused by the pandemic, coverage has surpassed 85%. However, for the indicators for which targets were not accomplished, there are several potential explanations.

The indicators in El Salvador's Performance Framework that did not meet their targets can generally be grouped into three categories: two indicators heavily relied on community outreach and primary healthcare, one was a recently introduced process of care, and three were hospital-level indicators. For each group, the challenges were similar, and identifying these issues may help explain why the targets were not met.

Honduras achieved four out of ten targets. It's worth noting that Honduras made significant progress during the second operation, which led to setting new targets based on the results of the third operation. Two targets exceeded 90%: antenatal care with quality and institutional birth. In addition, three indicator targets were above 80%: routine newborn care, use of family planning methods, and management of obstetric complications. These ambitious targets entailed significant risk for the country.

The COVID-19 pandemic, hurricanes ETA and IOTA, and political changes have all had significant impacts on Honduras' economy and public health. In 2022, a new political party took power, facing a divided Congress and high levels of violence and poverty exacerbated by the pandemic[18]. According CEPAL[19], the hurricanes alone reduced GDP by 0.8 percentage points in 2020 and 0.3 percentage points in 2021, while the World Bank estimates that the combined effects of the pandemic and hurricanes led to a 9% decline in GDP in 2020[20].

In summary, the COVID-19 pandemic posed substantial challenges to SMI's Results-Based Financing model. It directly impacted the healthcare system and had indirect consequences through economic and political channels. Addressing these challenges in the context of SMI raised numerous questions about risk-sharing and adaptation. The outcomes varied between countries, influenced by both local contexts and the maturity of implementation. However, despite the challenges, all countries achieved important results.

[18] https://www.bbc.com/mundo/noticias-america-latina-60149354

[19] https://www.cepal.org/es/publicaciones/46853-evaluacion-efectos-impactos-causados-la-tormenta-tropical-eta-huracan-iota

[20] https://www.bancomundial.org/es/country/honduras/overview

Countries with Three Operations

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Administrator IDB

Belize

Belize

Salud Mesoamerica Initiative in Belize

SMI's overall objective of the operation is to reduce maternal, neonatal, and child mortality in the poorest areas of Belize. The specific objective is to improve the health of women of childbearing age, mothers, newborns, and children under 5 by improving access, use and quality of health services in the districts of Corozal, Orange Walk and Cayo. Approximately 156,654 people live in SMI target areas in Belize (40.4% of the country's total population), of which 41,256 are women in reproductive age and 18,377 are children under 5 years old. This population is served by 2 regional hospitals, 2 community hospitals and 19 Health Centers.

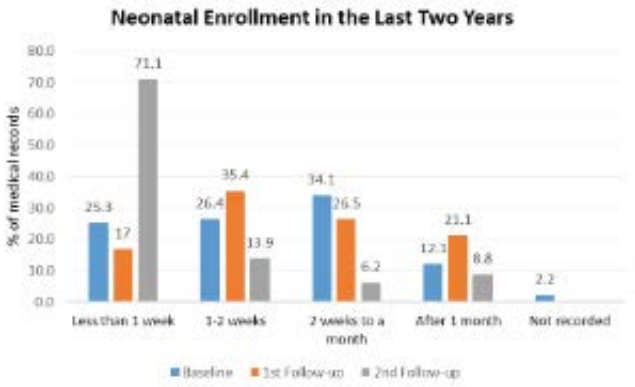
First Operation

The first operation in Belize prepared the health system to improve quality of care and population health indicators for the second and third operations. The first operation received USD $500,000 of donation funds and USD $500,000 of national resources. Belize obtained a score of 0.333 for the First Operation's Performance Framework, meeting targets for 4 of 12 performance indicators, which was not enough to receive the performance tranche award (see Annex B: 1st Operation Performance Framework Results). Nevertheless, considerable improvements were achieved. The first operation adopted a quality improvement collaborative approach including the use of evidence-based standards and interventions linking specific care content or processes to desired outcomes as well as measuring gaps between observed and desired practices. Alongside the collaborative model, a key element of the quality improvement effort was the Quality Innovation Fund, through which supply-side results-based financing at the service provider level was implemented. Further, the project supported the expansion and increased usage of Belize's Health Information System. In addition, the project strengthened priority areas of service delivery, mainly through the provision of key inputs, and revitalized the community health worker platform.

On the first operation, Belize achieved several results. For example, the MOHW implemented Quality of Care job aid tools for reproductive health in 55.3% of health facilities in the target area. Furthermore, the MOHW established the infrastructure and implemented the Belize Health Information System (BHIS) in 30% of the 10 eligible facilities. Sexual and reproductive health educational materials targeted at adolescents were developed, reaching 63.9% of health facilities. The Quality Improvement Fund (QIF) was established, for which 95% of eligible health facilities submitted proposals. In addition, Belize increased permanent availability of family planning methods from 73.7 to 89.5% and of supplies and equipment for prenatal and postnatal care from 2.9 to 17.2%.

Second Operation

The second operation executed USD $300,000 of donation funds and USD $300,000 of domestic resources. A performance tranche of USD $150,000 was awarded after Belize obtained a score of 1, meeting the targets for all 10 indicators for the Second Operation Performance Framework (Annex C: 2nd Operation Performance Framework Results). The second operation sought to strengthen the supply and demand for women's and children's health services and improve management practices and health information systems. It built on the progress and lessons from the first operation. The following organizational systems were consolidated: i) strengthening the supply chain management system for medications and medical supplies, enabling services to maintain an uninterrupted supply of the required maternal and child health inputs; ii) integrating and linking of the Belize's Health Information System with business analytics tools (dashboard) and continuous quality improvement systems; and iii) technical assistance for the design of the national health model to establish mechanisms to implement the components for care, management, and financing of the health system. In addition, a community platform was designed and validated, culturally tailored to the reality and



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integrated into the different cultures of Belize's diverse populations.

On performance indicators, improvements were observed at all levels and in all life-stages from pregnancy to delivery care and children health. For example, the proportion of women who received postnatal care within 7 days of delivery increased 33.7 percentage points from baseline to 2nd operation follow-up. Routine newborn care with quality increased from 30.2% in the baseline to 88.7% in the second follow-up. In many cases, the improvements were beyond the performance indicators per se. For example, the percentage of neonates who enrolled after 1 month decreased from 12.1% to 2.2% from baseline to the second operation follow-up, and the proportion of those enrolling after 2 weeks and less than a month decreased from 34.1% to 6.2% (see Fig. X).

Third Operation

The third operation concluded entailed an investment of USD $241,130 of donation funds and USD $340,000 of domestic resources. A total of USD $102,000 could be achieved by Belize's Ministry of Health and Wellness as part of the Performance tranche. The third operation build upon achievements initiated by the first two operations, seeking to consolidate or expand the strategies to ensure long-term sustainability.

First, the operation sought to consolidate and expand the implementation of quality improvement processes, as part of the National Quality Improvement Strategy supported by SMI. As starting points, Belize sought to improve the quality of antenatal care at the ambulatory level, quality monitoring of immediate postpartum care and management of obstetric and neonatal complications in hospitals. Implementation included the following key actions: (i) expanding the indicators included in the rapid improvement cycles; (ii) mapping and optimizing new maternal and child care clinical processes related to new performance indicators (such as cervical cancer screening and treatment, preconception, antenatal and postnatal care); (iii) improving diagnosis coding and classification of hospital discharges; (iv) supporting the rapid improvement cycles and quarterly central level auditing; (v) exchanging best practices through collaborative workshops; (vi) continuing the Quality Innovation Fund through incentives and measurement.

Second, it sought to strengthen community health by expanding the Community Participation Strategy. This strategy improved primary healthcare delivery processes and aimed to implement community platforms designed during the second operation. Some of the key outcomes included improving full vaccination coverage and at-home management of diarrhea for children under 5, cervical cancer screening for women over 25 years old and preconception care coverage. Actions that were planned for implementation included, (i) intercultural dialogues with social actors and community leaders; (ii) identification of community volunteers (individuals and organizations); (iii) capacity building at the individual and organization level; (iv) providing job aide tools and supplies to volunteers; (v) implementing a family census to identify priority groups and risk factors; (vi) establishing catchment areas for volunteers; and (vii) creating supervision and monitoring tools integrated with the MOHW information systems.

In addition, SMI continued supporting data-driven decision-making through the MOHW dashboard and sought to increase capacities for specific interventions. This includes improving managerial skills at the central and regional levels, and creating competencies in health personnel for topics such as visual inspections with a acetic acid for cervical cancer screening, establishing preconception care routines, and improving antenatal and postnatal care.

Nevertheless, due to the onset of the COVID-19 Pandemic in March 2020, not all interventions were implemented or implemented with the expected intensity. One of the most affected areas was the implementation of community platforms, which had to be halted given its strong dependency on fieldwork. Lockdowns and social distancing during 2020 and most of 2021, meant that the MOHW conducted very limited activities entailing community outreach and providing ambulatory care. Many nurses from health centers were called to support hospitals. On 2021, a large effort to deploy COVID-19 vaccines was undertaken, making use of an important number of the primary healthcare workforce. The health system was also affected directly by a loss of personnel, some of whom decided to retire, and others that died –at least three deaths are documented[21] of doctors that died in Belize due to COVID between 2020 and 2021 (Belize has about 400 doctors[22]).

[21] Loop News, "Belize Loses Another Doctor to COVID-19," Caribbean News, January 11, 2021, https://caribbean.loopnews.com/content/belize-loses-another-doctor-covid-19.

[22] World Bank, "Physicians (per 1,000 People)," The World Bank Data, 2018, https://data.worldbank.org/indicator/SH.MED.PHYS.ZS.

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Target Setting and Target Verification Process

Targets for the Performance Framework all operations in Belize were negotiated and approved at the start of the initiative in February 2012. Nevertheless, after the first and second operations, the Performance Framework was reviewed during the second operation design process to align indicators and targets with country priorities. Indicators were selected considering the Initiative's Monitoring and Evaluation Framework, including process indicators for the first operation, and healthcare coverage and quality indicators for the second and third operations.

The performance framework for the third operation was designed to build upon the results of the previous operations, institutionalize gains, and address new priority areas that had not been previously considered. Three indicators were part of the performance framework negotiated at the onset of the initiative, four indicators built upon work done in previous operations, and three indicators entailed new priority areas and interventions. For example, early catchment for antenatal care before 13 weeks of gestation was included in the original framework negotiated on 2012. Given the large improvement on early catchment, which went from 22.8% at baseline to 39.9% by the end of the second operation, a composite indicator for quality antenatal care, including early catchment as part of its criteria, was negotiated for the third operation. This meant that the MOHW negotiated indicators based on the rate of improvement and lessons learnt during the Second Operation, even when the time allocated was only 24-30 months compared with two 24-month operations, which had been the case for the second operation. For indicators entailing new interventions, the MOHW aimed to take advantage of the support and drive from SMI, with full awareness that this meant additional work to achieve targets.

The target setting process took place using a hybrid model that considered quantitative and qualitative data, including a) an economic model based on cost-benefit analysis, b) review of the literature and international experiences, c) historical trends of national indicators and impact of specific interventions, d) statistical power calculations, and e) operational requirements and expert advice. The criteria for each indicator was negotiated and described in the country's Indicators Manual.

The target verification process was performed in accordance with SMI Operating Regulations, which state that the verification of indicators must be performed independently. All indicators for the second operation were measured using independent health facility surveys performed by the Institute for Health Metrics and Evaluation (IHME). Baseline health facility surveys were collected by IHME in April—May 2013, for the first operation follow-up surveys in May—July 2014, and for the second operation in September—November 2017. For the third operation, follow-up surveys were collected in August—October 2022. IHME computed and provided the indicator values for the nine performance indicators. One indicator was measured by an external expert in October 2022, who provided the indicator results.

Considerations on results for the disbursement of the performance tranche

Belize achieved a score of 0.5 on the Performance Framework for the third operation, achieving targets for half of the committed indicators. This is important progress in light of the pandemic, where Belize's Ministry of Health and Wellness MOHW had to make difficult decisions to refocus their workforce and prioritize interventions. For some of the indicators for which targets that were not achieved, a deeper look at the criteria shows promising results. All the indicator targets achieved surpassed the targe, some by a considerable level. While most of the indicator targets achieved were at the hospital level, the majority of indicator targets not achieved relied on the ambulatory level, which was also the most affected by the pandemic, and most were indicators in new intervention areas.

The impact of the COVID-19 pandemic on health systems was not limited to the immediate crisis in 2020, where hospitals were overwhelmed by unprecedented demand for acute care, it also had several ramifications to other areas of care expanding well beyond the initial months. A few examples include: a change in population health behaviors, where people stopped seeking care, in particular for preventive services, due to fear of getting infected (which not only meant a sudden decrease in intervention coverage, but also a potential future increase of certain conditions, such as cervical cancer, and a future need to increase capacity, such as to vaccinate children who missed their appointments); loss of high-skilled personnel due to illness or death, with COVID-19 disproportionally affecting medical personnel; a shift in priorities, first towards hospital care and later towards COVID-19 vaccination coverage, to name a few. This was particularly serious in small countries like Belize, where the health sector workforce was already overstretched.

In Belize, the country's Adviser for Maternal and Child Health is also the point person in charge of deploying COVID-19

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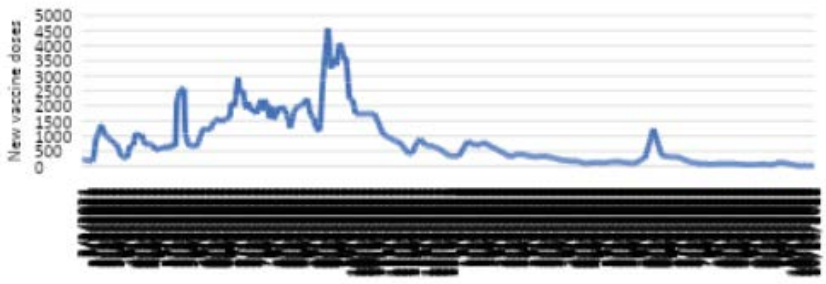
vaccines across the country, including seeking vaccine donations, procuring vaccines, establishing vaccination sites, keeping track of vaccines stocks and administration, as well as the general campaign to inform and motivate people to get vaccinated. The vaccination campaign began in March 2021 (see Figure 16. Daily COVID-19 vaccine doses administered in Belize), when the first vaccines became available in the country, and has continued until today. The campaign relies on primary healthcare personnel, such as nurses from rural health clinics to staff vaccination sites, reducing the supply for maternal and child health services. In 2020, before vaccines were available, healthcare outreach was severely limited to prevent disease spread, and medical personnel were called to support hospital services.

Figure 16. Daily COVID-19 vaccine doses administered in Belize



7-day rolling average. All doses, including boosters, are counted individually.
Source: Our World in Data. Accessed 11/02/22.
https://ourworldindata.org/grapher/daily-covid-19-vaccination-doses?tab=chart&stackMode=absolute&time=earliest..latest&region=World&country=~BLZ

Preventive services have been the most affected worldwide, as has been the case in Belize. First, people were more likely to postpone or forgo care for preventive services, such as screening for cervical cancer and routine vaccinations. Second, during 2020, health facilities prioritized essential services and changed their organization, affecting service delivery for other services. Third, community outreach was highly affected. For example, in 2020 vaccination coverage decreased 4 percentage points globally[23] and breast cancer screening fell 5 percentage points in OECD countries OECD.[24] For family planning, the best-case scenario was no improvement contrary to a 4-percentage point increase before the pandemic.[25] In Belize, an additional strain has been the large negative economic impact on households left by the pandemic. On the SMI's monitoring survey last year, over 80% of the people interviewed said that their income had been reduced as a result and financial constrains were among the main reasons for people avoiding or postponing care.

In Belize, four of the five indicator targets that were not achieved were concerned with ambulatory care, and three of those were related to preventive services. In other words, more than half of the indicator targets that were not achieved were in the areas most affected by the pandemic. Nevertheless, for some indicators, when looking at the specific criteria individually, results are more optimistic. Only a few criteria lagged behind, and improvements are visible for others. In addition, for most indicators, there were not huge drops in coverage.

An example of such indicators is antenatal care with quality. This indicator is comprised of 13 individual criteria, including that each woman had at least five visits, one visit before 13 weeks, monitoring of vital signs performed at each visit, fundal height and fetal vitals at appropriate visits, and all lab tests at least once. In comparison, for the second operation, only timely antenatal care before 13 weeks of gestation was included as a performance indicator. Nevertheless, to increase the bar for Belize for the Third Operation, and in response to indirect maternal deaths, the indicator was replaced to include a richer picture of antenatal care with quality. Although the overall composite indicator result for the third operation was 9.5%, no individual criteria scored below 20% and several criteria scored above 80%. The proportion of antenatal care visits with all lab tests performed has increased progres-

[23] BMGF, "2021 Goalkeepers Report: Innovation and Inequity" (Seattle, WA: Bill & Melinda Gates Foundation and Institute for Health Metrics and Evaluation (IHME), 2021), https://gates.ly/GK2021.

[24] OECD, Health at a Glance 2021: OECD Indicators, Health at a Glance (OECD, 2021), https://doi.org/10.1787/ae3016b9-en.

[25] BMGF, "2021 Goalkeepers Report: Innovation and Inequity."

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sively from the Baseline in 2013 to the Third Operation Follow-up in 2022 from 50% to 62.9% (see Table 6. Composite criteria for indicator 3030 Antenatal Care with Quality).

IHME also obtained data from 2019 to mid-2020, to understand the impact of the pandemic on the performance indicator progress. In this Pre-Evaluation period, although the proportion of antenatal records for women who received all lab tests during antenatal care improved, the proportion of antenatal records with at least five visits and with visits before 13 weeks decreased compared to the 2nd Operation results. This may be explained in part by the pandemic, which strongly affected the first two quarters of 2020. Another culprit may be the move in some health facilities from paper records to digital records using the Belize Health Information System, which could have affected record keeping practices. Further analysis is needed to understand why this happened, which will be performed by IHME as part of SMI's Final Evaluation.

A similar situation can be observed for the indicator considering home treatment of diarrhea with oral rehydration solutions (ORS) and zinc indicator. The overall result for the Third Operation was 0%. Yet, when looking at ORS and zinc separately, ORS was administered to 61.9% of children who had diarrhea, which was within the same confidence interval as the results for previous measurements (see Table 7. Home-administration of oral rehydration solutions and zinc). Although the results show that the MOHW was unable to introduce zinc for home management of diarrhea, ORS management is a well-established practice that did not plunge after the pandemic.

Two new indicators whose targets were not met consisted of preventive services and were also new interventions introduced for the Third Operation (not part of previous operations): preconception care coverage, and cervical cancer screening coverage. Preconception care coverage was included to address indirect maternal deaths by identifying diseases and risk factors before the pregnancy. Establishing this new practice entailed a plethora of challenges. First, a new process had to be developed to offer and provide preconception visits for women who wanted to get pregnant. Second, new forms had to be designed and implemented to record all preconception visit details. Lastly, and probably the most challenging, preconception care had to be promoted among women of reproductive to encourage them to seek care. For cervical cancer screening, although screening was already in place, the target sought to increase coverage to reach most women above 25 years old. For both indicators, the target population was large. From a population perspective, the interventions did not entail urgent health needs, but preventable services that could be postponed without immediate health consequences, which meant an additional challenge to encourage people to attend care. Shifts in health seeking behaviors because of the pandemic highly impacted these

Table 6. Composite criteria for indicator 3030 Antenatal Care with Quality
Source: IHME. 2022. Belize Third Operation Results.

	Baseline	1st Operation	2nd Operation	Pre-Evaluation	3rd Operation
	%	%	%	%	%
At least five ANC visits	54.5	87.7	79.1	47	37.1
First visit before 13 weeks gestation	31.8	27.9	41.9	36.4	35.2
All appropriate checks performed, at least five ANC visits	50	84.5	76.4	19.7	21
Among patients with at least 5 visits, all visits had weight checked	91.7	99.5	93.2	45.2	56.4
Among patients with at least 5 visits, all visits had blood pressure checked	91.7	99.5	96.6	48.4	59
Among patients with at least 5 visits, all visits >= 14 weeks gestation had uterine height checked	85.7	54.2	55.6	25.9	36.8
Among patients with at least 5 visits, all visits >= 20 weeks gestation had fetal checkups	100	93.2	93.2	82.6	87.8
All lab tests performed at least once during pregnancy:	50	38.4	31.8	57.6	62.9
Blood group	81.8	96.3	96.6	83.3	81.9
Rh factor	81.8	95	95.3	83.3	81.9
Blood glucose	54.5	74.9	40.5	72.7	70.5
HIV test		95	98.6	95.5	96.2
Syphilis test (VDRL / RPR)	81.8	80.8	89.2	93.9	94.3
Hemoglobin	81.8	98.6	63.5	84.8	82.9
Urinalysis	77.3	63.5	91.9	80.3	78.1
Antenatal care with quality (3080)	13.6	9.6	16.9	9.1	9.5

Note: RPR not captured as VDRL alternative at 1st operation or baseline; HIV not captured at baseline
Note: Gestational age eligibility for uterine height and fetal checkups can only be determined for the first ANC visit at baseline

Source: IHME. 2022. Belize Third Operation Results.

Table 7. Home-administration of oral rehydration solutions and zinc
Source: IHME. 2022. Belize Third Operation Results.

	Baseline	2nd Operation	3rd Operation
	%	%	%
ORS administered	73.2 (57 - 84.9)	56.1 (40.2 - 70.9)	61.9 (38.3 - 80.9)
Zinc administered	2.4 (0.3 - 16.6)	7.3 (2.3 - 21.2)	0 (-)
Diarrhea treatment with ORS and zinc at home (5060)	2.4 (0.3 - 16.6)	4.9 (1.1 - 18.4)	0 (-)

Source: IHME. 2022. Belize Third Operation Results.

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services. This situation was already evident last year, in the Monitoring measurement performed by SMI, both indicators failed poorly.

The last indicator that was not met sought to measure the implementation of routine procedures to investigate maternal deaths. The MOHW made a calculated decision not to pursue this target for several reasons. On one hand, probably the biggest bet to address maternal and neonatal mortality in the country was establishing Quality Improvement (QI) Units in hospitals together with QI processes. Although the initiative was encouraged and supported by SMI, the MOHW established the QI Units in all hospitals throughout the country, not only those targeted by SMI. Rather than relying solely on retrospective measurements, the procedures included real-time monitoring of criteria to ensure all women received adequate care. According to the MOHW, this strategy seemed effective, as the burden of maternal mortality shifted towards indirect deaths. On the other hand, key personnel from the central level and hospitals were overburdened and burned out with COVID-19 and vaccinations. The MOHW was not able to set time apart to convene a National Committee to investigate maternal deaths. In the end, three of the indicators whose targets were met by the MOHW involved improving hospital quality of care, which itself aimed to address direct causes of maternal mortality (which were the most common causes before SMI)

In addition to meeting targets for five of the ten indicators of the performance framework, the MOHW has achieved important milestones for sustainability purposes. A few examples include the following:

- **Establishing a Quality Improvement Unit in the MOHW:** Based on recommendations from SMI, this year (2022) the MOHW formally established a Quality Improvement Unit (QIU) within the Ministry's structure. This decision was made after the realization that, to fully undertake quality improvement (QI), it is necessary to continually work with intentionality and purposefulness at the local level, especially in Hospitals, with support from all levels of the Ministry. The QIU will support QI teams in the seven district hospitals in the country –not limited to hospitals in SMI intervention areas. Responsibilities of QI teams include identifying and addressing gaps in patient care and organizational management. For example, catalyzing opportunities to build staff competencies and provide continuous education to address the most frequent health issues, establishing effective communication channels between patients, medical officers, nurses and referral hospitals. The MOHW is now seeking to formalize this unit by creating permanent staff positions dedicated to QI.

- **Implementing innovative approaches to address obstetric complications:** Belize has been the only country in Mesoamerica trained on the management of post-partum hemorrhage complications (PPH) using the bundled approach methodology, facilitated by the Global Health Innovation Lab (GHI) from the Massachusetts General Hospital/Harvard University in 2021. With this training, Belize updated its management protocols introducing the use of tranexamic acid[26] (TXA) as a main course of treatment to control PPH, a low-cost non-pneumatic anti-shock Garment (NASG) to limit persistent PPH, and the use of a ultra-low-cost effective uterine balloon tamponade package[27] (ESM-UBT) to manage uncontrolled PPH. These protocols are now in place in the seven regional hospitals, and under the coordination of the Hospital QI teams, staff skills training on PPH management continues. Over 231 people (specialists, doctors and nurses) have completed the training. Furthermore, Belize introduced real-time monitoring tools to ensure quality of care and patient safety. These tools include establishing checklists, whiteboards, and stand-up meetings to closely monitor complications while the patient is still in the hospital. These tools are currently in use in all SMI hospitals and are in process of being scaled to the three additional district hospitals.

- **Continuous use and spread of digital health tools.** Throughout the three operations, several iterations of

[26] Belize currently is the only country in Central America that has incorporated TXA in its PPH management protocol.

[27] EMT-UBT is an artisan kit put together by hospital staff, using commonly available hospital supplies, at an approximate cost of USD$10, in contrast with commercial UBT devices that can cost more than US$250.

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- digital health tools to monitor and evaluate quality of care for MCH interventions have been developed and effectively used. The tools were designed to objectively collect medical record data using portable electronic devices (smart phones or tablets), and to visualize results that are automatically computed on a dashboard. The digital app adopted by Belize has over 123 active users in the seven hospitals and urban ambulatory facilities in the country. Since 2020, 635 cases of obstetric complications and 795 cases of neonatal complications have been measured by the MOHW. Currently Belize is looking to expand the use of these tools to monitor routine immunizations in children under 5 and COVID-19 vaccinations.

After 10 years working with Salud Mesoamerica Initiative, Belize has made substantial progress to improve maternal and child health. The final evaluation will seek to estimate the improvements achieved in maternal and neonatal mortality in the past ten years. The MOHW publicly recognizes the success of SMI in the country and has already taken important steps to scale up and sustain SMI interventions. As part of this, the MOHW has already secured funding from their own domestic funding, and from other agencies and donors, including UNICEF, Japan and PAHO.

The following table summarizing Belize's overall funding and PT achieved in the three operations:

Operation	Performance Tranche	Amount Awarded	% Awarded
First	$250,000	$0	0%
Second	$150,000	$150,000	100%
Third	$102,000	$63,750	62.5%
Total	**$502,000**	**$213,750**	**42.6%**

Overall Funding for Salud Mesoamerica Initiative in Belize

Operation	Donation Funds (IT)	% of (IT +CT)	Country Funds (CT)	% of (IT +CT)	Performance Tranche Available (PT)	% of CT	Performance Tranche Funds Awarded	% of PT
First Operation	$500,000	50%	$500,000	50%	$250,000	50%	$0	0%
Second Operation	$300,000	50%	$300,000	50%	$150,000	50%	$150,000	100%
Third Operation	$241,130	41%	$340,000	59%	$102,000	30%	$63,750	62.5%
Belize Country Total	$1,041,130	48%	$1,140,000	52%	**$502,000**	**44%**	**$213,750**	**42.6%**

Total Operation Funds (IT + CT)	**$2,181,130**

Belize Performance Frameworks

First Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
7000	Health facilities that have the necessary inputs for providing emergency obstetric and neonatal care according to the norms	1/12	0%	75%	0% (0-60.2)	Not Met	0
7020	Health facilities that have the necessary inputs for providing pre- and post-natal care according to the norms	1/12	2.9%	85%	17.2% (5.8-35.8)	Not Met	0
7200	Health facilities that have submitted a Quality Improvement Fund (QIF) proposal to the national quality audit team	1/12	0%*	75%	95%	Met	0.0833
7050	Health facilities that have the necessary inputs to provide child health care according to the norms	1/12	0%	85%	0% (0-9.5)	Not Met	0
7400	Health facilities that have implemented Quality of Care job aid tools for reproductive health	1/12	0%*	85%	55.3% (38.3-71.4)	Not Met	0
7405	Health facilities that can submit and receive data from the Belize Health Information System (BHIS)	1/12	0%*	85%	30% (6.7-65.2)	Not Met	0
7050	Health facilities that have permanent availability of all 5 types of modern family planning methods (injectable, barrier, oral, IUD, permanent) according to the norms	1/12	73.7	85%	89.5% (66.9-98.7)	Met	0.0833
7420	Health facilities that have sexual and reproductive health (SRH) educational materials specifically targeted at adolescents	1/12	0%*	85%	63.9% (46.2-79.2)	Not Met	0
7430	Norms for improving the quality of reproductive and child health and nutrition services and for the establishment of a community platform of services adopted	1/12	No	Yes	Yes	Met	0.0833
7440	Community health workers (CHW) trained in the community platform	1/12	0%*	85%	58%	Not Met	0
7450	District HECOPAB Officers that are currently monitoring the CHWs	1/12	0%*	85%	100%	Met	0.0833
7460	Health facilities with a mechanism in place for carrying out patient satisfaction surveys	1/12	0%	85%	55.3% (38.7-78.1)	Not Met	0
						Total Score:	0.333

* New intervention: baseline assumed to be 0 %.

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Second Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
3040	Pregnancies for which the woman attended at least one antenatal care visit during the first trimester for the most recent pregnancy in the last two years.	1/10	22.8%	29.8%	39.9% (32-48)	Met	0.1
4095	Institutional deliveries for which oxytocin was administered immediately following birth as part of Active Management of the Third Stage of Labor (AMTSL) in the last two years for the most recent delivery.	1/10	34.1%	49.1%	98.7% (95-100)	Met	0.1
4103	Institutional deliveries for which immediate (within 24 hours) neonatal care was provided to the infant according to the norms in the last two years.	1/10	19.4%	39.4%	88.7% (83-93)	Met	0.1
4080	Obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) managed according to the norms in the past two years.	1/10	2.6%	37.6%	33.3% (23-45)	Met	0.1
4070	Neonatal complications (prematurity, low birth weight, asphyxia and sepsis) managed according to norms in the last two years.	1/10	7.5%	37.5%	53.5% (41-66)	Met	0.1
2500	Female health facility patients of reproductive age that receive post-partum contraception in the last year	1/10	7%	17%	90.3% (83-95)	Met	0.1
4030	Live births for which the women received post-partum care before the first 7 days of birth in the last two years for the most recent pregnancy.	1/10	—	37.8%*	75.4% (65-85)	Met	0.1
4420	Newborns enrolled for child health services within seven days of birth in the last two years.	1/10	25.3%	35.3%	66.5% (59-73)	Met	0.1
4410	Children 0-23 months with growth and development checkups according to the norms	1/10	2.7%	37.5%	69.6% (63-76)	Met	0.1
5135	Diarrhea cases in children 0-59 months presenting in health facilities that were treated with Oral Rehydration Solution (ORS) and zinc during their last visit.	1/10	20%	80%	95.3% (91-98)	Met	0.1
						Total Score:	**1**

* Target set as gold standard.

Third Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
3000	Women in reproductive age (15-49 years) who received preconception care —*New*	1/10	N/A	20% (gold standard)	0% (—)	Not Met	0
6000	Women in reproductive age (15-49 years) that were screened for cervical cancer and received the results in the last two years —*New*	1/10	65.5%	75.5% (+10PP)	53.2% (46.3—59.8%)	Not Met	0
7080	Maternal deaths in Belize investigated, analyzed and decisions taken according to norms at each level of the Ministry of Health and reviewed by the National Committee for Prevention and Review of Maternal Mortality	1/10	N/A	100% (gold standard)	0%	Not Met	0
3030	Women of reproductive age (15-49 years) who received 5 antenatal care visits by doctor or nurse according to the best practices in the last two years —*New*	1/10	16.9%	36.9% (+20PP)	9.5% (5.1—17%)	Not Met	0.1
4080	Obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) handled according to the norms in the last two years	1/10	34.6%	49.6% (+15PP)	56.1% (45—66.6%)	Met	0.1
4070	Neonatal complications (prematurity, low birth weight, asphyxia and sepsis) handled according to norms in the last two years	1/10	29.3%	44.3% (+15PP)	56.2% (45—66.9%)	Met	0.1
4050	Postpartum patients evaluated and registered in clinical records, at least every 15 min during the first hour and every 30 min during the second hour and at discharge in the last two years	1/10	26.6%	46.6% (+20PP)	49.2 (36.4—62.1%)	Met	0.1
5020	Children 0-59 months identified as having received full vaccination for age	1/10	12.6	22.6% (+10PP)	52.8% (40.6—64.6%)	Met	0.1
5060	Mothers who gave their children (0-59 months) ORS and zinc supplements during the last episode of diarrhea in the two weeks	1/10	5.3	45.3% (+10PP)	0% (—)	Not Met	0
7500	Health facilities that report, access, and use quality data for decision-making from the health information and quality management systems	1/10	N/A	40% (gold standard)	50%	Met	0.1
						Total Score:	**0.5**

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SMI's overall objective in El Salvador is to help reduce maternal and child morbidity and mortality in 14 of the country's poorest municipalities through strengthening the response capacity of the primary and hospital levels of care, and strengthening the integrated networks of care, in accordance with MINSAL's health sector reform. Approximately 265,244 people live in SMI target areas in El Salvador, of which 69,695 are women in reproductive age and 51,134 are children under 5 years old. This population is served by 78 primary health facilities and nine hospitals.

First Operation

The first operation received a total of $8.12 million in funding, including $4.87 million in donation funds and $3.25 million in national resources. El Salvador achieved a score of 0.8 and received an incentive of $1.62 million based on performance.

During the first operation, SMI supported the provision of an expanded set of services through ECOS, established technical and management capacities for the delivery of high-quality health services, improve the supply of inputs, equipment, and medications, strengthened referral systems to higher levels of care, and encouraged community participation and greater awareness on social determinants of health. The number of ECOS increased from 39 to 74 Family Health ECOS and three new Specialized Health ECOS were established. Approximately 121 health personnel joined the ECOS. Medications, inputs and training were provided, as well as transportation, to support preventive health care activities. Twelve additional health facilities were constructed.

ECOS performance was closely monitored at the central level. Services provided included the compliance with the ministerial protocols for treatment of pregnant women and children under five years of age, as well as the introduction of proven cost-effective interventions, such as micronutrient powders and zinc.

Second Operation

The second operation concluded on July 15th, 2017, in which El Salvador executed $2.95 million dollars of donation funds and $1.97 million of domestic resources. The country achieved a score of 0.82 on the Performance Framework for the second operation and obtained the performance tranche of $986 thousand. El Salvador accomplished targets for nine out of eleven indicators in its Performance Framework. Targets were challenging, as seven performance indicators were measured through household surveys, prompting El Salvador to improve coverage in the poorest and hardest-to-reach communities. In addition, quality indicators prompted actions to improve processes of care for health service provision. Many of the observed improvements were large and statistically significant.

Population level improvements were high, and, as far as we know, similar experiences of improvements at scale in poor areas have not been documented. For instance, El Salvador was able to increase the prevalence of family planning from 53.5% [95% Confidence Interval (CI): 51-57] to 75.0% [CI: 70-79]. According to analysis performed by IHME, at the global and regional level, the richest quintiles of countries improve contraceptive prevalence by 0.7 percentage points (PP) annually. Considering the years between baseline and the second operation follow-up, El Salvador was expected to improve by 4.4 PP. With targeted interventions, it was considered that a challenging improvement. Hence, the attained increase of 21.5 PP is striking and unprecedented. Similar improvements were observed for coverage of institutional birth by qualified attendant, immunization with MMR vaccine, and home treatment of diarrhea with ORS and zinc.

Improvements were substantial in highly challenging population-level and quality indicators. El Salvador was able to improve indicators in areas with already high coverage and despite an adverse context.

Third Operation

The 3rd operation involved an investment of USD $970,000 in donation funds and USD $2,270,000 in domestic resources. The Ministry of Health in El Salvador could achieve up to USD $680,000 as part of the performance tranche. In El Salvador, the third operation was not initially considered. However, given the impressive results shown in the second operation and the country's willingness to continue in SMI, a third operation was designed. The operation built upon the achievements of the first two operations and placed an increased emphasis on improving the quality of care at the hospital level.

The operation sought to increase the number of women in reproductive age who received quality antenatal care, increase the number of users of modern family planning methods, increase cervical cancer screening and quality, improve quality antenatal care, strengthen postpartum contraception, improve the management of obstetric and neonatal complications, improve quality antenatal care, and improve the quality of integrated childcare. In terms of cross-cutting interventions to strengthen health systems, the operation promoted the use of data for decision-making at the primary

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and hospital levels, reviewing and adjusting processes of care to ensure quality, implementing workshops and collaborative gatherings to share best practices and promote peer-learning at the hospital level, and improving supply chain networks. Furthermore, the pilot program of team incentives to improve primary healthcare continued implementation based on its success in previous operations.

Despite the preparatory work carried out for various interventions in El Salvador's healthcare system, the COVID-19 pandemic, which began in March 2020, hindered the expected progress of these efforts. Although norm updates, manual development, and process optimization were largely completed, the effective implementation of some interventions was limited due to a range of critical steps that could not be fully carried out. The lockdowns and social distancing protocols imposed in 2020 and most of 2021 had a significant impact on the Ministry of Health's ability to engage in community outreach and supervise health teams. Furthermore, the change in government in June 2019, with the arrival of a new political party and its associated health agenda, compounded the challenges faced by the SMI.

Target Setting and Target Verification Process

Targets for the first two operations in El Salvador were negotiated and approved at the start of the initiative in July 2012. Indicators were selected considering the Initiative's Monitoring and Evaluation Framework, including process indicators for the first operation, and healthcare coverage, quality, and effective coverage indicators for the second operation. The initial design of SMI in El Salvador considered only two operations; however, due to the impressive performance on the second operation and willingness to continue, a third operation was designed at the end of the second operation.

The performance framework for the third operation was designed to build upon the results of the previous operations, institutionalize gains, and address new priority areas that had not been previously considered. Given that the third operation had not been initially planned, no indicators were negotiated from the onset of the initiative. However, three indicators were directly linked with work done in the second operation, although the targets or criteria increased. For example, the second operation included two antenatal care indicators: antenatal care according to best practices, and early catchment to antenatal care. On the third operation, these two indicators were merged into a single indicator one including early catchment as one criterion. In addition, other criteria were also included, such as syphilis testing (together with the six other lab tests), up-to-date tetanus vaccination, and adequate management of clinical and lab findings. Despite the more challenging criteria, the target was also higher, establishing a 20-percentage point increase in the third operation compared to a 15-percentage point increase on the second operation.

An additional indicator considering the use of data for decision making was not linked to previous indicators but was meant to consolidate the gains from the quality improvement interventions implemented in previous operations. This indicator meant to ensure that monthly data review and analysis sessions were routinely conducted by primary health teams, which was an essential component of the continuous quality improvement strategy.

Four indicators entailed interventions to improve quality at the hospital level, which was not considered in previous operations. Although these indicators were introduced only in the third operation, the targets for some of these indicators were very ambitious considering the progress observed in other countries. For example, the targets for women with obstetric complications and neonates with complications managed according to norms were established considering a 25-percentage point increase. This meant that higher targets had to be achieved within a shorter timeframe of 24-30 months compared with two 24-month operations, which had been the case for the second operation.

Finally, two indicators targeted new priority areas where no previous interventions had been conducted but aimed at addressing priority reproductive and maternal health issues.

The target setting process took place using a hybrid model that considered quantitative and qualitative data, including a) an economic model based on cost-benefit analysis, b) review of the literature and international experiences, c) historical trends of national indicators and impact of specific interventions, d) statistical power calculations, and e) operational requirements and expert advice. The criteria for each indicator were negotiated and described in the country's Indicators Manual.

The target verification process was performed in accordance with SMI Operating Regulations, which state that the verification of indicators must be performed independently. All indicators for the second operation were measured using independent household and health facility surveys performed by the Institute for Health Metrics and Evaluation (IHME). Baseline health facility surveys were

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collected by IHME in April—May 2011, and first operation follow-up surveys in February—April 2014. Follow-up surveys to verify targets for the second operation were collected in July—November 2017. For the third operation, follow-up surveys were collected in August—December 2022. IHME computed and provided the indicator values for all performance indicators.

Considerations on the target verification results for the disbursement of the performance tranche

El Salvador has made considerable progress in meeting the targets of its Performance Framework, having achieved four out of ten indicators. The indicators for which targets were attained covered diverse topics and were not restricted to a specific life-cycle stage or level of care. Of particular interest is the remarkable reduction in anemia prevalence among children aged 6 to 23 months, which has decreased by over 30 percentage points since the latest measurement. Moreover, despite the substantial reduction in cervical cancer screening caused by the pandemic, coverage has surpassed 85%. However, for the indicators for which targets were not accomplished, there are several potential explanations. A thorough examination of specific criteria demonstrates that, even in cases where progress was limited, most of the gains made by the Salvadoran Ministry of Health were sustained.

The performance of El Salvador has been affected by the COVID-19 pandemic and a meaningful change in government. In June 2019, after ten years of left-wing government under the Farabundo Martí National Liberation Front, a new political party came to power with the election of Nayib Bukele. President Bukele's political agenda included a promise to transform the health sector to improve healthcare for the population. However, in the initial months of his government, his plans were met with great uncertainty, causing a delay in decision-making among government officials until the actual implications of his agenda became clearer. Just a few months later, the pandemic hit, and the government was forced to respond. In response, the government created a state-of-the-art hospital with over 400 beds, including 105 for intensive care and 143 in intermediate care[28]. Although these actions helped to mitigate the burden of the pandemic on the health system, the pandemic had a significant impact on health services in El Salvador.

The COVID-19 pandemic had a significant impact on outpatient visits, which constituted a critical component of El Salvador's primary healthcare model. Community outreach was particularly affected in 2020 due to the pandemic. Despite the health facilities remaining open, individuals refrained from seeking healthcare services due to fear. They also restricted healthcare personnel's access to communities and/or denied entry to health brigades. According to SMI's monitoring surveys, approximately 42% of health facilities in El Salvador suspended some services due to the pandemic, with around one third of home visits being affected (refer to Figure 17. Proportion of health facilities that suspended health services in 2020). Moreover, over two-fifths of health facilities experienced a reduction in staff, primarily to perform COVID-19-related activities. This scenario had a considerable impact on preventive health services, including cervical cancer screening, micronutrient powder distribution, and antenatal care.

[28] Manuel Bello et al., "Hospital El Salvador: A Novel Paradigm of Intensive Care in Response to COVID-19 in Central America," The Lancet Global Health 9, no. 3 (March 2021): e241–42, https://doi.org/10.1016/S2214-109X(20)30513-1.

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Administrative data confirms the impact of the pandemic on primary healthcare. Cervical screening consultations, for instance, fell substantially during between March and October 2020. However, there is a notable recovery by the end of 2022 in SMI municipalities compared non-SMI municipalities (see Figure 18. Cervical cancer screening visits).

Furthermore, the COVID-19 pandemic resulted in a shift of priorities, initially towards hospital care and later towards COVID-19 vaccination coverage, exacerbating the challenges faced by health systems. El Salvador was among the first countries in the region to vaccinate a significant proportion of the population, fully vaccinating nearly two-thirds of the country's population by January 2022. However, despite the new priorities and other services continuing, the workforce did not expand, leading to some activities bearing the burden of the additional workload. For instance, fieldwork supervision and communication with field teams received less attention, without the necessary level of effort to inspire change. Unfortunately, SMI could not provide direct support to mitigate this impact due to travel restrictions and remote monitoring of operations was not sufficient to get a full picture of the situation in the field.

The indicators in El Salvador's Performance Framework that did not meet their targets can generally be grouped into three categories: two indicators heavily relied on community outreach and primary healthcare, one was a recently introduced process of care, and three were hospital-level indicators. For each group, the challenges were similar, and identifying these issues may help explain why the targets were not met.

Figure 17. Proportion of health facilities that suspended health services in 2020

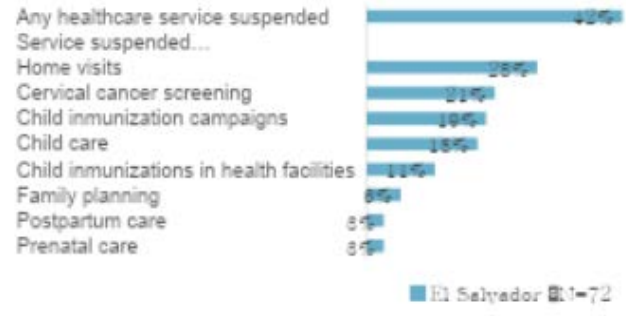
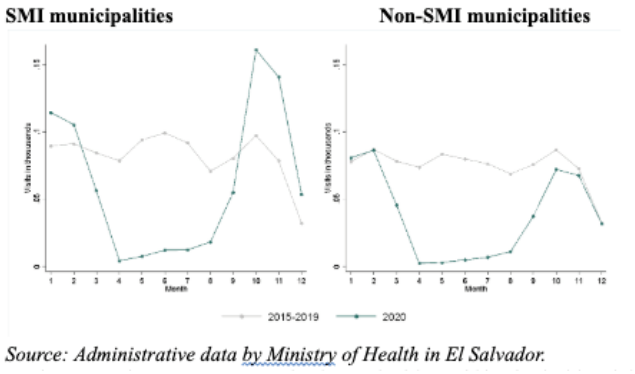


Figure 18. Cervical cancer screening visits



Source: Administrative data by Ministry of Health in El Salvador.

Antenatal care with quality and diarrhea treatment with ORS and zinc are two key indicators that heavily rely on community outreach and adequate primary healthcare response. In the second operation, a significant improvement of more than 15 percentage points was observed in the quality of antenatal care, accompanied by a nearly 10-percentage point increase in early catchment for antenatal care. Considering this improvement, the third operation added additional criteria for evaluating the quality of antenatal care, which included merging the two indicators together, incorporating syphilis tests, appropriate management of risk factors, and updated tetanus vaccination. Compared to previous measurements, the antenatal care with quality indicator included four additional criteria.

To comprehensively analyze the results of the third operation for the antenatal care with quality indicator, it is pertinent to closely examine the individual components that constitute the composite criteria. In this regard, the two main factors responsible for the results include the absence of hemoglobin tests in more than 40% of patient records and the non-adherence to systematic checkups such as blood pressure, fundal height,

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fetal heart rate, among others, during every antenatal care visit. On the contrary, there were not setback in most other issues, and progress in some of them (see Figure 19. Antenatal care with quality disaggregated results by Operation). Tetanus vaccination, for instance, improved almost 30-percentage points. The Ministry of Health's outreach efforts can be measured by two criteria: compliance with early catchment and four ANC visits. Both of these criteria decreased between the Pre-Evaluation period (which mostly represents the time before the pandemic) and the Payment period.

In contrast, home treatment of diarrhea in children with oral rehydration solutions (ORS) and zinc depends largely on community outreach efforts. When a child experiences diarrhea, the caretaker must be aware of the appropriate treatment using ORS and zinc, have these supplies available, and administer them correctly. Achieving this requires a long-term behavior change strategy to educate the population about diarrhea treatment, ensure that ORS and zinc are readily accessible in communities, and remind caretakers to provide the correct treatment. However, the results of the 3rd Operation indicate that treatment for diarrhea decreased proportionally for ORS and zinc (as shown in Figure 20. Home-treatment of diarrhea with ORS and zinc.), which is likely an effect of decreased outreach due to the pandemic.

On the contrary, prior to the COVID-19 pandemic, preconception care was a process that lacked a well-established framework. Recognizing the need to reduce indirect maternal deaths, the Ministry of Health took on the challenge of establishing preconception care as a routine intervention. However, this was a complex undertaking that required the development of specific norms and guidelines to support implementation. While initial groundwork was completed and updated guidelines were disseminated to all health facilities, efforts to ensure actual implementation of preconception care did not progress far enough. The establishment of supervision and monitoring mechanisms was necessary to verify that the changes were taking place. In addition, a strong behavior change component was required to encourage women who desired to become pregnant to seek preconception care. Therefore, although progress was made in multiple preparatory processes, the ultimate outcome level result did not reflect these achievements.

The final three indicators of the program were related to the quality of care provided in hospitals. In contrast to other countries, hospital quality of care was only introduced for the third operation, with all previous operations focusing on ambulatory care. Despite this, the targets for the indicators were set ambitiously. The targets for the indicators related to obstetric and neonatal complications managed according to norms were set at a 25-percentage point increase from the 2nd Operation Result. These targets were considered challenging yet achievable, given the low baselines and the rate of improvement observed in other countries. Similarly, the target for postpartum care with quality was an increase of 15-percentage points, which was among the highest.

The COVID-19 pandemic had significant healthcare delivery consequences, creating challenges to ensuring that clinical practices were consistently followed and documented by all staff members.

Figure 19. Antenatal care with quality disaggregated results by Operation

	1st Operation				2nd Operation				3rd Operation: Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI
First ANC visit before 13 weeks gestation	166	108	65.1	(57.4 - 72)	241	175	72.6	(66.6 - 77.9)	75	62	82.7	(72.1 - 89.8)	159	125	78.6	(71.5 - 84.6)
At least four ANC visits	166	131	78.9	(72 - 84.5)	241	179	74.3	(68.3 - 79.4)	75	55	73.3	(62 - 82.3)	159	111	69.8	(62.2 - 76.5)
All appropriate checks performed, at least four ANC visits	166	118	71.1	(63.7 - 77.5)	241	161	66.8	(60.6 - 72.5)	75	48	64	(52.3 - 74.2)	159	88	55.3	(47.5 - 63)
All lab tests performed at least once during pregnancy:	166	127	76.5	(69.4 - 82.4)	241	198	82.2	(76.8 - 86.5)	75	34	45.3	(34.2 - 56.9)	159	88	55.3	(47.5 - 63)
Blood group	166	153	92.2	(86.9 - 95.4)	241	221	91.7	(87.5 - 94.6)	75	71	94.7	(86.4 - 98)	159	144	90.6	(84.9 - 94.3)
Rh factor	166	152	91.6	(86.2 - 95)	241	220	91.5	(87 - 94.3)	75	68	90.7	(81.4 - 95.6)	159	144	90.6	(84.9 - 94.5)
Blood glucose	166	154	92.8	(87.6 - 95.9)	241	218	90.5	(86 - 93.6)	75	70	93.3	(84.7 - 97.3)	159	138	86.8	(80.5 - 91.3)
HIV test	166	156	94	(89.1 - 96.7)	241	212	88	(83.2 - 91.5)	75	70	93.3	(84.7 - 97.3)	159	137	86.2	(79.8 - 90.8)
Syphilis test (VDRL / RPR*)	166	139	83.7	(77.2 - 88.6)	241	210	87.1	(82.2 - 90.8)	75	64	85.3	(75.1 - 91.8)	159	133	83.6	(77 - 88.7)
Hemeglobin	166	138	83.1	(76.6 - 88.1)	241	203	84.2	(79 - 88.3)	75	38	50.7	(39.3 - 62)	159	92	57.9	(50 - 65.4)
Urinalysis	166	161	97	(92.9 - 98.8)	241	208	86.5	(81.5 - 90.1)	75	68	90.7	(81.4 - 95.6)	159	155	94.9	(78.4 - 89.7)
Tetanus vaccine	166	118	71.1	(63.7 - 77.5)	241	150	62.2	(55.9 - 68.2)	75	63	84	(73.6 - 90.8)	159	139	87.4	(81.2 - 91.8)
Appropriate management of risk factors: **	0				55	26	47.3	(34.5 - 60.4)	16	9	56.2	(31.9 - 77.9)	51	39	76.5	(62.8 - 86.2)
HIV: specialist consultation	0				1	0	0	(-)	0				0			
Syphilis: specialist consultation	0				2	0	0	(-)	0				0			
Rh factor negative: specialist consultation	0				20	1	5	(0.7 - 28.5)	5	0	0	(-)	7	1	14.3	(1.9 - 58.6)
Hypertension: specialist consultation	0				5	2	40	(9.9 - 80.2)	2	0	0	(-)	3	1	33.3	(4.2 - 85)
Gestational diabetes: specialist consultation	0				4	1	25	(3.3 - 76.5)	0				4	3	75	(23.3 - 96.7)
Urinary infection: antibiotics	0				29	26	89.7	(72.2 - 96.7)	13	10	76.9	(47.1 - 92.6)	40	37	92.5	(79 - 97.6)
Antenatal care performed according to standard (3030)	166	48	28.9	(22.5 - 36.3)	241	70	29	(23.6 - 35.1)	75	17	22.7	(14.4 - 33.8)	159	48	30.2	(23.5 - 37.8)

** RPR not captured as VDRL alternative at 1st operation.*
*** Management of risk factors not captured at 1st operation.*
Notes on 1st operation: Uterine height and fetal checkups are only evaluated at first visit, if eligible based on gestational age. Referrals not captured at 1st operation and can not be excluded.

Note: The 3rd Operation Pre-Evaluation period considers a time period from January 1, 2019 to June 30, 2020, before the actual verification period from July 1, 2020 to June 30, 2022.

Figure 20. Home-treatment of diarrhea with ORS and zinc.

	2nd Operation				3rd Operation			
	N	n	%	CI	N	n	%	CI
Diarrhea treatment with ORS	40	33	82.6	(71.1 - 90)	29	19	62.9	(41.1 - 80.5)
Diarrhea treatment with zinc	40	15	38	(23.7 - 54.8)	29	7	23.5	(10.8 - 43.9)
Diarrhea treatment with ORS and zinc (6-59mo)	40	14	35.3	(23 - 50)	29	5	15.7	(5.4 - 38.0)

El Salvador

Although real-time monitoring mechanisms were in place to ensure that all patients received quality care according to norms, it is unclear whether all procedures were documented in patients' medical records.

Despite these challenges, there was a notable improvement in the quality of neonatal care by over 15-percentage points compared to the 2nd Operation result. Although this result was not sufficient to achieve the indicator target, it is a remarkable achievement of a magnitude comparable to the target set in other countries for the 2nd Operation. Insufficient lab tests were the primary driver of the underperformance, given that most other procedures were performed correctly.

Similarly, lab tests were also the primary driver of underperformance for obstetric complications managed according to norms. For instance, in cases of preeclampsia, which had the highest proportion of cases among the indicator, only one in every ten cases received the required lab tests. Aspartate aminotransferase and alanine transaminase were the two required lab tests that were mostly lacking, as shown in Table 8. Preeclampsia management according to norms.

The quality of immediate postpartum care did not improve at the expected rate. The primary reason for underperformance was the reduced frequency of checks for bleeding at discharge, as well as insufficient monitoring of blood pressure and respiratory rate during the first hour after delivery, as depicted in Table 9. Postpartum care with quality.

In summary, El Salvador met the targets for 4 of 10 indicators in the performance framework for the third operation. Improvements were substantial in highly challenging population-level and quality indicators. El Salvador was able to improve indicators in areas with already high coverage and in spite of adverse context.

The Performance Framework indicators provide only a partial view of the country's performance since they concentrate solely on incentivized indicators. However, the SMI employed a health system strengthening strategy that extended beyond the incentivized indicators. For instance, the assessment of the SMI's impact in El Salvador[29] during the first operation revealed that its effects went beyond the incentivized outcomes. The forthcoming SMI Final Evaluation will scrutinize the full impact of the pandemic on the country's performance, thereby situating the Performance Framework outcomes in context. Meeting each target implied not only achieving the committed percentage increase but also reversing the adverse impact that the pandemic had on the healthcare system.

Table 8. Preeclampsia management according to norms

	2nd Operation				3rd Operation: Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI
Vital signs checked	73	41	56.2	(44.6 - 67.1)	49	13	26.5	(15.9 - 40.8)	109	44	40.4	(31.5 - 49.9)
Pulse / heart rate	73	73	100	(-)	49	49	100	(-)	109	107	98.2	(92.9 - 99.5)
Blood pressure	73	73	100	(-)	49	49	100	(-)	109	108	99.1	(93.7 - 99.9)
Respiratory rate	73	73	100	(-)	49	45	91.8	(79.9 - 97)	109	107	98.2	(92.9 - 99.5)
Patellar reflex	73	41	56.2	(44.6 - 67.1)	49	13	26.5	(15.9 - 40.8)	109	44	40.4	(31.5 - 49.9)
Lab tests	73	0	0	(-)	49	1	2	(0.3 - 13.6)	109	11	10.1	(5.6 - 17.4)
Urine protein	73	26	35.6	(25.5 - 47.3)	49	5	10.2	(4.2 - 22.6)	109	29	26.6	(19.1 - 35.8)
Platelet count	73	70	95.9	(87.9 - 98.7)	49	34	69.4	(55 - 80.8)	109	99	90.8	(83.7 - 95)
Aspartate aminotransferase	73	2	2.7	(0.7 - 10.4)	49	3	6.1	(1.9 - 17.7)	109	12	11	(6.3 - 18.5)
Alanine transaminase	73	1	1.4	(0.2 - 9.2)	49	3	6.1	(1.9 - 17.7)	109	12	11	(6.3 - 18.5)
All appropriate medications administered	73	30	41.1	(30.4 - 52.7)	49	30	61.2	(46.8 - 73.9)	109	47	43.1	(34.1 - 52.6)
Ringer's lactate / Hartmann's / saline solution	73	39	53.4	(41.9 - 64.6)	49	39	79.6	(65.8 - 88.8)	109	79	72.5	(63.3 - 80.1)
Magnesium sulfate	73	67	91.8	(82.8 - 96.3)	49	46	93.9	(82.3 - 98.1)	109	99	90.8	(83.7 - 95)
Hydralazine / labetalol / nifedipine (if systolic BP >= 160 or diastolic BP >= 110)	22	16	72.7	(50.9 - 87.3)	28	20	71.4	(52 - 85.2)	71	37	52.1	(40.5 - 63.5)
Dexamethasone / betamethasone (if gestational age 24-35 weeks)	8	2	25	(6.2 - 62.6)	9	1	11.1	(1.5 - 51)	16	1	6.3	(0.9 - 34)
Pre-eclampsia managed to standard	73	0	0	(-)	49	0	0	(-)	109	6	5.5	(2.5 - 11.8)

Note: The 3rd Operation Pre-Evaluation period considers a time period from January 1, 2019 to June 30, 2020, before the actual verification period from July 1, 2020 to June 30, 2022.

Table 9. Postpartum care with quality

	1st Operation				2nd Operation				3rd Operation : Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI
Blood pressure:	86	0	0	(-)	210	120	57.1	(50.3 - 63.7)	81	32	39.5	(29.3 - 50.7)	174	80	46	(38.6 - 53.5)
Four times in first hour	86	23	26.7	(18.3 - 37.3)	210	122	58.1	(51.3 - 64.6)	81	35	43.2	(32.7 - 54.4)	174	87	50	(42.6 - 57.4)
Two times in second hour	86	23	26.7	(18.3 - 37.3)	210	191	91	(86.2 - 94.2)	81	54	66.7	(55.5 - 76.2)	174	128	73.6	(66.4 - 79.6)
Once at discharge	86	0	0	(-)	210	208	99	(96.2 - 99.8)	81	62	76.5	(65.9 - 84.7)	174	152	87.4	(81.5 - 91.6)
Respiratory rate:	86	11	12.8	(7.1 - 21.9)	210	115	54.8	(47.9 - 61.4)	81	30	37	(27.1 - 48.3)	174	52	29.9	(23.5 - 37.2)
Four times in first hour	86	22	25.6	(17.3 - 36)	210	138	65.7	(59.4 - 62.8)	81	35	43.2	(32.7 - 54.4)	174	77	44.1	(37 - 51.8)
Two times in second hour	86	20	23.3	(15.4 - 33.5)	210	192	91.4	(86.8 - 94.6)	81	52	64.2	(53 - 74)	174	109	62.6	(55.2 - 69.6)
Once at discharge	86	19	22.1	(14.4 - 32.3)	210	207	98.6	(95.6 - 99.5)	81	51	63	(51.7 - 72.9)	174	119	68.4	(61 - 74.9)
Heart rate / pulse*:	86	4	4.7	(1.7 - 12)	210	190	90.5	(85.7 - 93.8)	81	39	48.1	(37.3 - 59.2)	174	97	55.7	(48.2 - 63)
Four times in first hour	86	20	23.3	(15.4 - 33.5)	210	193	91.9	(87.2 - 94.9)	81	52	64.2	(53 - 74)	174	120	69	(61.6 - 75.5)
Two times in second hour	86	18	20.9	(13.5 - 31)	210	206	98.1	(95 - 99.3)	81	54	66.7	(55.5 - 76.2)	174	128	73.6	(66.4 - 79.6)
Once at discharge	86	11	12.8	(7.1 - 21.9)	210	208	99	(96.2 - 99.8)	81	58	71.6	(60.6 - 80.5)	174	147	84.5	(78.2 - 89.2)
Blood abnormalities**:	0				210	107	51	(44.2 - 57.7)	81	24	29.6	(20.6 - 40.7)	174	33	19	(13.8 - 25.6)
Four times in first hour	0				210	116	55.2	(48.4 - 61.9)	81	34	42	(31.5 - 53.2)	174	86	49.4	(42 - 56.9)
Two times in second hour	0				210	177	84.3	(78.7 - 88.6)	81	54	66.7	(55.5 - 76.2)	174	126	72.4	(65.2 - 78.6)
Once at discharge	0				210	192	91.4	(86.8 - 94.6)	81	28	34.6	(24.9 - 45.8)	174	61	35.1	(28.3 - 42.5)
Temperature, once at discharge	86	19	22.1	(14.4 - 32.3)	210	208	99	(96.2 - 99.8)	81	56	69.1	(58 - 78.4)	174	136	78.2	(71.3 - 83.7)
Postpartum care with quality (4050)	86	0	0	(-)	210	104	49.5	(42.8 - 56.3)	81	21	25.9	(17.4 - 36.8)	174	14	8	(4.8 - 13.2)

** Heart rate not captured as alternative to pulse at first operation.*
*** Blood abnormalities checks not captured at first operation.*

Note: The 3rd Operation Pre-Evaluation period considers a time period from January 1, 2019 to June 30, 2020, before the actual verification period from July 1, 2020 to June 30, 2022.

[29] Pedro Bernal, Sebastián Martínez, and Pablo Celhay, "Is Results-Based Aid More Effective than Conventional Aid?: Evidence from the Health Sector in El Salvador" (Inter-American Development Bank, January 2018), https://doi.org/10.18235/0000980.

El Salvador

In addition to the Performance Framework results, several other noteworthy outcomes have been achieved. A few examples are highlighted below:

- Processes to manage obstetric and neonatal complications have been optimized and implemented. Despite not being reflected in the quality indicators results, which comprise multiple criteria, these processes have improved healthcare team collaboration during emergency patient care. The optimized processes have been printed on large posterboards and placed in emergency and delivery rooms in most hospitals, allowing for quick reference. The Ministry of Health and hospital staff have widely adopted these processes, which are becoming routine.

- The instruments to monitor intervention coverage for women in reproductive age, pregnant women, and children under five by community health workers were improved to enable nominally following each person. The instruments were designed and improved during the second operation and are now widely used.

- The quality improvement strategy for the primary healthcare networks, which began during the second operation, is now widely adopted as a routine process for healthcare teams. Quality indicators are already part of the health information system and reported on a routine basis on the country's health information system.

- A screening tool to identify early pregnancies and women in need of family planning has been extensively implemented in El Salvador. The tool is a short questionnaire that health staff ask all women of reproductive age. It was first developed by a nurse in a small clinic in El Salvador and identified as a promising practice during a site visit in 2015. Since then, the tool has been implemented in several Mesoamerican countries. In El Salvador, it has become standard practice for primary healthcare teams, who now use a digital version of the tool to collect data on electronic tablets and upload the results to the country's routine health information system.

- To address the high prevalence of anemia among children and low adherence to supplements, a pilot program was initiated that included non-invasive measurement to make anemia more salient to mothers and caretakers. New processes were developed, incorporating non-invasive measurement of anemia into routine child healthcare visits, including clear criteria for providing iron supplementation and follow-up visits, instructions on when and how to refer cases of moderate and severe anemia in children to higher-level care, and how to record data in the medical record and information systems, among other things. In the pilot areas, these processes are now considered part of the standard routine, and the Ministry of Health is considering expanding this experience to the rest of the country.

El Salvador has made significant strides in enhancing maternal and child health after a decade of collaboration with the Salud Mesoamerica Initiative. In the third operation, data was gathered from comparison municipalities in El Salvador to enable a comprehensive analysis of the country's performance as part of the SMI Final Evaluation. This analysis will facilitate a more comprehensive understanding of El Salvador's results within a broader context. The final evaluation will also seek to estimate the improvements achieved in maternal and neonatal mortality in the past ten years.

The following table summarizing El Salvador's overall funding and PT achieved in the three operations:

El Salvador

Operation	Performance Tranche	Amount Awarded	% Awarded
First	$1,625,000	$1,625,000	100%
Second	$986,000	$986,000	100%
Third	$680,000	$340,000	50%
Total	**$3,291,000**	**$2,951,000**	**90%**

Overall Funding for Salud Mesoamerica Initiative in Belize

Operation	Donation Funds (IT)	% of (IT +CT)	Country Funds (CT)	% of (IT +CT)	Performance Tranche Available (PT)	% of CT	Performance Tranche Funds Awarded	% of PT
First Operation	$4.87 M	60%	$3.25 M	40%	$1.625 M	50%	$1.625 M	100%
Second Operation	$2.95 M	60%	$1.97 M	40%	$0.986 M	50%	$0.986 M	100%
Third Operation	$0.97 M	30%	$2.27 M	70%	$0.680 M	30%	$0.340 M	50%
El Salvador Country Total	**$8.79 M**	**54%**	**$7.49 M**	**46%**	**$3.291 M**	**44%**	**$2.951 M**	**90%**

Total Operation Funds (IT + CT)	**$16.28 M**

El Salvador Performance Frameworks

First Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
7193	Number of Family and Specialized Community Teams (ECOS) created	1/10	37	68	59 (49-67)	Not Met	0
8880	Number of Families ascribed to Family Community Teams (ECOS)	1/10	14,681	38,661	59,495	Met	0.1
7020	Number of community health units with the necessary inputs for prenatal care	1/10	35	68	75 (69-77)	Met	0.1
7050	Number of community health units with stocks of four family planning methods (injection, barrier, orals, IUD)	1/10	11	65	71 (62-75)	Met	0.1
7010	Number of community health units with the necessary inputs for infant care	1/10	24	58	71 (62-75)	Met	0.1
7001	Number of community family health units with refrigerator or cool box to care for vaccines adequately	1/10	43	65	60 (50-68)	Met	0.1
8310	Review of the national policy for the disbursement of micronutrients in powder for children 6 to 23 months	1/10	No	Yes	Yes	Met	0.1
7720	Inclusion in the norm of the adequate dose of therapeutic zinc for treatment of diarrhea in children younger than 5 years old (20 mg of zinc during 10-14 days in each episode of diarrhea)	1/10	No	Yes	Yes	Met	0.1
3041	Percentage of pregnant women recorded in the prenatal registry that had prenatal birth control performed by a doctor or nurse before 12 weeks.	1/10	67	77	64.9 (58.8-70.6)	Not Met	0
4106	Percentage of children younger than one year registered in the system that were recorded in less than eight days	1/10	51	61	90.1 (86.6-92.9)	Met	0.1
						Total Score:	**0.8**

El Salvador

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Second Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
2010	Women of reproductive age (15-49 years) currently using or whose partner is using a family planning method	1/11	53.5[1]	60.5	75.0% (70-79)	Met	0.09
3041	Women of reproductive age (15-49 years) who assisted the first antenatal care visit by doctor or nurse before 12 weeks gestation	1/11	64.9[2]	74.9	74.6% (69-79)	Met	0.09
3030	Women of reproductive age (15-49 years) who received antenatal care according to best practices by doctor or nurse in their most recent pregnancy in the last two years	1/11	47.5[3]	62.5	63.9% (58 - 70)	Met	0.09
8380	Pregnant women with institutional birth attention referred by ECOS as part of activities in the birth plan	1/11	0	70	86.3% (82 - 90)	Met	0.09
4010	Women of reproductive age (15-49 years) whose most recent birth was performed by qualified birth attendant in a health facility in the past two years	1/11	86.2[4]	94.2	98.3% (96 - 99)	Met	0.09
4031	Women of reproductive age (15-49 years) that were visited by health staff one week after the delivery, including medical staff and community workers	1/11	81.2	91.6	62.6% (53 - 71)	Not Met	0
1060	Children 6-23 months with hemoglobin < 110 g/L	1/11	46.5[5]	36.5	47.3% (36 - 59)	Met	0.09
5025	Children 12-24 months with measles, mumps and rubella vaccine (MMR)	1/11	66.6[6]	73.6	91.1% (83 - 95)	Met	0.09
5030	Children 12-59 months who received two doses of deworming treatment in the past year	1/11	35.4[7]	56.4	40.5% (35 - 46)	Not Met	0
5060	Mothers that gave their children 0-59 months oral rehydration salts (ORS) and zinc in the last episode of diarrhea	1/11	4.4[8]	24.4	33.7% (21 - 49)	Met	0.09
8890	Expenditure by the Ministry of Health on Primary Healthcare	1/11	6.291.814	8.020.000	11,199,579	Met	0.09
						Total Score:	**0.82**

Third Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
3000	Pregnant women who received preconception care with quality before their current pregnancy	1/10	N/A	10%	0% [—]	Not Met	0
2500	Women who received postpartum contraceptives in the last year	1/10	14.7%	29.7% (+15PP)	30.5% [21.3—41.5%]	Met	0.1
6005	Women aged 20–59 years who underwent cervical cancer screening with quality in the last year	1/10	N/A	70%	85.7% [81.1—89.3%]	Met	0.1
3030	Percentage of women of childbearing age (15–49 years) who received four prenatal checkups according to best practices by a physician or nurse during their most recent pregnancy in the last two years	1/10	29%	49% (+20PP)	30.2% [23.5—37.8%]	Not Met	0
4080	Women with obstetric complications (preeclampsia/eclampsia, hemorrhage, and sepsis) managed according to norms	1/10	12.2%	37.2% (+25PP)	13.6% [9.2—19.7%]	Not Met	0
4070	Neonates with complications (low birth weight, prematurity, asphyxia, and sepsis) managed according to norms	1/10	24.1%	49.1% (+25PP)	39.8% [32.4—47.6%]	Not Met	0
4050	Women who received postpartum care provided with quality standards	1/10	49.5%	64.5% (+15PP)	8% [4.8—13.2%]	Not Met	0
5060	Caretakes who gave children under five ORS and zinc in their last episode of diarrhea	1/10	35.3%	45.3% (+10PP)	15.7% [5.4—38.0%]	Not Met	0
1060	Anemia prevalence in children 6 to 23 months	1/10	47.3%	42.3% (-5PP)	15.5% [10.1—22.9%]	Met	0.1
7500	Health facilities using quality data for decision making and continuous quality improvement	1/10	N/A	50%	70.4% [49.6—85.2%]	Met	0.1
						Total Score:	**0.4**

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Administrator IDB

Honduras

Honduras

The general objective of the third operation is to help reduce maternal and child morbidity and mortality in 19 of the country's poorest municipalities. Approximately 248,709 people live in SMI target areas in Honduras, of which 67,624 were women in reproductive age and 33,261 are children under 5 years old.

First Operation

The first operation received US$ 4 million dollars of donation funds and US$ 4 million of national resources. Honduras obtained a score of 0.91 and received $2 million incentive corresponding to the performance tranche. SMI-Honduras strengthened the provision of services through primary health service providers hired under the decentralized management model. The maternal and neonatal care strategy has implemented actions related to early pregnancy detection, prenatal care, delivery care by qualified personnel, early identification and management of obstetric and neonatal emergencies and immediate postpartum care, as well as strengthening of the referral system. The strategy for child health care has supported actions to prevent chronic malnutrition and anemia through the strengthening of the AIEPI strategy, including face-to-face counseling and distribution of powdered micronutrients for children 6–24 months old, prevention and prompt treatment of diarrhea and pneumonia, and inclusion of zinc in the treatment of diarrhea

Second Operation

The second operation concluded on May 29th, 2017, which utilized $3.5 million dollars in donation funds and $3.5 million dollars in domestic resources. A performance tranche of $1.75 million dollars was awarded for the Second Operation Performance Framework. The second operation built upon the progress and lessons learned from the first operation and aimed to improve the quality and coverage of maternal and child services by expanding the coverage of the Family Health Teams (ESAF), implementing the Obstetric and Neonatal Care strategy (EONC), increasing access to family planning services and methods, and distributing micronutrients to reduce anemia. Moreover, the strengthening of the Support Committees and quality improvement at the hospital level continued.

Honduras achieved an impressive score of 1 in the second operation, meeting the targets of all indicators and showing significant improvements in indicators. Notably, the percentage of women who received their first antenatal care visit before 12 weeks increased by more than 30 percentage points, from 51% to 82%. The percentage of institutional births also increased by 16 percentage points, reaching 85%. Management of obstetric complications saw a more than 20 percentage point improvement, reaching 63%, while management of neonatal complications improved by over 26 percentage points. The significant improvements made in the previous operations set high and challenging targets for the third operation. Nevertheless, targets for two indicators were still exceeded, with over 90% achievement in antenatal care with quality and institutional birth. Additionally, three indicator targets were expected to have a success rate of over 80%.

Third Operation

The Third Operation involved an investment of $4.5 million, with $1.5 million coming from donation funds and $3 million from domestic resources. The Ministry of Health could obtain up to $850,000 as part of the performance tranche. The goal of the Third Operation was to consolidate and institutionalize interventions from the previous operations, while leveraging the achievements and lessons learned through the implementation of quality improvement processes.

These processes included the optimization and implementation of community, institutional outpatient, and inpatient care processes. Community and outpatient care processes focused on early detection of pregnancy before the 12th week of gestation and providing immediate and mediate postpartum care for neonates and women. These processes also included services such as cervical cancer screening, delivery of oral rehydration salts, and zinc to treat diarrhea in children under 5.

The hospital process involved improving the management of neonatal obstetric complications and standard deliveries. This process involved acquiring key inputs to provide care, improving diagnosis coding and classification of hospital discharges, and exchanging best practices through collaborative workshops, between others.

In summary, the Third Operation aimed to improve the delivery of healthcare services by consolidating and institutionalizing successful interventions from previous operations while implementing quality improvement processes. These processes focused on optimizing community, institutional outpatient, and inpatient care processes, and exchanging best practices.

Target Setting and Target Verification Process

Performance Framework targets in all operations in Honduras were negotiated and approved at the start of the Initiative in April 2012. However, the Performance Framework was reviewed during the

Honduras

second Operation to assess the design process to align indicators and targets with country priorities. Indicators were selected considering the Initiative's Monitoring and Evaluation Framework, including process indicators for the First Operation and healthcare coverage, quality, and effective coverage indicators for the Second Operation.

The performance framework for the Third Operation was designed to build upon the results of the previous operations, institutionalize gains, and address new priority areas that had not been previously considered. Three indicators were completely new for the Performance framework: neonatal care within 3 days, neonatal care with quality, and cervical cancer screening, the last one was also a new intervention for SMI. Three other indicators were new for the Third Performance Framework. Still, they were set since the First Operation they rely on field work activities that were planned to be strengthen in the Third Operation but the pandemic limited those activities: A reduction in anemia, treatment with of ORS and zinc during the last diarrhea episode, and use of family planning methods.

The target-setting process took place using a hybrid model that considered quantitative and qualitative data, including:

- An economic model based on cost-benefit analysis.
- Review of the literature and international experiences.
- Historical trends of national indicators and impact of specific interventions.
- Statistical power calculations.
- Operational requirements and expert advice.

The indicators' criteria were negotiated and described in the country's Indicators Manual.

The target verification process was performed per SMI Operating Regulations, which state that indicators must be verified externally and independently. Performance Framework Indicators for the Second Operation in Honduras were quality and coverage indicators collected from independent household and health facility surveys.

IHME collected baseline health facility surveys in January-July 2013 and First Operation follow-up surveys in June-August 2014. Follow-up surveys to verify the Second Operation's targets were collected from June-November 2017. For the third Operation, follow-up surveys were collected in September-December 2022. IHME computed and provided the indicator values for the ten performance indicators.

Considerations for results for the performance tranche disbursement

The COVID-19 pandemic, hurricanes ETA and IOTA, and political changes have all had significant impacts on Honduras' economy and public health. In 2022, a new political party took power, facing a divided Congress and high levels of violence and poverty exacerbated by the pandemic[30]. According CEPAL[31], the hurricanes alone reduced GDP by 0.8 percentage points in 2020 and 0.3 percentage points in 2021, while the World Bank estimates that the combined effects of the pandemic and hurricanes led to a 9% decline in GDP in 2020[32].

Due to the onset of the COVID-19 pandemic in March 2020, not all interventions were implemented with the expected intensity. The pandemic also had a significant impact on healthcare services in Honduras, with many people postponing or foregoing preventative care due to the pandemic. Health facilities prioritized essential services, leading to changes in service delivery for other services, and community outreach was hampered. Globally, vaccination coverage decreased by four percentage points in 2020, and breast cancer screening fell by five percentage points in OECD countries. In Honduras, 29% of health services reported suspending healthcare in 2020, and 14% of health services reported reducing home visits. Additionally, 13% of health facilities reported reduced cervical cancer screening and childcare services, which rely heavily on fieldwork activities (Figure 21. Proportion of health facilities that suspended health services in 2020). In 2021, Honduras made efforts to deploy COVID-19 vaccines, as in other countries, to combat the pandemic and its impact on public health.

30 https://www.bbc.com/mundo/noticias-america-latina-60149354

31 https://www.cepal.org/es/publicaciones/46853-evaluacion-efectos-impactos-causados-la-tormenta-tropical-eta-huracan-iota

32 https://www.bancomundial.org/es/country/honduras/overview

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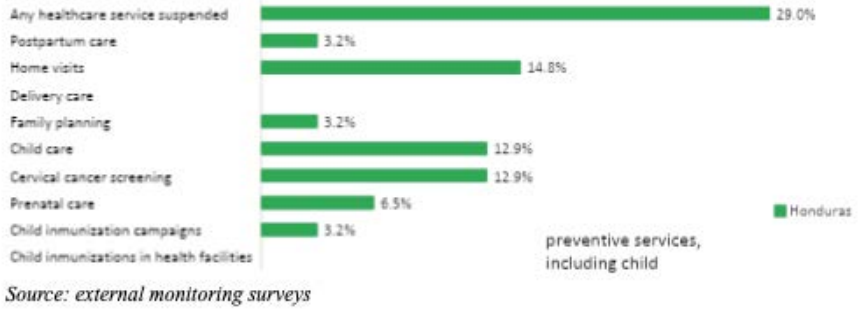
Honduras achieved four out of ten targets. It's worth noting that Honduras made significant progress during the second operation, which led to setting new targets based on the results of the third operation. Two targets exceeded 90%: antenatal care with quality and institutional birth. In addition, three indicator targets were above 80%: routine newborn care, use of family planning methods, and management of obstetric complications. These ambitious targets entailed significant risk for the country.

In Honduras, the availability and use of modern family planning methods have been strengthened since the first operation. The use of modern family planning methods increased from a baseline of 69.3% to 75.4% in the second operation and 79.8% in the third operation, meeting the target for this indicator.

While the antenatal care (ANC) with quality and early capture indicator did not meet the 90% target, there was still significant improvement compared to the baseline. The ANC care with quality and early capture increased from 12.8% in the baseline to 43% in the first operation, 82% in the second operation, and 63.8% in the third operation. Table 10 shows that compliance with five visits is the criterion that most significantly affects this indicator, which was also most likely affected by decreased healthcare seeking behaviors from COVID-19 and the areas affected by hurricanes (which impacted transportation networks).

Similarly, while the institutional birth indicator did not meet the target, it still achieved a significant result of 86.9%, which is similar to the second operation result of 85.2% and well above the baseline of 68.9%. Hence, the gains achieved on the second operation were maintained, despite the challenging environment.

Figure 21. Proportion of health facilities that suspended health services in 2020



Source: external monitoring surveys

Table 10. Compliance with antenatal care with quality.

	Baseline				1st Operation				2nd Operation				3rd Operation: Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI
At least five ANC visits	125	90	72	(63.4 - 79.3)	236	146	61	(54.6 - 67.1)	272	240	88.2	(83.8 - 91.6)	82	62	75.6	(64.9 - 83.8)	177	135	76.3	(69.4 - 82)
First visit before 12 weeks gestation	125	74	59.2	(50.5 - 67.8)	228	134	58.8	(52.2 - 65)	272	240	88.2	(83.8 - 91.6)	82	67	81.7	(71.6 - 88.8)	177	155	87.6	(81.8 - 91.7)
All appropriate checks performed, at least five ANC visits*	125	124	99.2	(94.4 - 99.8)	236	140	59.3	(52.9 - 65.5)	272	245	90.1	(85.9 - 93.1)	82	58	70.7	(59.8 - 79.7)	177	131	74	(67 - 80)
All lab tests performed at least once during pregnancy:	125	34	27.2	(20 - 35.8)	236	208	88.1	(83.3 - 91.7)	272	267	98.2	(95.6 - 99.2)	82	75	91.5	(82.9 - 95.9)	177	161	91	(85.7 - 94.4)
Blood group	125	107	85.6	(78.2 - 90.8)	236	229	97	(93.8 - 98.6)	272	268	98.5	(96.1 - 99.5)	82	80	97.6	(90.5 - 99.4)	177	170	96	(91.9 - 98.1)
Rh factor	125	107	85.6	(78.2 - 90.8)	236	229	97	(93.8 - 98.6)	272	268	98.5	(96.1 - 99.5)	82	80	97.6	(90.5 - 99.4)	177	170	96	(91.9 - 98.1)
Blood glucose	125	98	78.4	(69.9 - 85.1)	236	229	97	(93.8 - 98.6)	272	268	98.5	(96.1 - 99.5)	82	80	97.6	(90.5 - 99.4)	177	171	96.6	(92.6 - 98.5)
HIV test	125	118	94.4	(88.6 - 97.3)	236	227	96.2	(92.8 - 98)	272	270	99.3	(97.1 - 99.8)	82	82	100	(-) - (-)	177	172	97.2	(93.8 - 98.8)
Syphilis test (VDRL / RPR**)	125	105	84	(76.4 - 89.5)	236	217	91.9	(87.7 - 94.8)	272	260	95.6	(92.1 - 97.8)	82	70	85.4	(76.1 - 91.6)	177	168	94.9	(90.5 - 97.4)
Hemoglobin	125	104	83.2	(75.5 - 88.8)	236	215	91.1	(86.7 - 94.1)	272	268	98.5	(96.1 - 99.5)	82	81	98.8	(91.5 - 99.8)	177	172	97.2	(93.3 - 98.8)
Urinalysis	125	102	81.6	(73.7 - 87.5)	236	220	93.2	(89.2 - 95.8)	272	258	94.9	(91.6 - 96.9)	82	81	98.8	(91.5 - 99.8)	177	171	96.6	(92.6 - 98.5)
If patient referred during pregnancy, all visits were to standard (even if less than 5 visits)***	0				0				4	4	100	(-) - (-)	4	3	75	(22.9 - 96.8)	15	13	86.7	(59.1 - 96.7)
At least 5 antenatal care visits to standard (3090)	125	16	12.8	(7.9 - 20)	228	98	43	(36.7 - 49.5)	272	223	82	(76.9 - 86.1)	82	50	61	(49.8 - 71.1)	177	113	63.8	(56.4 - 70.6)

Cervical cancer screening was a new intervention in SMI, included in the third operation due to cervical cancer being one of the leading causes of death for women of reproductive age in the region. Results showed that 57% of women who received medical care underwent cervical cancer screening according to the norm. If the results were positive, they received further treatment in a timely manner. However, the target of 70% was not met, which was a challenge considering that this was a new intervention. Furthermore, screening for all cancers decreased during the pandemic, with breast cancer screening, for example, dropping by five percentage points in OECD countries.

Three indicators were measured mainly in hospitals: routine newborn care, management of obstetric complications, and management of neonatal complications. Two of these indicators met their targets: neonatal management of complications achieved a value of 68.3%, which was a significant improvement from the second operation results of 41.7%, and routine newborn care achieved 78.8%.

However, the management of obstetric complications did not meet their targets. The management of obstetric complications result was very similar in the second and third operations, at 61.1% and 66.4%, respectively, however improves with respect to baseline 36%. When breaking down the indicator by cause, as shown in Table 11, 89.4% of hemorrhage, 100% of sepsis, 48% of pre-eclampsia, and 22.8% of eclampsia cases were managed according to the norm.

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It is important to note that 51% of the complications were related to eclampsia and pre-eclampsia, with 42% of cases attributed solely to pre-eclampsia. Further details on the breakdown of eclampsia and pre-eclampsia cases can be found in Table 11 and Table 12.

It is concerning to observe that both eclampsia and pre-eclampsia cases exhibited a lack of registration of important clinical and lab tests. Specifically, patellar reflexes were not recorded in 66% and 25% of cases, respectively. Additionally, tests such as Lactate dehydrogenase were not recorded in 80% and 50% of eclampsia and pre-eclampsia cases, respectively. Urine protein tests were also lacking in 66% and 25% of eclampsia and pre-eclampsia cases, respectively.

It is worth noting that the COVID-19 pandemic had a significant impact on the implementation of childcare indicators in the Third Operation. The limited outreach activities due to restrictions on mobility and physical distancing measures resulted in lower compliance with the indicators. Despite these challenges, the anemia reduction indicator was able to meet its target of 37%, indicating that some progress was made in this area. However, the indicator for newborn care within 3 days did not meet its target, achieving a similar result as the previous operation. This highlights the need for more effective community outreach efforts to ensure timely newborn care.

Similarly, the indicator for diarrhea treatment with ORS and zinc also fell short of its target, achieving only 9.6% (see Table 14). The main challenge with this indicator was compliance with zinc treatment, which again relies heavily on community outreach efforts. Overall, achieving these childcare indicators

Table 11. Management of obstetric complications

Complete Facilities*	Baseline				2nd Operation				3rd Operation: Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI
Sepsis managed to standard	18	9	50	(28.1 - 71.9)	20	17	85	(61.9 - 95.2)	0				8	8	100	(-)
Hemorrhage managed to standard	30	17	56.7	(38.5 - 73.2)	27	25	92.6	(74.3 - 98.2)	21	15	71.4	(48 - 87.1)	47	42	89.4	(76.6 - 95.6)
Pre-eclampsia managed to standard	46	8	17.4	(8.8 - 31.4)	51	19	37.3	(25 - 51.4)	13	6	46.2	(21.4 - 72.9)	50	24	48	(34.4 - 61.9)
Eclampsia managed to standard	6	2	33.3	(8.2 - 73.8)	7	5	71.4	(32.1 - 93)	3	2	66.7	(13.8 - 96.1)	8	1	12.5	(1.7 - 54.5)
Management of obstetric complications	100	36	36	(27.1 - 46)	105	66	62.9	(53.1 - 71.7)	36	22	61.1	(43.7 - 76.1)	113	75	66.4	(57 - 74.6)

Table 12. Management of Obstetric Complications according to the norm in Pre-eclampsia

Complete Facilities	Baseline				2nd Operation				3rd Operation: Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI
Vital signs checked	46	39	84.8	(71.1 - 92.7)	51	44	86.3	(73.6 - 93.4)	13	8	61.5	(33.1 - 83.8)	50	33	66	(51.7 - 77.9)
Pulse / heart rate	46	46	100	(-)	51	51	100	(-)	13	13	100	(-)	50	49	98	(86.8 - 99.7)
Blood pressure	46	45	97.8	(85.7 - 99.7)	51	51	100	(-)	13	13	100	(-)	50	50	100	(-)
Respiratory rate	46	45	97.8	(85.7 - 99.7)	51	51	100	(-)	13	13	100	(-)	50	49	98	(86.8 - 99.7)
Patellar reflex	46	41	89.1	(76.1 - 95.5)	51	44	86.3	(73.6 - 93.4)	13	8	61.5	(33.1 - 83.8)	50	33	66	(51.7 - 77.9)
Lab tests	46	9	19.6	(10.4 - 33.6)	51	22	43.1	(30.2 - 57.1)	13	7	53.8	(27.1 - 78.6)	50	33	66	(51.7 - 77.9)
Urine protein	46	38	82.6	(68.6 - 91.3)	51	46	90.2	(78.1 - 95.9)	13	9	69.2	(39.5 - 88.6)	50	42	84	(70.9 - 91.9)
Platelet count	46	42	91.3	(78.7 - 96.8)	51	48	94.1	(83 - 98.1)	13	12	92.3	(58.5 - 99)	50	50	100	(-)
Creatine	46	39	84.8	(71.1 - 92.7)	51	45	88.2	(75.9 - 94.7)	13	12	92.3	(58.5 - 99)	50	48	96	(85.1 - 99)
Uric acid	46	34	73.9	(59.2 - 84.7)	51	42	82.4	(69.2 - 90.7)	13	10	76.9	(46.2 - 92.8)	50	47	94	(82.7 - 98.4)
Aspartate aminotransferase / glutamic oxaloacetic transaminase	46	34	73.9	(59.2 - 84.7)	51	44	86.3	(73.6 - 93.4)	13	12	92.3	(58.5 - 99)	50	45	90	(77.9 - 95.9)
Alanine transaminase / glutamic-pyruvic transaminase	46	34	73.9	(59.2 - 84.7)	51	44	86.3	(73.6 - 93.4)	13	12	92.3	(58.5 - 99)	50	46	92	(80.3 - 97)
Lactate dehydrogenase	46	11	23.9	(13.6 - 38.5)	51	24	47.1	(33.7 - 60.9)	13	8	61.5	(33.1 - 83.8)	50	40	80	(66.4 - 89)
All appropriate medications administered	46	42	91.3	(78.7 - 96.8)	51	49	96.1	(85.3 - 99)	13	13	100	(-)	50	45	90	(77.9 - 95.9)
Magnesium sulfate	46	42	91.3	(78.7 - 96.8)	51	51	100	(-)	13	13	100	(-)	50	45	90	(77.9 - 95.9)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110)	21	21	100	(-)	22	20	90.9	(69.5 - 97.8)	0				6	6	100	(-)
Pre-eclampsia managed to standard	46	8	17.4	(8.8 - 31.4)	51	19	37.3	(25 - 51.4)	13	6	46.2	(21.4 - 72.9)	50	24	48	(34.4 - 61.9)

Table 13. Management of Obstetric Complications according to the norm in Eclampsia

Complete Facilities	Baseline				2nd Operation				3rd Operation: Pre-evaluation				3rd Operation: Payment			
	N	n	%	CI	N	n	%	CI	N	n	%	CI	N	n	%	CI
Vital signs checked	6	6	100	(-)	7	5	71.4	(32.1 - 93)	3	2	66.7	(13.8 - 96.1)	8	2	25	(6.2 - 62.9)
Pulse / heart rate	6	6	100	(-)	7	7	100	(-)	3	3	100	(-)	8	8	100	(-)
Blood pressure	6	6	100	(-)	7	7	100	(-)	3	3	100	(-)	8	8	100	(-)
Respiratory rate	6	6	100	(-)	7	6	85.7	(41.1 - 98.1)	3	3	100	(-)	8	8	100	(-)
Patellar reflex	6	6	100	(-)	7	6	85.7	(41.1 - 98.1)	3	2	66.7	(13.8 - 96.1)	8	2	25	(6.2 - 62.9)
Lab tests	6	2	33.3	(8.2 - 73.8)	7	6	85.7	(41.1 - 98.1)	3	2	66.7	(13.8 - 96.1)	8	3	37.5	(12.3 - 72)
Urine protein	6	6	100	(-)	7	7	100	(-)	3	3	100	(-)	8	5	62.5	(28 - 87.7)
Platelet count	6	5	83.3	(36 - 97.8)	7	7	100	(-)	3	3	100	(-)	8	8	100	(-)
Creatine	6	2	33.3	(8.2 - 73.8)	7	7	100	(-)	3	3	100	(-)	8	8	100	(-)
Uric acid	6	3	50	(16.4 - 83.6)	7	7	100	(-)	3	3	100	(-)	8	8	100	(-)
Aspartate aminotransferase / glutamic-oxaloacetic transaminase	6	3	50	(16.4 - 83.6)	7	6	85.7	(41.1 - 98.1)	3	3	100	(-)	8	6	75	(37.1 - 93.8)
Alanine transaminase / glutamic-pyruvic transaminase	6	3	50	(16.4 - 83.6)	7	6	85.7	(41.1 - 98.1)	3	3	100	(-)	8	6	75	(37.1 - 93.8)
Lactate dehydrogenase	6	2	33.3	(8.2 - 73.8)	7	6	85.7	(41.1 - 98.1)	3	2	66.7	(13.8 - 96.1)	8	4	50	(19.7 - 80.3)
All appropriate medications administered	6	5	83.3	(36 - 97.8)	7	7	100	(-)	3	3	100	(-)	8	6	75	(37.1 - 93.8)
Magnesium sulfate	6	6	100	(-)	7	7	100	(-)	3	3	100	(-)	8	7	87.5	(45.5 - 98.3)
Hydralazine / labetalol / nifedipine (if diastolic blood pressure > 110)	4	3	75	(23.1 - 96.8)	2	2	100	(-)	0				2	1	50	(5.7 - 94.3)
Eclampsia managed to standard	6	2	33.3	(8.2 - 73.8)	7	5	71.4	(32.1 - 93)	3	2	66.7	(13.8 - 96.1)	8	1	12.5	(1.7 - 54.5)

Table 14. Diarrhea cases treated with ORS and zinc

	1st Operation				2nd Operation				3rd Operation			
	N	n	%	CI	N	n	%	CI	N	n	%	CI
ORS administered	77	41	53.2	(38.1 - 66.8)	68	59	87.3	(69.1 - 81.2)	75	52	69.7	(54.3 - 76.8)
Zinc administered	77	4	5.6	(2.1 - 14.1)	49	4	8.3	(3 - 21)	75	10	13.1	(5.3 - 25.1)
ORS and zinc administered to standard (SDG3)	77	0	0	(-)	49	4	8.3	(3 - 21)	75	8	9.6	(4.1 - 71)

requires a long-term behavior change strategy that involves educating the population, making supplies readily accessible, and reminding caretakers to provide the correct treatment. The COVID-19 pandemic has underscored the importance of effective community outreach efforts in achieving these goals.

In addition to the Performance Framework results, several other noteworthy outcomes have been achieved. A few examples are highlighted below:

- A partial implementation (not throughout the service network of the manager) of a continuous quality improvement strategy. The main actions developed were the review, standardization, and approval of checklists for the measurement of quality, in relation to obstetric and neonatal complications, cervical cancer screening, prenatal care with quality, postpartum and newborn care before 72 hours postpartum. This process was carried out jointly with the central level entities of the

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- Ministry of Health (Quality Management Unit, Decentralized Management Unit, Department of Second-Level Services, ISM Honduras Executive Unit, Department of First-Level Services).

- Competencies in Continuous Quality Improvement (CQI) were developed for 6 technical teams leading the managers (PREDISAN, MANCOSOL, Hombro a Hombro, Plan Honduras, MAMBOCAURE San Marcos de Colón, and MAMBOCAURE Concepción de María) and 150 members of the 12 operational level CQI teams in intervention areas and 7 management teams outside the ISM area (ASAMUC, ERANDIQUE, COLOSUCA, MAMLESIP, MAMUNI, COMIPRONIL, and Nueva Vida).

- Competencies were developed for seven members of the Quality Management Unit of the Ministry of Health (including the head) on the reorganization of the unit, including the review and/or adjustment of the organization and functions manual, the review and elaboration of processes and procedures corresponding to the new functional organization for quality management agreed with the Ministry of Health of Honduras. In addition, competency development in quality auditing continued, with the respective procedure being developed, with the specific methodology for auditing

- quality pending.

- The monthly verification process of quality in the 6 hospitals continued.

- The territorial coverage of the screening instrument for filter capture: pregnant women before 12 weeks of gestation, women of childbearing age with unmet needs for family planning methods, and women aged 25 to 64 without cervical cytology in was expanded in hard-to-reach communities.

The SMI Final Evaluation will seek to provide a complete picture of Honduras's performance throughout the years, not limited to SMI performance indicators. Indicators in the Performance Framework provide a partial perspective of the country's performance, as they only focus on incentivized indicators. Nevertheless, SMI followed a health system-strengthening approach that was not limited to those indicators. The impact evaluation in El Salvador[33], analyzing the effect of SMI during the First Operation, showed that SMI's impact went beyond incentivized results. The SMI Final Evaluation will also investigate the pandemic's total effect on the country's performance. This will place the Performance Framework results in perspective: meeting each target meant improving performance to achieve the committed percentual change and reversing the negative strain that the pandemic had left on the health system.

After ten years of working with the Salud Mesoamerica Initiative, Honduras has made substantial progress in improving maternal and child health. The final evaluation will estimate the improvements achieved in maternal and neonatal mortality in the past ten years.

The following table summarizing Honduras's overall funding and PT achieved in the three operations:

Operation	Performance Tranche	Amount Awarded	% Awarded
First	$ 2 mill	$ 2 mill	100%
Second	$ 1,75 mill	$ 1,75 mill	100%
Third	$ 0.850 mill	$ 0.425 mill	50%
Total	**$4,6 mill**	**$4,175 mill**	**91%**

Overall Funding for Salud Mesoamerica Initiative in Honduras

Operation	Donation Funds (IT)	% of (IT +CT)	Country Funds (CT)	% of (IT +CT)	Performance Tranche Available (PT)	% of CT	Performance Tranche Funds Awarded	% of PT
First Operation	$4 M	50%	$4M	50%	$2 M	50%	$2 M	100%
Second Operation	$3.5 M	50%	$3.5 M	50%	$1.75 M	50%	$1.75 M	100%
Third Operation	$1.50 M	33%	$3 M	67%	$0.85 M	28%	$0.425 M	50%
Honduras Country Total	**$9 M**	**46%**	**$10,5 M**	**54%**	**$4.6 M**	**44%**	**$4,175 M**	**91%**
Total Operation Funds (IT + CT)	**$19.5 M**							

[33] Pedro Bernal, Sebastián Martínez, and Pablo Celhay, "Is Results-Based Aid More Effective than Conventional Aid?: Evidence from the Health Sector in El Salvador" (Inter-American Development Bank, January 2018), https://doi.org/10.18235/0000980.

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Honduras Performance Frameworks

Honduras 1st Operation Performance Framework

Indicator[33]	Weight	Baseline	Target	Outcome 18 m	One-tailed Z tests	Assess-ment	Score
Updating national standards for management of illnesses prevalent in childhood (diarrhea, ARIs and pneumonia)	1/10	No	YES	YES	-	Attained	0.1
National standard on micronutrients approved	1/10	No	YES	YES	-	Attained	0.1
Primary and secondary health units supplied with family planning methods in accordance with the SESAL standard	1/10	86.4 (75-94)	90	93 (83-98.1)	0.773	Attained	0.1
Maternal-infant clinics with steady availability of drugs and supplies and equipment necessary for obstetric and neonatal emergency care	1/10	62.5 (24.5-91.5)	80	85.7 (42.1-99.6)	0.647	Attained	0.1
Number of secondary health units hospitals with steady availability of supplies and equipment necessary for obstetric and neonatal complication care	1/10	0 (0.0-45.9)	2/6	3=50% (11.8-88.2)	0.807	Attained	0.1
Primary health units (CESARs and CESAMOs) with steady availability of drugs and supplies and equipment necessary for diarrhea and pneumonia treatment	1/10	0 (0.0-4.6)	80	51.1 (35.8-66.3)	<0.00001	Not attained	0
CESARs and CESAMOs with steady supply of powdered micronutrients for supplementation at home	1/10	*[34]	80	93.5 (82.1-98.6)	0.989	Attained	0.1
Providers (*gestores*) with 100% of monitors and promoters selected and trained in individualized and improved face-to-face counseling	1/10	*[35]	4	6	-	Attained	0.1
Number of EAPS formed in the last year.[36]	1/10	*[37]	90	103	-	Attained	0.1
Maternal deaths reported and investigated in accordance with the norm in 2013	1/10	*[38]	80	80	-	Attained	0.1
						Score 0.9	

[33] The criteria for measuring each indicator have been defined in the country's indicators manual
[34] The intervention is new, baseline is 0 (was not measured)
[35] The intervention is new, baseline is 0 (was not measured)
[36] The proposed target was 39; however, 40 EAPS were formed
[37] The intervention is new, baseline is 0 (was not measured)
[38] An agreement was reached with SESAL that baseline was unnecessary

Honduras 2nd Operation Performance Framework

Indicator	Weight	Baseline	Target	Measurement	Assessment	Score
Women (15-49 years old) who received at least 4 prenatal checkups from qualified personnel during their most recent pregnancy in the past two years, as specified in best practices.	1/11	23.7%	33.7%	94.1 (91-97)	Met	0.1
Women (15-49 years old) whose most recent birth in the past two years was assisted by qualified personnel at a health care facility.	1/11	68.6%	76.6%	84.7% (78-89)	Met	0.1
Women who received postpartum care from qualified personnel within 7 days of their most recent delivery in the past two years.	1/11	47%	57%	60.4% (53-67)	Met	0.1
Postpartum service users (vaginal or cesarean deliveries) who were checked and whose perinatal clinical history was recorded at least every 15 minutes during the first hour of labor and then every 30 minutes, until a total of two hours were completed	1/11	67.5%	80%	91.2% (85-95)	Met	0.1
Newborns with complications (premature birth, low birth weight, asphyxia and sepsis) managed according to hospital standards, in the past two years. 33F[39]	1/11	6.9%	36.9%	42.9% (32-87)	Met	0.1
Women with obstetric complications (sepsis, hemorrhage and eclampsia) managed according to the standards during the most recent birth in the past two years. 34F[40]	1/11	11	51%	62.7% (55-70)	Met	0.1
Children 0-59 months old diagnosed with pneumonia who received a checkup within two days at CESARs or CESAMOs in the past two years.35F[41]	1/11	71.8%	79.8%	95.3% (91-98)	Met	0.1
Cases of diarrhea in children 0-59 months old who were treated with ORS and zinc, according to standards, in the past two years.	1/11	n.a	50%	95.3% (92-98)	Met	0.1
Mothers who report having given 50 packets of powdered micronutrients to their children 6-23 months of age during the past six months	1/11	0.1%	15.1%	29.5% (24-36)	Met	0.1
CMI service users, in which the warning curve was exceeded or evidence of deceleration of fetal pulse was present, and a decision was made based on information from a partograph during the past year	1/11	n.a	80%	97.9% (93 -100)	Met	0.1
Women who received their first antenatal care visit before 12 weeks of gestation in their most recent pregnancy in the last two years.36F[42]	1/11	51.1%	63.1%	89.7% (86-93)	Met	0.1
					Score	1

[39] The baseline value recalculated is 10
[40] The baseline value recalculated is 39
[41] The baseline value recalculated is 87
[42] The baseline value recalculated is 59.2

Honduras

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Honduras's Third Operation Performance Framework

Indicator	Weight	Baseline	2nd Op Result	Target	3rd Op Result	Assessment	Score
Women of reproductive age who use (or its partner) a modern family planning method.	1/10	66.8%	75.4%	80.4%	79.8% (75.0 – 83.9	Met	0.1
Women aged 25–49 who received quality screening for early detection of cervical / uterine cancer in the last year.	1/10	N.A	N. A	70%	57.4 % (51.1 – 63.4)	Not Met	0.1
Women of childbearing age (aged 15-49) who received antenatal care with quality and their first prenatal checkup by qualified staff before week 12 of their most recent pregnancy during the last two years	1/10	12.8%	82%	90%	63.8% (56.4 - 70.6)	Not Met	0.1
Women (15-49 years old) whose most recent birth in the past two years was assisted by qualified personnel at a health care facility.	1/10	68.6%	85.2%	91.7%	86.8 % (74.7-87.7))	Not Met	0.1
Women with obstetric complications (sepsis, hemorrhaging, severe preeclampsia, and eclampsia) treated in accordance with the standard in the last 2 years	1/10	36%	62.9%	82.9%	66.4% (57 – 74.6)	Not Met	0.1
Newborns who received care within 3 days of their most recent delivery in the past two years.	1/10	46.3%	33.3%	41.3 %	34.3% (29.0-40.0)	Not Met	0.1
Newborns with complications (prematurity, underweight, asphyxia and sepsis) treated in accordance with the standard in the last 2 years	1/10	10%	41.7%	61.9%	66.4% (57-74.6)	Met	0.1
Newborns who received quality neonatal care at a health unit in the last two years.	1/10	21.7%	74.7%	82.5%	78.8% (71.3 - 84.7)	Met	0.1
Mothers who gave their children aged 0–59 months ORS and zinc in last episode of diarrhea in the last two weeks	1/10	0%	8.3%	25%	9.6% (4.1-21)	Not Met	0.1
Children aged 6–23 months with hemoglobin value <110 g/L.	1/10	35%	62	52%	37% (29-45.9)	Met	0.1
						Score=0.4	

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Nicaragua

Nicaragua

SMI's overall objective In Nicaragua for the operation is to reduce maternal, neonatal, and child mortality in the poorest areas of Nicaragua. The specific objective is to improve the health of women of childbearing age, mothers, newborns, and children under 5 by improving access, use, and quality of health services in 19 of the country's poorest municipalities. Approximately 553,203 people live in SMI target areas in Nicaragua, of which 364,003 are women of reproductive age, and 189,200 are children under 5 years old. This population is served by two regional hospitals, one district hospital, 15 primary health hospitals and more than 700 health sectors

First Operation

The First Operation received USD $3.47 million of donor funds and $2.3 million in national resources. Nicaragua obtained a score of 0.91 and received $1.16 million incentive corresponding to the performance tranche. In the First Operation, Nicaragua encouraged the demand for services through transportation vouchers for prenatal care, institutional delivery, and lodging in maternal waiting homes. Social Agreements for Community Health and Well-being (ASSB-C) were also designed. These Agreements included maternal and child indicators targets, replicating the SMI RBA model at the community level. From the supply side, the program sought to reduce the gap in supplies and equipment needed to provide adequate maternal and childcare and to improve the integration of community care with the institutional services network.

Second Operation

The Second Operation concluded on May 25th, 2017, executing $2.72 million of donor funds and $1.86 million of domestic resources. A performance tranche of $980,000 may be awarded if the minimum score for the Second Operation Performance Framework is achieved. The Second Operation is built on the progress and lessons from the First Operation. To increase the quality and coverage of maternal and child services, the MOH reinforced community care and institutional capacity, increasing the coverage of the:

- Transport and lodging voucher program.
- The number of communities covered by the Contraceptive Methods Strategy (ECMAC).
- The Community Health and Nutrition Program (PROCOSAN).

At the hospital level, the actions for quality improvement were improved.

Third Operation

The Third Operation entailed an investment of $884,000 in donor funds and $1.98 million in domestic resources. Nicaragua's Ministry of Health could achieve a total of $595,000 as part of the performance tranche. The Third Operation builds upon strategies initiated by the first two operations, seeking to consolidate and expand these strategies, ensuring long-term sustainability.

The operation aims to consolidate and institutionalize interventions from the previous operations, building on achievements and lessons learned. The primary interventions were:

- The implementation of quality improvement processes, which includes: optimization and implementation of community, institutional outpatient, and inpatient care processes. Community and outpatient care entails the early detection of pregnancy before the 12th week and intermediate postpartum care. Additional services include cervical cancer screening, community delivery of micronutrients to prevent anemia, and community delivery of oral rehydration salts and zinc to treat diarrhea in children under 5. The hospital process revises the management of neonatal obstetric complications and standard deliveries, acquiring key inputs to provide care, improving diagnosis coding and classification of hospital discharges, and exchanging best practices through collaborative workshops.

- The procurement and delivery of rapid diagnostic tests (RDT) to the brigadistas (community health workers) and midwives for pregnancy detection, training for community personnel in the proper use of RDT, and monitoring by institutional personnel.

- An active search mechanism for postpartum women in the community and coordination with the maternity care homes to provide postpartum care to their lodgers before their discharge from the facilities

Due to the onset of the COVID-19 pandemic in March 2020, not all interventions were implemented with the expected intensity. Preventive services have been the most affected worldwide. People were more likely to postpone or forgo care for preventative services, such as screening for cervical cancer and routine vaccinations. Second, in 2020, health facilities prioritized essential services and changed their organization, affecting service delivery for other services. Third, community outreach was highly involved. For example, in 2020

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vaccination coverage decreased by four percentage points globally[34], and breast cancer screening fell by five percentage points in OECD countries.[35] Even though Nicaragua did not implement a lockdown, 10% of the services reported that care was suspended during 2020, and 5% of health services reported a reduction in home visits with a strong dependency on fieldwork activities. In 2021, as in other countries, efforts were made to deploy COVID-19 vaccines in the country.

Scoring Rules for Operations

First and Second Operations Rules

For each of the First and Second Operations, the Performance Framework had 8-12 indicators in each country. A target was negotiated for each indicator. If the target was achieved, the indicator received a value of 1. If the target was not achieved, the indicator received a value of 0. All indicators had equal weights. The score was computed as the sum of the values for each indicator over the total number of indicators. According to SMI Operating Regulations, a country had to score 0.8 or above to receive the Performance Tranche. Depending on the number of indicators in the Performance Framework, the country could miss 1 or 2 targets. In the First Operation, Belize achieved 4 of 12 targets, and in the Second Operation, 10 of 10 targets.

Third Operation Rules and Changes

The Performance Framework for the Third Operation in each country had ten indicators. A target was negotiated for each indicator. If the target was achieved, the indicator received a value of 1. If the target was not achieved, the indicator received a value of 0. All indicators had equal weights. The score was computed as the sum of the values for each indicator over the total number of indicators. Considering the impact of COVID-19 and hurricanes affecting the region, the SMI Donors Committee decided to modify the scoring rule from an all-or-nothing payment rule based on achieving a score of 0.8 or above to a proportional payment by indicator with a 0.8 threshold. The following table summarizes the new proportional payment scheme:

It is important to note that the proportional payment scheme continues to pay based on accomplishments (targets met). No indicators or targets were modified after the pandemic, and no additional funding was provided. Only a time extension was granted.

Target Setting and Target Verification Process

Performance Framework targets in all operations in Nicaragua were negotiated and approved at the start of the Initiative in March 2012. However, the Performance Framework was reviewed during the second Operation to assess the design process to align indicators and targets with country priorities. Indicators were selected considering the Initiative's Monitoring and Evaluation Framework, including process indicators for the First Operation and healthcare coverage, quality, and effective coverage indicators for the Second Operation.

Number of indicator targets achieved	Resulting Score achieved	Proportionate share of the performance tranche
0	0	0%
1	0.1	12.5%
2	0.2	25%
3	0.3	37.5%
4	0.4	50%
5	0.5	62.5%
6	0.6	75%
7	0.7	87.5%
8	0.8	100%
9	0.9	100%
10	1.0	100%

[34] BMGF, "2021 Goalkeepers Report: Innovation and Inequity" (Seattle, WA: Bill & Melinda Gates Foundation and Institute for Health Metrics and Evaluation (IHME), 2021), https://gates.ly/GK2021

[35] OECD, Health at a Glance 2021: OECD Indicators, Health at a Glance (OECD, 2021), https://doi.org/10.1787/ae3016b9-en.

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The performance framework for the Third Operation was designed to build upon the results of the previous operations, institutionalize gains, and address new priority areas that had not been previously considered. Two indicators included new priority areas and interventions, such as cervical cancer screening and the use of information for decision-making. Three other indicators were new for the Third Performance Framework. Still, they were set since the First Operation and included:

- A reduction in anemia.
- Use of ORS and zinc during the last diarrhea episode.
- Complete vaccination for age.

The target-setting process took place using a hybrid model that considered quantitative and qualitative data, including:

- An economic model based on cost-benefit analysis.
- Review of the literature and international experiences.
- Historical trends of national indicators and impact of specific interventions.
- Statistical power calculations.
- Operational requirements and expert advice.

The indicators' criteria were negotiated and described in the country's Indicators Manual.

The target verification process was performed per SMI Operating Regulations, which state that indicators must be verified externally and independently. Performance Framework Indicators for the Second Operation in Nicaragua were quality and coverage indicators collected from independent household and health facility srveys.
IHME collected baseline health facility surveys in March-August 2013 and First Operation follow-up surveys in June-August 2014. Follow-up surveys to verify the Second Operation's targets were collected from July-December 2017. For the third Operation, follow-up surveys were collected in August-October 2022. IHME computed and provided the indicator values for the ten performance indicators.

Considerations for results for the performance tranche disbursement

Nicaragua met 7 of the ten targets. The Second and Third SMI operations reinforced the integration of the community strategy and neonatal and obstetric care for women. Nicaragua strengthened the active search for pregnant women through management censuses and community personnel. Additionally, midwives were trained on and supplied with rapid pregnancy tests to identify pregnant women promptly. In addition, it implemented the transport for ANC, delivery, and accommodation voucher mechanism in the First and Second Operations. This increased coverage of ANC and admission into maternity care homes. As a result of these and other actions, prenatal checkups in the first twelve weeks of gestation rose by 11.75 PP from the Second Operation's results. (It increases from 51.7% in the Second Operation to 63.45% in the Third Operation).

The SMI also supported strengthening 36 maternity care homes out of 53 in the Second Operation.[36] In the baseline, 12% of the women stayed in the maternity care home. In contrast, in the follow-up, 21% responded that they had remained in a maternity care home.[37] At the end of the Second operation 25,135[38] transport vouchers were provided, and 86% were redeemed, resulting probably in a significant improvement in postnatal care passing from 60% in the baseline to 82.6% in the second Operation. In the Third Operation, vouchers were not provided to women. Still, actions to maintain institutional delivery coverage, maternity care homes, and postnatal coverage were sustained: a slight increase of 4PP was observed in the Third Operation resulting in 86.8% coverage. The target was met according to the confidence interval criteria.

Cervical cancer screening was a new intervention in SMI. It was included in the Third Operation, given that cervical cancer is one of the region's leading causes of death in women of reproductive age. Results showed that 76% of the women who had received medical care had a cervical cancer screening according to the norm. If the results are positive, they receive them promptly to receive further treatment, therefore complying with the target.

Four indicators were measured at the hospital level, and results were mixed:

[36] Data taken from technical cooperation for the third operation, p. 6.

[37] Calculations made here using data from IHME.

[38] Data taken from technical cooperation for the third operation, p. 6

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two indicators met targets: neonatal management of complications (according to confidence interval criteria), which improves around 13PP from the Second Operation results (46.3% vs. 59.5%) and hospitals using information for decision-making, which achieved 93%.

However, obstetric complications and quality of care indicators did not meet the target. The average obstetric complications results were very similar in the Second and Third Operations (44.9% and 44.5%, respectively). When breaking down the indicator by cause, as shown in the Table 15, 65.3% of hemorrhage, 55.6% of sepsis, 22.8% of eclampsia, and 28.9% of pre-eclampsia were managed following the norm. Pre-eclampsia and eclampsia are mainly affected by lab test especially Lactate dehydrogenase.

The target for quality newborn care was not met. It increased from 7% to 43.7% in the Second Operation but dropped to 35.8% in the pre-covid period. It slightly increases to 39.1% in the third measurement. However, three points out of ten drive down the indicator: evaluations of malformations, BCG, and the registry of respiratory rate in the medical record, as shown in Table 15.

As part of the community health promotion strategies for children under five, the Community Health and Nutrition Program (PROCOSAN) was implemented in 380 of 1,495 communities targeted during the Second Operation. Three children's indicators were supported on this platform: Full vaccination for age, management of diarrhea with ORS and zinc, and reduction of anemia. Complete vaccination for age met the target (according to confidence interval criteria) and showed an improvement from the Second Operation results (46.7% to 52.4%). This result is good, given that according to the Goalkeeper Report, vaccination drops worldwide by 4PP[39]. The indicator for anemia reduction also met the target (according to confidence interval criteria) and slightly decreased from the baseline to the Second Operation of 51.3% and again in the Third Operation to 50.1%. Even though Nicaragua did not implement lockdowns during the pandemic, external monitoring in 2020 showed that 5% of health services reported a reduction in home visits and changes in personnel due to the pandemic. The indicators for treating diarrhea with ORS and zinc do not meet the target but show a slight improvement concerning the Second Operation results of around 4 PP.

Table 15. Management of Obstetric Complications according to the norm

	3rd Operation: Payment			
	N	n	%	CI
Sepsis managed to standard	9	5	55.6	(24.9 - 82.5)
Hemorrhage managed to standard	101	66	65.3	(55.5 - 74)
Pre-eclampsia managed to standard	97	28	28.9	(20.7 - 38.7)
Eclampsia managed to standard	21	5	23.8	(10.2 - 46.2)
Management of obstetric complications	218	97	44.5	(38 - 51.2)

Table 16. Quality routine newborn care

	3rd Operation			
Criteria	N	n	%	CI
Vitamin K	174	154	88.5	(82.8 - 92.5)
Application of prophylaxis with oxytetracycline ophthalmic/chloramphenicol	174	154	88.5	(82.8 - 92.5)
Curing the umbilical cord with water and chlorhexidine	174	154	88.5	(82.8 - 92.5)
Evaluation for the presence of malformations	174	88	50.6	(43.1 - 58)
BCG vaccine	174	114	65.5	(58.1 - 72.3)
APGAR score (1 or 5 minutes)	174	171	98.3	(94.7 - 99.4)
Weight	174	170	97.7	(94 - 99.1)
Height	174	169	97.1	(93.2 - 98.8)
Head circumference	174	169	97.1	(93.2 - 98.8)
Respiratory rate	174	135	77.6	(70.7 - 83.2)
Routine newborn care with quality (4103)	174	68	39.1	(32 - 46.6)

[39] OECD, Health at a Glance 2021: OECD Indicators, Health at a Glance (OECD, 2021), https://doi.org/10.1787/ae3016b9-en.

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It is important to mention that The SMI in Nicaragua has supported strengthening community-level health interventions within the Family and Community Health Model[40] (FCHM). This reinforces the provision of services by decentralizing administration to the Local Comprehensive Health Care Systems (SILAIS) and linking primary care with specialized medical services through the strategy for integrated community health care networks and territorial organization through sectorial grouping[41]. This decentralized process intensified at the end of 2015, doubling the number of fixed health units in the SMI areas where care was provided from 200 to more than 500 in 2017. This has involved a complete process of file mobilization, decentralization of equipment and supplies in the territories, and increased health and community personnel to serve more sectors. This could pose an additional challenge for achieving improvements in the provision of healthcare services in the short term. Still, once this process is consolidated, a more sustainable improvement could be expected in the long term.

The SMI Final Evaluation will seek to provide a complete picture of Nicaragua's performance throughout the years, not limited to SMI performance indicators. Indicators in the Performance Framework provide a partial perspective of the country's performance, as they only focus on incentivized indicators. Nevertheless, SMI followed a health system-strengthening approach that was not limited to those indicators. The impact evaluation in El Salvador[42], analyzing the effect of SMI during the First Operation, showed that SMI's impact went beyond incentivized results. The SMI Final Evaluation will also investigate the pandemic's total effect on the country's performance. This will place the Performance Framework results in perspective: meeting each target meant improving performance to achieve the committed percentual change and reversing the negative strain that the pandemic had left on the health system.

After ten years of working with the Salud Mesoamerica Initiative, Nicaragua has made substantial progress in improving maternal and child health. The final evaluation will estimate the improvements achieved in maternal and neonatal mortality in the past ten years. The MOHW publicly recognizes the success of SMI in the country and has already taken the necessary steps to scale up and sustain SMI interventions in other SILAIS. For example, there is a collaboration between the four (4) SILAIS and 12 of their municipalities, promoting the sharing of experiences and collective learning about the optimized ambulatory processes and the expansion of SMI quality improvement at the hospital level to the rest of the country.

The following table summarizing Nicaragua's overall funding and PT achieved in the three operations:

Table 17. Diarrhea cases treated with ORS and zinc

	3rd Operation			
	N	n	%	CI
ORS administered	183	94	53.3	(45.5 - 61)
Zinc administered	182	23	13.4	(8.9 - 19.8)
ORS and zinc administered to standard (5060)	183	18	10.8	(7.3-15.6)

Operation	Performance Tranche	Amount Awarded	% Awarded
First	$ 1,16 mill	$ 1,16 mill	100%
Second	$ 0.98 mill	$ 0.98 mill	100%
Third	$ 0.6 mill	$ 0.52 mill	87.5%
Total	$2,74 mill	$2,66 mill	97%

[40] MOSAFC in spanish

[41] In each sector there are 600 to 1,000 families, approximately 3,000 inhabitants in the rural area and 5,000 inhabitants in the urban area, who are responsible for a Family Health Team

[42] Pedro Bernal, Sebastián Martínez, and Pablo Celhay, "Is Results-Based Aid More Effective than Conventional Aid?: Evidence from the Health Sector in El Salvador" (Inter-American Development Bank, January 2018), https://doi.org/10.18235/0000980.

Nicaragua

Nicaragua Performance Frameworks

First Operation Performance Framework

Indicator[52]	Baseline	Goal	Result 18 m in %	Test	Assessment	Weight	Score
Health units (posts, centers, primary hospitals) with supplies of modern family planning methods in accordance with current regulations (injectables, condoms, oral contraceptives, IUDs, permanent methods, as appropriate)	59.5 (42.1-75.2)	85%	87.5 (75.9-94.8	0.699 8	Completed	0.091	0.091
Health centers and hospitals authorized by MINSA to offer COE, which have the necessary supplies for such care according to the COE regulations in force in March 2012	60 (14.7-94.7)	85%	90.9 (58.7-99.7)	0.708 4	Completed	0.091	0.091
Health centres, health centers and primary hospitals that meet the basic equipment established in the health regulations in force in December 2011 for prenatal and postpartum care	10.8 (3.0-25.4)	85%	76.8 (63.6-87.0)	0.042 6	Completed	0.091	0.091
Health units (posts, centers, primary hospitals) that have the basic equipment and supplies established in the standard for care of children under 5 years of age in force in December 2011	0 (0-9.5)	85%	71.7 (57.7-83.2)	0.003 3	Not fulfilled	0.091	0
Health units (posts, centres, primary hospitals) that comply with the cold chain regulations in force in December 2011 for the management of vaccines	28.6 (13.2-48. 7)	85%	88.9 (70.8-97.6)	0.714 3	Completed	0.091	0.091
Establishing standards and guidelines for the national evidence-based community nutrition platform	n. a	Yeah	Yeah	-	Completed	0.091	0.091
Municipal health units (Family Health Centers) that sign Social Agreements for the Health and Well-being of the Community with community health committees and prepare follow-up reports in accordance with the supervision and monitoring guidelines contained in the RO	*[53]	85%	94.7	-	Completed	0.091	0.091
Nursing assistants and brigade members trained in ECMAC and with a training certificate issued by the MINSA in accordance with the schedule and at the time of the measurement	*2	95% of 950	146.8	-	Completed	0.091	0.091
Nursing assistants and community agents (midwives and health brigades) trained in the community management of sick newborns and with a certificate of training issued by the MINSA in accordance with the programming	*2	95% of 120	100	-	Completed	0.091	0.091
Pregnant women who are housed in Maternity Homes, who had access to educational materials and training activities reported to the health center according to the supervision and monitoring guidelines contained in the RO	*2	85%	92.4	-	Completed	0.091	0.091
Municipal Health Centers that implement the mechanism for the delivery of transportation and stay subsidy certificates for pregnant women, established in the RO	*2	100%	100	-	Completed	0.091	0.091
							Score=0.91

[52] The criteria for measuring the indicator have been defined in each country's indicator manual.
[53] The intervention is new so the baseline is zero and was not measured.

Second Operation Performance Framework

Indicator	Weight	Baseline	Target	Result	Assessment	Score
Women who report having received family planning information in the last 12 months from health workers or community agents.	1/10	39.1	49.1	34.2 (29.5-39.1)	Not Met	0.1
Postpartum women discharged with a birth-control method (sterilization, IUD, condoms, quarterly injections) in the last year.	1/10	47%[54]	57%	85.6% (77.9-91.4)	Met	0.1
Women of childbearing age (aged 15-49) who received their first prenatal checkup by qualified staff before week 12 of their most recent pregnancy during the last two years	1/10	37,3%	45,3%	51.7% (46.6-56.7)	Met	0.1
Women with obstetric complications (sepsis, hemorrhaging, severe preeclampsia and eclampsia) treated in accordance with the standard in the last 2 years	1/10	4.4%[55]	37.6%	44.9% (39.1-50.7)	Met	0.1
Women of childbearing age (aged 15-49) who received postpartum care from qualified staff within 10 days in their most recent pregnancy in the last two years.	1/10	60.1%	69.1%	82.6% (77.6-86.7)	Met	0.1
Newborns with complications (prematurity, underweight, asphyxia and sepsis) treated in accordance with the standard in the last 2 years.	1/10	0[56]	10%	46.3% (40.4-52.3)	Met	0.1
Newborns who received quality neonatal care at a health unit in the first 24 hours following their birth in the last two years.	1/10	7%	22%	43.7% (37.8-49.8)	Met	0.1
Infants aged 12–59 months who received 2 doses of anti-parasite treatment in the last year.	1/10	34.1%	42.1%	33.8% (30.0-37.9)	Not Met	0.1
Infants aged 12–23 months who received MMR vaccine according to their vaccinations card.	1/10	70.9%	78.9%	73.8% (67.8-79.1)	Met	0.1
Localities belonging to the Community Health Care and Welfare Social Agreement that attained their targets and received seed capital and innovation funding in accordance with the guidelines set forth in the Operating Regulations	1/10	n.a	80%	77.5% (61.5 -89.2)	Met	0.1
					Score	0.8

[54] The recalculated baseline is 43.5
[55] The recalculated baseline is 38.3
[56] The recalculated baseline is 40

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Third Operation Performance Framework

	Indicator	Weight	2nd Op Result	Target	3rd Op Result	Assessment	Score
	Women aged 25–49 who received quality screening for early detection of cervical / uterine cancer in the last year.	1/10	N. A	60%	76.9 % (70.7.-82.2)	Met	0.1
	Women of childbearing age (aged 15-49) who received their first prenatal checkup by qualified staff before week 12 of their most recent pregnancy during the last two years	1/10	51.7%	58.7%	63.4% (57.3-69)	Met	0.1
	Women with obstetric complications (sepsis, hemorrhaging, severe preeclampsia and eclampsia) treated in accordance with the standard in the last 2 years	1/10	44.9%	69.9%	44.5% (38-51.2)	Not Met	0.1
	Women of childbearing age (aged 15-49) who received postpartum care from qualified staff within 10 days in their most recent pregnancy in the last two years.	1/10	82.6%	90.6%	86.4% (81.5-90.8)	Met	0.1
	Newborns with complications (prematurity, underweight, asphyxia and sepsis) treated in accordance with the standard in the last 2 years.	1/10	46.3%	61.3 %	59.5% (52.2-66.4)	Met	0.1
	Newborns who received quality neonatal care at a health unit in the first 24 hours following their birth in the last two years.	1/10	43.7%	58.7%	39.1% (32-46.6)	Not Met	0.1
	Quality management of information for decision-making at regional, departmental, and primary hospital in the last years.	1/10	N. A	66%	93.3% (58.4-99.3)	Met	0.1
	Children aged 0–59 months with complete immunization coverage for their age according to official PNI schedule.	1/10	46.7	56.7%	52.4 % (44.8-59.9)	Met	0.1
	Mothers who gave their children aged 0–59 months ORS and zinc in last episode of diarrhea in the last two weeks	1/10	1.4%.[57]	16.4%	10.8% (7.3-15.6)	Not Met	0.1
	Children aged 6–23 months with hemoglobin value <110 g/L.	1/10	53.5..[58]	43.5%	50.1% (41.2-59.1)	Met	0.1
						Score=0.7	

[57] This was the baseline value included in contract, not the 2nd operation results
[58] This was the baseline value, included in contract, not the 2nd operation results

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Countries with Two Operations

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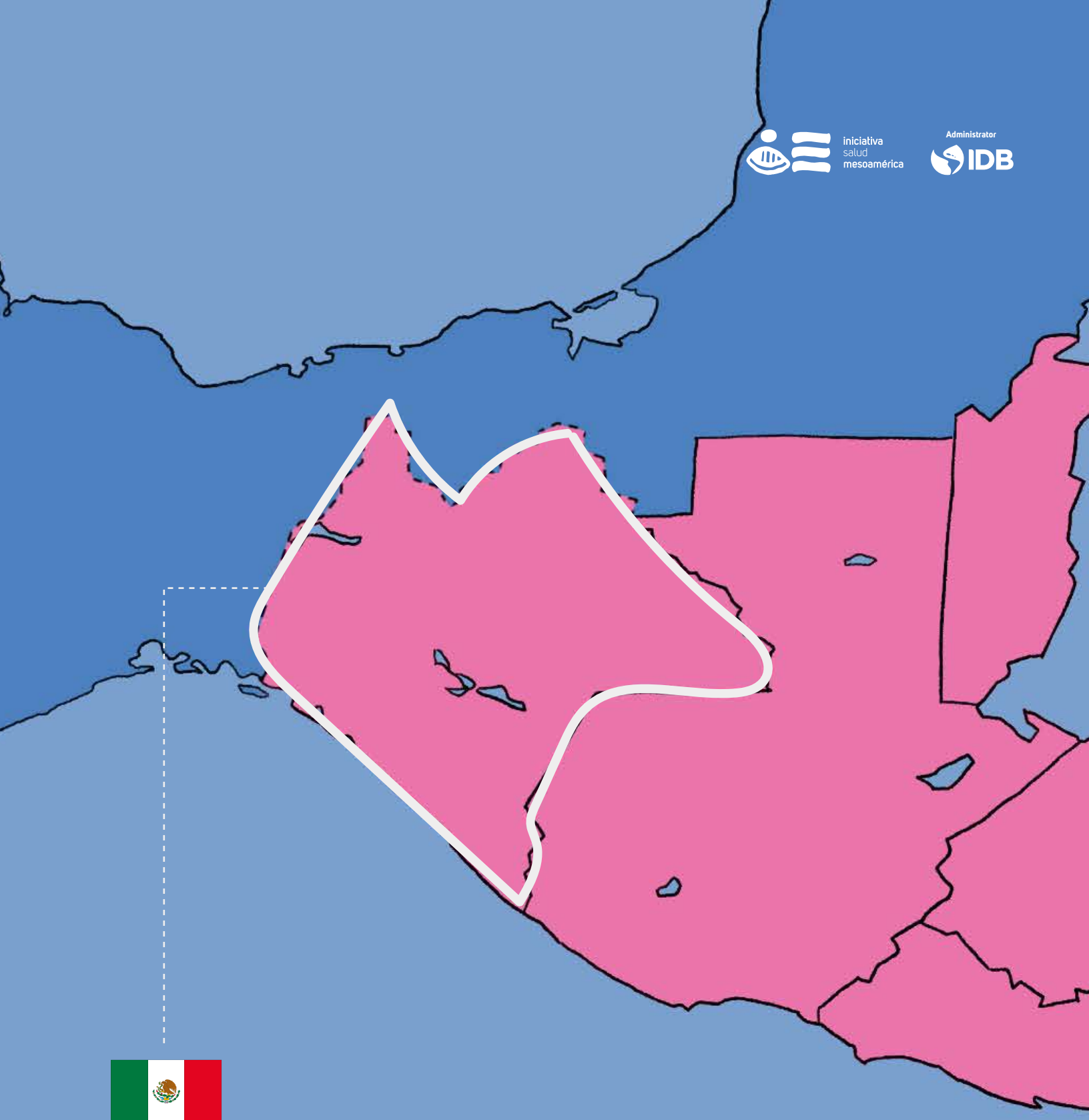

Chiapas, Mexico

COUNTRIES WITH TWO OPERATIONS /

Chiapas, Mexico

The general objective of the second operation was to reduce maternal, neonatal and child morbidity and mortality in the poorest 30 municipalities of the State of Chiapas. Specific objectives are i) to improve health and nutrition of women of child-bearing age and children under five years by increasing coverage of health service; ii) encourage the institutionalization of interventions through policy dialogue; and iii) improve the effectiveness and efficiency in service provision by strengthening the Ministry of Health operational capabilities. Approximately 1.1 million people live in SMI target areas in Chiapas, of which 281,797 are women of reproductive age and 156,291 are children under 5 years old. This population is served by approximately 301 health facilities, including 12 basic and 2 complete facilities providing essential obstetric and neonatal care (EONC).

First Operation

The first operation received $2.59 million dollars of donation funds and USD 3.88 million of national resources. Chiapas obtained a score of 0.25 and was not able to receive the performance tranche. Nevertheless, the Donors Committee requested a Performance Improvement Plan that was implemented in around 9 months. After this period, Chiapas was able to meet the targets for all remaining indicators. In the first operation, several achievements were accomplished. SMI supported the MOH estimating gaps in equipment and supplies to purchase strategic commodities to guarantee service provision; reviewing human resource needs and developing competencies in family planning, vaccination, nutrition, quality and supply chains; restructuring service provision networks to improve access and continuity of care through EONC; developing a Management Strategy for Family Planning and Contraception; adapting the Strategy for Comprehensive Attention to Nutrition to indigenous populations to decrease malnourishment and anemia.

Even when Chiapas was not able to meet targets from 6 of 8 performance indicators after the first measurement, all indicators improved when compared to the baseline. The two indicators that achieved targets included the percentage of health facilities with cold chain according to norms, that improved from 70.8% to 77.8% [+/-13,6%] and the implementation of an incentive program to encourage institutional deliveries, for which 31.4% of the eligible women received the incentives. All other indicators were related to availability of equipment, medicines and supplies for maternal and child health, which showed important progress from baseline, but were not enough to meet the performance targets. For example, the percentage of health facilities with permanent availability of supplies and equipment for antenatal and postpartum care increased from 3.6% to 45.8%, and those with permanent availability of inputs and equipment necessary for delivery and newborn care increased from 0 to 21.4%.

Performance Improvement Plan

After careful consideration, the SMI Donors Committee requested Chiapas to implement a Performance Improvement Plan, to close the gaps remaining at the end of the first operation. The Plan had to be followed by an additional measurement of the six indicators that were not met. Activities undertaken under the Performance Improvement period did not entail additional donation funding.

Chiapas was able to close gaps observed in the first operation follow-up surveys after implementing the Performance Improvement Plan. Targets were met for all 6 indicators that were measured .When compared to the values computed for first operation follow-up results excluding 3-month stock-outs, availability of inputs and equipment for prenatal and postnatal care increased from 50.8% to 73.3%; inputs and equipment for delivery and newborn care increased from 42.9% to 100%; inputs and equipment for emergency obstetric and neonatal care from 21.4 to 93.3%; inputs and equipment for child care from 40.7% to 100%; and family planning methods from 81.4% to 100%.

Second Operation

The second operation concluded on May 5th 2018, and executed $2.59 million dollars of donation funds and $3.88 million of domestic resources. A performance tranche of $1.94 million may be awarded if the minimum score for the Second Operation Performance Framework is obtained. The second operation focused on seven interventions: 1) the community platform; 2) maternal waiting homes; 3) incentives for institutional deliveries; 4) clinical management; 5) quality management; 6) internal communications, and 7) information management. Some of the results include developing competencies on 906 doctors and nurses for family planning counseling with cultural pertinence; supporting the adequate and continuous operation of 183 vaccination storage points, routine quality of care measurements in 16 hospitals and 15 meso-networks; developing competencies on emergency obstetric and neonatal care of 341 doctors and nurses; implementing the Integrated System for Warehouse Management; establishing a referral and counter-referral management system; and establishing community platforms in 1,033 communities.

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Considerations on the target verification results for the disbursement of the performance tranche

Results for the second operation in Chiapas showed promise. The State attained important progress on several indicators and demonstrated a strong focus on reducing inequalities. Considering the confidence intervals of the resulting point-estimates, Chiapas accomplished targets for 9 out of 10 indicators in its Performance Framework. Indicators in the Performance Framework were well-balanced, given that half of them measured healthcare coverage through household surveys and the other half measured quality of care through health facility surveys and medical record reviews. Given that several indicators were accomplished by meeting confidence intervals, IHME performed additional analysis to facilitate donor's decision regarding the disbursement of the performance tranche.

On four indicators the resulting point estimates surpassed the targets, on two indicators the target was met because of the confidence intervals but improved over 5 percentage points, on three indicators the targets were also met because of the confidence interval but little improvement was observed, and on one indicator the improvement was over 6 percentage points but failed to meet the target.

Effective coverage of the measles, mumps and rubella (MMR) vaccine increased, even when there was little improvement on the MMR vaccine coverage indicator measured through the vaccine card. Given that measles outbreaks are rare, presence of antibodies is a good indication of vaccination. Even when the MMR card coverage showed only a minimal increase in intervention areas, the dried blood spot analysis showed notable progress.

Figure 22. Children with vaccination cards and DBS tests

Baseline			
N = 688		Vaccinated according to card	
		Yes	No
Has DBS antibodies	Yes	37.4%	25.4%
	No	22.3%	14.8%

Second Follow-up			
N = 200		Vaccinated according to card	
		Yes	No
Has DBS antibodies	Yes	59.6%	22.7%
	No	5.4%	12.3%

Children antibodies increased greatly, indicating that the cold chain has paid off. Further, an important proportion of children who did not have a vaccine card had antibodies, and more children had antibodies and vaccine cards compared to the baseline (see Figure 22. Children with vaccination cards and DBS tests). Hence, it is possible that many children were vaccinated during all vaccination interventions, but the provider or the caretaker did not have the vaccine cards or did not fill it out. This may also be the effect of a more stringent policy to use of vaccine cards as identification cards, which may limit the provision of vaccine cards in certain circumstances. Overall, there was 19.5 percentage points increase from baseline to follow-up in children with measles antibodies.

The highest improvement was observed for immediate postpartum care with quality, which improved by 47.8 percentage points. To meet the indicator, hospitals had to perform and document frequent checkups of postpartum women to detect early sings of complications. Frequent postpartum checkups were a new intervention introduced by SMI, entailing a change of norms by the federal government the previous norm did not explicitly establish the frequency of checkups in the hours following birth. Although the change may seem simple to some, it entailed the reorganization of postpartum areas and processes to ensure postpartum women were properly monitored without hiring additional staff.

Another indicator in which considerable improvement was observed was oxytocin administration postpartum. Oxytocin administration improved consistently between measurement, with 72.3% at baseline, 83.6% at the first operation follow-up and 97.3% at the second operation follow-up. Indicators for the management of obstetric and neonatal complications also improved. For obstetric complications, the improvement was driven by better management of hemorrhage, which is also the main cause for maternal mortality in the state. For neonatal complications, improvements were mostly driven by better management of newborns with low birth weight and sepsis.

Of the remaining indicators measured in health facilities, the target for antenatal care with quality was not met. However, there were modest improvements in the number of antenatal care visits, clinical exams and laboratory tests. Table 18 summarizes the results from baseline, to

Chiapas, Mexico

first and second operation follow-up surveys. The composite indicator result was driven by the number of visits attended by each woman, given that almost 50% did not meet minimum of 5 visits, and the combination of laboratory tests, which were only received by 21.2% of all women.

In terms of indicators measured in household surveys, the biggest improvement was observed for home treatment of diarrhea with oral rehydration salts in children under 5 years old. The indicators increased about 9PP when compared to the baseline.

IHME analyzed health service utilization between indigenous and non-indigenous populations. In intervention areas, around 75% of the sample population was indigenous, while under 40% was indigenous in comparison areas (considering language to determine ethnicity). Table 19 summarizes performance indicator results by ethnicity. Both indicators improved for indigenous populations, while in-facility delivery by qualified attendant remained unchanged and postpartum care within 7 days of birth decreased for non-indigenous populations. In both cases, the baseline values for indigenous populations are significantly below the baseline for non-indigenous populations. These improvements highlight the strong focus of the operation to improve equity among indigenous populations.

Similar results can be observed when exploring utilization of child services. Utilization and health seeking behaviors among children with indigenous ethnicity increased while mostly decreased for non-indigenous children. Table 20 details if the child attended a facility for: recent illness, suspected acute respiratory infection, or diarrhea. In all cases, utilization among children with indigenous ethnicity increased, while it dropped for all variables for non-indigenous children, except for recent illness.

Table 18. Comparison of antenatal care with quality in baseline, first and second operations

	Ambulatory								
	Baseline			First Follow-up			Second Follow-up		
	N	%	SE	N	%	SE	N	%	SE
At least 5 ANC visits	73	41.1	5.8	321	48.3	2.8	457	56.9	2.3
At least 5 ANC visits according to the norm*	73	24.7	5.0	321	38.3	2.7	457	45.3	2.3
All lab tests performed at least once during pregnancy:	73	17.8	4.5	321	21.8	2.3	457	21.2	1.9
Hb	73	23.3	4.9	321	29.3	2.5	457	36.1	2.2
Blood glucose	73	27.4	5.2	321	28.3	2.5	457	46.4	2.3
Urinalysis	73	24.7	5.0	321	27.4	2.5	457	40.5	2.3
HIV	73	26	5.1	321	26.5	2.5	457	48.1	2.3
5 ANC visits with appropriate checks and laboratory tests	73	6.8	3.0	321	12.5	1.8	457	12.9	1.6

*Appropriate checks include: weight and blood pressure captured at every visit + uterine height captured if gestational age > 13 weeks + fetal heart rate and fetal movement captured if gestational age > 20 weeks

*RPR was not captured at baseline or the first follow-up as an alternative to VDRL. At the baseline, fetal heart rate + fetal movement + uterine height were only measured at the first visit if the woman was of the appropriate gestational age.

Table 19. Performance indicators by ethnicity

	INTERVENTION - INDIGENOUS						INTERVENTION - NONINDIGENOUS					
	Baseline (2013)			Follow-up (2018)			Baseline (2013)			Follow-up (2018)		
	N	%	SE	N	%	SE	N	%	SE	N	%	SE
Women (age 15-49) delivered in hospital/health center with skilled attendant in their most recent pregnancy in the last two years	1687	26.5	2.5	572	34.5	4.6	373	78.3	2.8	131	78.9	9.8
Women (age 15-49) who received postpartum care within 7 days with skilled personnel (doctor, nurse, or pro. midwife) in their most recent pregnancy in the last two years	1682	22.7	1.8	573	26.1	3.5	373	45	3	132	32.1	5.2

Table 20. Utilization of child services by ethnicity

	INTERVENTION - INDIGENOUS						INTERVENTION - NONINDIGENOUS					
	Baseline (2013)			Follow-up (2018)			Baseline (2013)			Follow-up (2018)		
	N	%	SE	N	%	SE	N	%	SE	N	%	SE
Sought care for recent illness	983	54.6	2.7	360	65.5	2.8	262	62.4	3.4	101	67	3.9
Child was hospitalized for recent illness	237	1.2	0.7	97	5.3	2.1	73	15	6.3	44	4	2.6
Sought care for suspected acute respiratory infection	1086	50.5	2.6	434	57.9	3.2	291	56.2	4.5	98	52	4.9
Sought care for diarrhea	415	55.3	3.8	166	62.7	3.5	99	49.9	5.7	59	54	5.2

Unmet need for contraception is an example of growing differences between intervention and comparison areas. Unmet need increased about 2 percentage points from baseline to follow-up. Comparison areas fared worse than intervention areas, showing detriments instead of improvements. In comparison areas, unmet need increased about 7 percentage points. According to IHME, the process evaluation reveled that in rural areas "there are many misconceptions about risks and side effects of contraceptives, as well as religious objections and cultural barriers to accepting family planning methods." Hence, the results should be seen as an achievement as unmet need did not greatly increase in intervention areas.

In summary, Chiapas met targets for 9 of 10 indicators in the performance framework for the second operation. Results showed important improvements in some indicators and reductions in inequalities among indigenous populations in others. According to IHME, "there has been improvement (some very remarkable) against many odds during a difficult

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period of pressure on the economy and mistrust of the Chiapas government due to the political atmosphere."

Chiapas Performance Frameworks

First Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	One-tailed Z test	Assessment	Score
7020	Health services with permanent availability of inputs and equipment necessary for prenatal and postpartum care	1/8	3.6	80	45.8 (32.7-59.2)	<0.00001	Not Met	0
7040	Health services with permanent availability of inputs and equipment necessary for delivery and newborn care	1/8	0	80	21.4 (4.7-50.8)	<0.00001	Not Met	0
7030	Health services with permanent availability of inputs and equipment necessary for emergency obstetric and neonatal care	1/8	0	80	7.1 (0.2-33.9)	<0.00001	Not Met	0
7010	Health services with permanent availability of inputs and equipment necessary for pediatric, vaccination and nutrition health care	1/8	3.6	80	13.6 (6.0-25)	<0.00001	Not Met	0
7050	Health services with modern family planning supplies (oral, injectable, barrier, IUD), according to the schedule (population under responsibility, time of year, rotation)	1/8	55.1	80	61 (47.2-73.5)	<0.00001	Not Met	0
7080	Maternal deaths due to selected causes reported and investigated according to the standards for monitoring mortality (at the district level) in the last year	1/8	N/A	85	66.7	-	Not Met	0
5155	Midwives or community personnel (in the pilot area) who received incentives linked to prenatal, partum, postnatal and/or newborn care (prior analysis pending)	1/8	0	20	31.4	-	Met	0.125
7000	Units (micro-region) with a cold chain that meets the standards	1/8	70.8	80	77.8 (57.8-91.4)	0.3864	Met	0.125
							Total Score:	**0.25**

Performance Improvement Plan Performance Framework

No.	Indicator	Weight	Baseline	Target	First Operation Result	Performance Improvement Plan Result	One-tailed Z test	Assessment	Score
7020	Health services with permanent availability of inputs and equipment necessary for prenatal and postpartum care	1/8	3.6	80	45.8 (32.7-59.2)	73.3 (54.1-87.7)	0.1807	Met	0.125
7040	Health services with permanent availability of inputs and equipment necessary for delivery and newborn care	1/8	0	80	21.4 (4.7-50.8)	100 (78.2-100)	0.9736	Met	0.125
7030	Health services with permanent availability of inputs and equipment necessary for emergency obstetric and neonatal care	1/8	0	80	7.1[59] (0.2-33.9)	93.3 (68.1-99.8)	0.9016	Met	0.125
7010	Health services with permanent availability of inputs and equipment necessary for pediatric, vaccination and nutrition health care	1/8	3.6	80	13.6 (6.0-25)	100 (88.4-100)	0.9969	Met	0.125
7050	Health services with modern family planning supplies (oral, injectable, barrier, IUD), according to the schedule (population under responsibility, time of year, rotation)	1/8	55.1	80	61[60] (47.2-73.5)	100 (88.4-100)	0.9969	Met	0.125
7080	Maternal deaths due to selected causes reported and investigated according to the standards for monitoring mortality (at the district level) in the last year	1/8	N/A	85	66.7	100	-	Met	0.125
5155	Midwives or community personnel (in the pilot area) who received incentives linked to prenatal, partum, postnatal and/or newborn care (prior analysis pending)	1/8	0	20	31.4	-	-	Met	0.125
7000	Units (micro-region) with a cold chain that meets the standards	1/8	70.8	80	77.8 (57.8-91.4)	-	0.3864	Met	0.125
								Total Score:	**1.00**

[59] IHME revised this value after results shared from 7.1 (0.2-33.9) to 14.3 (1.8-42.8) percent.
[60] IHME revised this value after results shared from 61 (47.2-73.5) to 62.7 (49.1-75.0) percent.

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Second Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
2020	Women of child-bearing age (15-49) who did not wish to become pregnant and who were not using/did not have access to family planning methods (temporary and chronic).	1/10	52.7%[1]	45.7%	53.0% [45.7-61.7]	Met	0.1
3035	Women of child-bearing age (15-49) who in their most recent pregnancy received at least 5 prenatal checkups by a physician, nurse or COCS, in accordance with best practices in the last two years.	1/10	6.8%	16.8%	12.9% [10.0-16.3]	Not Met	0
4010	Women of child-bearing age (15-49) whose most recent delivery was done by qualified personnel in a health facility in the last two years.	1/10	34.7%	42.7%	40.5% [31.4-50.3]	Met	0.1
4030	Percentage of women of child-bearing age (15-49) who received postpartum care from qualified personnel within 7 days after their most recent delivery in the last two years.	1/10	26.2%	32.2%	26.9% [21.1-33.7]	Met	0.1
5060	Mothers/caregivers who report having administered ORS to their children aged 0-59 months during the last episode of diarrhea in the last two weeks.	1/10	48.9%	63.9%	57.6% [48.0-66.7]	Met	0.1
4050	Institutional postpartum patients of child-bearing age evaluated and recorded in clinical records at least every 15 minutes during the first hour after delivery and every 30 minutes after completing two hours and when the patient is discharged from hospital, for their most recent delivery in the last two years.	1/10	0%	30%	47.8% [40.9-54.9]	Met	0.1
4090	Deliveries with active management of the third stage of labor (intramuscular introduction of 10 IU oxytocin/carbetocin one minute after delivery, uterine massage, controlled cord traction and counter-traction and late clamping of umbilical cord) in the most recent delivery in the past two years.	1/10	72.3%	92.3%	97.3% [94.3-99.0]	Met	0.1
4070	Neonates presenting a complication (sepsis, asphyxia, prematurity, low birth weight) that was managed according to standards in the last two years.	1/10	0%[2]	20%	38.5% [31.1-46.2]	Met	0.1
4080	Women with obstetric complications (hemorrhage, sepsis, preeclampsia severe eclampsia) that was managed according to standards in their most recent delivery in the last two years.	1/10	0[3]	20%	24.4% [19.0-30.6]	Met	0.1
5025	Children 12 to 23 months) that received at least one dose of measles, mumps, rubella (MMR) vaccine, according to vaccine card	1/10	48.5[4]	55.5%	49.9% [41.3-58.6]	Met	0.1
						Total Score:	**0.9**

1. Recalculated value is 51.2%.
2. Recalculated value is 22.8%.
3. Recalculated value is 17.9%.
4. Recalculated value is 48.9%.

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Guatemala

Guatemala

The general objective of the second operation is to help reduce maternal and child morbidity and mortality in 31 of the country's poorest municipalities. Approximately 456,788 people live in SMI target areas in Guatemala, of which 248,880 were women in reproductive age and 207,908 are children under 5 years old.

First Operation

The first operation received USD 5.8 million dollars of donation funds and USD 3.9 million of national resources. Guatemala obtained a score of 0.64 in the Performance Framework, which was not enough to receive the disbursement of the 18-month performance tranche. Therefore, the SM2015 Donors Committee requested the implementation of a Performance Improvement Plan and a follow-up measurement of targets that were not met to close the gaps remaining at the end of the first operation. The Plan had to be followed by an additional measurement of the four indicators that were not met. Guatemala was able to close gaps observed in the First Operation Follow-up surveys after implementing the Performance Improvement Plan. Targets were met for all 4 indicators that were re-measured related to availability of inputs and on investigation of maternal deaths.

During the first operation the maternal and neonatal care strategy in Guatemala implemented actions to increase delivery care and postpartum care by qualified personnel, early identification and adequate management of obstetric and neonatal complications to reduce the fourth delay and strengthen the referral system. The strategy is complemented by the provision of supplies and equipment needed to provide satisfactory maternal and child care. The child health care strategy implements actions to prevent chronic malnutrition and anemia through the integration of primary health care with the AINM-C to support distribution of powdered micronutrients for children aged 6–24 months. In addition, promotes prevention and prompt treatment of diarrhea which includes zinc.

Second Operation

The second operation concluded on September 14th, 2018 and executed USD 7.8 million dollars of donation funds and USD 5.2 million of domestic resources. A performance tranche of USD 1.75 million dollars may be awarded if the minimum score for the Second Operation Performance Framework is obtained. The second operation is built on the progress and lessons from the first operation and on a new institutional Health strategy from the Ministry of Health (MSPAS) that institutionalize community-level preventive actions and geographically categorize the population into districts, territories and sectors to support.

With SMI support, however, sectorization of San Marcos and Huehuetenango (into 73 territories and 308 sectors) was able to be completed. The area has a permanent headquarters and primary care support team (EAPAS). Each sector has a health post and assigned community team. And it was possible to strengthen coverage actions with two (2) nursing assistants (1 fixed and 1 mobile) and one (1) professional nurse in each territory.

Target Setting and Target Verification Process

Targets for the two operations in Guatemala were negotiated and approved at the start of the initiative on March 2012. Indicators were selected considering the Initiative's Monitoring and Evaluation Framework, including process indicators for the first operation, and healthcare coverage, quality and effective coverage indicators for the second operation.

The target setting process took place using a hybrid model that considered quantitative and qualitative data, including: a) an economic model based on cost-benefit analysis, b) review of the literature and international experiences, c) historical trends of national indicators and impact of specific interventions, d) statistical power calculations, and e) operational requirements and expert advice. The criteria for each indicator was negotiated and described in the country's Indicators Manual.

The target verification process was performed in accordance with SMI Operating Regulations, which state that the verification of indicators must be performed externally and independently. Indicators of the Performance Framework for the second operation in Guatemala were quality and coverage indicators collected from independent household and health facility surveys.

Baseline health facility surveys were collected by IHME May and August 2013, and first operation follow-up surveys on June—August 2014. First follow-up surveys to verify targets for the second operation were collected on between July and September 2014. Second verification was done in May-June 2015 for Improvement plan. Second follow-up surveys were collected from May to August 2018.

Considerations on the target verification results for the disbursement of the performance tranche

Guatemala met 7 of the 10 indicators for disbursement of the performance tranche as described in Figure 23. Health cover-

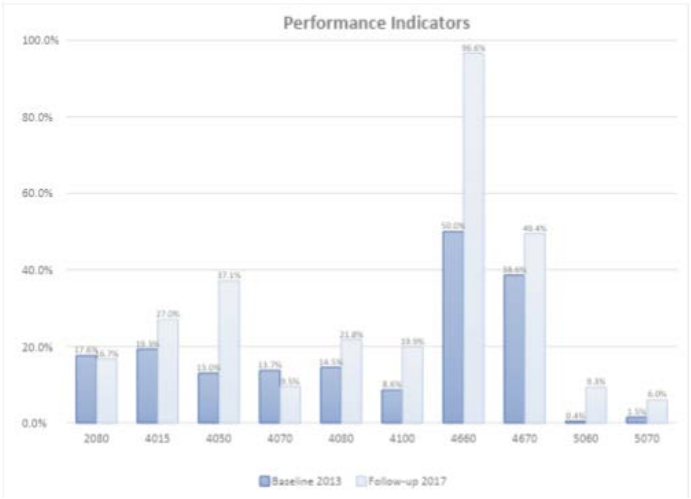
Guatemala

age indicators were observed to slightly improve despite challenges to continuity of coverage expansion actions, as described in the 2018 donors annual report. Implementation of this process has been hindered due to repeated turnover of Ministers.

The institutional birth rate (indicator No. 4015) rose from 19.3% to 27% and immediate neonatal care (within 48 hours after birth indicator No.4100) rose from 8.6% to 19.9%. These improvements are the result of various factors. For example, the sectorization process included population mapping and identification of pregnant women, puerperal mothers, newborns, and children under 2 in order to provide better follow-up in these groups. The concept of the birth plan (individual and community) was implemented, as well as referral / follow-up of high-risk pregnancies. Surveillance and follow-up of maternal deaths was also strengthened. Situation rooms were updated / analyzed, and results were shared with community leaders in assemblies (intercultural dialogues and other activities).

The Guatemala operation sought to improve child health mainly through reducing diarrhea (severity and duration of episodes) and anemia. In the baseline, approximately seven (7) of every 10 children under 2 had anemia. Oral rehydration salts (ORS) and zinc were used to reduce diarrhea and micronutrients to reduce anemia. In the second measurement, the percentage of children receiving ORS and zinc treatment (indicator No. 5060) in the last episode of diarrhea in the last two weeks rose 9 percentage points (9.3%), according to the mothers. This indicator could have been improved with greater use of zinc, since 52.2% of the mothers reported they received ORS while only 12% said they

Figure 23. Performance Indicator Results in Guatemala



received zinc. About 37.6% of the mothers reported they received a micronutrient packet in the last six months to combat anemia (17 percentage points above the baseline). But consuming a single packet is not enough to reduce anemia. Only 6% of the mothers reported receiving 60 micronutrient packets in this period (indicator 5060), slightly higher than the baseline of 1.5%.

The percentage of women who said they received family-planning information (indicator 2080) from health personnel or community volunteers remained steady (17.6% in baseline and 16.7% in the follow-up measurement), despite application of the screening form (hoja filtro) and surveillance to capture / enroll women of childbearing age and those who want family planning (unmet demand) in the community as well as in health services. About 13.8% of the women reported having received information from health personnel and 7% from community workers, so the intervention reached some 80% of the numbers of women it would have reached if health personnel and community workers had enrolled different women (20.8%).

The continuous quality improvement (CQI) strategy continued to be implemented hospitals and basic EONC health facilities (permanent care centers, or CAPs; and comprehensive maternal / child health centers, or CAIMIs). Quality of delivery care improved significantly as well as basic postpartum care with quality. Quality institutional births in CAPs and CAIMIs (indicator No 4660) rose to 96.6% and quality immediate postpartum care (indicator No 4050: checkup every 15 minutes in first hour and every 30 minutes in second hour) rose from 13.0% to 37.1%. Such progress was largely due to the establishment of 20 improvement teams and standardization of processes, measurements and monthly follow-up. Percentage of institutional births with at least two intercultural criteria (birthing position, beverage, language, clothing, accompaniment, etc.) rose to 49.4%. (indicator 4670)

Guatemala

There was also a slight improvement in the follow-up measurement of management of obstetric complications (indicator 4080), 21.8% of the cases met standard protocol management. However, management of eclampsia and severe preeclampsia that met the standards was 0%, 60% for sepsis and 37% for hemorrhage. The performance of the indicator for hemorrhaging is mainly affected by retained placental management, and for sepsis is mainly affected by endometritis management. In basic EONC, both severe preeclampsia and eclampsia compliance are primarily determined by the urine protein test, and in complete EONC by dexa or betamethasone administration (if gestational age 24-35 weeks), patellar reflex and lab tests (conducted in only 38.9% and 44.4% of the cases). However, application of GOT and GPT has improved with respect to baseline.

Approximately 9.5% of neonatal complications (indicator 4070) were managed according to standard. The baseline was recalculated (to make comparison possible with the follow-up measurements) at 13.7% (a statistically insignificant difference). Management of sepsis according to standard reached 3.2%, asphyxia 31.2%, prematurity 5.8% and low birth weight 15.7%. In complete EONC, the exams performed to detect sepsis helped reduce the indicator: only 4 % of case records showed blood culture (0% complies with all lab tests), 28% oxygen saturation, and 56% were evaluated by a specialist. In prematurity, low birth weight and asphyxia, there are general shortcomings in some criteria. For low birth weight, the indicator primarily reflects the Silverman score (18.2% in basic EONC and 24.3% in complete EONC). In addition, in complete EONC, after the Silverman score, the criteria with poorest compliance levels are oxygen saturation (40.5%) and evaluation by a specialist (54.1%). The same pattern can be observed in prematurity (see Table 22. Management of neonatal complications: Complete CONE Prematurity). In basic EONC, in terms of asphyxia, the criteria with the poorest compliance level is the respiratory rate (58.3%), followed by pulse (or heart) rate (66.7%). In complete EONC, the criteria with poorest compliance levels were APGAR score (40%) and oxygen saturation (60%).

Table 21. Management of obstetric complications: Complete CONE Preeclampsia results

Complete	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Vital signs	29	31	(15.3 - 50.8)	18	38.9	(17.3 - 64.3)
Respiratory rate	29	96.6	(82.2 - 99.9)	18	94.4	(72.7 - 99.9)
Pulse / heart rate	29	100	(88.1 - 100)	18	100	(81.5 - 100)
Blood pressure	29	100	(88.1 - 100)	18	100	(81.5 - 100)
Patellar reflex	29	31	(15.3 - 50.8)	18	38.9	(17.3 - 64.3)
Lab exams	29	17.2	(5.8 - 35.8)	18	44.4	(21.5 - 69.2)
Urine protein	29	41.4	(23.5 - 61.1)	18	66.7	(41 - 86.7)
Platelets	29	86.2	(68.3 - 96.1)	18	83.3	(58.6 - 96.4)
Creatine	29	93.1	(77.2 - 99.2)	18	94.4	(72.7 - 99.9)
Uric acid	29	82.8	(64.2 - 94.2)	18	88.9	(65.3 - 98.6)
Aspartate aminotransferase / glutamate oxaloacetate transaminase	29	48.3	(29.4 - 67.5)	18	83.3	(58.6 - 96.4)
Alanine aminotransferase / glutamate-pyruvate transaminase	29	44.8	(26.4 - 64.3)	18	88.9	(65.3 - 98.6)
Lactate dehydrogenase	29	72.4	(52.8 - 87.5)	18	83.3	(58.6 - 96.4)
Medication administered	29	13.8	(3.9 - 31.7)	18	5.6	(0.1 - 27.3)
Magnesium sulfate	29	69	(49.2 - 84.7)	18	83.3	(58.6 - 96.4)
Hydralazine / nifepedine (if dias. bp >= 110)	0			1	0	(0 - 97.5)
Dexamethasone / betamethasone (if gest age 24-35 weeks)	26	11.5	(2.4 - 30.2)	16	0	(0 - 20.6)
Pre-eclampsia managed according to the norm	29	0	(0 - 11.9)	18	0	(0 - 18.5

Table 22. Management of neonatal complications: Complete CONE Prematurity

Complete	Baseline			Second Follow-Up		
	N	%	CI	N	%	CI
Gestational age calculated using Capurro/Ballard	20	75	(50.9 - 91.3)	39	82.1	(66.5 - 92.5)
Classification based on gestational age	20	75	(50.9 - 91.3)	39	84.6	(69.5 - 94.1)
Vital signs checked	20	10	(1.2 - 31.7)	39	46.2	(30.1 - 62.8)
Pulse / heart rate	20	100	(83.2 - 100)	39	97.4	(86.5 - 99.9)
Respiratory rate	20	95	(75.1 - 99.9)	39	84.6	(69.5 - 94.1)
Weight	20	90	(68.3 - 98.8)	39	100	(91 - 100)
Silverman score	20	10	(1.2 - 31.7)	39	46.2	(30.1 - 62.8)
Head circumference	20	85	(62.1 - 96.8)	39	87.2	(72.6 - 95.7)
APGAR at 1 or 5 minutes	20	80	(56.3 - 94.3)	39	76.9	(60.7 - 88.9)
Lab exams	20	15	(3.2 - 37.9)	39	38.5	(23.4 - 55.4)

Guatemala

Guatemala Performance Frameworks

First Operation Performance Framework

Indicator[61]	Baseline	Target	Result 18 m	Test	Valoración	Weight	Score
Health services[62] with the necessary equipment for prenatal care (inputs and equipment to be determined according to level of care)	14.1 (6.6-25.0)	50%	10.7 (4.0-21.9)	<0.00001	Not attained	0.091	0
Health services equipped for delivery care with the necessary inputs and equipment for obstetric and neonatal emergencies, postnatal and newborn care (defined according to the level)	0 (0-19.5)	50%	8.3 (0.2-38.5)	0.0008	Not attained	0.091	0
Health services with the necessary equipment and inputs for pediatric care (anthropometric equipment, oral rehydration salts, zinc, anti-helminthic drugs, and powdered micronutrients).	3.2 (0.4-11)	50%	3.6 (0.4-12.5)	<0.00001	Not attained	0.091	0
Health services reporting shortage of supplies in one of the 4 family planning methods (injectable, oral, barrier and IUD) at the time of the interview, confirmed through observation and according to level of care	40.3 (28.1-53.6%)	30%	33.9 (21.8-47.8)	0.2606	Attained	0.091	0.091
Children 0–23 months old, whose growth was monitored according to their age, register in data on children in the MSPAS.	*[63]	6%	81.3 (77.9-84.5)	1	Attained	0.091	0.091
Updated strategic guidelines on micronutrient supplementation in children <5 years old at national level, according to international scientific evidence	n.a	yes	yes	–	Attained	0.091	0.091

[61] The criteria for measuring each indicator have been defined in the country's indicators manual.
[62] Services provided by basic teams through the coverage extension program, health posts, health centers, CAPs, CAIMIs, departmental hospitals and third-level hospitals.
[63] The intervention is new, baseline: 0 (was not measured).

Guatemala

Performance Improvement Plan Performance Framework

No.	Indicator	Weight	Baseline	Target	First Operation Result	Performance Improvement Plan Result	One-tailed Z test	Assessment	Score
7020	Health services with permanent availability of inputs and equipment necessary for prenatal	1/11	14.1	50	10.7 (4.0-21.9)	83.3 (65.3-94.4)	0.9999	Met	0.091
7030	Health services with permanent availability of inputs and equipment necessary for emergency obstetric and neonatal care	1/11	0	50	8.3 (0.2-38.5	94.7 (74.0-99.9)	1.000	Met	0.091
7010	Health services with permanent availability of inputs and equipment necessary for pediatric, vaccination and nutrition health care	1/11	3.2	50	3.6 (0.4-12.5)	100 (88.4-100)	1.000	Met	0.091
7080	Maternal deaths reported and investigated according to the maternal mortality surveillance protocol	1/11	N/A	90	15	100	-	Met	0.091
7050	Health services reporting shortage of supplies in one of the 4 family planning methods (injectable, oral, barrier and IUD)	1/11	40.3	30	33.9 (21.8-47.8)	NA	0.2626	Met	0.091
8610	Children 0–23 months old, whose growth was monitored according to their age, register in data on children in the MSPAS	1/11	N/A	6	81.3 (77.9-84.5)	NA	-	Met	0.091
7028	Health services with health care personnel trained in obstetric and neonatal emergencies according to their operational level and level of care	1/11	N/A	70	93.3 (81.7-98.6)	NA	-	Met	0.091
7160	Municipal health districts able to access data and generate regular reports on immunization, maternal, neonatal and infant care in the context of Health Maternity Law.	1/11	N/A	70	92.9 (66.1-99.8)	NA	0.9919	Met	0.091
8620	Health Areas with a piloted dashboard, based on supervision and monitoring guidelines	1/11	N/A	2 Health Areas	2 Health Areas	NA	-	Met	0.091
7170	Eligible communities with activated emergency committees (receive an advance from the rotating fund)	1/11	N/A	20	27	NA	-	Met	0.091
8310	Updated strategic guidelines on micronutrient supplementation in children <5 years old at national level, according to international scientific evidence	1/11	N/A	yes	yes	NA	-	Met	0.091
								Total Score:	**1**

Guatemala

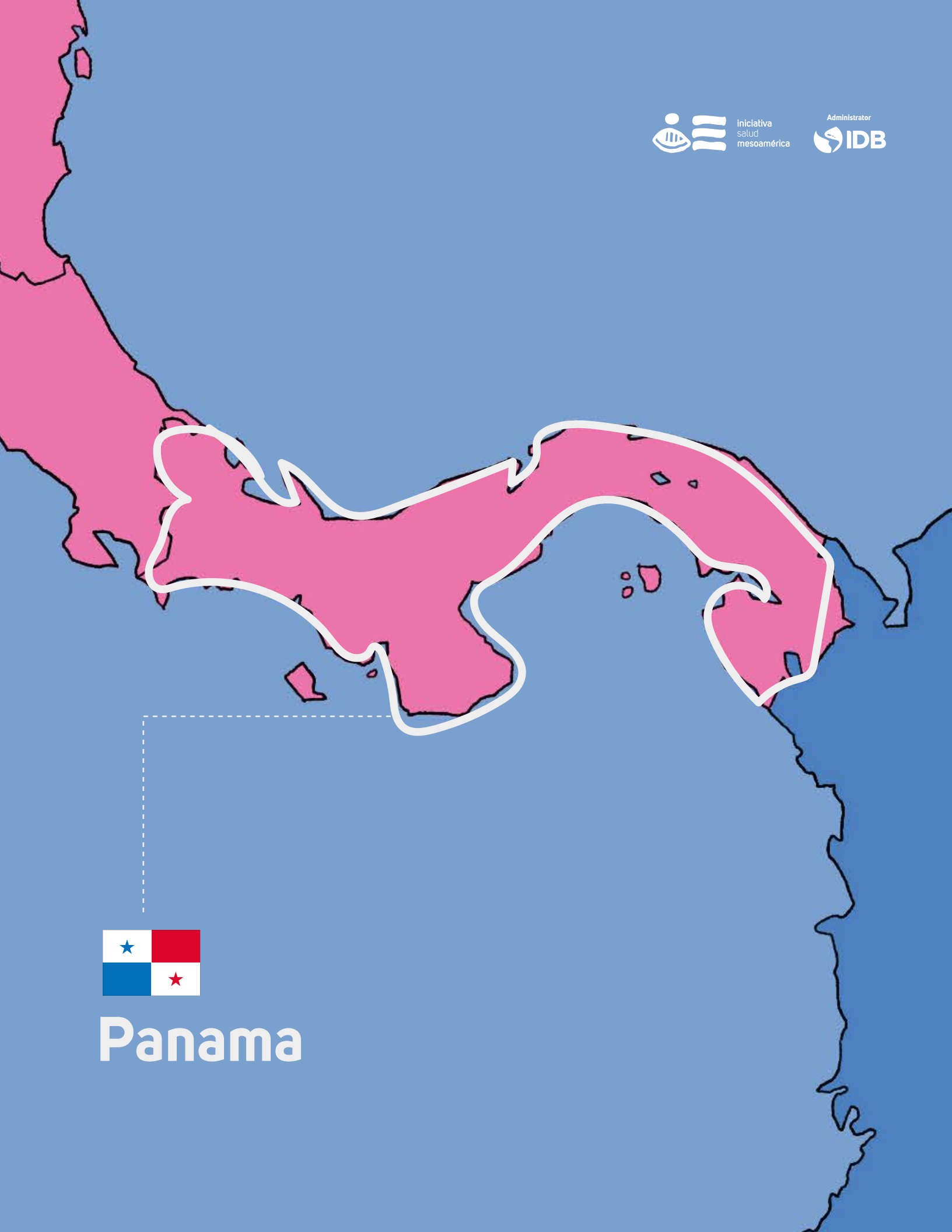
Second Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
2020	Women of child-bearing age (15-49) who did not wish to become pregnant and who were not using/did not have access to family planning methods (temporary and chronic).	1/10	52.7%[1]	45.7%	53.0% [45.7-61.7]	Met	0.1
3035	Women of child-bearing age (15-49) who in their most recent pregnancy received at least 5 prenatal checkups by a physician, nurse or COCS, in accordance with best practices in the last two years.	1/10	6.8%	16.8%	12.9% [10.0-16.3]	Not Met	0
4010	Women of child-bearing age (15-49) whose most recent delivery was done by qualified personnel in a health facility in the last two years.	1/10	34.7%	42.7%	40.5% [31.4-50.3]	Met	0.1
4030	Percentage of women of child-bearing age (15-49) who received postpartum care from qualified personnel within 7 days after their most recent delivery in the last two years.	1/10	26.2%	32.2%	26.9% [21.1-33.7]	Met	0.1
5060	Mothers/caregivers who report having administered ORS to their children aged 0-59 months during the last episode of diarrhea in the last two weeks.	1/10	48.9%	63.9%	57.6% [48.0-66.7]	Met	0.1
4050	Institutional postpartum patients of child-bearing age evaluated and recorded in clinical records at least every 15 minutes during the first hour after delivery and every 30 minutes after completing two hours and when the patient is discharged from hospital, for their most recent delivery in the last two years.	1/10	0%	30%	47.8% [40.9-54.9]	Met	0.1
4090	Deliveries with active management of the third stage of labor (intramuscular introduction of 10 IU oxytocin/carbetocin one minute after delivery, uterine massage, controlled cord traction and counter-traction and late clamping of umbilical cord) in the most recent delivery in the past two years.	1/10	72.3%	92.3%	97.3% [94.3-99.0]	Met	0.1
4070	Neonates presenting a complication (sepsis, asphyxia, prematurity, low birth weight) that was managed according to standards in the last two years.	1/10	0%[2]	20%	38.5% [31.1-46.2]	Met	0.1
4080	Women with obstetric complications (hemorrhage, sepsis, preeclampsia severe eclampsia) that was managed according to standards in their most recent delivery in the last two years.	1/10	0[3]	20%	24.4% [19.0-30.6]	Met	0.1
5025	Children 12 to 23 months) that received at least one dose of measles, mumps, rubella (MMR) vaccine, according to vaccine card	1/10	48.5[4]	55.5%	49.9% [41.3-58.6]	Met	0.1
						Total Score:	**0.9**

1. Recalculated value is 51.2%. 3. Recalculated value is 17.9%.
2. Recalculated value is 22.8%. 4. Recalculated value is 48.9%.

iniciativa salud mesoamérica

Administrator IDB



Panama

Panama

The objective of the second operation in Panama was to improve access, coverage, use and quality of healthcare to improve reproductive, maternal, neonatal and child health and nutrition in the indigenous areas of Guna Yala and Emberá Wounaan. To achieve this objective, the program sought the implementation of diverse strategies, including counseling, communication and behavior change for reproductive, maternal, neonatal and child health and nutrition, incentives to increase demand for services and the creation of a network for essential obstetric and neonatal health. Approximately 8,640 women in reproductive age and 5,379 children under 5 years old live in SMI target areas. This population is served by approximately 41 health facilities, including 24 ambulatory and 17 basic facilities providing essential obstetric and neonatal care (EONC).

First Operation

The first operation in Panama was meant to prepare the health system to improve quality of care and population health indicators for the second operation. The first operation received USD 1,142,857 of donation funds and USD 1,714,286 of national resources. Panama obtained a score of 0.8 and received an incentive of USD 857,143 corresponding to the performance tranche. Panama achieved important results at the end of the second operation, increasing substantially the availability of equipment and supplies in health facilities, making key changes in norms and protocols, and implementing new community initiatives. Targets for 8 out of 10 performance indicators were met and progress was observed across all indicators. Within the operation's 24 months, Panama increased continuous availability of family planning methods in basic health units from 7.1 to 78.9%, equipment and supplies for prenatal care from 17.6 to 100%, equipment and supplies for delivery care from 7.1 to 47.1%, and supplies for child care from 11.8 to 84.2%. Doctors and nurses in basic health units available 24/7 increased from 60 to 76.5%. In addition, Panama revitalized the integrated community child health program (AIN-C in Spanish), monitoring weight of at least 80% of children in 53.3% of health facilities and began the implementation of community delivery plans and community water quality and sanitation plans, reaching 87.5% and 100% of target communities respectively. Panama also included zinc in national guidelines for treatment of diarrhea and established mechanisms to provide and supervise incentives for community workers and other community facilitators.

Second Operation

The second operation, with assigned funding of $1.167 million donation funds and $1.75 million of domestic resources, concluded on August 1st 2018. A performance tranche of $0.875 million could be awarded if the minimum score for the Second Operation Performance Framework was obtained. The expected outcomes of the second individual operation were: i) expanded coverage and care for women of childbearing age and pregnant women; ii) improved quality of hospital care; iii) improved coverage and quality of health care for children under 5. The objective was to improve access to and coverage, use and quality of maternal, reproductive, neonatal and child health and nutrition services in the indigenous territories of Guna Yala and Embera Wounaan, through implementation of counselling, communication and behavior change strategies in reproductive, maternal, neonatal and child health and nutrition.

Target Setting and Target Verification Process

Targets for the two operations initially planned in Panama were negotiated and approved in November 2011. Indicators were selected considering the Initiative's Monitoring and Evaluation Framework, including process indicators for the first operation, and healthcare coverage, quality and effective coverage indicators for the second operation.

The target setting process took place using a hybrid model that considered quantitative and qualitative data, including: a) an economic model based on cost-benefit analysis, b) review of the literature and international experiences, c) historical trends of national indicators and impact of specific interventions, d) statistical power calculations, and e) operational requirements and expert advice. The criteria for each indicator was negotiated and described in the country's Indicators Manual.

The target verification process was performed in accordance with SMI Operating Regulations, which state that the verification of indicators must be performed externally and independently. Indicators of the Performance Framework for the second operation in Panama included ten quality and coverage indicators collected from independent household and health facility surveys.

Baseline household and health facility surveys were collected by IHME between April and August 2013, and first operation follow-up surveys between September and October 2014. Follow-up surveys to verify targets for the second operation were collected on June—September 2018. IHME computed and provided the indicator values for all performance indicators.

Panama

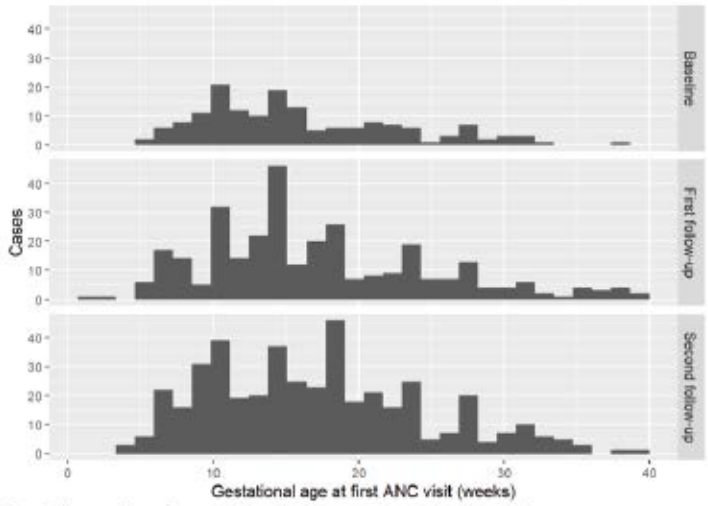
Considerations on the target verification results for the disbursement of the performance tranche

Panama showed little improvement in most indicators for the second operation Performance Framework. Panama achieved targets for 2 out of 10 indicators. Most indicators required the implementation of a strong community component to increase intervention coverage and encourage demand for health services. Eight indicators were measured through household surveys and two indicators were measured through health facility surveys.

Unmet need for contraception increased significantly. Almost no sexually active women in the two comarcas who do not want to get pregnant use family planning methods. Although the proportion of women in need of contraception slightly increased from 83.9% to 86.9%, the proportion of women not using methods increased much further from 90% to 98.8%. In the baseline, injectable contraceptives were the most used mother method, used by 8.9% of partnered women; however, in the 2nd operation follow-up survey, only 1.2% women were using this method and no other method was used instead.

Antenatal care (ANC) coverage also decreased. The decrease was consistent both on the early antenatal care indicator calculated with data from medical record reviews and from the 4 ANC coverage indicator collected in household surveys. As shown in Figure 24, in baseline surveys the distribution of the gestational age for the first ANC visit was right-skewed, indicating earlier visits; on the contrary, on follow-up surveys, the distribution has two peaks, one around 15 weeks gestation and another around 32 weeks, indicating later visits. The decrease in ANC coverage was not driven by more women receiving at least one ANC visit, as the proportion of women attending at least one visit decreased from 85.5% to 59.5%

Figure 24. Histogram of gestational age at fist ANC visit between surveys



Note: The number of cases in the histogram reflect a larger sample, not more women receiving ANC.

In terms of birth attention, the proportion of women receiving oxytocin immediately after birth increased from 78.3% to 85.4%, meeting the target of 85%. The prophylactic use of oxytocin postpartum reduces the risk of excessive bleeding after birth.

When looking at coverage of postpartum and newborn care, the proportion of women receiving postpartum care within 48 hours of birth remained almost unchanged from 13.4% in the baseline to 10.9% in the follow-up (not statistically significant), while newborn care in the same timeframe increased from 10.4% to 16.4% respectively. These two indicators not only consider healthcare received while at the facility immediately after birth, but also include women who gave birth in their community and received care from health staff after. In most of Mesoamerica, and particularly in indigenous communities, people believe that women should remain at home for at least 40 days to recover postpartum. Hence, it is possible that newborns were taken by a family member to a health facility for checkups or vaccines, which would explain the differences between the two indicators.

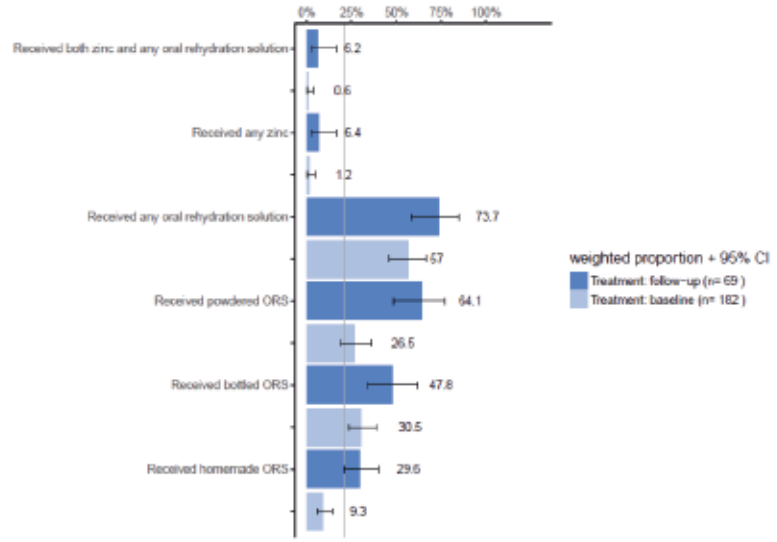
Indicators for child care also showed little or no improvement. The proportion of children with at least one deworming treatment increased from 38.6% to 42.2%, an increase in almost the same proportion of those who received two deworming treatments, which increased from 8.7% to 12.9% —far from the 38.7% target. Likewise, caretakers giving their

Panama

children oral rehydration solutions (ORS) and zinc for treatment of diarrhea increased from 0.6% to 6.2%. Zinc was included in the norms for childhood diarrhea as part of the second operation, so the small improvement shows initial steps in its implementation. Nevertheless, uptake of ORS alone, without including zinc, increased further from 57% to 73.7% (see Figure 25). Finally, the measles, mumps and rubella (MMR) vaccine coverage measured by the vaccine card (which is the gold standard to measure vaccination coverage) did not improve. Yet, more caretakers responded that their children had received an MRR vaccine, which improved from 61% to 76.6%. When considering both recall or the vaccine card, the increase was only 4.7 percentage points.

Water quality was measured requesting the interviewee for a glass of drinking water and taking water samples to perform two tests: one for chlorination and another for presence of coliforms. To meet the indicator, the water sample had to be chlorinated and coliform free. On the baseline, water from 90.7% of households had coliforms and only 2.9% was chlorinated, with only 0.9% of households meeting the indicator criteria. In follow-up surveys, no water samples were chlorinated and 100% contained coliforms, with no household meeting the indicator. In the follow-up surveys, IHME conducted an additional test for presence of E. coli, which was positive for 99.1% of the water samples. Hence, the water quality in the indigenous communities is not safe.

Figure 25. Treatment of diarrhea with ORS and zinc



Panama

Panama Performance Frameworks

First Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	One-tailed Z test	Assessment	Score
7050	Basic Health Units (IT, facility-based network) that have supply of modern family-planning methods (oral, injectable, barrier, IUD), according to programming (population covered, time of year, rotation).	1/10	7.1%	80%	78.9% (54.4-93.9%)	0.4543	Met	0.1
7020	Basic Health Units that have necessary supplies for providing prenatal care according to care protocol and response capacity.	1/10	17.6%	80%	100% (82.4-100%)	0.9854	Met	0.1
7740	BHUs that have birth plans for the communities under their responsibility (initial agreement between health services and community authorities + guidelines defined in community delivery plan) verified in the community.	1/10	N/A*	80%	87.5% (61.7-98.4%)	0.7734	Met	0.1
7192	Basic Health Units that have qualified staff to attend births 24/7, according to standard.	1/10	60%	78%	76.5% (50.1-93.2%)	0.4395	Met	0.1
7040	Basic Health Units that have the necessary supplies for appropriate care of uncomplicated deliveries, according to standard.	1/10	7.1%	80%	47.1% (23.0-72.2%)	<0.00001	Not Met	0
7720	Inclusion of zinc in standards for diarrhea treatment (Yes-No).	1/10	NO	YES	YES	-	Met	0.1
7010	Basic Health Units that have the necessary supplies for child care (micronutrients, zinc, deworming drugs, ORS).	1/10	11.8%	80%	84.2% (60.4-96.6)	0.6768	Met	0.1
7710	Basic Health Units reporting monthly AIN-C in which 80% of children <24 months surveyed are registered.	1/10	N/A*	80%	53.3% (26.6-78.7%)	<0.00001	Not Met	0
7730	Population that lives in communities that have a plan for improvement of community sanitation and water quality (identification of problem and short- and long-term solutions).	1/10	N/A*	80%	100% (79.4-100%)	0.9772	Met	0.1
7750	Establishment of delivery and supervision mechanism for incentives for promoters, AIN-C monitors, women and companions (for birth), and community committees in the operating regulations for provision of PAISS+N.	1/10	NO	YES	YES	-	Met	0.1
							Total Score:	**0.8**

* New intervention: baseline assumed to be 0 %

Panama

Second Operation Performance Framework

No.	Indicator	Weight	Baseline	Target	Result	Assessment	Score
2020	Women of childbearing age (15—49 years) who did not want to get pregnant and were not using or did not have access to family planning methods	1/10	90.3%[1]	84.3%	98.8% [97.6-99.5]	Not Met	0
3040	Women of childbearing age (15—49 years) who attended their first antenatal care by doctor or nurse before 13 weeks gestation in their most recent pregnancy in the last two years	1/10	31.4%[2]	46.4%	31.2% [26.9-35.8]	Not Met	0
3020	Women of childbearing age (15—49 years) who received at least 4 antenatal care consultations for their most recent pregnancy by doctor or nurse in the last two years	1/10	38.3%	53.3%	24.2% [19.2-30.0]	Not Met	0
4095	Births in which intramuscular oxytocin (10 international units) were administered after birth in the most recent birth in the last two years	1/10	78.3%	85%	85.4% [81.0-89.1]	Met	0.1
4020	Percentage of women in childbearing age (15—49 years) who in their most recent pregnancy in the last two years received postpartum care by qualified personnel within the first 48 hours of birth	1/10	13.4%	28.4%	10.9% [7.7-15.2]	Not Met	0
4100	Newborns who received neonatal care by qualified personnel in a health facility within the first 48 hours of birth in the last two years	1/10	10.8%[3]	16.7%	16.4% [12.3-22.3]	Met	0.1
5030	Children 12 to 59 months who received 2 doses of deworming treatment in the last year	1/10	8.7%	38.7%	12.9% [10.2-16.2]	Not Met	0
5060	Mothers who gave their children 0—59 months oral rehydration salts and zinc in their last episode of diarrhea in the last two weeks	1/10	0.6%	20.6%	6.2% [2.2-16.4]	Not Met	0
5025	Children (12—23 months) who received at least one dose of MMR vaccine, according to vaccination card	1/10	69.1	76.1%	71.0% [65.7-75.8]	Not Met	0
5710	Homes in the target area consuming water with adequate quality	1/10	0.9	16%	0.0% [0.0-0.0]	Not Met	0
						Total Score:	**0.2**

1. Recalculated value is 90.0%. 2. Recalculated value is 37.3%. 3. Recalculated value is 10.4%.

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Administrator IDB

Costa Rica

Costa Rica

The purpose of SMI in Costa Rica is to help reduce adolescents' risky behavior in sexual and reproductive health — resulting in fewer adolescent pregnancies — through inter-institutional coordination of health, education and social services.

SMI-beneficiary areas include 11 Health Areas in the Huétar Caribe and Brunca regions, home to approximately 90,000 adolescents.

First Operation

The first operation lasted 24 months and received over USD 1 million (USD 1,142,857) from the SMI investment tranche and over USD 1.7 million (USD 1,714,286) in government counterpart. The performance tranche, committed on condition that performance targets are met, was USD 857,143. For disbursement of the performance tranche in the first operation, the Ministry of Health and Inter-American Development Bank agreed on eleven (11) process indicators.

In the first operation, conditions were established to implement the new care model for adolescents, including updating the national norm for comprehensive health care for adolescents: component on sexual / reproductive health. A new tool was designed and implemented to help identify at-risk adolescents (anyone who presents risk in sexual / reproductive health or mental health or social risk). To improve the quality of health care for adolescents: a) skills were developed in service providers; b) more flexible and convenient office hours were opened, tailored for adolescents; c) physical spaces were refurbished with improved conditions for privacy during consultations and counseling in sexual / reproductive health; d) actions "a" "b" and "c" were complemented with new education material and collective communication activities for adolescents; and e) supply / availability of at least four (4) modern birth control / protection methods were improved in the EBAIS (basic comprehensive health care teams).

Several national institutions participate in the adolescent care model, including the Ministry of Health, which holds the sector's steering role; the Costa Rican Social Security (CCSS), which is the health services provider; and the Ministry of Education, which is in charge of addressing issues of sexual / reproductive health in the educational sphere. In turn, the country's national child welfare agency (PANI) is in charge of protecting children / youth under the age of 18: it provides services to adolescents under age 15 who are pregnant and intervenes in the case of a denouncement of abuse, violence, or neglect. PANI also awards scholarships to adolescents so they can remain in the education system. And the education / nutrition centers (CEN) and integrated child nutrition / care centers (CINAI) provide support through meals services and education for adolescent mothers who have scarce resources and request support. In the framework of this initiative, they have contributed a specific module of education and accompaniment for adolescent mothers to prevent or postpone subsequent pregnancies.

In order to ensure sound inter-institutional coordination, a national-level management structure (UCN) was created, headed by the Ministry of Health, with offices at the regional level (UCR) and local level (UCL) to monitor the actions agreed upon in the framework of the care model and its interventions. The adolescent information system (SINA) was designed, as an institutional tool to facilitate case management and follow-up through the services network. One of the operation's main successes and challenges has been implementation of this system, which forms part of the Ministry of Health's national automated health surveillance system (SINAVISA). SINA is an integrated data platform interconnecting diverse sources, enabling the feeding of a registration system to track adolescents. There is a data entry module with all the programming in order to capture data from multiple sources, based on the data loading of adolescents' unified electronic health files (EDUS). There is a reports module, which can provide follow-up for individual adolescents, consolidated by EBAIS or regionally. It enables compilation of demographic information on adolescents, to verify minimum required interventions, update data on risks, interventions and referrals, identify cases with pending interventions and monitor the status of specific interventions.

SINA compiled information for adolescents from the following systems[43]:

- The CCSS's electronical medical record: EDUS (unified electronic

[43] One of the main challenges in assuring quality of SINA data has been to determine the number of adolescents attended by each institution in the SMI beneficiary area, since the geographic areas of concern vary from one institution to another (for example, there are PANI regional offices that do not coincide with the CCSS's Health Areas).

Costa Rica

- health file), which includes these two systems: the identification / agendas / appointments system (SIAC) and integrated health records system (SIES).
- The pharmacy system (SIFA)
- The CCSS's hospital discharge data module.
- PANI's INFOPANI system.
- The Ministry of Education's Programa de Informatización para el Alto Desempeño (PIAD) [informatics program for high performance], which enables access to data on student matriculation and on periodic movements from ministry databases.
- Information from CEN-CINAI through uploading data on adolescents registered directly by personnel in the centers.
- Civil registry database, enabling verification of each identified adolescent.

Second operation

The second operation received USD 846,400 from the investment tranche and USD 1.27 million from the government counterpart. The performance tranche, awarded on condition of meeting performance targets, is USD 635,000.

The second operation set up a performance framework between the Ministry of Health and the Inter-American Development Bank with ten (10) indicators. In this period, actions were intensified to expand coverage of comprehensive care for adolescents, for which the EBAIS and education centers organized to carry out enrollment of adolescents and develop clinical actions and health promotion actions in the education sphere. Inter-institutional tracking and follow-up of at-risk adolescents was also strengthened through the local coordination units (UCLs). In parallel, implementation of the SINA system continued, promoting the systematic registry of information on services provided to adolescent clients.

Criteria for evaluation of targets

The target measurement process in Costa Rica is more elaborate than in other SMI countries since most of the indicators (seven out of ten) use data on the entire beneficiary population. In addition, since a sampling is not used, in these indicators there is no confidence interval included (as it is in the other seven countries) to estimate whether the target is met, which makes attainment more restricted. Only in the three indicators measured by IHME, a target is considered to be met when the estimated value of the follow-up measurement is greater than the target; or when less than the target, the confidence interval of the measurement includes the value of the target.

What follows is a description of modifications made to definitions of the two indicators that did not involve changes in the set targets:

- Indicator–2: Subsequent births for adolescents. The denominator was modified because it had originally been defined as the ratio of subsequent births for adolescents over first-time births for adolescents. However, since the intervention aims at reducing the denominator, the original proposal no longer held. The indicator was modified to be: Women with two or more children before age 19 in the last year per 1000 over total number of adolescents age 10—19. The target of a 27% reduction was not modified.

- Indicator–4: Adolescents who adopted a modern birth control method within 42 days after giving birth or miscarrying in the last year. The period extended from seven (7) to forty-two (42) days to make it consistent with the country's current health standard and with the international standard on appropriate time to provide birth control methods after an adolescent girl has just given birth.

Second Operation Results

Costa Rica met the targets of eight (8) of the ten (10) indicators and shows a reduction in the main impact indicators in implementation of SMI. As previously mentioned, to verify targets, seven (7) of the ten (10) indicators relied on data from the country's adolescent information system (SINA).

In terms of results, Indicator–1 (ratio of birth in adolescents over total adolescent women per 100) fell from 4.97% in the baseline period (July 2011—June 2012) to 3.26% (in July 2017—June 2018 period), which constitutes a 34% reduction. This reduction surpasses the set target of 28%, even in the case of the June 2012—June 2013 period. An average reduction of 5% annually (over seven years) can be observed.

Indicator-2 is the ratio of subsequent births to adolescents over the total adolescent women per 1000. The indicator fell from 9.76 (in the July 2011—June 2012 period) to 7.16 (in the July 2017—June 2018 period), a drop of 27%, exactly meeting the target (27%).

Indicator-3 — adolescents who were pregnant or already mothers and who remained in the education system (began and finished the school year) — was over 90% in 2018, well above the target of 60%. The indicator only started to be calculated after start of the intervention; so with no prior data for a baseline, it was set at zero (0).

Costa Rica

Approximately 81.3% of adolescents in 2018 received a birth control method in the first 42 days after giving birth (Indicator-4), meeting the target of 80%. This is another indicator that did not have a baseline available, but the data uploaded to SINA show that in 2015 the value of the indicator was below 50%. As part of the project, this protocol was incorporated into the health care standard, and long-term birth control methods were acquired and made available to adolescents. Also, activities were coordinated with hospitals to make birth control methods available after an adolescent has given birth. As part of verification of this indicator, a sampling of cases was obtained in which the electronic file was reviewed in the CCSS and pharmacy systems, since as part of the intervention to facilitate access to condoms and injections, these methods were made available at the point of service, eliminating the need to write a prescription and track delivery. In addition, a smaller percentage was observed reporting procurement of oral contraceptives and condoms in the private sector. This group is not included in the calculations of this indicator, so the actual value may be even higher.

Indicator-5 — on adolescents who are treated in a comprehensive checkup ("consulta de atencion integral") for the first time during the period 2015—2018 — was more than 75% (72,926 adolescents), surpassing the target of 70%. The baseline for this specific intervention is zero (0), since the comprehensive checkup for adolescents involved implementation of a new national care model — including longer appointments, twice the length of regular checkup, and use of a risk screening tool — that had not been used prior to SMI. According to the new SMI-supported "national norm for comprehensive care of adolescents: component of sexual / reproductive health," every adolescent should get at least one comprehensive checkup and risk assessment during each stage of adolescence.

This is a basic intervention of the new care model because it involves not only enrollment of adolescents in the system and identification of their health risks, but also provision of counseling and follow-up. Through the local and regional coordination units (where representatives from the institutions involved in the project meet), it was possible to coordinate the inter-institutional work to enroll adolescents and provide follow-up. While the greatest number of adolescents have been enrolled by CCSS, it would not have been possible without the diligent work of the other institutions.

SINA reported 47,772 adolescents in its registries in 2018 alone. About 80% of these were registered in CCSS, 35% in PIAD (matriculation information system of students enrolled in the education system). In 2018 alone, CCSS reported 25,891 adolescents with at least one (1) comprehensive checkup. In total, 42,000 comprehensive checkups were performed. And in 2018, according to SINA, PANI attended to 2% of the adolescents and CEN-CINAI to 1%. In total, 83.3% of the adolescents registered by SINA in 2018 were attended to in at least one (1) of the institutions and 16% of the adolescents in at least two (2).

This year there were 14,184 risk assessments. Approximately 77.6% of these were classified as no risk, 13.7% as situations of medium risk, and 8.7% as high risk (1243 adolescents). Another key intervention is the identification and tracking of high-risk adolescents (1243 adolescents) and adolescent girls who became pregnant or gave birth in 2018 (1121). About 80.9% of these adolescents were tracked by PANI and CCSS (Indicator–6). The baseline was zero (0), because the intervention (and its registry) was new. Approximately 82.3% of these adolescents had at least one (1) comprehensive checkup under the new CCSS model. Of these high-risk adolescents, pregnancies, or new mothers, or girls under 15 years, they should have a referral and care in PANI; based on this definition, only 43 adolescents qualified under these criteria.

Indicator-7 — active adolescent and youth promoters who provide information and referrals for their adolescent partners in the last year — surpassed the target of 80% (reaching 81%). The baseline was zero (0) because this intervention is also new.

The three indicators captured through surveys were measured in June and August 2018, approximately six months before completion of the timeframe set for the second operation. Indicator–8, percentage of adolescents reported to have requested and received a birth control method or protection, met the proposed target. Indicator-9, on knowledge about use of birth control methods, showed a slight improvement, rising from 4.8% to 12.7%, but because the indicator is composed of twelve (12) criteria that must all be satisfied simultaneously, the target was not met. However, knowledge about the moment when a condom should be placed rose from 91.2% to 95.8%; the percentage of adolescents who reported knowing when to acquire a method rose from 61.5% to 77.9%; and there was a rise in percentage of adolescents who reported having received information on HIV in high school or in a health facility. In 2018, about 88.6% of adolescents reported having received information on HIV in their high school

Costa Rica

and 79.4% in the EBAIS, while in the baseline it was 57.3% in health facilities and 73.1% in high schools, respectively. Prevalence of use of methods in adolescents (Indicator-10), even though it fell short of the set target (82%), did attain 71.6%.

Costa Rica Performance Frameworks

First Operation Performance Framework

Indicator	Base-line	Target	Outcome 18 m	Tests	Assessment	Weight	Score
EBAIS officials sensitized to provide differentiated, friendly, comprehensive and quality care to adolescents.	0	75% of 496	114.1	N.A	Attained	0.091	0.091
Community leaders trained to promote health, identify high-risk cases, and bring health services to communities.	0	95% of 110	133.6	N.A	Attained	0.091	0.091
EBAIS centers that have physical areas with conditions of confidentiality and privacy to provide care for adolescents, according to a minimum standard defined in the Operations Manual	0	80%	100 (89.1-100)	0.9977	Attained	0.091	0.091
EBAIS with permanent availability of modern family planning methods according to the standard (injectable, condoms, oral, IUDs, as appropriate)	*	90%	90.6 (75-98.0)	0.5469	Attained	0.091	0.091
EBAIS that meet the norms of SRH counseling and have educational aides needed for counseling, education and differentiated attention to adolescents	0	80%	96.9 (83.8.-99.9)	0.9915	Attained	0.091	0.091
Local Inter-sector Coordination Units (UCL) created and implementing local plans according to the Operations Manual	0	90%	100 (89.1-100)	0.9977	Attained	0.091	0.091
EBAIS that have the norms for comprehensive attention of adolescents with intercultural perspective and in line with the philosophical framework of the project according to the Operational Manual	0	80%	100 (71.5-100	0.8655	Attained	0.091	0.091
EBAIS that have scheduled attention for adolescents (hours designated for adolescent care)	0	70%	93.8 (79.2-99.2)	0.9983	Attained	0.091	0.091
EBAIS that have the tools for early detection of risks associated with the reproductive behavior of adolescents	0	85%	56.3 (39.1-73.4)	0.000	Not Attained	0.091	0
EBAIS that have mechanisms to monitor adolescents at risk according to the technical norms and Operating Manual	0	85%	71.9 (53.3-86.3)	0.0188	Not Attained	0.091	0
EBAIS that have records and generate statistical reports about adolescents for UCL according to the provisions of the Program's Operating Manual	0	85%	88.7 (81.8.1-93.7)	0.8763	Attained	0.091	0.091
							Score=0.82

Costa Rica

Second Operation Results Framework

Results of performance indicators	Weight	Baseline	Measurement	Target	% change	Compliance	Score
1. Births to adolescent women age 10 —19 in the last year / Total number of adolescent women age 10—19 in the last year.	1/10	4.97	3.26	–28%	–34%	Yes	0.1
2. Women under 19 with two or more children in the last year / Total number of adolescent women ages 10—19 in the last year.	1/10	9.76	7.14	–27%	-27%	Yes	0.1
3. Adolescent mothers or pregnant adolescents remaining in education system in the last year.	1/10	*	90.7	60	NA	Yes	0.1
4. Adolescents using a modern birth control method within first 42 days after childbirth or miscarriage in last year.	1/10	*	81.2	80	NA	Yes	0.1
5. Adolescents receiving care at a comprehensive health center for first time, 2015—2018.	1/10	0	75.2	70%	75.2%	Yes	0.1
6. At-risk adolescents who received follow-up — intervention, referral (intra- and inter-institutional) —in last year.	1/10	0	80.9	80	nd	Yes	0.1
7. Active adolescent and youth promoters providing information and referrals to adolescents in last year.	1/10	0	81	80	81%	Yes	0.1
8. Adolescents who reported having requested and received a contraception/protection method in CCSS health services.	1/10	75	84.4 (74.3-91.5)	90	5.6PP	Yes	0.1
9. Adolescents who know correct way to use modern contraception/protection methods selected.	1/10	4.8	12.7 (9.3-17.1)	50	7.9 PP	No	0
10. Adolescents with an active sexual life (and/or partner) who currently use a modern contraception/protection method in their last relation (three months).	1/10	74	71.6 (63.3-78.5)	82	–2.4PP no sig	No	0
						Score	0.80

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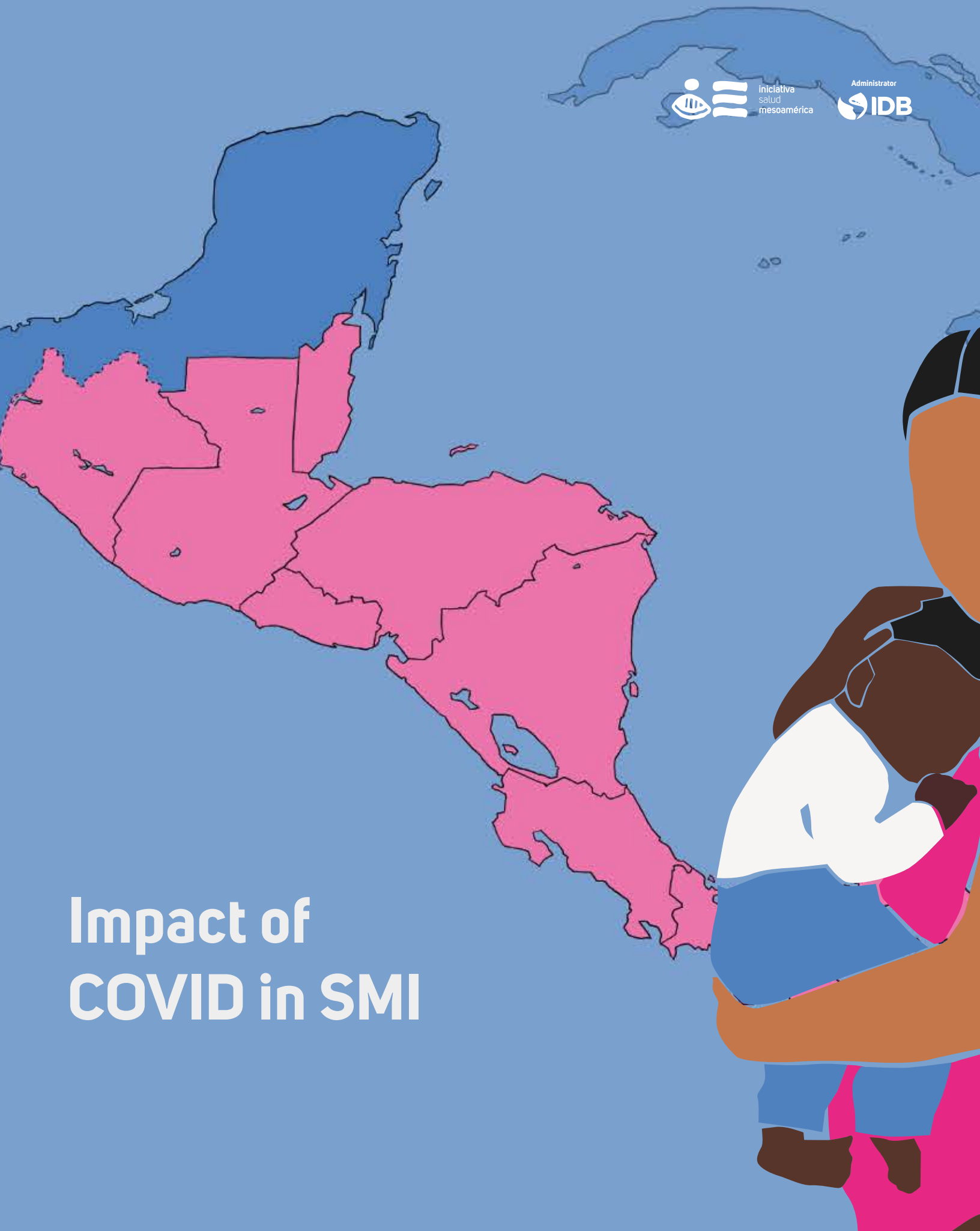
Administrator IDB



Impact of COVID in SMI

SMI conducted some analysis of the impact of COVID-19 in Honduras, Nicaragua, El Salvador, and Belize during the last trimester in 2021. This was based on the external monitoring surveys that were implemented in 2021, which had served as input for the proposal of changes in rules of operations presented to donors.

The analysis showed that the effects on service provision have been different effects between and within countries but were also consistent with global trends: in general preventive services were affected (community visits, maternal and child care), but most of the emergency care was sustained: Nicaragua, Honduras, and El Salvador did not report suspending delivery care but a reduction in community visits: 28% in El Salvador and 15% in Honduras, followed by cervical cancer screening (decreasing 21% and 13% respectively) and childcare visits (reductions of 18% and 13%

In El Salvador, 41% of health facilities reported suspending services due to the pandemic, 29% in Honduras, and 10% in Nicaragua (see Figure 26). In addition, there was a change in the number of required antenatal and child checkups (23% of in Honduras, almost 10% in El Salvador, and 3% in Nicaragua).

The pandemic has also impacted health-care-seeking behaviors: 13% of the population did not seek care in El Salvador and Belize, and 4% in Honduras. Covid-19 vaccination is ongoing in countries and may also impact the capacity to provide health services, especially at the beginning of the vaccination campaigns.

In conclusion, the pandemic affected maternal and child health services in SMI countries. In addition, hurricanes Eta and Iota also hit the region with devastating effects in 2020.

Feasibility of Reaching the targets

SMI analyzed the impact on payment indicators. For analysis purposes, we separate them into four groups:

- The first group of performance indicators related to new interventions. This includes interventions such as preconception care and cervical cancer screening.
- The second set of indicators are those of interventions that rely highly on community outreach strategies and were partially in place in the second operation because they were payment indicators for the third operation.
- The third set of indicators includes primary health care interventions already in place during the second operation.
- The fourth group of hospital quality of care that were already in place during the second operation.

Group 1: New Indicators and Interventions in SMI

Interventions and indicators not implemented were incentivized or measured before as part of SMI, such as pre-conceptional or cervical cancer screening (see Figure 27).

Countries went one step further, given the success in improvements in the second operation in reproductive and maternal child health indicators. They saw their inclusion in the performance matrix as an opportunity to improve results in other areas that need improvement. For example, cervical cancer screening is one of the leading causes of death in Central American countries, according to GBD. But doing that, governments assume higher risks because it is less likely to achieve targets in interventions already offered. Still, the degree of systematization and improvement had not been implemented.

Countries originally had only two years to optimize processes, change current practices and, in some cases, design and implement new tools to achieve improvements in coverage. In the end, the timeframe was extended due to the pandemic, but these indicators rely on healthcare seeking the most affected preventive services. It is expected that targets for these indicators will not be met, given that the gap between the latest monitoring measurement and the high target. Indicators are measured retrospectively considering the previous year and high targets (between 60 and 70%). According to the Goalkeeper report, breast cancer screening fell 5 percentage points in OECD countries.

Group 2: Primary Health Care Interventions Highly Rely on Outreach

The second group of indicators are from interventions that rely highly on community outreach strategies, such as home treatment of diarrhea, distribution of micronutrients to prevent anemia, and child immunization campaigns.

Childcare at the facility level was meant to be strengthened during the second operation, and community outreach was supposed to be strengthened during the third operation. However, it has been highly impacted by the pandemic. For some indicators, there is potential for improvement, such as home treatment of diarrhea, given that the recall period is short and teams in ministries of health are increasingly refocusing on these interventions (see Figure 28). For other indicators, there is less space for improvement, given the larger recall period for measurement as complete vaccination for age or anemia, for example. According to the Goalkeeper, in 2020, vaccination coverage decreased four percentage points globally3.

Group 3: Primary Health Care Interventions from the Second Operations

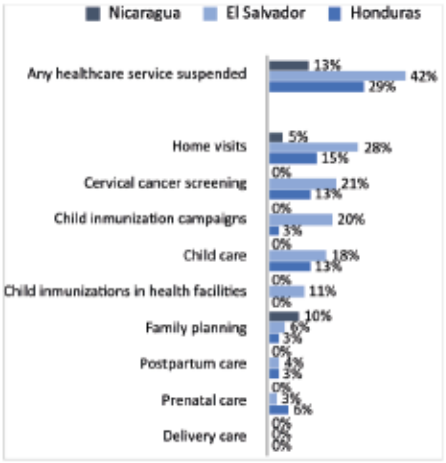
The third set of indicators includes primary health care interventions already in place during the second operation. For these indicators, mixed results are expected depending on the country and the type of indicator. For example, the pandemic has affected the timing of antenatal care and the number of antenatal care visits, mainly in Honduras and Belize. Being measured retrospectively considering two years before the survey, which may include periods highly impacted by the pandemic, could affect the likelihood of achieving the targets. In addition, these indicators also rely to some extent on community catchment, which was highly affected. Delivery services were not interrupted, and women continued seeking delivery care, a sign of success in maintaining gains with previous SMI operations.

Group 4: Hospital Interventions Related to Quality of Care

The fourth set of indicators are those related to the quality of care. Hospitals continued providing delivery care and managing obstetric and neonatal complications. Monitoring results showed a few exceptions, a generally improving trend between baseline, second operation results, and the latest monitoring measurement for hospital indicators. These indicators are in general on track to meet targets.

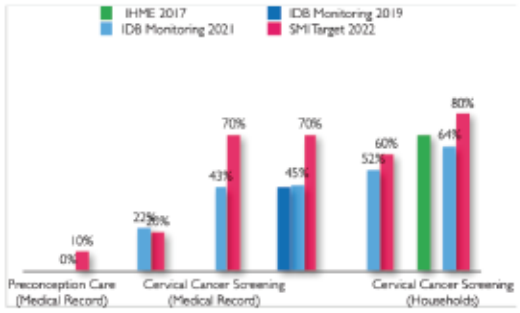
Feasibility of Reaching the targets

Figure 26. Proportion of health facilities that suspended health services in 2020.



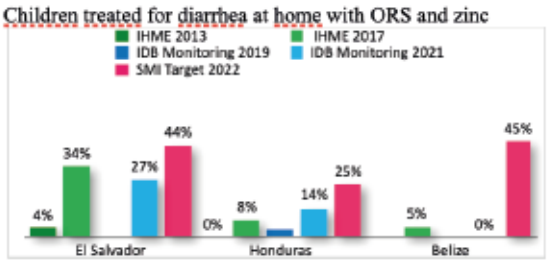
Source: SMI 2021. Midterm Monitoring Measurement Results in each country.

Figure 27. Examples of new indicators and operations



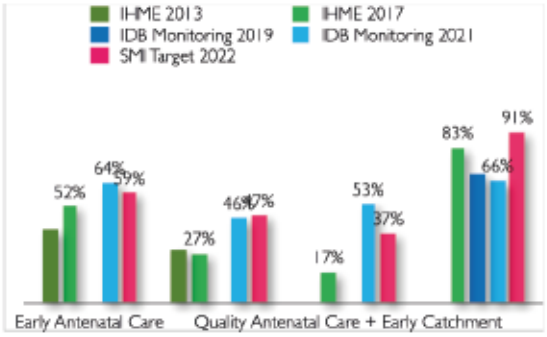
Source: SMI 2021. Midterm Monitoring Measurement Results in each country.

Figure 28. Examples of Primary Health Care Interventions that Rely Heavily on Community Outreach



Source: SMI 2021. Midterm Monitoring Measurement Results in each country.

Figure 29. Examples of Primary Healthcare Interventions from 2nd Operations



Source: SMI 2021. Midterm Monitoring Measurement Results in each country.

ANNEXES

Annex 1: Sustainability Workshops

Belize Workshop – August 18-19, 2022

The workshop in Belize took place on August 18 to 19, 2022, marking the first country workshop. This event served as an opportunity to experiment with facilitation methods and obtain valuable insights from this first experience. The primary objective was to construct a sustainability plan founded on activities, practices, or essential cross-cutting interventions facilitated with SMI support throughout its three operations. The interventions were intended to be self-sustaining by the country once SMI's technical assistance concluded.

As part of the workshop, several outcomes were anticipated:

1. Compilation of all interventions conceived and executed with SMI backing, categorized by their level of maturity using the Ecocycle mapping process.
2. Compilation of prioritized interventions to be sustained, based on the analysis conducted by country teams.
3. Development of a Sustainability Matrix encompassing the prioritized interventions, elucidating the rationale for their sustainability, financial requirements, impediments to be considered, and a vision of success five years into the future.
4. Agreements regarding how these initial components would inform the sustainability plan and subsequent steps were also sought.

The workshop brought together 19 participants across five districts within Belize. Following an introductory phase, participants were subdivided into smaller groups tasked with identifying SMI interventions that had been conceived and applied during the preceding three SMI operations. Each identified intervention was documented on a post-it note, which included pertinent information regarding the intervention's objective, scope of implementation, and target audience. These post-it notes were then arranged on an eco-cycle planning diagram to gauge their maturity levels. Subsequently, participants cast their votes using circle stickers to prioritize interventions, starting with those already mature and those in the early stages. Additional voting rounds were conducted to consider other interventions, including those in the development stage or requiring reevaluation.

With the interventions prioritized, participants jumped into discussions on the sustainability assessment results. They employed sustainability capacity domains to scrutinize the prioritized interventions and discerned the requisite activities to ensure their ongoing viability. The culmination of this effort was a matrix of prioritized interventions coupled with a list of activities earmarked for implementation.

Several noteworthy lessons were gleaned from this first workshop. It was deemed necessary to incorporate aids to facilitate the identification and selection of interventions. Surprisingly, some of the most critical interventions brought forth by SMI, such as electronic tools for healthcare quality assessment, did not emerge prominently in initial discussions due to their perceived integration into the Ministry of Health's routine operations. While this was encouraging, it underscored the need to determine whether additional efforts were necessary to secure their sustainability. Furthermore, certain interventions were part of more extensive strategies. In subsequent workshops, efforts would be made to group them by strategic areas or lines of work, recognizing that identical activities might be necessary to sustain multiple interventions.

In summary, the workshop proved successful, and the selected interventions will undergo strategic discussions between the IDB and the decision-makers from the Ministry of Health to determine the required support from SMI in order to develop the sustainability plan accordingly.

Annex 1: Sustainability Workshops

El Salvador Workshop – July 18-20, 2023

Between July 18 and 20, the Sustainability Workshop for El Salvador was conducted with the aim of formulating a plan based on strategies and interventions supported by the ISM throughout its three operational phases. The selection process for definitive interventions emphasized prioritizing those that had demonstrated success or showed promise, along with an appropriate level of development or maturity for sustained presence or expansion in the country.

Utilizing an interactive approach that involved group participation, the creation of collaborative spaces, and thorough analysis, complemented by progressive voting involving all attendees, a total of seven interventions were identified. These interventions encompass various stages of the life cycle and different levels of attention.

The final plan will undergo a joint strategic review in collaboration with the Inter-American Development Bank (IDB) and local authorities. This review is intended to guide efforts toward priority areas that align with the sustainability goals outlined.

Honduras Workshop – August 1-3, 2023

From August 1 to 3, the Sustainability Workshop for Honduras was convened with the aim of formulating a plan based on strategies and interventions supported by ISM across its three operational phases. The selection process for definitive interventions emphasized giving precedence to those that had demonstrated success or promising outcomes and exhibited an appropriate level of development or maturity for their sustained presence or expansion in the country.

Utilizing an interactive approach involving group participation, the creation of collaborative spaces, and thorough analysis, complemented by progressive voting involving all attendees, a total of 10 interventions were identified. These interventions span various stages of the life cycle and encompass different levels of care, including a cross-sectional intervention.

The final plan will undergo a comprehensive joint strategic review involving the Inter-American Development Bank (IDB) and local authorities. This review aims to guide efforts towards priority areas aligned with the sustainability goals established.

Annex 2: Condensed Draft Sustainability Plans

Belize: Draft Sustainability Plan

EDT	Component, products and activities	SMI TA	MOHW support	Responsability (MOHW or IDB)	Start	End	Status
1	Continuous quality improvement (CQI) strategy to reduce maternal and neonatal morbidity and mortality						
1.1	Scale up and sustain QI interventions for Quality of care in Maternal and neonatal health in 7 hospitals and referring Urban facilities within the Country´s 6 Districts.	x		IDB	1/16/2023	6/30/2023	
1.2	Strengthening QI Leadership and management skills in MOHW Authorities	x	x	EMI, KS, JNS, MPC, NB, AG, QIOs	4/10/2023	4/28/2023	
1.3	Strengthen the QIU in its roles, functions and QI knowledge to prepare and qualify it for further scale-up in country.	x					
2	Cervical cancer screening coverage and timely management						
2.1	Secure provision of VIA services in country	x	x				
3	Contraception						
3.1	Ensure availability for permanent contraception in all regional hospitals in country (BTLs, Mini-Lap and Vasectomy) and availability of temporary methods in country		x		11/1/2022	6/30/2023	
4	Use of digital health tools (link to Plan Digital)						
4.1	Plan to finance licenses by country, starting 2024-payment confirmed by SMI until 2023	x	x	EMI, KS, DL, NB			
4.2	Adjust current data capture tools (CC and Tableau) to enable analysis of maternal and neonatal outcomes linked to QI routine monitoring of complications, including information from early pregnancy care.	x		Digital	1/6/2023	3/30/2023	
4.3	Work with the Epidemiology unit to design default visuals and/or infographics with aggregated and disagregated data for use by MOHW officials, Directors, and MOHW webpage.	x	x	KS, NB, AG, Digital	4/1/2023	4/30/2023	

Annex 2: Condensed Draft Sustainability Plans

El Salvador: Draft Sustainability Plan

Interventions, components, Activities	Identified domains	Responsible Unit
Improve the management and monitoring of Diarrhea in children under 5 years of age at the first level with community participation - (through strengthening the work of the ENRO Volunteer at the community level) - think about the option of expanding the work in child care within the community. - Think about how to rethink this intervention for the community)		
Strengthen the actions of the National Network of Volunteers in Oral Rehydration	Environmental Support, Communications, Partnership	
Agree and develop a suitable profile for the selection of RO volunteers		DNPNA/Community Health Unit
Socialize to 100% of the families the names of the RO Volunteers		
Maintain constant communication between the Health team and RO Volunteer		
Develop skills in the Network of Oral Rehydration Volunteers and Health Workers. (continuous training plan)	Organizational Capacity, Enabling Environments, Program Evaluation, Program Adaptation	
Train RO Volunteers on issues related to Determinants, prevention and adequate treatment of EDAS		DNPNA/Community Health Unit
Carry out demonstrations in the preparation of Oral Serum and Zinc dosage to RO Volunteers		
Verify what the Volunteers have learned in RO		
Train and strengthen community social values such as Solidarity, discretion among others.		
Supply of Oral Serum and Zinc to RO Volunteers	Organizational capacity, favorable environment, ability to adapt	
Review of the needs for Oral Rehydration Salts and Zinc according to population		DNPNA/Community Health Unit
Review of ORS and Zinc consumption for replenishment		
Supply Whey and Zinc to RO Volunteers on a monthly basis (the monitoring book for children under 5 years of age has fallen into disuse (mainly for stationery). What they carry is the daily activity record sheet)		
Motivate the network of RO Volunteers	Environmental support, association, organizational capacity, communication, favorable environment	
Card to the network of RO Volunteers		DNPNA/Community Health Unit
	environment	
Card to the network of RO Volunteers		DNPNA/Community Health Unit
Hold regular meetings between the Health Team and RO Volunteers and document successful experiences in the minute book.		
Congratulate the efforts and give reports on the evolution of cases to the RO Volunteers		
Manage locally the celebration of the international volunteer day 5/12		
Provision of Basic Equipment for EDAS care by RO Volunteers		
Intervention _ Contraception		
Component - Strengthening of capacities	Strategic planning	DIMPYN/ DPNA
Activity 1.1.1. Update of Eligibility criteria for health personnel		
Activity 1.1.2. Socialization of the eligibility criteria.		
Activity 1.1.3 Continuous education plan for newly hired health personnel.		
Component - Promotion	communications	Communications / Health Promotion
Activity 1.2.1. Design communication materials to promote the proper use of birth control methods according to age groups.		
Component - Supply	Funding stability	Supply Chain / DNPNA
Activity 1.3.1. Identify organizations to ensure the permanent supply of contraceptive methods		
Activity 1.3.2. Supply monitoring by health establishment through digital platforms		
Activity 1.3.3. Distribute methods according to need and in a timely manner		
Activity 1.3.4. Secure the budget line annually to acquire the methods		
Component - Monitoring and follow-up of interventions	Program evaluation	DNPNA / Hospitals
Activity 1.4.1. Update the PNA facilitative supervision manual		
Activity 1.4.2. Implementation of the supervision manual		
Activity 1.4.3. Technical assistance according to need.		
Activity 1.4.4. Monitoring of files through the SIS		
Satisfaction indicator, covered couples, mix calculation methodology		
Intervention _ Preconceptional Care		
Component - Have a regulatory framework (there is an update)	Strategic planning	DIMPYN/ DPNA
Activity 1.1.1. Regulation update		
Activity 1.1.2. Regulatory approval		
Activity 1.1.3. Socialization of regulations		
Activity 1.1.4 Continuous education plan for newly hired health personnel.		
Component - Promotion	communications	Communications / Health Promotion
Activity 1.2.1. Mass dissemination plan on the importance of preconception		
Activity 1.2.2. Design communication materials to promote preventive activities in MEF		
Component - Supply	Funding stability	Supply Chain / DNPNA
Activity 1.3.1. Manage financing for preconception care		
Activity 1.3.2. Guarantee the availability of medication supplies (folic acid and multivitamins) and laboratory supplies (preconceptional care profile, rapid pregnancy tests) in health facilities.		

Annex 2: Condensed Draft Sustainability Plans

Component - Monitoring and follow-up of interventions	Program evaluation	DNPNA
Activity 1.4.1. Update the PNA facilitative supervision manual		
Activity 1.4.2. Implementation of the supervision manual		
Activity 1.4.3. Technical assistance according to need.		
Activity 1.4.4. Monitoring of files through the SIS		
Implementation at the establishment level?		
how to monitor capture?		
Early detection of cervical cancer in women from 20 to 59 years old		
Strengthen the theoretical and practical competence of multidisciplinary human resources	First Level Directorate National Directorate of Hospitals National Institute of Health Institutional Financial Unit Association with Basic Health International Support from WHO/PAHO	Health Programs Policy Unit Office of Noncommunicable Diseases-Cancer
Carrying out training for multidisciplinary human resources to provide feedback on the screening strategy with the HPV and PAP test, based on the updated and official technical guidelines for the prevention and control of cervical uterine and breast cancer.		
Conducting training to train multidisciplinary human resources responsible for treatment centers.		
Carrying out training for the formation of Colposcopists aimed at Gynecological Doctors, training 17 gynecologist-colposcopists		
Target Population Identification		
Preparation of a list of women from 20 to 59 years old by geographic area of the corresponding Health Unit (cytology and HPV)		
Identification of women between the ages of 20 and 59 who meet the criteria for screening		
Establishment of goals to be met in a planned period of time: 70% of women screened; 90% of women in treatment for a positive screening and/or cancer (it is important to maintain the SI)		
Execution of screenings		
Planning of screening days by health establishment		
Offer screening to all women who attend the Health Unit: enrollment in programs and/or spontaneous demand. (There are screening cards, and review of the electronic file) (It will be linked to the intervention of the 40-59a woman group)		
Strengthen Installed Capacity		
Count as a minimum for each area of the process the following: a) the performance of the screening: have the supplies for taking the screening (HPV: tubes-brushes/ PAP: slides, spatulas and brushes) gynecological couch, rotating bench, neck lamp goose, two-step racks, steel bucket, speculums, different measures, record book for cervical screening; (there is still support in the paper record)-incorporation into the SIS is in process) b) treatment: cryotherapy guns, thermocoagulators, acetic acid, nitrous oxide, gloves, swabs, sanitary towels c) Laboratory processing: HPV: Powder-free gloves, laboratory consumables; Computer, refrigerator (maintain cold chain) HPV test processing equipment (loan) / PAP: supplies for staining slides, gloves, microscopes		
Give continuity to the care networks defined by SIBASI		
100% of health establishments at the first level of care carry out screening; 19 National Health Units established with HPV test processing laboratory 75 Health Units where treatment centers have been implemented; 5 Health Units trained with a Colposcopy Unit 25 Reference hospital for colposcopic evaluation as appropriate; 1 Third level hospital (National Women's Hospital) for referral of women diagnosed with cancer.		
Nominal Registry of Target Population		
Screened women must be registered in the official information system: SIS-VIEGEPES- Cancer Registry		
international partnerships		
Maintain current international associations: Basic Health International		
Give continuity to the management of support with national and international organizations or agencies: PAHO/WHO- International Atomic Energy Agency _ Mesoamerica Health Initiative		
Monitoring of actions carried out for the construction of indicators		
Give continuity to the management of support with national and international organizations or agencies: PAHO/WHO- International Atomic Energy Agency _ Mesoamerica Health Initiative		
Construction of Process indicators: Screening Coverage, Treatment Coverage: The objective of these indicators is to achieve 70% screening and 90% treatment.		
Intervention _ Quality Prenatal Controls		
Component - Strengthening of capacities	Strategic planning	DIMPYN/ DPNA
Activity 1.1.1. training plan		
Activity 1.1.2. Resource management for the implementation of the Plan		
Activity1.1.3. Implementation of the training plan for facilitators		
Activity 1.1.4 Follow-up to replicas of the training plan		
Activity 1.1.5 Continuing education		
Component - Supply	Funding stability	Supply Chain / DNPNA
Activity 1.2.1. Have basic medical equipment, furniture and diagnostic equipment (US and Doppler)		
Activity 1.2.2. Guarantee the availability of supply of medicines and laboratory supplies in health establishments.		
Component - Monitoring and follow-up of interventions	Program evaluation	DNPNA / Quality
Activity 1.3.1. Standardize CPN evaluation criteria		
Activity1.3.2. Socialize CPN evaluation criteria		
Activity 1.3.3. Evaluations of compliance with criteria in establishments provided by CPN		
Activity 1.3.4. Audit of MOE (extreme obstetric morbidities) and Maternal Deaths		

Annex 2: Condensed Draft Sustainability Plans

Intervention _ Quality Prenatal Controls		
Component - Strengthening of capacities	Strategic planning	DIMPYN/ DPNA
Activity 1.1.1. training plan		
Activity 1.1.2. Resource management for the implementation of the Plan		
Activity1.1.3. Implementation of the training plan for facilitators		
Activity 1.1.4 Follow-up to replicas of the training plan		
Activity 1.1.5 Continuing education		
Component - Supply	Funding stability	Supply Chain / DNPNA
Activity 1.2.1. Have basic medical equipment, furniture and diagnostic equipment (US and Doppler)		
Activity 1.2.2. Guarantee the availability of supply of medicines and laboratory supplies in health establishments.		
Component - Monitoring and follow-up of interventions	Program evaluation	DNPNA / Quality
Activity 1.3.1. Standardize CPN evaluation criteria		
Activity1.3.2. Socialize CPN evaluation criteria		
Activity 1.3.3. Evaluations of compliance with criteria in establishments provided by CPN		
Activity 1.3.4. Audit of MOE (extreme obstetric morbidities) and Maternal Deaths		
Activity 1.3.5. Carry out improvement plan		
Intervention _ Obstetric complications		
Component - Guarantee early identification and timely management of obstetric complications in the first and second level	Strategic planning	DIMPYN/ DPNA
Intervention: Preventive Attention and Health Care for Adult Women.		
Component: Development, dissemination and implementation of the registration and control filter sheet for adult women for the identification and approach of risk factors that predispose to the suffering of prioritized prevalent diseases.	Communications and organizational capacity	Adult Health Care and Attention Unit
Validation of the registration and control filter sheet for adult women.		
Reproduction of the registration and control filter sheet for adult women.		
Dissemination, socialization, implementation and execution of the registration and control filter sheet for adult women.		
Generation of competencies in multidisciplinary personnel for the application of the registration and control filter sheet to adult women		
Monitoring and evaluation of the implementation of the registration and control filter sheet for adult women		
Feedback and accompaniment (coaching)		
Component: Systematization of the approach to adult women through the performance of specific regular screenings by age intervals, to identify and prevent risks of suffering from prioritized prevalent diseases.	Funding stability and Associates/Partners	Adult Health Care and Attention Unit
Validation of screening toolboxes - screening toolbox - in adult women by age intervals.		
Development of strategies for the insurance of inputs, equipment, medicines; for the realization of screening toolbox.		
Dissemination, socialization, implementation and execution of the screening toolbox in adult women.		
Generation of competences in the multidisciplinary personnel for the realization and analysis of the screening toolbox in adult women.		
Monitoring and evaluation of the performance and analysis of the screening toolbox for adult women		
Feedback and accompaniment (coaching)		
Component: Development of clinical pathways for preventive care and health care for adult women.	Communications and organizational capacity	Adult Health Care and Attention Unit
Design of clinical pathways for preventive care and health care for adult women.		
Dissemination, socialization, implementation and execution of clinical pathways for preventive care and health care for adult women.		
Generation of competencies in multidisciplinary personnel for the use of clinical pathways in preventive care and health care for adult women.		
Digital design of educational material for adult women in relation to findings found with the use of clinical pathways		
Monitoring the execution of clinical pathways		
Feedback and accompaniment (coaching)		

Annex 2: Condensed Draft Sustainability Plans

Honduras: Draft Sustainability Plan

EDT	Interventions, components, Activities
1	Family Planning in the rural area
1.1	Component 1: ORGANIZATION AND COORDINATION OF COMMUNITIES TO INTERVENE WITH THE RURAL FP STRATEGY
	1.1.1. Activity: Prioritization of communities to implement the intervention, according to the established criteria
	1.1.2. Activity: Organization of workshops, acquisition of documents and supplies for training
	1.1.3. Activity: Programming of workshops, selection of participants
1.2	Component 2: DEVELOPMENT OF COMPETENCES
	1.2.1. Activity: Training for the facilitator team of the health regions, networks and the manager's coordinating team
	1.2.2. Activity: Training for the monitors of the selected communities
	Activity:
1.3	Component 3: PERMANENT AVAILABILITY OF CONTRACEPTIVE METHODS TO MONITORS
	1.3.1. Activity: Scheduling delivery of contraceptive methods to monitors
	1.3.2. Activity: Distribution of contraceptive methods to the monitors of the intervened communities (depends on the ES)
	1.3.3. Activity: monitoring delivery of contraceptive methods
1.4	Component 4: SUPERVISION, MONITORING AND EVALUATION
	1.4.1. Activity: Monthly meetings with the AGC (rural FP monitors)
	1.4.2. Activity: Continuous strengthening of AGCs (rural FP monitors)
	1.4.3. Activity: Follow-up on referrals for delivery of long-term and permanent methods, adverse effects of contraceptive methods
	1.4.4. Activity: Evaluation of the rural FP strategy, through: a) Percentage of communities intervened with respect to those programmed b) Family Planning Coverage by area of intervention c) Quantity of methods delivered by type of method d) Couples Protected by type of method
1.5	Component 5: INFORMATION SYSTEM: RECORD FORMATS
	Activity: Provision of the stationary used for the development of the activities of the rural FP monitor
	Activity: Monitoring the correct completion of the different instruments: a) FFR No 1: "Monthly Activities Report", which compiles all the activities that represent "community care for people" and therefore becomes a physical goal.
2	Cervical cancer screening with quality
2.1	Component 1: UPDATED REGULATIONS
	2.1.1. Activity: Coordination with the First Level Care Department to manage the updating of the cancer screening regulations
	2.1.2. Activity: Provision of updated regulations to the ESFAM
	2.1.3. Activity: Programming of human resources that will be updated in the cervical cancer regulations
2.2	Component 2: DEVELOPMENT OF COMPETENCES
	2.2.1. Activity: Training for the facilitator team of the health regions and the coordinating team of the network
	2.2.2. Activity: Training of operational resources of health establishments
2.3	Component 3: BIOSPSY COLPOSCOPY
	2.3.1. Activity: Coordination with second level for carrying out colposcopy-biopsy
	2.3.2. Activity: monitoring of management according to biopsy results
2.4	Component 4: COUNSELING
3	Surveillance of MEF and 50 to 64 years of age for community monitoring of MAC, CACU Screening
3.1	Component 1: SUPPLY OF INPUTS
	3.1.1. Activity: Planning the number of lists necessary for the registration of women of childbearing age and women between 50 and 64 years of age in the communities
	3.1.2. Activity: printing MEF lists for monitoring in the community
	3.1.3. Activity: Printing of consolidated lists by network and by ES
3.2	Component 2: DEVELOPMENT OF COMPETENCES
	3.2.1. Activity: Training for the facilitating team of the health regions and the network coordinating team
	3.2.2. Activity: Training of operational resources of health establishments
3.3	Component 3: FOLLOW-UP, MONITORING AND EVALUATION
	3.3.1. Activity: Home visits by ESFAM for the initial filling of the community list
	3.3.2. Activity: Listing update
	3.3.3. Activity: Analysis, evaluation throught:
	a) Women of childbearing age who use MAC
	b) Couples protected by type of contraceptive method
	c) Women of childbearing age identified as at risk who use CAM
	d) Women with current Cacus screening
4	Quality prenatal care and identification of pregnant women at obstetric risk
4.1	Compliance with quality prenatal control regulations
	1. Monthly, quarterly, semi-annual and annual supervision and analysis of compliance with quality prenatal care regulations
	2. Continuous training
4.2	Early identification of obstetric risk factors that affect neonatal prognosis and timely referral to the corresponding level.
	Timely management of pathologies identified during pregnancy and referral as needed
	Filling out the obstetric risk screening sheet
	Compliance with the guidelines of the national reference and response system (SINARR)
	Effective use of information and communication technologies with SINARR
	Request second level specialist shift role
	Follow-up of referred users, by first and second level
	Collaborative Training
	Other topics that can be included: Mother Star, Filter Sheet for the MEF
5	Clean and safe delivery with humane treatment

	Other topics that can be included: Mother Star, Filter Sheet for the MEF
5	Clean and safe delivery with humane treatment
5.1	Continuous quality improvement
	collaborative development
	User satisfaction survey
	Process implementation
	Incentive plan for good performance
5.2	skills development
	Establish management mechanisms to ensure technical and financial support with other cooperators to ensure training processes.
	In-service training on the topic of clean, safe and humanized delivery
5.3	Monitoring/Evaluation
	Technical support for the elaboration of the monitoring and evaluation guide.
	Technical support for training and implementation of the monitoring and evaluation guide.
5.4	Required inputs (adequate infrastructure, adequate physical spaces)
	Establish a stock pact for medicines, inputs and supplies for the care of a clean and safe delivery.
5.5	Interculturality
	Technical support to identify and develop interventions for institutional delivery.
6	Implementation of the model for the care of obstetric complications at the hospital level
6.1	Component 1 Organization phase
	Process documentation activity (diagnosis)
	Process optimization activity
	Activity Skills development (workshops)
	Management management team formation
	Formation of the care maternal deaths team
	Approve handling protocols including triage sheet
	Collaborative between hospitals that have an implemented model
6.2	Component 2 Obstetric Triage Implementation Phase
	Environment Identification Activity for Triage Operation
	Activity Environment equipment
	Activity Training and sensitization of the Obstetric triage sheet
	Activity
6.3	Component 3 Management of obstetric complications
	Training in standards of care for obstetric complications
	Training of the operation of the Rapid Response Team to all obstetrics personnel
	Organization of the rapid response team
	Search for national suppliers of handmade hydrostatic balloons
	Training in management of obstetric hemorrhages with an integrated approach
	Equip Kit for Obstetric Complication
6.4	Component Transfer if necessary
	Train transport personnel
	Guarantee the good condition of ambulances
	Transfer kit equipment.
	Implement transfer protocol [illegible]
6.5	Monitoring and follow-up
	external monitoring
	self-monitoring
	Development of skills in monitoring the entire team.
	Accompaniment in service
7	Implementation of the Neonatal Care Model for the healthy and complicated neonate at the Hospital level
7.1	Component Clinical Screening of the Pregnant
	Activity: Preparation of an instrument that contains maternal risk factors that affect the newborn
	Activity: Application of the instrument in Health Establishments of the first and second level (hospitals of lower complexity to refer to a level of greater complexity) of care, for timely decision-making.
	Activity: In a meeting of the advisory council, carry out the corresponding coordination with the Health Region.
	Activity: Communication and coordination (patient management) for timely referrals
	Activity: Have a registry of patients with maternal risk factors.
7.2	Component 2 Immediate care of the newborn: Conventional or differentiated
	Activity: Collaborative learning for the human resource that is in direct attention
	Activity: Monthly self-monitoring of indicators
	Activity: Periodic supervision of compliance with the application of care protocols.
	Activity: Meetings of the neonatology service for dissemination and analysis of results.
	Activity: Socialization of results periodically to the hospital authorities, for timely decision-making
7.3	Component 3 Activation of the response team
	Activity: Collaborative learning for the human resource that is in direct attention
	Activity: Organization and assignment of functions for the activation of the response team
	Activity: Have the necessary supplies and equipment for the management of neonatal complications.
7.4	Component 4 Initial management and stabilization of the neonate prior to transfer to the neonatology
	Activity: Collaborative learning for the human resource that is in direct attention
	Activity: Organization and assignment of functions for the initial management and stabilization of the neonate prior to transfer
	Activity: Have the necessary supplies and equipment for the safe transfer of the neonate
7.5	Component 5 Specific management of the complication according to the protocol, protocol for the transfer of the critical newborn to a more complex ES)
	Activity: Collaborative learning for the human resource that is in direct attention
	Activity: Supervision of compliance in the application of management protocols
	Activity: Have the necessary supplies and equipment for the safe transfer of the neonate
	Activity
	Activity
8	Implementation of the STABLE Protocol at Both Levels
8.1	Component 1: Development of skills in the first and second level of care
	Activity: Collaborative learning for the human resource that is in direct attention in HE of the first and second level of attention.
	Activity: Formation of teams for the transfer of suitable RN
8.2	Assurance of Supplies, Medicines and Logistics
	Activity: Assurance of the timely supply of supplies and medicines

Annex 2: Condensed Draft Sustainability Plans

8	Implementation of the STABLE Protocol at Both Levels
8.1	**Component 1: Development of skills in the first and second level of care**
	Activity: Collaborative learning for the human resource that is in direct attention in HE of the first and second level of attention.
	Activity: Formation of teams for the transfer of suitable RN
8.2	**Assurance of Supplies, Medicines and Logistics**
	Activity: Assurance of the timely supply of supplies and medicines
	Activity: Availability of trained human resources for the transfer of the NB
	Activity: Have equipped ambulances for timely and safe transfer of newborns in the first and second level of care.
8.3	**Implementation**
	Activity: Preparation and application of an instrument that should be used to monitor vital signs during the transfer of the newborn.
8.4	**Communication with the Receiver**
	Activity: Communication and coordination through hospital patient management to guarantee immediate care for the newborn.
8.5	**Intra-transfer follow-up**
	Activity: Communication and monitoring of the transfer team with the receiving hospital.
8.6	**Answer**
	Activity: Ensure the continuity of care provided to the newborn.
9	Decreased levels of anemia in children under 2 years of age
9.1	**Component 1: Organization of the process**
	Preparation of work plan
	Preparation of monitoring instruments
	Lists for community monitoring of children under 5 years of age
	Identification of human resource gaps (Institutional and community)
	Definition of target population from 4 months to 2 years.
9.2	**Component 2: Implementation**
	Development of technical skills, knowledge and practice for institutional and volunteer staff (standards, guides, protocols, uses of equipment, etc.)
	collaborative learning
	Direct attention in the ES for micronutrient delivery
	AIN-C meetings for supplementation and follow-up of children
	Home visits to homes to verify consumption and delivery of micronutrients
	Update of micronutrient supplementation lists
	Supplies (Stationery, IMCI sheet, medical history, nutritional surveillance card, etc.)
	Micronutrient supply
	Logistics (demobilization expenses
9.3	**Component 3: Process monitoring**
	Field supervisions to verify process compliance
	Field supervision and health establishment to verify micronutrient supply
9.4	**Component 4: Monitoring**
	Possibility of digitizing the list of children for community monitoring of children under 5 years of age
	Design and development of measuring instrument
	Measurement of anemia in children under 2 years of age every 6 months with non-invasive equipment
10	Sustainability in the use of digital tools for monitoring, follow-up and decision-making to improve care.
10.1	**Component 1: Development of competencies at the institutional level.**
	Activity 1.1 Training for the development team in business logic
	Activity 1.2 Training for hospital personnel in the information system
	Technical training in the functionality of existing digital tools for quality measurement and visualization of results.
10.2	**Component 2: Guarantee of continuity and sustainability of Information Systems.**
	Activity 2.1 Documentation of the current situation of the flow of information
	Activity 2.2 Necessary ICT equipment at the Second Level of care to meet the objective of the component
10.3	**Component 3: Formation of a technical team.**
	Activity 3.1 Assignment of functions to personnel in charge of the Information System.
	Activity 3.2 Analysis of open source tools that meet the development requirements for monitoring at the second level of care
	Selection of alternatives, approval and transition of existing tools
	Activity

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