SALUD MESOAMÉRICA INITIATIVE PROCESS EVALUATION

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LIST OF ACRONYMS

AECID	Agencia Española de Cooperación Internacional para el Desarrollo
BMGF	Bill & Melinda Gates Foundation
COMISCA	Consejo de Ministros de Salud de Centroamérica y República Dominicana
CSF	Carlos Slim Foundation
DR	Document review
EONC	Essential Obstetric and Newborn Care
FGD	Focus group discussion
HCP	Health care provider
HR	Human resources
HSS	Health Systems Strengthening
IDB	Inter-American Development Bank
IHME	Institute for Health Metrics and Evaluation
IMSS	Instituto Mexicano del Seguro Social
INSP	Instituto Nacional de Salud Pública
ISECH	Instituto de Salud del Estado de Chiapas
JSI	Jon Snow, Inc.
KI	Key informant
KII	Key Informant Interview
MDGs	Millennium Development Goals
MMoH	Mesoamerican Ministries of Health
MoF	Ministry of Finance (Secretaría de Hacienda y Crédito Público)
MoH	Ministry of Health (Secretaría de Salud)
MSH	Management Sciences for Health
NCDs	Non-communicable diseases
PARTNER	Program to Analyze, Record, and Track Networks to Enhance Relationships
PCU	Project coordination unit
PDM	Policy Dialogue Model
PHI	Public Health Institute
RBA	Results-based aid
SMI	Salud Mesoamérica Initiative
SMIPE	Salud Mesoamérica Initiative Process Evaluation
SSA	Secretaría de Salud, México
TA	Technical assistance
TG	Topic guide
TOC	Theory of change
WHO	World Health Organization

ABOUT IHME

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

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EXECUTIVE SUMMARY

OBJECTIVES

The Salud Mesoamérica Initiative (SMI) is a public-private partnership that aims to reduce maternal and child health inequities in the coverage, quality, and use of health services across Mesoamérica, using a results-based aid model (RBA).

Each participating country contributes funds to implement evidence-based interventions for the poorest 20% of their population. Interventions include supporting information systems, developing competences to comply with norms and processes, improving the quality and increasing the use of the basic public health services, expanding coverage, and providing monetary incentives to incentivize health outcomes as increased antenatal and postpartum care visits and institutional delivery. Each country's invested funds are matched by the Initiative. SMI disburses to countries an incentive equal to half of the initially invested funds for meeting predetermined performance targets, for unrestricted use within the health sector.

The Salud Mesoamérica Initiative Process Evaluation (SMIPE) assessed the initiative processes from conception through implementation in order to evaluate its relevance, effectiveness, and implementation, and to explore the following questions:

1. What components of SMI influenced whether outcomes were achieved or not according to stakeholders?
2. How did SMI contribute to the visualization and prioritization of the poor in the policy-dialogue agenda at the national and regional level?
3. What was the contribution of SMI in the performance of health systems in the region?

SMIPE aimed at uncovering topics to investigate in the upcoming measurement surveys, and explain findings from the previous ones.

SMIPE addressed these questions both at the regional level, and specifically in the Mexico, as a case study at a local level, through the experience of the State of Chiapas.

METHODS

SMIPE was based primarily on document review (DR), key informant interviews (KII), focus group discussions (FGDs), and a partnership analysis. Data collection for this study occurred between May 6 and October 14, 2016. All transcripts were analyzed for their context and coded by researchers at IHME through a process of recursive abstraction.

KEY RESULTS

RELEVANCE

1. SMI is a successful intervention with a robust design incorporating input from all appropriate levels.
2. SMI was based on a flexible theory of change with clear goals maintained through the initiative.
3. SMI aligned with and catalyzed national and regional health priorities, such as reducing maternal and neonatal mortality.
4. SMI strategies were based on a multiplicity of assessments and were aimed at addressing the identified bottlenecks specific to each of the participating countries.
5. The success of SMI is driven by each of its models:
    a. The regional approach creates peer-pressure that drives inter-country learning and support, increases efficiency in the use of technical assistance across countries, and allows for economies of scale, specifically for medicine and supply procurement.
    b. The results-based aid (RBA) model drives success as a financing model and through competition.
        i. The incentives scheme is highly appreciated by countries as they are free to re-invest awarded funds as they wish, and the measurement component holds recipients accountable.
        ii. The success of RBA through SMI means that domains other than maternal and child health, or other than the health sector can be incentivized through this model.
    c. Tailored technical assistance provided through SMI not only helps countries meet their targets, but also contributes to the sustainability of gains through capacity builidng.
    d. The policy dialogue model has advanced a number of policies and reinforced existing ones, especially in terms of best practices.
        i. It shed light on inequalities, focused the attention on quality improvement, and changed the conversation environment to a results-based one.
    e. SMI has fostered an experience-based learning environment with the multiplicity of generated information and through its use at every level, and for different purposes.
        i. This environment allowed for disseminating tools to non-SMI regions due to proven efficiency and effectiveness.
        ii. It generated a platform for ministries of health to learn from one another and to benchmark against other countries.

EFFECTIVENESS

1. Lengthy negotiations with countries, time for conducting the baseline measurement, and time for preparing for the following operations led to delays between the original idea of SMI and implementation.
    a. However, these delays allowed for mind sets to become attuned to the initiative, and hence drove a cultural change around health in the region.
2. In Chiapas, target indicators were not met for the first operation, but the state accomplished substantial changes and improvement.
    a. One of the root causes behind this situation is that the state is used to receiving unmonitored aid or little accountability.
        i. SMI, being a results-based model, forced the birth of a culture of accountability
        ii. This drove the success of an improvement plan devised to make up for the first operation.
    b. The second operation was faced by many hurdles that slowed implementation:
        i. The state went through several months of social unrest, political instability and economic restraints that reflected heavily on implementation.
        ii. However, with SMI adaptive management, an appropriate risk mitigation plan from the coordination unit at IDB, strong and diverse monitoring system, tailored technical assistance, and increased ownership of the initiative by ISECH, all partners are working towards a 100% implementation plan of activities.
3. In Chiapas, SMI contributed to a new culture of health, including 1) establishing clear targets and focusing on results, 2) increased accountability from top levels down to health workers, 3) a culture of quality and improved processes due to the long-term nature of the project, and the focus on quality improvement, 4) a priority of neonatal and maternal health, and 5) a culture of planning.
4. The health system in Chiapas saw improvements in all its building blocks due to SMI:
    a. Improvements affected the leadership indirectly as changes that occurred were not planned as part of the initiative, while all other blocks were directly and positively affected.
5. The responsiveness of the health system is still sub-optimal in a difficult situation in Chiapas.
    a. The increased demand for health services is stretching ISECH capacity to become more responsive at all levels.

SUSTAINABILITY

1. The changes introduced by SMI have a high probability of being sustainable:
    a. The technical assistance provided through SMI has improved processes, increased quality in human resources, and built the capacity to last after the end of SMI.
    b. The policy dialogue model, with the availability of evidence, introduced new and modified policies to the health system and infiltrated decision-making processes.
    c. The RBA model, that requires continued monitoring and evaluation, forces countries to fulfill their co-financing requirements.
    d. The regional approach created a between-county competition environment.
    e. In parallel, the initial delays that SMI faced led to longer implementation and planning time, allowing for changing habits in health systems.
2. Despite the positive environment, stakeholders should pay close attention to several factors that threaten sustainability such as social unrest, shortages in supplies, and financial problems.
    a. Specifically in Chiapas, the constant changes in governance impact public employees at all levels, all the time.
        i. This risk is seen as a barrier to sustainability, as priorities are re-evaluated and the understanding of the initiative is lost with each shift of employees.

KEY RECOMMENDATIONS

The results of this evaluation converged with results from quantitative measurements that have been conducted since the start of SMI. The results from the community and healthcare providers' interviews have helped modify the existing measurement surveys, and added several new topics that are essential to investigate around quality improvement, health information systems, human resources, healthcare management, access and barriers to healthcare, preferences, and utilization of the health system. Our findings also highlight the need for process evaluations in remaining countries to account for their particularities. While this evaluation focused on SMI particularly in Chiapas, and we were only able to collect limited data from the remaining SMI countries, factors driving operations in these countries have yet to be fully explored. Given the success of SMI, it's important for the global health community to fully understand the factors behind this success, especially with the increased need for efficient use of global assistance for health.

TO DONORS

1. Significant improvement in indicators should be valued even if targets are not met:
    - Consider using improvement plans for countries that show serious improvements even if targets were not met.
2. Investments in the Initiative are showing success and need to be continued.
3. Consider advantages from this scheme vs provider's pocket incentives.

TO INTER-AMERICAN DEVELOPMENT BANK

1. Address operational and bureaucratic processes to speed financial flows to the Initiative.
2. Continue the current support and commitment in financial and technical assistance which is valued by stakeholders.
3. Improve communication with stakeholders.

TO SECRETARÍA DE SALUD, MÉXICO

1. Continue current accompaniment provided for SMI implementation highly valued by ISECH.
2. Find solutions around shortages of federally managed supplies, such as vaccines and family planning methods.
3. Adopt and implement success stories in other states.

TO INSTITUTO DE SALUD DEL ESTADO DE CHIAPAS

1. Increase focus on human resources, supplies availability, and community outreach.
2. Implement a culture of norms and guidelines around routine compliance for accountability in all places.

CHAPTER I: INTRODUCTION

BACKGROUND OF THE SALUD MESOAMÉRICA INITIATIVE (SMI)

The Salud Mesoamérica Initiative (SMI) is a public-private partnership including the Bill and Melinda Gates Foundation (BMGF), the Carlos Slim Foundation (CSF), Spain's Cooperation Agency for International Development (AECID), the Inter-American Development Bank (IDB) and the Ministries of Health in eight participating Mesoamerican countries. The initiative aims to reduce maternal and child health inequities in the coverage, quality, and use of health services across Mesoamérica, using a results-based aid model (RBA).

At the onset of SMI, participating countries, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico (State of Chiapas), Nicaragua, and Panama, agreed to a set of process, coverage, quality, and impact targets to be externally verified. The Institute for Health Metrics and Evaluation (IHME) serves as the third party independent evaluation partner for the initiative.

Each country has contributed funds to implement evidence-based interventions for the poorest 20% of their population. Interventions include supporting information systems, developing competences to comply with norms and processes, improving the quality and increasing the use of the basic public health services, expanding coverage, and providing monetary incentives to incentivize health outcomes as increased antenatal and postpartum care visits and institutional delivery. Each country's invested funds were matched by the Initiative. SMI committed to disbursing to countries an incentive equal to half of the initially invested funds for meeting predetermined performance targets, for unrestricted use within the health sector (1).

RULES OF THE GAME

According to SMI's early design, a "stoplight system" was enacted, where a score equal to or above .8 for the performance indicators at the end of each operation would lead to the countries receiving the performance tranche for that operation (a "green light"). This would mean that the country had achieved its targets for 80% of the payment indicators for that operation. A score below .8 would lead to a "yellow light," or a warning, and the country would not receive the performance tranche. If a country did not reach 80% of its targets at the end of two operations in a row, that country would be disqualified from the initiative (a "red light"). While this was the initial performance framework, donors re-evaluated the system after Chiapas, Guatemala and Belize did not reach their targets at the end of Operation 1. A performance improvement plan was enacted to Chiapas and Guatemala to assist these two countries to

reach their targets so that they would have the appropriate groundwork laid to achieve their goals during the second operation measurement. Figure 1 below describes in detail the results-based aid model.

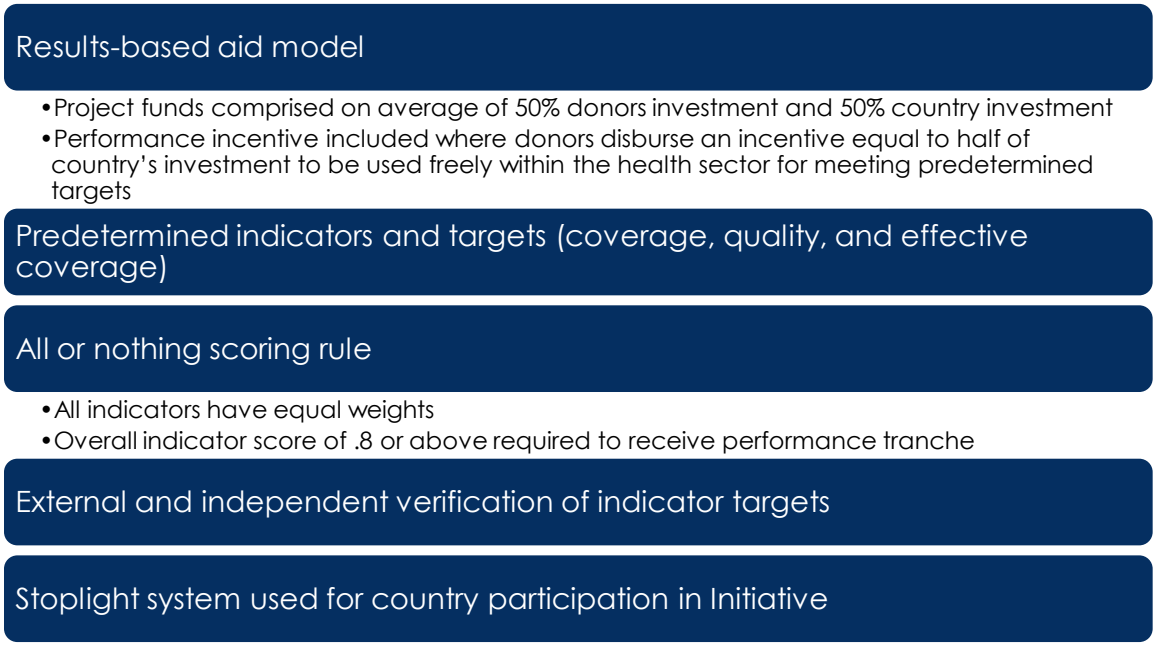

Figure 1: Rules of the game for the results-based aid model of the Salud Mesoamerica Initiative

DESCRIPTION OF SMI IN CHIAPAS, MEXICO

In Mexico, SMI aims to reduce the maternal, neonatal, and child mortality and morbidity in the poorest municipalities of the southernmost State of Chiapas. The primary administrative units in Mexico are states and municipalities. Mexico is a federation comprising 31 states and a Federal District, the capital city. In the state of Chiapas, which has 114 municipalities, the Inter-American Development Bank (IDB) and the ISECH identified 30 intervention municipalities in which to conduct the initiative on the basis of their high concentration of residents in the country's lowest wealth quintile, and 26 control municipalities with similar socioeconomic characteristics and ethnic composition.

SMI plans to achieve this goal by 1) improving the level of health and nutrition of women (aged 15-49 years) and children (aged <5 years) by increasing the effective coverage (availability, use and quality) of health services; 2) promoting the institutionalization of the interventions through policy dialogue; and 3) improving the effectiveness and efficiency in delivery of services by strengthening operational systems of the Health Institute of the State of Chiapas. To reach these objectives, SMI hypothesizes a Theory of Change (TOC) for Chiapas in which several strategies,

targeting both the supply of and the demand for health services, will be followed within three models (2).

The Three Delays Model facilitates the mitigation of the delay by a woman and her family in identifying a risk and deciding to seek care, the delay in accessing services and the delay in receiving quality care at the health center (3). The Safe Motherhood Model addresses these problems through four pillars based on the Continuum of Care: 1) family planning for spacing births and planning a family; 2) quality prenatal care; 3) clean and safe childbirth; and 4) obstetric and newborn care for prevention and management of complications (2). The Comprehensive Child Care Model addresses the needs of children aged 29 days to 5 years by ensuring comprehensive pediatric care in the form of vaccinations, growth monitoring, nutrition, and de-worming, as well as appropriate childhood illness management (2).

The first SMI operation in Chiapas, Mexico was eligible to start by September 2012. Due to some delays related to political issues, it began in April 2013 and ended in September 2014 (4). The second operation began in March 2016 (5). SMI uses an RBA scheme to address the health inequalities in Chiapas. It was designed to involve three individual consecutive phases and corresponding measurement of progress toward health targets set by the State government in agreement with IDB and donors. The measurement of targets includes a baseline measurement in households and health facilities, followed by measurements after each operational phase.

Indicators and targets were set with the Mexican government, in line with country-specific priorities in maternal, neonatal, and child health. Key indicators include contraceptive prevalence rate, , antenatal and postnatal care for women and newborns, in-facility delivery and skilled birth attendance, management of maternal and neonatal complications, complete vaccination coverage for age, prevalence of anemia in children, and quality of care for antenatal, delivery, postnatal, and child health care visits. At the onset of SMI, an initial contribution (investment tranche), accompanied by counterpart financing from the government of Chiapas, financed preliminary child and maternal health interventions. Depending on whether indicator targets are met at each critical measurement juncture between operations, Chiapas will receive a financial incentive corresponding to half of their counterpart investment to be used freely within the health sector.

Though considerable progress was observed after the first operation, Chiapas was found to have fallen short of its 24-month operation targets at the first follow-up measurement. An exceptional measure was taken by introducing a performance improvement plan as a chance for Mexico to catch up on its indicators and continue in the initiative, despite concerns from

donors that little progress had been made to reach targets. When given this additional time, Chiapas, with its own financing and technical assistance from IDB, was able to meet all previously missed 24 month first operation targets.

JUSTIFICATION OF THE SMI PROCESS EVALUATION

Since the beginning of SMI, it has been proposed that the initiative be evaluated through a mixed-method approach, incorporating process evaluations with quantitative ones (6).

IHME, in collaboration with the Inter-American Development Bank, serves as a third party evaluator and conducts a full-scale quantitative measurement that parallels the implementation of the Initiative. IHME has now completed the baseline and first follow-up assessment and is prospectively assessing trends in indicators. Information collected thus far has been used to measure the progress of the countries towards the initiative targets, and make decisions about the disbursement of funds. The methods and key findings from quantitative data collection in households and health facilities in 8 countries are further described in "Salud Mesoamérica 2015 Initiative: design, implementation, and baseline findings"(7). Though ample quantitative information has been made available through the previous rounds of household and health facility surveys, these data alone cannot fully explain implementation processes and survey findings.

To bridge this gap, the SMI Process Evaluation (SMIPE) assesses the influence of the Initiative on strategic decision-making of ministries of health, the effectiveness of training providers on the rigor of record-keeping or care, and the perceptions and practices of women and their incentives for using health services. SMIPE, through qualitative methods, assesses SMI processes from conception through implementation in order to explain the degree to which SMI's intermediary and final outputs, outcomes, and impact have been achieved. To do so, we attempt to answer, to the extent possible, the following five of SMI's six strategic questions (8):

1. What was the contribution of SMI in the performance of health systems in the region?

2. What were the effects of specific interventions and the possibility of scale-up?

3. How did SMI contribute to the visualization and prioritization of the poor in the policy-dialogue agenda at the national and regional level?

4. What components of SMI influenced whether outcomes were achieved or not according to stakeholders?

5. How does the SMI model compare to other financing or intervention models?

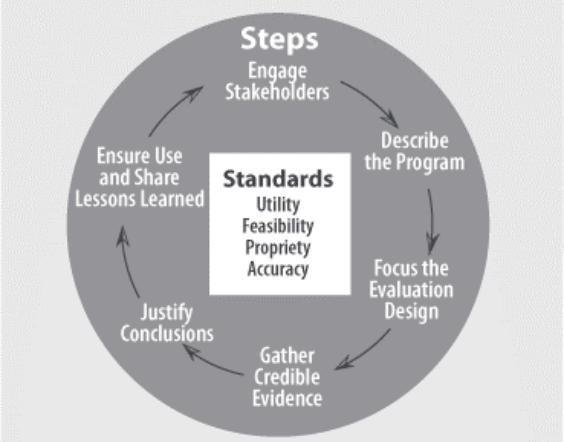

Figure 2: General framework for SMIPE
Source: Centers for Disease Control and Prevention. Framework for program evaluation in public health [Internet]. Centers for Disease Control and Prevention; 1999 Sep p. 4.

As proposed, SMIPE followed the six steps of the guidelines of the Centers for Disease Control and Prevention for evaluating public health programs (9). This framework is meant to be an operational framework that sets the order of the different steps to be followed from inception to conclusion of the evaluation. Through this work, we maintain four core standards: utility, feasibility, propriety and accuracy. Figure 2 represents the steps and standards of SMIPE's operational framework.

DESCRIPTION OF THE SMI THEORY OF CHANGE AND EVALUATION FRAMEWORK

Regional Master plans were created in 2009 with participation from representatives of all countries and a group of experts coordinated by the National Institute of Public Health-Mexico.. These plans included key interventions for reproductive, maternal, child health and vector control agreed to by the Ministries of the Mesoamerican Countries. Around the same time, IDB created a proposal for the Salud Mesoamerican Initiative, using RBA to implement cost-effective and evidence-based interventions, including those listed in the Master Plans. When IDB started the management of the Initiative, more concrete intervention plans and indicator and target setting activities were elaborated within each country. Activities were initiated at different points in time in the countries, starting in 2011. Although SMI was planned for five years, the process of agreement elaborations between IDB and participating countries was longer than expected, and the initiative is still ongoing (7 years to date).

The overall initiative is guided by the SMI initial TOC (Figure 3), which illustrates the rationale for strategic planning, decision-making processes and evaluation as pathways contributing to the goal of reducing neonatal, child, and maternal mortality and morbidity (10). This TOC has evolved into a causal-loop model presented in Figure 3. Figure 4 represents the TOC as described in the comprehensive model for a systemic approach to the second operation for Chiapas, Mexico (2).

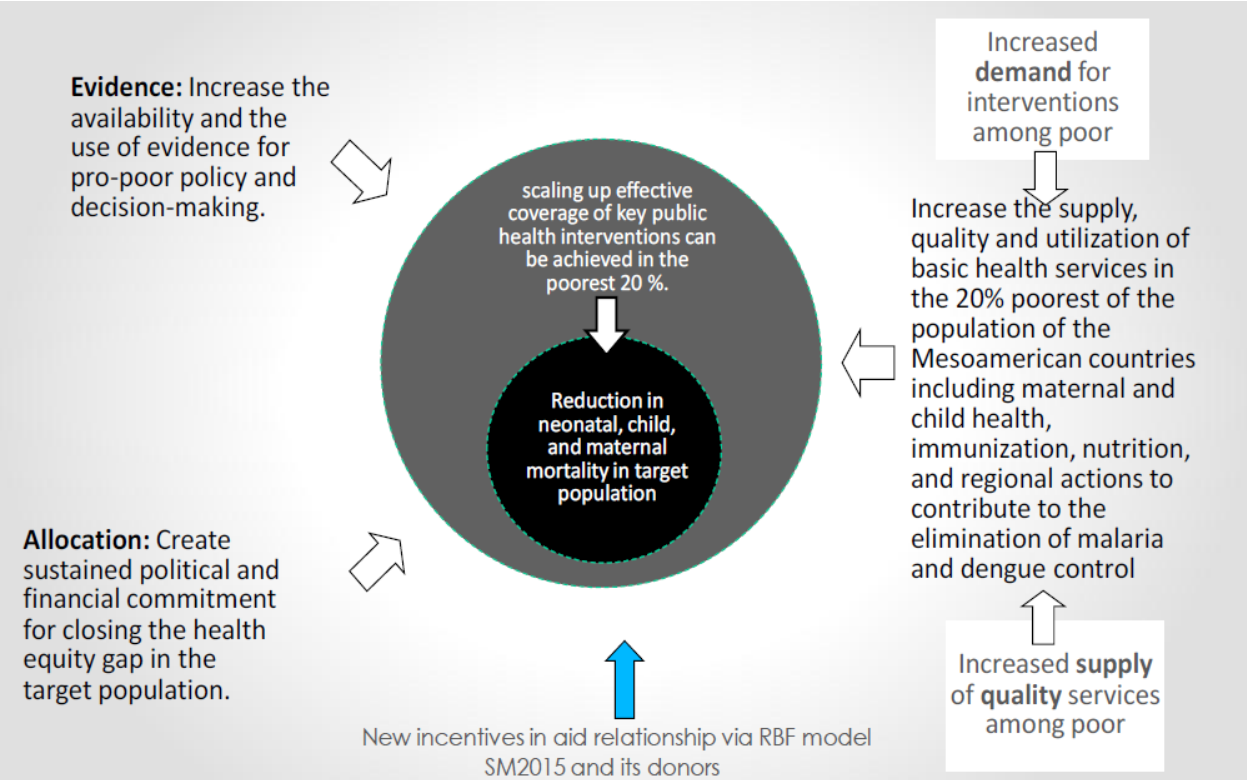

Figure 3: SMI initial Theory of Change
Source: Monitoring and Evaluation Plan. Salud Mesoamerica 2015 Initiative; 2011.

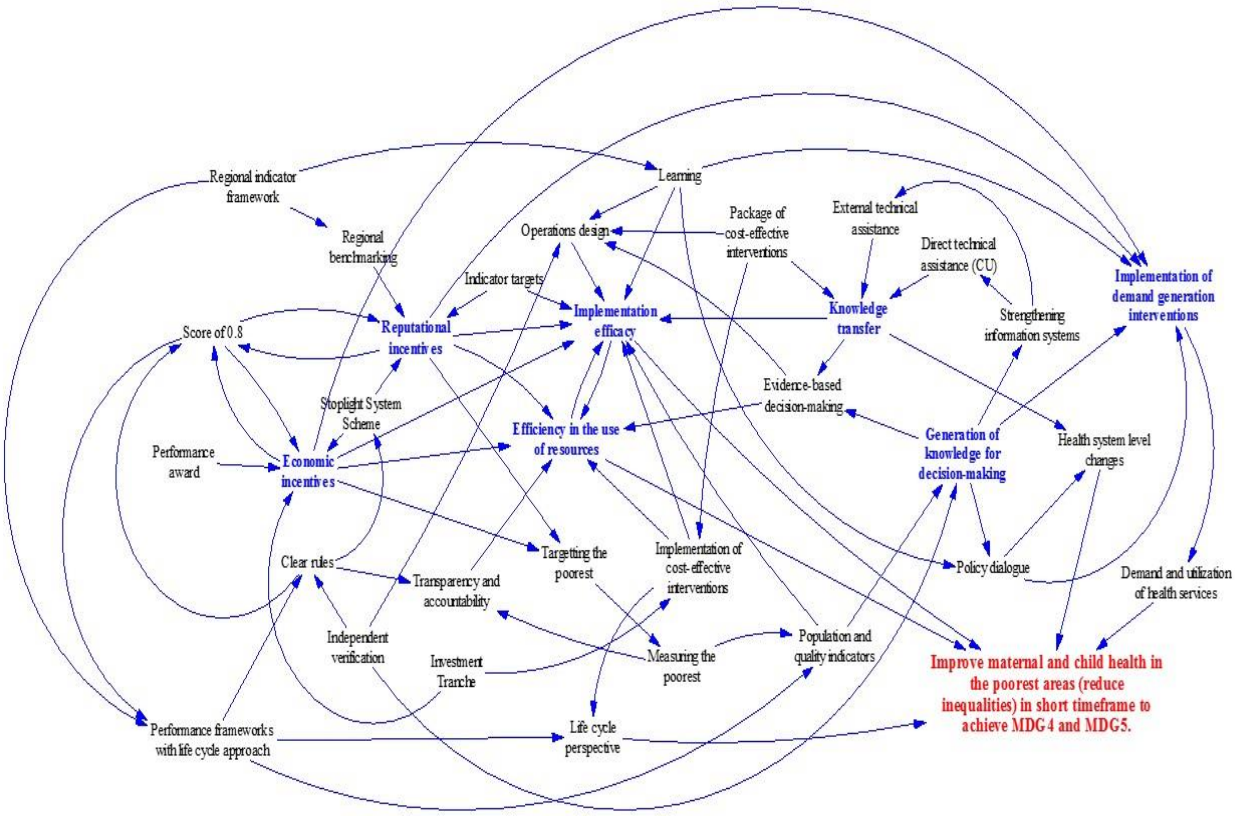

Figure 4: Causal-loop model of the Salud Mesoamerica Initiative

Source: Interamerican Development Bank, Salud Mesoamerica Initiative, internal communication

At the onset of the Initiative, a comprehensive SMI Evaluation was included and has been under continuous development considering a mixed-methods approach (Figure 5). The SMI Evaluation seeks to disentangle and explain the complexity of the program to understand what worked and what did not work, and why and how it happened. Its two main purposes are: 1) to contribute to the broader evidence base of development aid, public health programs and interventions; and 2) to improve the program by continuing or changing current rules or practices (11,12).

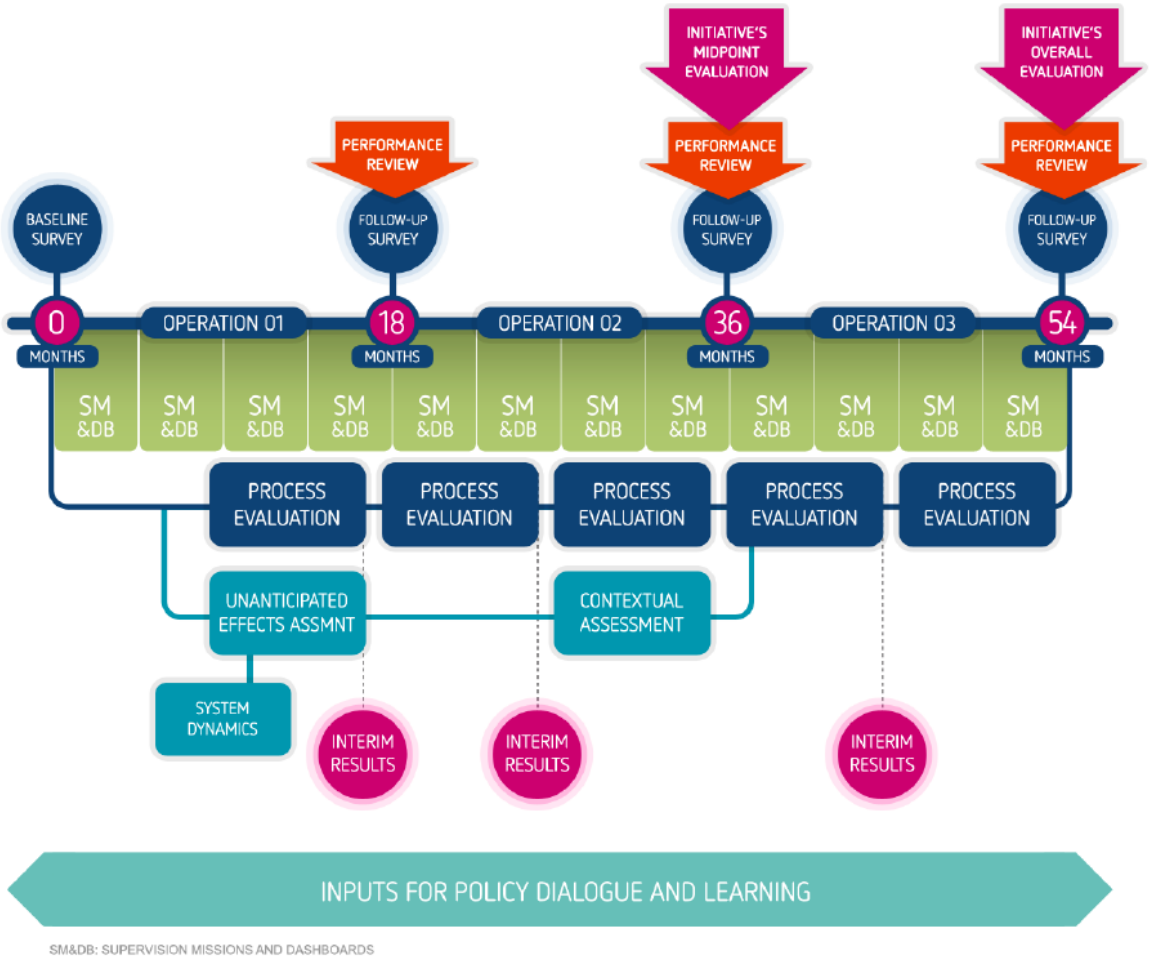

Figure 5: SMI Original Evaluation Framework
Source: SM2015 Monitoring and Evaluation Component. Salud Mesoamerica 2015; 2012.

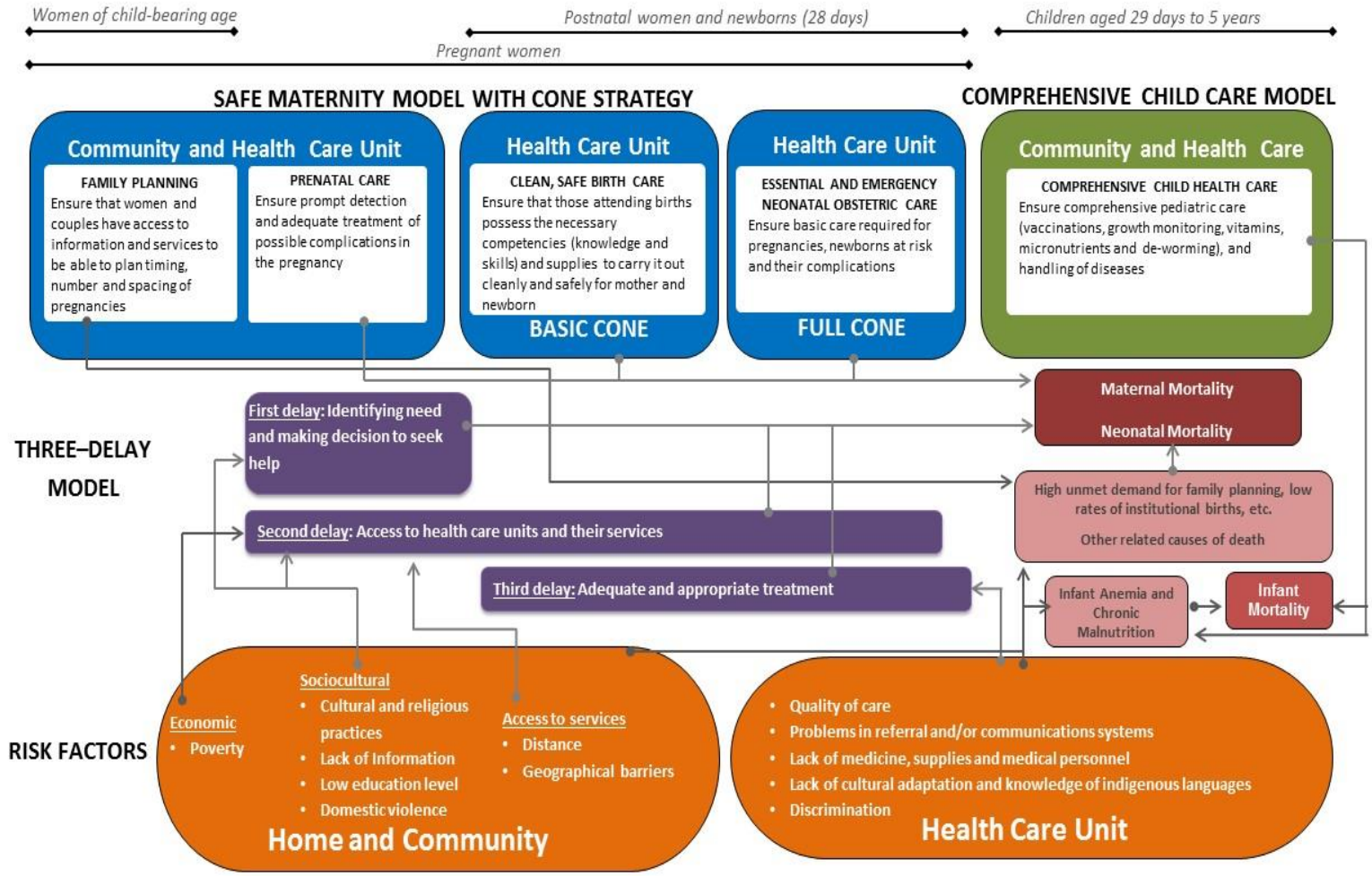

Figure 6: Theory of Change of the Salud Mesoamérica Initiative, Chiapas, Mexico
Source: Comprehensive model for a systemic approach to the second operation, Chiapas Mexico

CHAPTER 2: METHODOLOGY

EVALUATION DESIGN

SMIPE complements the ongoing quantitative evaluation to form a sequential explanatory and exploratory design (13). The results of each will impact the design of the other. A sequential explanatory design is typically used to explain and interpret quantitative results by collecting and analyzing additional qualitative data (13). This design is specifically useful when unexpected results arise from a quantitative study such as, for example, in the case of SMI surveys, the failure of Chiapas to attain its indicators during the first operation, followed by the success of such attainment through the performance improvement plan. In the example, data on indicators were obtained from surveys which do not provide complete information on the reasons why the indicators were not reached at first, nor why were they reached later on. Furthermore, the qualitative data collected from SMIPE will be used to inform the design of the future surveys. Specifically, we will be able to add questions that will measure the factors that were behind the failure and success in reaching the indicators. Figure 7 represents a scheme of the sequential exploratory design.

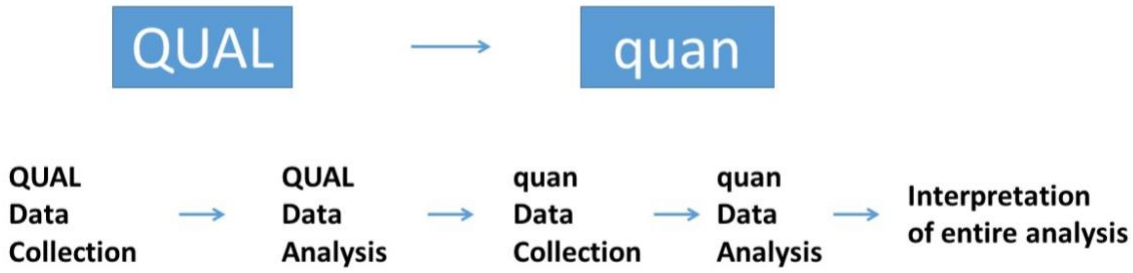

Figure 7: Sequential exploratory design scheme
Source: Creswell JW. Research design: qualitative, quantitative, and mixed methods approaches. 3rd ed. Thousand Oaks, Calif: Sage Publications; 2009.

Exploratory design is usually used to explore a phenomenon not well studied or understood (13). In the case of SMI, many of its aspects are unique and new to the region. For instance, the RBA model that SMI follows is unique and little is known about its effects in the Mesoamerican region. SMI is also different in the fact that it is a partnership, contrary to the top-down model of financial support generally used to govern most assistance for health. Given the novelty of this initiative to the region, it is essential to explore how these aspects are being deployed, and their effect, in order to better assess their relevance and effectiveness. Figure 8 represents a scheme of the sequential explanatory design.

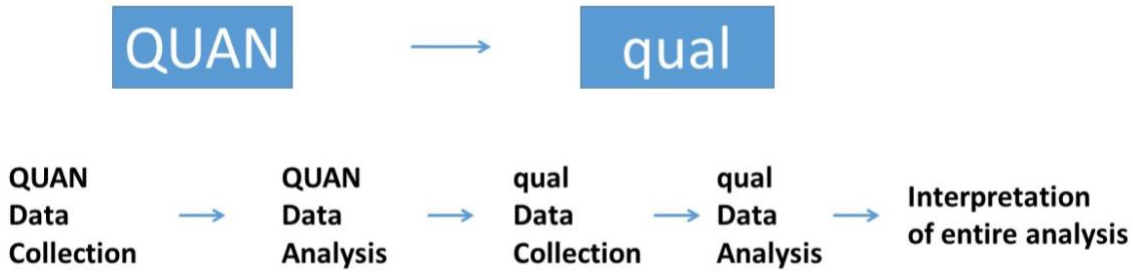

Figure 8: Sequential explanatory design scheme
Source: Creswell JW. Research design: qualitative, quantitative, and mixed methods approaches. 3rd ed. Thousand Oaks, Calif: Sage Publications; 2009.

THEORETICAL FRAMEWORK AND RESEARCH QUESTIONS

SMI's general TOC and Chiapas specific TOC are the natural theories guiding this evaluation. SMIPE assessed the process behind each component of these theories (14,15) through a Program Theory Evaluation model. This model is most suitable for measuring 1) attainment of program goals and objectives (here we mean mid-level goals and objectives and not outcomes), 2) program improvement, 3) improvement of theory about intervention, and 4) overall impact of any program. As SMI's TOC captures key components of the Initiative, we evaluated the actual process compared to these components, which are already being measured through the ongoing quantitative evaluation and previous qualitative studies.

Naturally, SMIPE has a formal, external, explicit mode in regards to the three main components of the evaluation: information process, value judgment, and decision-making (16).

- An evaluation process is formal if it involves indicators, a method and tools of information collection;

- An evaluation is considered as internal or external depending on the status of the person(s) in charge of the evaluation; it is internal when such persons belong to the management team, and external otherwise;

- An evaluation is considered explicit when carried out through a recognized process.

Under the SMI strategic questions, we addressed the five criteria for evaluation of developmental aid designated by the Development Assistance Committee of the Organization for Economic Co-operation and Development (17,18). These criteria are: relevance, effectiveness, efficiency, impact, and sustainability. However, given SMIPE's scope impact is not a focus, but will be assessed through household and health facility surveys at the end of the second and third SMI operations. Instead, we address the partnership aspect of SMI given the relevance of this aspect of the initiative.

The SMI TOC and program objectives were analyzed by SMI partners to establish the levels of analysis required for the SMI Midterm Evaluation. Four distinct levels of analysis were identified: population, health system, public finance and fiscal and technical policy, and development aid. In order to evaluate outcomes at each level, six strategic questions were proposed in the concept note for this evaluation (8):

1. What was the effect of SMI on reproductive, maternal and child health outcomes?

2. What was the contribution of SMI in the performance of health systems in the region?

3. What were the effects of specific interventions and the possibility of scale-up?

4. How did SMI contribute to the visualization and prioritization of the poor in the policy-dialogue agenda at the national and regional level?

5. What components of SMI influenced whether outcomes were achieved or not according to stakeholders?

6. How does the SMI model compare to other financing or intervention models?

Given the scope of SMIPE and its qualitative nature, we attempt to answer, to the extent possible, questions number 2, 4, and 5. Questions 1, 3, and 6 are answered to a lesser extent given the more quantitative nature of these questions. To answer these questions, we have developed a list of topics and questions based on the five criteria of the Development Assistance Committee of the Organization for Economic Co-operation and Development that we will attempt to investigate. Appendices A-C list samples of the SMIPE topic guide questions for different study audiences(8).

QUALITATIVE METHODS

Qualitative methods are based primarily on document review (DR), key informant interviews (KII), focus group discussions (FGDs).

DOCUMENT REVIEW

An exhaustive document review was conducted to describe SMI, assess the theory of change, refine the evaluation questions, create the topic guides for key informant interviews, review the quantitative data analysis from the surveys already conducted, retrieve key dates, and identify potential KIs. Key documents reviewed include:

- SMI proposal and Operating Regulations
- SMI operational plans (first and second operations)
- SMI proposal documents from Mexico, including meeting minutes, approval letters, and requests for clarification
- SMI budget documents and expenditure reports for Mexico
- SMI cost-benefit analysis for indicator and target setting
- Mexico National Health Norms
- Reproductive, Maternal, and Neonatal Health Master Plan
- Immunization Master Plan
- Nutrition Master Plan
- All available SMI-Chiapas official reports and memos
- Available meeting notes related to SMI in Chiapas and design and supervision mission reports
- SM2015 Integrated learning, communication, and policy dialogue plan

KEY INFORMANT INTERVIEWS

Structured topic guides were developed following the document review, exchanges with the monitoring and evaluation team at SMI-IDB, and a fact-finding mission. The KII topic guides covered the components of the TOC which were more easily evaluated through interviews. These focused on issues related to the fields of planning, design, and implementation of SMI, as well as results, efficiency, and the lessons learned in Chiapas thus far. KII topic guides were developed specific to the following audiences:

1. Donors/funders
2. IDB Headquarters/IDB-SMI unit in Panama/ IDB in Mexico
3. Secretaría de Hacienda y Crédito Público (Ministry of Finance)
4. Secretaría de Relaciones Exteriores (Ministry of Foreign Affairs)
5. Project Coordinating Unit in Chiapas
6. Management Sciences for Health
7. Secretaría de Salud of Mexico (SSA)
8. Instituto de Salud del Estado de Chiapas (ISECH)
9. ISECH (Jurisdiction leaders)
10. Health care providers in SMI areas
11. Health care providers in non-SMI areas
12. Midwives in Chiapas

FOCUS GROUP DISCUSSIONS

FGDs were conducted to seek input from community members on health themes related to SMI, including knowledge and perceptions around reproductive care, child care, and general health and wellbeing. These participants were also asked about their relationships with the health care system and their experiences with utilization. FGDs were used to yield richer data from the community through group discussions; due to the sensitivity of some topics, women with children, women without children, and men participated in separate groups.

Data were also collected through a focus group discussion and several KIIs at the Latin American and Caribbean Conference 2016, where relevant ministry of health stakeholders gathered during the course of this study. A shortened topic guide was developed in order to capture the perceptions of these participants from six Mesoamerican countries: Honduras, Guatemala, Costa Rica, Belize, El Salvador, and Panama.

FGD topic guides were developed specific to the following audiences:

1. Health committees
2. Women aged 15-49 in SMI areas
3. Women aged 15-49 in non-SMI areas
4. Men in SMI areas
5. Men in non-SMI areas
6. Representatives from Mesoamerican Ministries of Health attending the Latin America and Caribbean Conference 2016

FIELD VISITS

In order to advance and inform the process evaluation, several trips to Chiapas and Mexico City were taken by IHME researchers. Each trip yielded valuable context and enhanced understanding between SMI stakeholders, data collectors, and researchers. These visits included fact-finding and observation missions, training and re-training trips, and a data collection supervisory trip.

- A fact-finding mission was conducted in Chiapas March 15-18, 2016
- Training and pilot of data collection May 6-16, 2016
- Data collection supervisory visit May 31 – June 2, 2016
- Re-training and launch of second wave data collection August 16 – 23, 2016
- Field visit to observe SMI Collaborative Meeting

PARTNERSHIP ANALYSIS

To further assess the partnership aspect of SMI, we used the PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships) tool, which was designed to demonstrate how members are connected, to show how resources are leveraged and exchanged, to measure the levels of trust in a network, and to link outcomes to the process of collaboration. We administered the PARTNER questionnaire in both English and Spanish to as many SMI stakeholders as possible and collected data on paper and online.

Key informants representing the organizational stakeholders of SMI were asked to respond to questions measuring their perception of partner organizations and questions about SMI as a whole. Surveyed partners also responded to multiple-choice questions regarding their views on SMI's objective, its success, and the aspects of collaborative work that propel the success it has achieved so far.

SAMPLE

Three main groups were sampled for this qualitative study. With each study audience, we sought to identify the factors that impact their decisions, allocation of resources, and effectiveness. The first group included decision-makers from all SMI partner organizations. These organizations included funders of SMI (global key informants), IDB, ministries of health (national key informants), and the Chiapas ministry of health (local key informants). The second group consisted primarily of programmatic actors. This included managers of health care facilities and health care providers. The third group involved the users of the health care systems, both men and women, as well as midwives, who play a role in both providing health services and connecting women and children in the community to institutional health care. This third group included community members who use the health system, as well as those who do not utilize it. The latter group is especially important to understanding the drivers of health-seeking behavior. Understanding their perspectives will help the Initiative to better align with their preferences, and could contribute to overcoming these obstacles.

The SMIPE team compiled a list of key stakeholders who played a crucial role in the initiative, either as key informants (KIs) or by providing support with the process of the initiative. KIs were identified through previous work on the SMI quantitative evaluation, through document review, and as suggested by our partners at IDB-SMI and the remaining donors.

KIs were identified based on the following criteria:

- Their role in the design, and funding of SMI in general
- Their role in the design, planning and implementation of the SMI plan for Chiapas

- Their role in the Ministry of Health
- Their role in SMI in regards to Mexico
- Their role as beneficiaries of SMI (individuals from the target community), as well as their counterparts within Chiapas, outside of SMI regions.

Communities were selected within SMI and non-SMI areas for FGD recruitment based on the following criteria:

- Representation from both urban and rural communities
- Representation from both indigenous and non-indigenous communities
- In SMI areas, representation from communities with and without the SMI voucher program to incentivize institutional delivery

Within each selected community, various focus groups were organized, including ones with health committees, with mothers and women without children, and with men.

Table 1: Sample of SMI KIs

Study Audience	**KIs**
SMI Donor Representatives*	11
IDB/SMI Coordinating Unit + Management Sciences for Health*	12
Regional MOH Representatives (outside of Mexico)	9
SSA + ISECH, including Jurisdiction Leaders*	21
Health care providers - SMI	44
Health care providers – non-SMI	12
Midwives	11
TOTAL	**120**

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

Table 2: Sample of SMI FGDs

	FGD audience	FGDs	Total Participants
SMI (234)	Health committees	4	35
	Women with children under 5	17	110
	Women without children	7	44
	Men	8	45
Non- SMI (56)	Health committees	2	10
	Women with children under 5	4	26
	Women without children	2	11
	Men	2	9
TOTAL		**46**	**290**

DATA COLLECTION AND DATA QUALITY ASSURANCE

This study was reviewed by the Human Subjects Division at the University of Washington and was considered non-human subjects research, as the activity involved assessment of the Salud Mesoamerica Initiative (SMI) processes in order to explain the degree to which SMI's intermediary and final outputs, outcomes, and impacts have been achieved.

Data collection for this study occurred between May 6 and October 14, 2016. IHME conducted all KIIs with stakeholders at the regional, national, and state levels. For local KIIs and for all FGDs in Chiapas, IHME contracted El Colegio de la Frontera Sur (ECOSUR) in Chiapas to conduct the data collection. IHME provided technical assistance in training interviewers contracted by ECOSUR, and provided extensive supervision, detailed in the following components.

- Theoretical: A review of topic guides. Standard interviewing techniques and field work protocols were presented.

- In-class practice: Training included individual and group drills intended to familiarize trainees with conducting interviews and focus groups.

- Pilot: Following in-class practice, trainees worked in the field with IHME supervision, and conducted initial practice interviews (outside of the sample).

- Evaluation: All potential interviewers were evaluated based on level of skill in conducting interviews and performance on written comprehension exercises. Top performing trainees were selected to conduct the interviews and facilitate the group discussions for this study.

- Supervision: IHME continued contact with local interviewers to assess progress and provide feedback on collected data. IHME monitored quality and provided feedback, prior to data collection completion. One field supervision trip to Mexico was conducted mid-data collection and a retraining was performed before the second wave of data collection.

Given the complexity and the multitude of topics assessed, data collection took place in two waves. These two rounds were not meant to provide baseline and follow-up data for comparison, but were complimentary to ensure coverage of all topics of investigation.

Data was collected, when possible, until saturation, i.e. until interviews stop yielding new insights. All audio data was transcribed and translated to English, when applicable.

ANALYSIS

All transcripts were analyzed for their context and coded by researchers at IHME through recursive abstraction. In short, recursive abstraction is a qualitative data analysis method consisting of the following steps:

1) Transcribed data are grouped by topic and respondent to form a matrix.
2) Portions of comment that are relevant to the topic at hand are extracted and formed into code-like sentences.
3) Coded responses from various stakeholders within each respondent group are analyzed together to generate brief summary narratives. Agreement between different audiences and document review, as well as level of shared knowledge among respondents are taken into consideration.

Themes and patterns extracted from interview and focus group data were compared to relevant components of the TOC to determine to what extent the implementation of SMI is diverges from the TOC. The most relevant challenges for SMI implementation were chosen for root-cause analysis, a particularly useful approach in the study of complex interventions such as SMI.

Root cause analysis identifies the causes at the root of the chain of events that led to the challenge, or success, observed. Briefly, this analysis takes into account a challenge or an undesirable event which needs to be explained by answering the question of *why* that event or challenge occurred. Each identified cause is then subjected to the same question until identification of the root cause. The challenge, the intermediate causes, and the root causes are illustrated in a diagram showing the linkages between the various causes and events. The contextual factors identified are also represented on the diagram in order to produce a complete picture of the phenomenon.

ROBUSTNESS OF FINDINGS

Our analyses were evaluated by a measure of the robustness of findings. This measure took the form of an alphabetical indicator from A, B, or C.

- A, if the conclusions are supported by multiple data sources which are generally of good quality. If data sources were few, the supporting evidence is more factual than subjective
- B, if the findings are supported by many data sources of lesser quality, or if the conclusions are supported by fewer sources of data of good quality, but they are based on perceptions more than on facts.
- C, if the findings are from very limited data sources, not well supported, or if there are many conflicting information sources

CHAPTER 3: RESULTS

REGIONAL PARTNERSHIP AND INITIATIVE DESIGN

REGIONAL AND OPERATIONAL DESIGN

SMI originally designed at BMGF and later developed with CSF, IDB, and countries

Domain	Topic	Sources	Robustness of finding
Design	SMI regional design	Donors, IDB, SSA, ISECH, DR	A

The idea of SMI originated at BMGF with Jaime Sepulveda, who was later joined by Wolfgang Munar. Both were key contributors during early phases of the project development at BMGF. BMGF had previously funded the development of Master Plans through regional workshops in participation with representatives and experts from stakeholder countries. These Master Plans consisted of interventions relevant to several health domains to improve in the region and were a key element of the early design stages of SMI. These incorporated input from experts, including in-country ones. Based on the Master Plans, country stakeholders and IDB were able to select interventions to be used for the Initiative.

> *"BY THE TIME 2010 STARTED, THAT WHOLE YEAR WAS SPENT ON THE IDB SIDE TRYING TO BUILD THE RELATION WITH THE COUNTRIES, PUTTING TOGETHER ALL THE RULES OF THE GAME, ET CETERA, ET CETERA. AND THIS IS WHEN WE HAD THE BEST PART OF THE PARTNERSHIP. WE (BMGF)MET REGULARLY BETWEEN SPAIN, IDB, SLIM, AND US, IN SEATTLE, IN MEXICO, IN MADRID, IN WASHINGTON"*

At IDB, Amanda Glassman, another key contributor, introduced the results-based aid (RBA) model and led the development of a winning proposal detailing the initiative and submitted to BMGF. Once the proposal was finalized, IDB, CSF and BMGF developed SMI "rules of the game." The role of AECID in the design is described as limited to the malaria program which was later eliminated. The Public Health Institute (PHI) of California and McKinsey & Company of Seattle were mentioned in relation to the early design stages, though the direct influence of their work on the design of the initiative is unclear.

Building the ship while sailing

Domain	Topic	Sources	Robustness of finding
Design	Design	Donors, IDB, SSA, ISECH	B

The large scale and complex nature of SMI was paralleled with difficulties in adhering to the originally planned timeline of the project. Donors acknowledge the time required to negotiate the operations with country stakeholders as one of those difficulties. Stakeholders perceive that some steps in the design process were unnecessary or out of order.

Donors note that hiring consultants for some of the early steps in the design was a waste of time. In regards to the Master Plans generated from the Instituto Nacional de Salud Pública (INSP) consultancy, some respondents respected their development and found them useful in demonstrating country priorities and providing a foundation for the Initiative, while others viewed them as unhelpful in that they were fully technical and not associated with the financial model of SMI. The opportunity to introduce the financial model of SMI was missed during these early discussions, requiring further negotiations with country stakeholders (and further delays associated with these negotiations). Furthermore, one KI pointed out that the historical top-down social and economic relationship between Mexico and the Central American region was reflected further in the strong involvement of Mexican actors in planning early in the Initiative, including the selection of INSP to create the Master Plans. However, it should be noted that the development of the Master Plans was requested by BMGF, before IDB entered the partnership, and were not meant to introduce a financial model.

Donors and various stakeholders within Chiapas perceive the lengthy time required for planning and measurements as unnecessary, and express frustration due to a lack of understanding of negotiation timelines and unexpected setbacks. While the baseline measurement activities, negotiating contractual agreements, and designing, planning, and budgeting the interventions country by country delayed the initiative two years, it was a common theme among all stakeholder groups that having the baseline evaluation before designing country operations would have been ideal, and that starting the implementation without the completed baseline measurement was a step out of order.

Other steps in the process named as unnecessary by stakeholders at the state level were the double-checking of the needs assessment provided by ISECH, imposing new frameworks and regulations on the state, and the administrative steps necessary to have access to the resources. Further, some stakeholders feel that governments should have been approached and engaged

earlier in the SMI design for a truer partnership, while others note that the timeline was too short to permit this.

> *"I THINK IN THE END … I FEEL THAT THE IDB GAVE TOO MUCH SPACE TO THE DONOR BOTH IN THE CONCEPTUALIZATION AND IN THE IMPLEMENTATION. I MEAN THEY WERE SO ENGAGED, AND I THINK MAYBE IT WAS GOOD IN THE END FOR DISSEMINATING KNOWLEDGE FROM THE PROCESS, BUT I THINK IT SLOWED THINGS DOWN. IT GOT IN THE WAY…"*

Several respondents note ways in which the timeline could be improved for future operations or similar initiatives. First, the operational guidelines could be agreed on more quickly between donors and countries. Additionally, multiple phases of the country projects could be negotiated at once, as planned in the original design, rather than repeated three times, in order to reduce transaction costs. However, this was not possible because disbursement schedule did not line up with the required funds. The timeline could also be shortened by conducting a quicker baseline review to estimate the potential impact of different interventions. Relatedly, several respondents felt it could be helpful to conduct the baseline survey before setting the indicator targets, in order to ensure they were realistic. What has happened, and as a mitigation measure, SMI requested IHME to propose a model to estimate targets in addition to an economic model developed by IDB based on a review of interventions' effectiveness. It was also recommended that community involvement and accountability be incorporated into the design from the beginning, in order to better address the role of social factors.

Initial Chiapas operation designed jointly between SSA, ISECH, IDB, PCU and, to a lesser extent, jurisdiction leaders

Domain	Topic	Sources	Robustness of finding
Design	SMI operational design in Chiapas	Donors, IDB, SSA, ISECH, PCU, jurisdictions, DR	A

During the early stages of SMI in Mexico, ISECH in the state of Chiapas, rather than SSA, was most involved.

When asked about the design of the SMI operations in Mexico, stakeholders describe broad involvement. Stakeholders from SSA and ISECH believe that the donors, IDB, SSA, and ISECH all participated in the design of the local operations, and believe that ISECH had the last word in

making plans and decisions for SMI. These stakeholders also mentioned the involvement of the Ministry of Foreign Affairs and the Governor of Chiapas. Other respondents confirmed the list mentioned by SSA and ISECH, mentioning also the Project Coordinating Unit (PCU) in Chiapas. The strong influence of CSF at the beginning was described by one local respondent, and CSF's continued involvement in Chiapas has been noted by several other stakeholders.

Input from a number of different sources was incorporated when designing SMI operations in Chiapas, including health area experts, local experts, findings from various studies, including a barriers to access study and social networking studies on institutional delivery.

Health jurisdiction leaders in Chiapas report that the jurisdictions were involved in selecting which municipalities would be part of the program, and they also helped in the negotiations of targets and indicators. These informants had no comment about who were the strongest decision makers at the origin of SMI. Also, their involvement was not confirmed or mentioned by higher level stakeholders.

When describing the design phase of the SMI Chiapas operations, stakeholders noted that decisions were made in workshops with country representatives and that decisions were ultimately left up to the country without any one person having a final say. However, in certain respects, minimal flexibility was allotted to these operational decisions in order to comply with SMI's rules of the game.

Contrary to SSA and ISECH narratives, two relevant stakeholders point out a lack of engagement from SSA when designing SMI's operation in Chiapas, which made Chiapas' participation more difficult. Further, with the Mexican political transitions, all SSA actors involved in SMI were replaced within a six-year span, making it hard to get more accurate information on the level of involvement or commitment of SSA.

Overestimation of the human capital to implement SMI is a non-trivial weakness

Domain	Topic	Sources	Robustness of finding
Design	Consideration of local capacity	IDB, SSA, ISECH	B

Key informants disagree about how institutional capacity in Chiapas was evaluated prior to the initiative. Regardless of what assessments were conducted, respondents agree that it is difficult to assess human capital; in fact, there is still some disagreement as to whether ISECH's capacity was underestimated or overestimated. At the local level, most agree that human resources are

a weak point for ISECH, and that ISECH's overconfidence in their own administrative capacity likely contributed to Chiapas not meeting the first operation indicators.

One driver of weak human resource capacity is high staff turnover at multiple levels, caused by political and social unrest. At the health facility level, new staff were hired and trained for SMI. However, each time these staff leave, ISECH has to start all over again. At the jurisdiction and state level, political changes lead to revolving administrative staff; SMI coordination Unit in Chiapas, and SMI IDB team must re-engage and educate these new staff each time they are replaced.

THEORY OF CHANGE

Evolution of TOC mirroring the development of SMI

Domain	Topic	Sources	Robustness of finding
Design	Theory of Change	Donors, IDB, SSA, DR	A

Like the development of SMI, the TOC for the overall initiative evolved frequently over time, with little clarity among most current KIs on the development process itself. SMI's Learning Plan (2013) gives a clear direction on how SMI will achieve its desired changes through a reflective learning environment. A limited number of KIs attribute its development to the IDB coordination unit, McKinsey & Company consultants, and to lessons learned from the health system strengthening (HSS) work done by Gavi. Among donors, there was a multiplicity of opinions on reasons behind the adoption of the TOC, ranging from attributing it entirely to the preferences of one donor organization to attributing it to strategies to reduce inequalities. One relevant stakeholder enumerated the sources influencing the creation of the TOC, including the personal experience of designers, workshops, intense discussions among experts, literature review, meta-analysis, and use of every available tool to bring evidence to policy.

Regarding the guiding SMI framework for Chiapas, local KIs see the operational framework, figure 6 above, as SMI's TOC. National stakeholders perceive that the adoption of the TOC revolved around meeting the initiative objectives with the resources allocated, within the context of Chiapas. Upon reviewing project documents, it is clear that the TOCs for Mexico have an overall approach of taking accepted theoretical frameworks and adapting them to Mexico based on the findings of the qualitative barriers study that was conducted in order to inform SMI.

ROLES AND REASONS FOR PARTICIPATION

Reasons for joining SMI varied greatly between stakeholders SMI

Domain	Topic	Sources	Robustness of finding
Design	Roles and reasons for participation	DR, Donors, IIDB, PCU, MSH, SSA, ISECH, JLs	B

The Bill and Melinda Gates Foundation cited joining SMI for a variety of reasons, including their interest in the Mesoamerican region, testing innovative interventions in middle income countries, and because SMI focused on improving MDG-relevant outcomes among the poor. They also saw SMI as a way to increase CSF's investments and involvement in global health. BMGF joined with the goal of contributing both financing and their significant experience with large global health initiatives. Over time, they see that their role has become more proactive to ensure sustained financing. They have also significantly increased their emphasis on HSS.

CSF joined the initiative in order to expand their regional influence, maximize their impact per dollar invested, experiment in global health, and unite with other large philanthropic organizations. They saw SMI as an opportunity to bring new, sustainable options to the region, and to promote a shared vision for changing public policy in innovative ways. CSF has been more involved than the other donors at the operational level in Chiapas, and while their style has evolved over time, their overall role has remained relatively consistent.

AECID was primarily interested in experimenting with a public-private partnership. They believed the SMI model could offer greater efficiency, and saw the partnership as a way for countries to overcome resource limitations to achieve their goals. However, due to economic conditions in Spain early on in the initiative, the financial contribution of AECID was reduced from $42 million to 14 millions (19). AECID now continues to provide technical monitoring and support for the initiative.

IDB was selected as the administrator/manager executor of the initiative given its history in the region. Over time, its role grew considerably from managing the funds to: organizing and structuring technical assistance; leading policy dialogue; supervising and assisting with implementation; and generally ensuring that the initiative is implemented as designed. They also participate and make recommendations during donor meetings.

The IDB Panama unit of SMI is perceived as having developed the entirety of SMI operations and being the custodian of all of SMI strategies between the different countries. Their follow-up has made these strategies come to life.

The Chiapas Project Coordinating Unit operates as more of an executor than a coordinator. Its role includes executing SMI; building ministry ownership; and creating technical records, procurement records, benchmarks and timelines for interventions.

MSH provides technical assistance for SMI in six countries: Mexico, Belize, Guatemala, Panama, Honduras, and Nicaragua. In each country, a number of consultants work in a sample of the three levels of health units. They prepare guidelines and protocols, and provide training, in a wide array of topics. They create standards for quality improvement, including gap identification, improvement plan design, and implementation. MSH's focus has evolved with the phases of the initiative, shifting from inputs and supplies at the facility level to service delivery and human resources.

Another technical assistance partners is John Snow International (JSI). JSI's work was mostly focused in the first operation where they focused on improving supply chain management processes.

SSA joined SMI due to legal national and international commitments, and because some SMI-related programs such as vaccinations are managed centrally. It views SMI as an opportunity to learn from Chiapas and leverage the experience to other states given SSA's normative role. SSA provides accompaniment and support to Chiapas, and aligns SMI with federal regulations and guidelines. It also manages the availability of biological agents and other centrally-managed supplies, supervises the cold chain, and provides assessment and monitoring. SSA's involvement in SMI has grown after Chiapas did not reach its indicators in the first assessment. Starting with the improvement plan, SSA has been accompanying ISECH through technical assistance and field visits to ensure the state meets SMI targets.

According to key informants, Chiapas has one of the lowest human development rates of any state in Mexico, and it struggles to meet its constitutional obligation to comply with governmental development goals. Therefore, ISECH has developed a culture of welcoming any kind of international or other support for the population. In this context, SMI was seen as an opportunity to significantly impact health and help comply with the MDGs. ISECH was also attracted to the economic award offered by the initiative. As the top health authority in Chiapas, ISECH leads the coordination of SMI process in the state. They are deeply involved in the execution, adaptation and operation of the project, and hold the final responsibility for planning, monitoring, executing and attaining the targets. While their role has not changed over time, their ownership of the initiative has increased. They appointed a coordinator dedicated exclusively to SMI at both the technical and administrative level, and instituted the PCU to form

connections and coordination between different stakeholders, which significantly improved the relationship between ISECH and IDB. The perception of the project has changed from being an IDB project to an ISECH project, and the pressure to perform has grown from the state, presidency and international stakeholders.

During the design phase, the Jurisdictions' role was limited to selecting SMI municipalities, and several informants emphasize that they had a minimal role in negotiating indicators. During implementation, they are responsible for executing and monitoring SMI activities in each of the units.

RELEVANCE

Multiplicity of assessments at the origin of SMI/SMI strategies were in the right direction

Domain	Topic	Sources	Robustness of finding
Relevance	Bottlenecks identification	Donors, IDB, SSA, ISECH, MMoH	A

Use of evidence in the development of SMI has been a central theme, and is cited as one of the key factors contributing to its success so far. SMI strategies were based on several studies and reviews of the literature, including:

- Country-specific evidence packages required by IDB, including barrier studies, cost-effectiveness studies, and network analyses
- Analysis conducted by the Institute for Health Metrics and Evaluation (IHME) to estimate potential health gains despite absence of benchmarks for many of the systems indicators
- A variety of censuses and health facility data sources
- An examination of the mortality information system (from 1990 to the moment of the Initiative)

Despite the use of many information sources in the development of SMI, there is general agreement among many stakeholders that baseline measurement surveys were the essential piece of information that was missing during strategy selection. When selecting SMI activities, the Millennium Development Goals (MDGs) and workshops and meetings with IDB consultants and representatives were taken into consideration. Some local informants also mentioned strategy selection based on experiences in other municipalities. It is important to mention that the estimates produced based on the baseline surveys were close to the estimates used during

operations' design. However, a small number of the strategies and targets were modified based on the newly available numbers.

The strategies of SMI are seen as addressing the needs and bottlenecks in Chiapas; when questioned about whether there was an assessment of needs, many informants indicated that the alignment between SMI and Chiapas' needs is an indicator that there was an assessment of needs. There's a general perception that strategies are aimed at addressing the bottlenecks in implementation. However, some bottlenecks are yet to be addressed or solved. For instance, local stakeholders advocated to make procurement more flexible as there are differences in procurement processes between ISECH and IDB. The State has already started solving these by instituting a procurement committee which KIs hope will solve many of the issues they had faced with procurement of medical supplies in the past.

SMI not only aligns with national health priorities but catalyzes them

Domain	Topic	Sources	Robustness of finding
Relevance	Alignment with countries' priorities	IDB, PCU, MSH, SSA, ISECH, DR	A

Following a review of the national health plan for Mexico, SMI is found to align with country health priorities. SMI indicators are based on Mexican health standards, and the reduction of maternal and child mortality is part of national health plans objectives. Furthermore, SMI works as a catalyst for maternal and child health areas specified in the national health plan by contributing continuous quality improvement and providing accompaniment between the different levels of the health system.

Despite the alignment with national health priorities, local level KIs, perceive that striving to meet SMI indicators generates additional burden for Chiapas' health authorities due to the differing activities and priorities within and outside of SMI areas of work. However, one major benefit of the project is that SMI is perceived to enable ISECH to achieve their own goals and follow their own norms.

More so, SMI was originally meant to be completed by 2015, to align with the timeline of the MDGs, but is now more aligned with the National Health Plan in Mexico (2013-2018). However, SMI is likely to extend beyond 2018, due a number of overly optimistic timelines for essential operational activities including negotiations with countries, SMI planning activities, and the measurement surveys. One relevant informant did note that the lengthened program timeline may have allowed for increased innovation in implementation.

In Chiapas, operations have been further delayed by the economic crisis, social unrest, and multiple changes to the government administrations. As a result, implementation is occurring under emergency-like conditions, with limited operational resources available. KIs from Chiapas estimate that the second operation implementation period will be 60% shorter than originally planned. This is problematic, given that the second operation's focus on service delivery and quality improvement are more difficult to achieve than the first operation's input-focused goals. However, the 60% estimation is an overestimation of the time lost due to unrests. The actual timeframe of the operation is scheduled for two years, starting around April of 2016. The unrests only lasted few months and stakeholders have continued to work through these hard times with additional efforts to make up for the lost time.

Increased integration of SMI components between first and second operation

Domain	Topic	Sources	Robustness of finding
Relevance	Integration of activities	Donors, IDB, SSA, ISECH, Jurisdiction	B

Stakeholders perceive SMI to be an integrated program, though there is disagreement regarding the extent of integration achieved. First, they see SMI activities as integrated with existing government finances and interventions. During the first operation, some SMI activities were parallel to the work of ISECH, and a key lesson learned was to better integrate interventions into ISECH's responsibilities, in order to strengthen implementation. However, SMI is still sometimes perceived at the local level to cause additional work for ISECH, including prioritization of SMI activities over others.

> *"ONE OF THE LEARNINGS FROM THE FIRST OPERATION WAS TO TRY TO INCLUDE MANY OF THE INTERVENTIONS IN THE RESPONSIBILITIES OF THE INSTITUTE TO AVOID DUPLICATING THE EFFORTS AND INSTEAD STRENGTHEN THE ACTIONS."*

Second, SMI strives to integrate interventions across the full continuum of care, rather than using vertical interventions. For example, this means considering the entire life cycle in order to reduce maternal mortality, starting with improved access to family planning and good ANC. Another example would be ensuring that a woman who receives ANC would also be screened for HIV during her visit, rather than requiring her to make a separate visit to the health facility for each of her health concerns. A third example would be family planning postpartum, in which a woman

is offered family planning methods immediately after giving birth, rather than waiting until she is fertile, or a child coming for a general checkup that received missed vaccines.

Finally, informants perceive SMI as an integrated program in that it works well with other social development programs. The overlap between SMI and Prospera was mentioned by multiple informants, with examples given such as the integrated tasks of health auxiliary staff whose activities include vaccination, detection of pregnant women, distribution of family planning methods, detection of malnourishment among children, and communicating about health programming with community members.

SMI MODELS

REGIONAL MODEL

Benefits of a regional approach outweigh its inconveniences

Domain	Topic	Sources	Robustness of finding
Model	Regional approach	Donors, IDB	B

The regional SMI approach was developed in the context of strong existing regional partnerships. All the SMI countries except Mexico are partners in the Central American Integration System (SICA), along with the Dominican Republic. The Ministers of Health of SICA countries comprise COMISCA, which is an important collaborator and supporter of SMI. The SICA/COMISCA countries, along with Mexico and Colombia, are also part of the Proyecto Mesoamérica which, like its predecessor the Plan Puebla-Panama, aims to promote social and economic development in the region. The Proyecto Mesoamérica was initially championed by Mexico, exemplifying Mexico's agenda as a political and social leader in Central America. The opportunity to expand impact outside Mexico was also a motivating factor for CSF to become involved in the project, and all donors saw the regional model as an opportunity for a small investment to have a larger impact.

The regional approach has proven to benefit the initiative in many, often unexpected, ways. First, it has generated a sense of peer pressure among countries. This healthy competition is reinforced at bi-annual meetings of COMISCA, where SMI performance is a powerful reputational challenge. The regional approach has also allowed for significant inter-country learning and support, including comparison of interventions and standardization of best practices and cross-country exchanges. It also allows for efficient use of technical assistance across countries. Finally, it creates economies of scale for drugs, medicine and supply procurement, which COMISCA is able to negotiate prices jointly.

These benefits have outweighed the challenges posed by involving more stakeholders, which include longer timelines for country-by-country negotiations and additional human resources to meet the needs of all countries.

POLICY DIALOGUE MODEL

The PDM has advanced a number of policies and brought the topic of inequalities to the table

Domain	Topic	Sources	Robustness of finding
Model	Policy Dialogue Model	Donors, IDB, SSA, ISECH, MMoH	A

There isn't hard evidence that the process of developing, adopting and implementing new policies has systematically changed due to SMI. However, it is clear that SMI has encouraged more evidence-based decision making across the region. For example, regarding SMI in El Salvador, one respondent noted: "Many monitoring and evaluation instruments have been generated, the information generated is also evaluated every fourth night in what we call a situation room. And that information is essential for decision making from the operational level all the way to the minister who has to check and review the information." It has brought to light evidence on inequalities and health gaps, using evidence from the measurement surveys. National stakeholders are now forced to think about inequalities rather than averages, and allocate resources to the poorest populations. Though it is not clear whether this allocation of funding for the poor will be sustained over time.

"FOR EXAMPLE, ONE OF THE OUTCOMES IMPLIED FOR US TO CREATE STANDARDS THAT WE DIDN'T HAVE – THE USE OF MICRONUTRIENTS FOR CHILDREN: THAT WAS NOT STANDARDIZED. IT HAS FORCED US IN OTHER INSTANCES – THE MANAGEMENT OF PNEUMONIA AND DIARRHEA: WE ALSO HAD TO DEVELOP STANDARDS THAT WERE NOT IN PLACE. BECAUSE THEY WERE NOT EXPLICIT. I BELIEVE THAT, THROUGH THE INITIATIVE, WE'VE BEEN EXPOSED TO DIFFERENT MECHANISMS TO DEFINE PRIORITIES."

Among countries in the region, there are several examples that speak to the policy dialogue generated through SMI. Key informants from ministries of health in the region have cited the adoption of a variety of policies due to SMI including, cold chain improvements in Mexico, the creation of standards for the use of micronutrients for children in Honduras, the development of new norms around teen pregnancy in Costa Rica, the development of new standards for

management of urinary tract infections in El Salvador, the adoption of national environmental safeguards for construction or renovation of health facilities in Guatemala, and the re-enforcement of the EONC strategy across all countries.

National representatives find that SMI has generated a platform to review and develop standards that were not previously in place, to define priorities, and to strengthen existing health reform efforts. It has allowed countries to visualize and define existing problems and to prioritize specific issues at the regional level.

In Mexico, while there is a perception among some key informants that SMI facilitates discussions about norms, by exposing their weaknesses, and providing expertise to review them, this is not mentioned among national informants.

In Chiapas, most key informants see SMI's greatest policy contribution to be reinforcing existing health policies in Chiapas. For instance, SMI initiated the review of and potential introduction of maternity homes, using experiences in other places in an effort to adapt the program to the local indigenous context. However, there have been some conflicts between the IDB and federal level regarding the details of this plan (e.g. requirement that maternal homes be 10 minutes from a hospital). As another example, SMI encouraged the formal introduction of the EONC system. At the local level, health workers report that SMI helps them follow established guidelines for patient care and record keeping more closely. SMI is also supporting significant changes in the structure of the ministry in Chiapas. This includes the formal creation of a quality of care unit, and a logistical unit that will follow-up on supplying medical units, among other new units and coordinators.

Some of the policy improvements from SMI in Chiapas have been in strengthening the management, human resources and service delivery building blocks of the health system. This includes better planning and execution of procurement of supplies and equipment; more operational and implementation planning; better monitoring of progress; training on maternal homes and the EONC strategy; adoption of best or new practices like the red code and referral system.

KNOWLEDGE SHARING MODEL

Multiplicity of information used and produced by SMI

Domain	Topic	Sources	Robustness of finding
Model	Knowledge Sharing Model	Donors, IDB, PCU, MSH, SSA, ISECH, Jurisdictions, MMoH	A

During the design phase, SMI studied barriers to access and used secondary data from existing surveys. Baseline surveys were collected either before or at the same time as the beginning of implementation in some countries. During implementation, many other data sources are being used, including the dashboard system, medical records, progress reports, and resource availability tracking data and follow-up survey data.

Access barriers studies and secondary data from existing surveys were used to design the first operation. Existing data measuring the baseline levels of indicators and the impact potential of different interventions were used to set the targets, which were then modified based on the baseline surveys conducted for the purpose of SMI.

The follow-up surveys were used to verify progress against the targets and initiative effect. They also determined disbursement of the performance tranches, and eligibility for countries to continue in SMI. The results from the baseline and follow-up surveys further informed the design of the following operations, and in the case of Chiapas allowed ISECH to confront the reality of their population, and change or strengthen the strategies they had been using.

The dashboard is a monitoring system for countries to keep up to date on their progress, based on country routine health information systems. This information is used on a more regular basis at the health facility level, but is not accessible to donors, who are only able to access a regional-level version of the dashboard. However, donors have access to quarterly reports based on data from the countries' dashboard. Information on resource availability is used to guarantee availability of minimum necessary supplies through management process, and progress reports monitor implementation progress. Medical record review is used for a quality of care improvement strategy.

There are also opportunities for this information to shape activities outside of the initiative. For instance, BMGF has included a demand-component in another initiative based on the SMI-experience, and would like to see information from SMI used for this type of learning.

"SO THE INFORMATION GENERATED BY THE INITIATIVE IS THE MOST VALUABLE THING FOR ME BECAUSE IT'S SYSTEMATIZED, IT IS DOCUMENTED. THERE IS MEANS FOR VERIFICATION. AND ALSO HELPS US HAVE THE TOOL TO DO THIS ELSEWHERE.

Information from SMI is used to create awareness at multiple levels, to make decisions, and improve strategies. Many stakeholders have noted that the surveys data wasn't previously available and that, without SMI, there wouldn't be a direct means to obtain the same level of detailed information. Representatives of ministries of health in the region note that SMI data is frequently used for discussion during routine meetings. Further, these key informants explain that information tools generated through SMI have been effective and have already been disseminated to other non-SMI regions.

Standards and plans generated as a result of SMI are viewed as an important source of information with long lasting and far reaching effect (within and outside SMI areas). Data generated from SMI surveys has, in many cases, led to the review and revision of existing routine information and, in some cases, led to the discovery of miscoding of health information. Most country representatives could provide specific examples of exactly how information generated from SMI is used operationally, including the following:

- In Belize, SMI data has supported in generating checklists for procurement and identification of training needs for health care providers
- In Honduras, SMI data has been used to modify clinical care processes
- In Guatemala, SMI data has been used to establish the investment required in order to request a budget for minimum necessary equipment needed to provide basic care
- Research in Chiapas on vaccine potency (assessment of dried blood spot for the detection of measles antibodies) has led to the revision of cold chain protocols

Trust in external evaluation by all parties

Domain	Topic	Sources	Robustness of finding
Model	Knowledge Sharing Model	Donors, IDB, PCU, MSH, SSA, ISECH, Jurisdictions, MMoH	B

The external evaluation component of SMI is praised by all parties. External evaluation is perceived to be non-manipulable compared to country information systems. The external evaluation partner, the Institute for Health Metrics and Evaluation, is perceived by respondents as a credible organization. The external evaluation allows transparency between the health system and the population.

Unique experience due to SMI design and the results-based aid scheme

Domain	Topic	Sources	Robustness of finding
Model	RBA	Donors, MSH, ISECH, MMoH	A

Informants have been quick to name features that set SMI apart from other projects, and generally expressed positive views on their overall experience with SMI. Attractive, novel features named during interviews include:

- Results-based
- Incentives schemes
- Measurement
- Freedom in performance tranche investment
- Regional aspect
- Direct contact with ministries
- Direct support from donors
- Direct dialogue
- Fast-paced

> *"IT'S LIKE WE ARE TAKING AN EXAM AND WE WANT TO PASS."*

Additional features contributing to SMI success include:

- Extensive planning and execution
- Rigid and detailed monitoring
- Consistency, with very clear objectives and methodology
- Accompaniment of the state to the local level
- Commitment between the state and IDB
- Technical assistance and operational support

Informants from Mesoamerican ministries of health expressed that the results-based financing model of SMI has driven success. They feel that decision makers are mobilized by the funds available and incentivized strongly by both the money and a sense of competition.

SMI's novel results based aid model successfully increases responsibility among various actors through heightened transparency as well as financial accountability and clarity. This increased transparency can also help countries in securing additional lines of financing.

Although the financial assistance offered by SMI is a powerful motivator, external measurement and competition seem to have been even stronger drivers of change.

In addition to the benefits mentioned above, SMI also provides flexibility for countries to allocate the performance tranche freely within the health sector; magnify, further understand and act on the living conditions of the poorest, including generalizing the knowledge to other areas; generate conversations regarding national health policies; provide evidence for countries to make informed decisions regarding health initiatives and policy change for the future; and provide support for a period that exceeds standard timelines for health implementation projects.

Buy in on indicators but controversies around their nature

Domain	Topic	Sources	Robustness of finding
Model	RBA	Donors, IDB, SSA, ISECH, Jurisdictions	B

All stakeholders perceive the indicators as central to the results based financing mechanism. The indicators are crucial for identifying areas that need improvement and planning the project's activities. They give the countries a working objective that can be measured, and allow all partners to know whether results have been achieved and how effective the initiative has been.

The indicators and targets were negotiated by each country, based on the best available information and in compliance with existing national norms. Although countries negotiate their own targets, turnover in public officials in Chiapas challenges buy-in on indicators as new employees feel they did not commit to them. In Chiapas, not all stakeholders at the national level were aware of or agreed on indicators for the first operation. However, this has shifted to strong buy-in overtime and for the current operation.

> *"ACTUALLY WHAT I DISAGREE WITH IS THE WAY THEY MEASURE THE INDICATORS BECAUSE IT WORKS ON A SCALE OF ALL OR NOTHING AND YOU'RE WORKING IN THE COMMUNITY WHERE NOT NECESSARILY EVERYTHING IS THE RESPONSIBILITY OF THE MINISTRY OF HEALTH."*

The targets are perceived to be realistic by most stakeholders. However, there are some exceptions in Chiapas. SSA finds the indicators to be ambitious given the social and economic conditions of the state. Informants in Chiapas note that it is unfair to be evaluated for

population-level indicators given that (a) they are only one of two major health care providers in the region (along with IMSS-Prospera), and (b) that some indicators such as family planning or ANC coverage among indigenous women are outside the control of ISECH. Jurisdictions also worry that the next set of indicators will be even harder to reach given the focus on service delivery in comparison to focus on inputs.

Several stakeholders question the all or nothing nature of the indicators, noting that a country can fail in meeting the targets and receiving the performance tranche, despite making very significant progress. Another common critique is the difference in target difficulty between countries, due to each country negotiating their own targets. However, some respondents felt the all-or-nothing indicators helped the countries maintain focus by setting a high bar.

PARTNERSHIP

Shift in decision-making from BMGF to full donors committee, with IDB joining as a body that observes and makes recommendations

Domain	Topic	Sources	Robustness of finding
Partnership	Decision-making	Donors, IDB, SSA, DR	B

Key informants indicate that decision making power was, at the very early stages, held by BMGF, but that this shifted toward the donors committee once CSF and AECID joined the partnership. Due to Spain's economic crisis, AECID's ability to deliver committed funds, and therefore their power in the partnership, attenuated over time. Between the donors, the two foundations, BMGF and CSF, are described as having a more powerful role in decision-making relative to IDB and countries; this is consistent with the SMI operating regulations.

IDB's role in the partnership grew over time from fiduciary to technical, and they came to make recommendations more systematically to the donors' committee and negotiate with governments. When making decisions, donors take into serious consideration the recommendations from IDB. According to the rules of operations, decisions are made by consensus; while a voting system was designed to aid in the case of a split vote, according to donors, it has never been used, and each donor has the last word on topics that are the most important to their organization.

Stronger partnership with many changes over time

Domain	Topic	Sources	Robustness of finding
Partnership	Decision-making	Donors, IDB, PCU, MSH, SSA, ISECH, Jurisdictions, MMoH	B

Key informants tend to diverge in their opinions over who drives decision making in country operations; one relevant KI considers CSF to have driven decisions, and feels that Mexico has had a strong influence on other governments. In contrast, country representatives point to donors having the last word in broader terms and perceive that IDB's clout and decision-making power has increased over time. Some feel that IDB participants have previously imposed and held disproportionate power in selecting SMI interventions, though this has reportedly improved over time and resulted in a more equal partnership. In contrast, others feel that governments and ministries of health have always had the final decision, as country-specific operations are designed by that country/state.

In Chiapas, the partnership has evolved and developed a shared vision based on mutual trust. Harmony and alignment has increased over time, as all partners have become aware of operational challenges. Though the roles were defined from the beginning in the operation regulations, these have been refined by the donor committee, and many partners such as ISECH and SSA have increased their engagement in the project over time.

Many partners feel that countries' perspectives are increasingly valued in the initiative. However, some local Chiapas stakeholders also perceive that IDB has imposed itself on ISECH's procurement practices, and that these and other conflicts have complicated the partnership.

Partnership questionnaire reveals highly connected and trusting network in Chiapas

Domain	Topic	Sources	Robustness of finding
Partnership	Network strength	Donors, IDB, PCU, MSH, SSA, ISECH, Jurisdictions, technical assistance and evaluation partners	A

The partnership analysis revealed a high level of trust and connectedness in the network of actors involved in SMI. Twenty organizations involved in SMI Chiapas responded to the partnership survey, including donors, the federal Secretaría de Salud, IDB groups, IHME, ISECH and health jurisdictions, and technical assistance organizations. One donor, one ISECH department, and one SSA department did not respond, therefore the connections to their

nodes are the result of other respondents' answers to the questionnaire reporting partnership with these organizations.

As shown in Figure 9, the Chiapas SMI network contained a high degree of connectedness; no member, for example, was disconnected from the network, and all members were connected to at least four other members. While donors tended to have the fewest connections, the jurisdiction leaders, heads of ISECH departments, IDB actors, MSH, and federal Secretaría de Salud informants all responded in a way that indicated extremely strong interconnectedness among themselves. At the center of the SMI Chiapas network were ISECH and jurisdiction respondents, revealing the current strength of ties at the state level.

The overall trust between SMI actors in Chiapas was also quite high, with the nearly all organizations receiving moderate to high scores from their partners on measures of reliability, openness to discussion, and mutual support of the SMI mission. Using these measures, the partners rated as most trusted in the network were IDB-SMI in Panama, BMGF, the project coordinating unit stationed within ISECH, the IDB team in Mexico, and the Dirección de Atención Médica at ISECH.

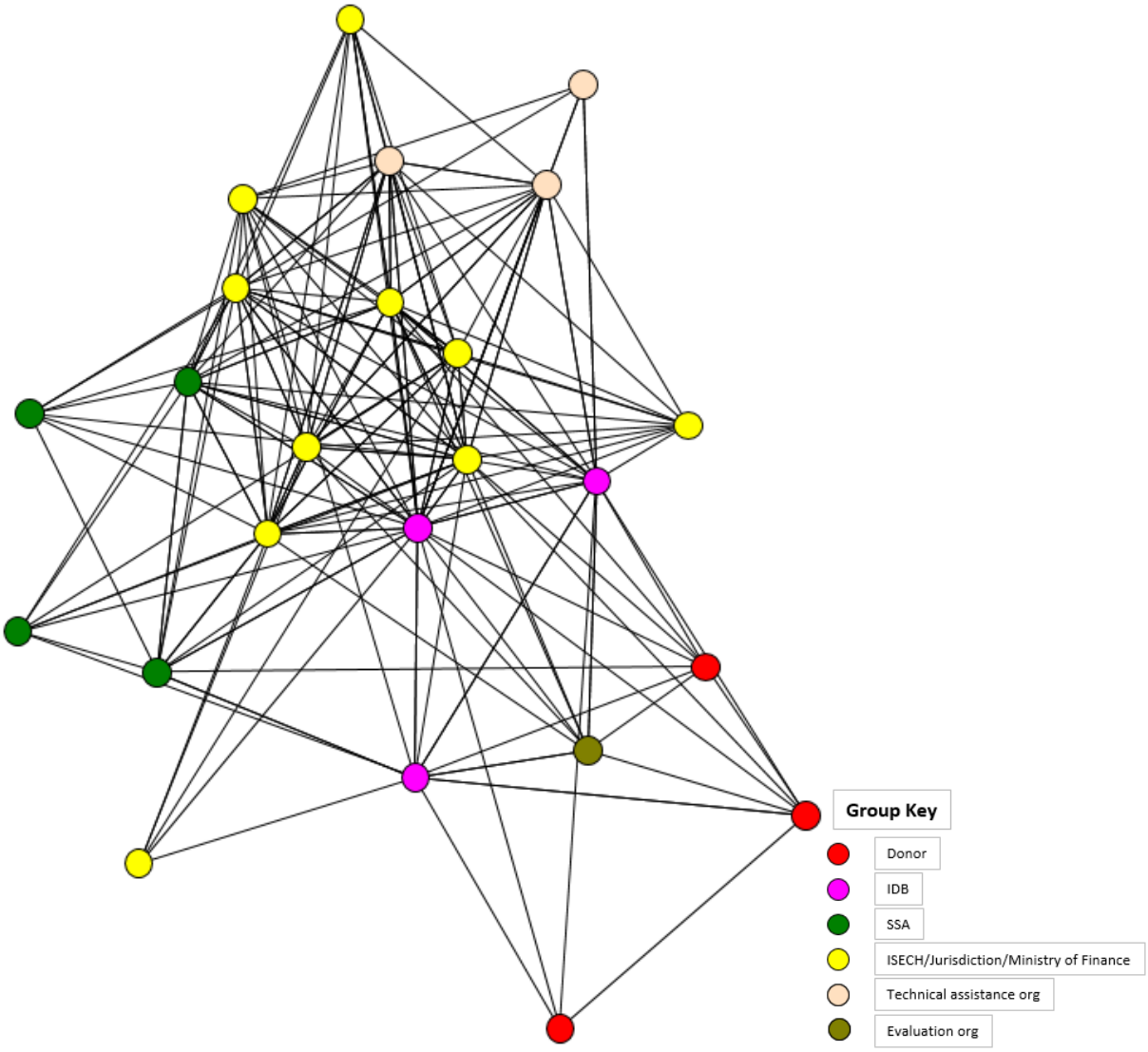

Figure 9: Chiapas partnership network

Surveyed partners also responded to multiple-choice questions regarding their views on SMI's objective, its success, and the aspects of collaborative work that propel the success it has achieved so far (results shown in figures 10-12). The most commonly chosen "most important objective of SMI" was to reduce health inequality (45% of respondents), followed by "to improve health outcomes" (25% of respondents).

While only one respondent reported viewing SMI as completely successful in reaching its goals, the majority (68.2%) indicated that SMI was "very successful" or "successful."

Finally, respondents selected many aspects of SMI that they feel contribute to its success; the most common were "Its results-based aid model" and "having a shared mission and goals" followed by "collective decision making" and "exchanging information and knowledge."

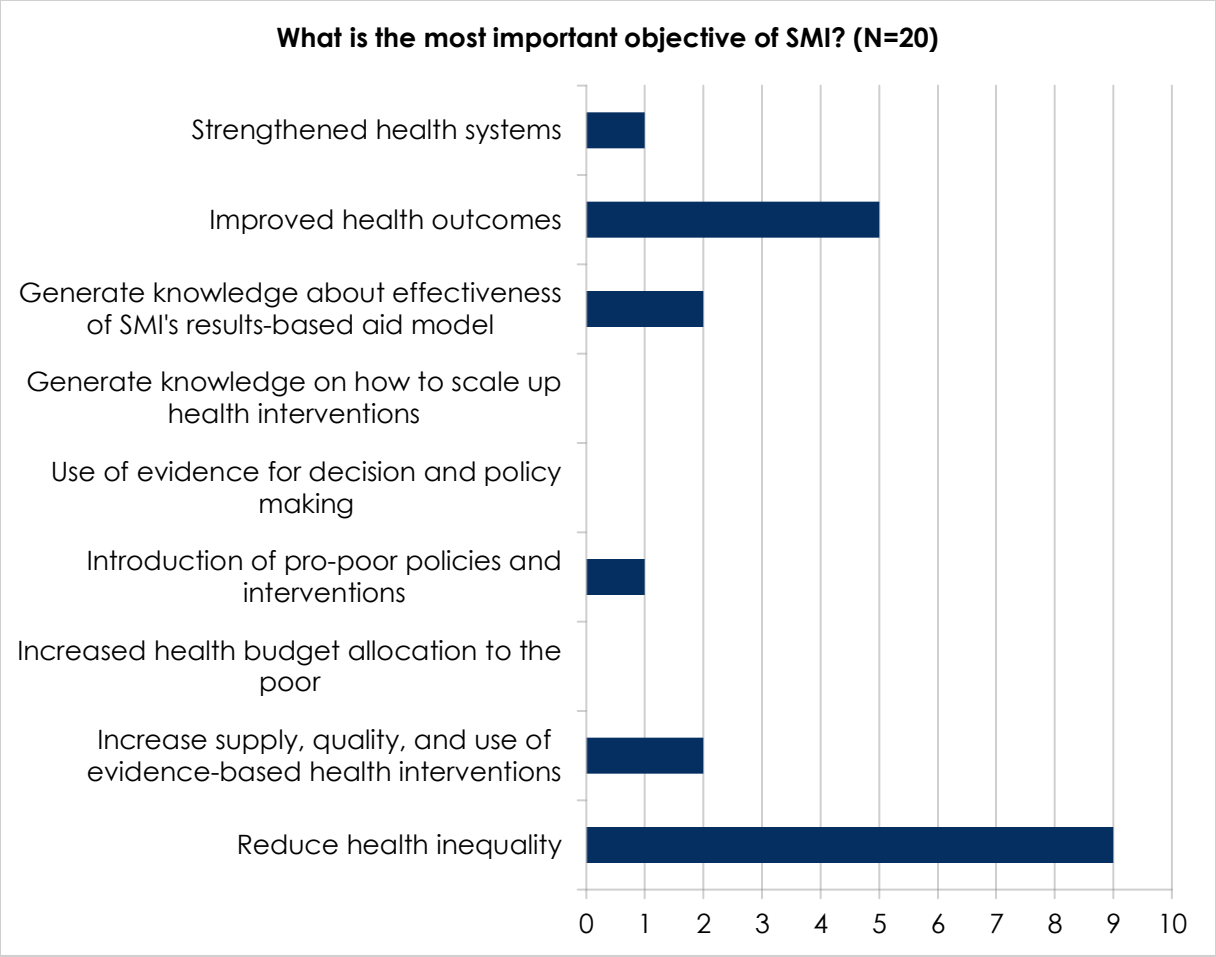

Figure 10: most important objective for SMI as perceived by different partners

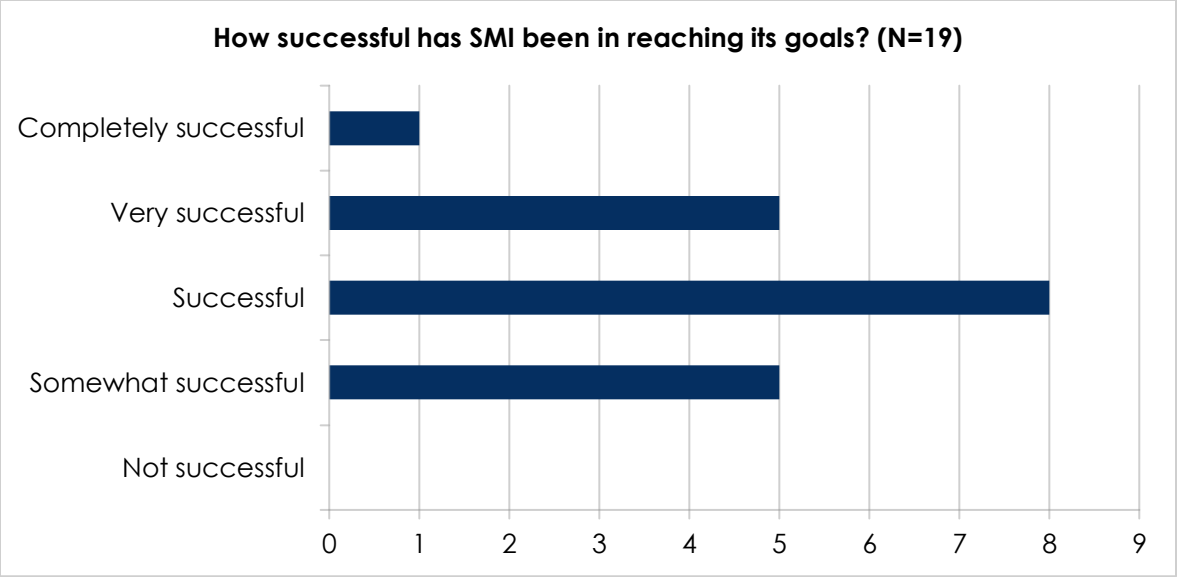

Figure 11: level of SMI success in reaching its goals as perceived by different partners

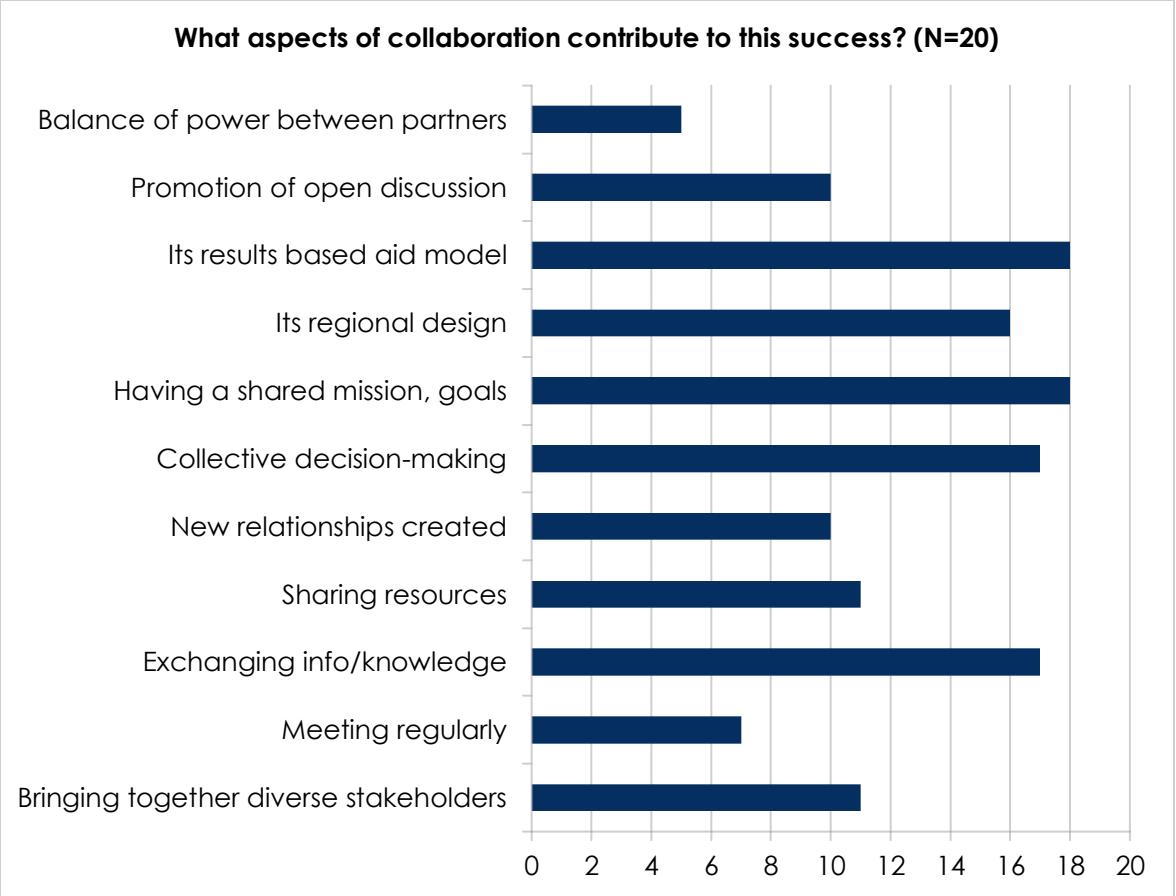

Figure 12: SMI aspects that contribute to its success as perceived by different partners

KNOWLEDGE OF STAKEHOLDERS

Better knowledge, in varying degrees, of goals and strategies of SMI than of its four components

Domain	Topic	Sources	Robustness of finding
Design	Knowledge of stakeholders	Donors, IDB, MSH, SSA, ISECH, Jurisdictions	B

Most stakeholders recognize that SMI's goals are to reduce maternal and child mortality and health inequalities, by providing evidence-based interventions to the poorest populations. Many stakeholders also see testing a new incentive model and new interventions as a fundamental goal.

National stakeholders at SSA and ISECH enumerate SMI's goals and strategies with a focus on indicators and differences in operation. They specifically focus on family planning, improving access and quality of hospital care, hospital supply management, information system improvement, child nutrition, prenatal care, institutional delivery and systematization of activities performed in the state. ISECH further emphasizes improving the health system, health services, and decision making, and not simply maternal and child outcomes, these stakeholders in Chiapas are also aware of the regional SMI context, and note that the methods and goals vary by country. At the jurisdictional level, only one leader was interviewed about this question. The respondent was knowledgeable of SMI's goals, but confused SMI's core components with the operational phases.

Consultants from MSH demonstrate a high level of knowledge of SMI's goals and objectives both at the theoretical and technical level. They can detail each of SMI's strategies, and identify implementation weaknesses that can affect or hinder attainment of the objectives.

IMPLEMENTATION AND IMPROVEMENT PLAN

IMPLEMENTATION

Multiple root causes behind first operation's challenges and improvement plan's success

Domain	Topic	Sources	Robustness of finding
Implementation	First operation and improvement plan	Donors, IDB, MSH, SSA, ISECH	A

The first operation in Chiapas suffered several factors that prohibited reaching the target indicators despite a great deal of improvement in indicators. The state of Chiapas has been

historically used to welcoming un-monitored support of different origins, or a lack of accountability. This meant a poor understanding of the initiative and the all-or-nothing nature of its indicators. It also meant a lack of local level engagement, a low commitment from jurisdictions and health care providers, and a lack of engagement of SSA in the design of the first operation. Further, with this lack of engagement, ISECH was not accompanied by SSA during the implementation, contributing directly to not meeting the targets.

> *"WHY DID CHIAPAS FAIL? WE'VE ALWAYS THOUGHT THAT FIRST THERE WAS THIS POLITICAL INSTABILITY. THERE WERE THREE CHANGES OF LEADERSHIP IN CHIAPAS, IN HEALTH. SECOND, THIS LACK OF ENGAGEMENT, TALKING ABOUT THE IDB PROJECT ALWAYS, NOT BEING THE CHIAPAS PROJECT OR OUR PROJECT."*

In parallel to the culture of welcoming un-controlled support, the political instability in Chiapas is characterized with a high turnover of government employees. In this context, it is difficult to build a strong institutional memory for SMI, and requires additional time for new appointees to engage in the initiative. This contributes to the low commitment from the jurisdictions and health care providers, and hence a lack of appropriate response to equip facilities with the needed supplies.

The turnover of government employees meant a discontinuity in points of contact for the initiative which, along with multilevel bottlenecks, delayed compliance with bank procurement process, and therefore the procurement of supplies. This in tandem to the lack of the appropriate response at the local level weakened and delayed the implementation, and contributing directly to not meeting the targets.

In parallel to all this, ISECH suffered from a weak internal monitoring system of supply and equipment availability, increasing the unawareness of the system of what was available in health facilities. This, along with the fact that targets were set before the baseline data being collected, allowed ISECH to overestimate their human capital, and other system capacity to implement SMI. Along with the poor understanding of SMI's indicators, this made the indicators too ambitious for Chiapas' preparedness level which contributed directly to not meeting the targets.

On top of all these causes, the results of the first operation were measured, as contractually agreed, before the end of the distribution of the procured supplies to facilities.

Initially, the donors disagreed on the implications of the un-met targets. While the original SMI rules stated that countries not meeting first operation targets would be allowed to continue in the initiative (though without receiving the performance tranche), some donors felt that Chiapas should be removed from the initiative. As a mid-way solution, the donors agreed that Chiapas could attempt an Improvement Plan and have their targets re-measured six months later. Meanwhile, SSA and ISECH took the first operational results to heart, and seriously committed to increasing their engagement in SMI. Under the improvement plan, SSA and ISECH implemented many successful efforts which improved awareness of supply and equipment gaps, and allowed them to fulfill these needs. First, they developed stronger monitoring systems, based on new appointments and health worker training. They placed banners with SMI supply and equipment requirements in facilities, and conducted repeated internal measurements of these items. Second, communication between facilities and the jurisdiction about supply needs improved greatly. Third, they implemented operation "Sabritas", which equipped vans to visit facilities to check inputs, and fix, replace or introduce missing items. Finally, they created two new ISECH units dedicated to logistics and quality management, including additional staff hired by ISECH for a 4-month period. As a result of all of these efforts, equipment and supply needs were fulfilled, and the improvement plan targets were met. However, all of this occurred in a long-standing pre-existing context of commonly deferring payments to suppliers, due to a lack of receipts. As a result, payments continued to be deferred, and Chiapas enters the second operation with significant debt to suppliers.

The series of events leading to the unfavorable results at the end of the first operation and the improvement plan in Chiapas are represented in a RCA in Figure 13.

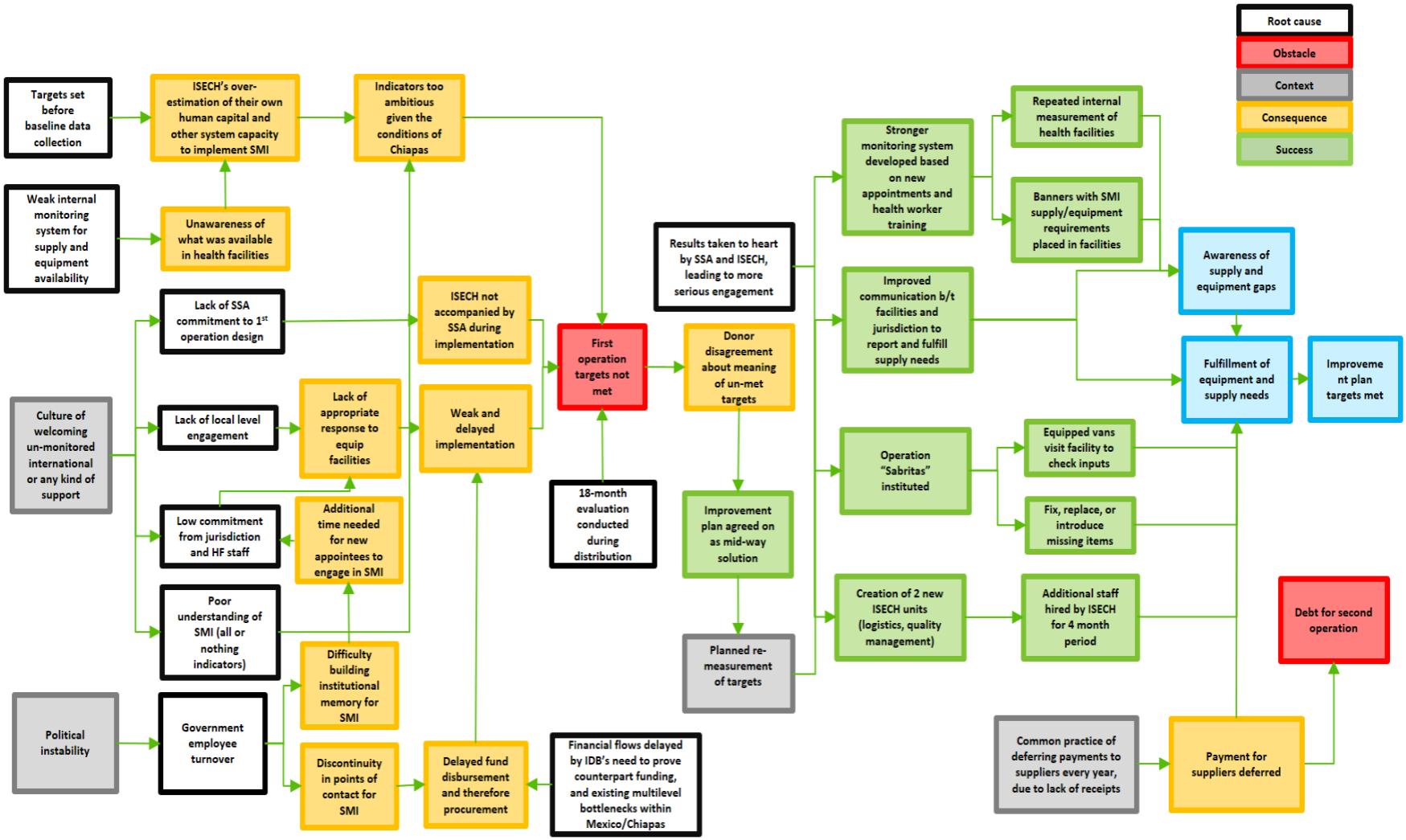

Figure 13: Root Cause Analysis – Sub-optimal first operation followed by a successful Improvement Plan in Chiapas

Multi-level bottlenecks in financial flows delay implementation significantly

Domain	Topic	Sources	Robustness of finding
Implementation	Financial flow	Donors, IDB, SSA, ISECH	A

Interruptions to financial flows have been a major hindrance on implementation. These bottlenecks have affected all levels of SMI implementation regionally, and in Mexico specifically.

Key informants from donor organizations were able to provide further contextual understanding for the delays in financing and implementation plaguing the state of Chiapas. The fact that Chiapas could not meet its target indicators for the first operation created a confusion at the donors' level and preferred to withhold funds until targets were met following the improvement plan.

Another major bottleneck at the donors' level was the economic crisis in Spain that reduced AECID's contribution from $42 million to $14 million. This meant the elimination of the malaria component, and BMGF and CSF had to find ways to fund some of the remaining activities. However, this bottleneck hasn't affected neither the first, nor the second operation.

Financial delays were also due to having a highly bureaucratic organization such as IDB between donors and the Chiapas government. Many donors felt that this hierarchical structure was difficult to work because of factors such as the rules of engagement developed by IDB.

Regardless of this, IDB has continued to play a major role in insuring sustainable improvements to financial flows in Mexico. One way it has done this is by leading the effort to have Mexico's 2009-2020 budget law updated. For Mexico, national policies were also a contributing factor to financial flow bottlenecks, specifically preventing CSF and other Mexican based philanthropic organizations from donating outside the country. Through IDB lead efforts, the budget law was revised, and now includes a clause that excuse organizations of which is Mexico is a member or holds a position in its governance.

At the state level, financial problems continue to cause issues with aid disbursement. For instance, all financial aid should be first channeled through the Ministry of Finance, and from there to the Ministry of health. Established as a protection against ineffective and inappropriate spending, this clause has inadvertently increased congestion in financial flows. In response, the Project Coordination Unit (PCU), a logistics management unit was created with IDB, and instituted at ISECH, to allow for greater control over administrative processes and expenditures.

Many lessons learned from first operation and improvement plan

Domain	Topic	Sources	Robustness of finding
Implementation	Lessons learned	Donors, IDB, MSH, SSA, ISECH	B

Following the first operation and not reaching the target indicators, lessons were learnt in different domains by SMI stakeholders in Chiapas. Communication and engagement came up often, with informants stating that engagement should include all levels, from the federal level down to local health care providers. Empowering and informing people on the frontlines about initiative goals was described as important in driving achievement. Furthermore, empowering jurisdictions to solve their problems contributed to stronger implementation. In moments of shortcoming, informants noted that it was more helpful to clarify participants' responsibilities in the initiative, rather than seeking to place blame. Some respondents brought up the importance of transparency around results, but others mentioned that SMI targets were a bit too high.

In implementation, other lessons learned included the value of technical assistance, especially in the form of the SMI coordination unit, which helped connect the dots on the ground. Another aspect included cooperation and communication between health units; one tactic that was developed to increase efficiency in times of limited resources including identifying resources that aren't needed in a specific medical unit, and sharing those with other medical units.

However, and while the improvement plan was seen as a success, it's not perceived as a sustainable process for later stages of SMI; informants note that better planning and timelier information is needed in the future as the lack of good planning and timely information were among the main reasons why Chiapas did not meet the targets of the first operation.

Further lessons from SMI covered a range of big-picture topics. A donor mentioned that SMI proved the possibility of investment in middle-income countries with strong results, and another respondent mentioned the possibility of incentivizing domains such as quality of care through results-based financing. Of high importance, it was mentioned that the regional platform could be used to address other regional issues, like Zika.

Social and economic circumstances are major obstacles to the current operation

Domain	Topic	Sources	Robustness of finding
Implementation	Second operation	IDB, PCU, MSH, SSA, ISECH	A

The social and political upheaval in Chiapas are a major obstacle to the second operation of SMI. The protests and roadway blockades in the state limit travel within Chiapas as well as

access to different parts of the state. According to informants, the SMI risk management plan considered this as an accepted risk which necessitated a continuous adaptation to changing conditions, and a mitigation strategy prioritizing activities that can be implemented without delay. Interventions that operated at the local level went better than those that depended on the state level due to the difficulty of traveling between areas in Chiapas.

The financial context in which SMI operates is another obstacle to the success of the current operation; Chiapas is going through a financial crisis on top of prior state debts. According to informants, in this context, the state's budget has been reduced and programs have been reordered and adjusted accordingly. Staff report operating without the needed resources and occasionally without being paid for their work. At the same time, it was reported that facility managers are stretched with over twenty different programs to implement, with three of these being SMI programs. In terms of resource shortages, informants mentioned shortages of supplies and medications within health facilities, shortages of fuel to operate vehicles, and difficulties maintaining equipment such as refrigerators.

Central to the difficulties of implementation is the frequent governmental staff turnover. There is a lack of a formal permanent communication process, such as on-boarding, to inform newer players of what the initiative is, what its objectives are, and the interventions have been. Similarly, there is a loss of buy-in with successive waves of government officials, and a need to engage new stakeholders, causing significant delays in implementation, and an additional burden to IDB and technical assistance staff who need to engage new officials every time. Additionally, some informants expressed troubles with health facility staff, stating that staff are not accustomed to meeting a high level of demand and working long shifts, and that some staff members are undisciplined or uncooperative with SMI activities. Absenteeism was also mentioned as an issue.

In addition to the obstacles stated above, a small number of informants felt that the IDB exerted burdensome bureaucratic requirements, adding to the delays faced by the Initiative. Specifically, they felt that the initial timeline may have been optimistic, given the delays faced in signing all necessary agreements by all necessary parties involved in the initiative.

Satisfaction about implementation is attenuated by the circumstances

Domain	Topic	Sources	Robustness of finding

Implementation	Second operation	IDB, PCU, MSH, ISECH, Jurisdictions	B

When discussing their satisfaction with implementation, informants generally had positive sentiments. Local stakeholders were satisfied with the day-to-day activities of SMI and expressed that there has been an increased sense of responsibility and pressure to perform, and among IDB, PCU, and MSH informants, there was agreement, to a certain extent, that so far there has not been much deviation from the plan. Despite this, the social circumstances, protests, and blockades seem to have impeded real changes and improvements in health facilities in underserved communities. Jurisdiction leaders estimate that they will be able to achieve 75 or 80% of the scheduled activities, though partners are working toward achieving 100%. Some activities are being implemented completely, such as continuous supply of family planning inputs in facilities. The incentive program is one that had not begun at the time of interview and which may not be implemented as planned. This program is meant to provide pregnant women with vouchers that would allow them to pay transportation to a health facility for delivery.

Mixed results regarding SMI implementation at the local level, affected by systemic, communal, and cultural factors

Domain	Topic	Sources	Robustness of finding
Implementation	Second operation	HCP	C

Health care providers reported on the positive changes as well as the challenges inherent in SMI during interviews. Interviewees in many health facilities reported improvements in the overall quality of care provided and in patient outcomes, record keeping, and outreach. They also report being able to unify staff to work together toward a common goal; improvements in management practices, trainings, and receiving feedback were reported, as well as in analyzing supply needs to avoid stock outs. In some cases, improvements in equipment and supplies were also mentioned.

Challenges in many aspects were noted by health care providers. Lack of supplies, equipment, infrastructure, and specialists, as well as overworked staff, are reported as ongoing challenges at multiple facilities. This forces patients to purchase their own goods or ask to be discharged. Additionally, some facility directors felt that resistance to change among staff, especially among long-term employees, has affected the success of trainings and implementation of SMI activities. Interviewees also discussed their administrative and bureaucratic challenges, which are worsened by the constant rotation of jurisdiction staff and leaders. Finally, health care providers identified cultural factors within the community and language barriers as impediments to

success. Often mentioned was their feeling that traditional beliefs make women hesitant to accept, for example, modern family planning.

Positive factors mentioned by this group include the systematic approach of SMI, the continued communication between all levels, improvements in supplies and processes, the commitment among workers to achieving results, improved staff skills and training, and, in some facilities, the support of the community and the staff.

Community engagement is seen as the strongest factor positively affecting implementation

Domain	Topic	Sources	Robustness of finding
Implementation	Second operation	ISECH, Jurisdictions	C

During interviews, midwives and community organizations stood out as indispensable connections between SMI and the population it's serving, in order to overcome cultural barriers. The community is engaged in the implementation of SMI activities through health, education, road, water, and municipal committees. Midwives, especially, are a primary component of community involvement due to the cultural sensitivity around pregnancy among women in communities served by SMI. Because health care providers cannot identify who is in need of antenatal care, particularly during the first trimester of pregnancies, midwives play a crucial role in connecting women with health facilities.

Beyond community engagement, there are several other factors positively affecting implementation, according to respondents at ISECH. The support of SMI liaisons and the learning from other countries have helped. Additionally, the health workers' union now has a better understanding of SMI, is offering less resistance, and is attending SMI meetings in the jurisdictions. Finally, there is a strong, diverse monitoring system in order for corrective action to be taken when needed and for SMI management to adapt to changing circumstances. This, and the diverse set of communication channels developed between all levels involved, helps keep implementation on track.

TECHNICAL ASSISTANCE

IDB is valued for their role in organizing and structuring SMI technical assistance

Domain	Topic	Sources	Robustness of finding

Implementation	Technical assistance	IDB, SSA, ISECH, MMoH	B

IDB is perceived as having developed the entirety of SMI operations and being the custodian of all of SMI strategies between the different countries. Their follow-up has made these strategies come to life.

> *"WE HAVE BEEN BUILDING THE WHOLE- SINCE THE START OF THE INITIATIVE, WE HAVE BEEN PROGRESSIVELY INTRODUCING DIFFERENT TOOLS, ACCORDING TO OUR OPINION, WHERE MATURITY IS GOOD ENOUGH TO DO SO. EVEN THOUGH WE HAVE THAT RISK MANAGEMENT TOOL AND PLAN DURING THE DESIGN AND UPDATED EVERY SIX MONTHS, WE KNEW IT WAS ALREADY TOO MUCH. AND WE HAVE TO PICK OUR BATTLES. EVERY TIME."*

SSA values IDB in this coordination role for SMI, creating tools to plan for the short, medium and long term, providing close accompaniment and diagnosis of the issues, supervising the implementation, and bringing in experts to strengthen the initiative.

IDB's role, according to ISECH, is one of consulting with the ISECH in order to assist with the entirety of SMI by offering solutions to problems at both a micro and macro scale. They've provided advocacy within Mexico to facilitate ISECH's access to funds and shared the experiences between countries. They also approve changes to activities and indicators to ensure compliance with the operating regulations. For most key informants, IDB is positively influencing efficiency, permitting faster acquisition of supplies, better use of staff, and better communication and organization within ISECH. Additionally, IDB liaisons have conducted regular, helpful meetings and have helped get new governmental officials up to speed when there was a change in leadership.

In addition, national representatives from Mesoamerican Ministries of Health have expressed their gratitude to the efforts of the IDB SMI Coordination Unit, recognizing that that group truly has the capacity of providing technical assistance. IDB in this sense is perceived as having a lot of experience and "know how" to implement the program. One national key informant, noted that compared to other projects, the SMI technical support has been phenomenal.

MSH is trusted locally, supports SMI strategic interventions through technical assistance

Domain	Topic	Sources	Robustness of finding
Implementation	Technical assistance	PCU, MSH, SSA, ISECH	B

Management Sciences for Health (MSH) is an SMI technical assistance partner. While quality improvement efforts have been made in Mexican health facilities for many years, the goal of MSH is to standardize these efforts for long-lasting impact. MSH operates in a subset of intervention-area facilities, joined by quality teams from ISECH, so that their processes may be replicated in other facilities. In Chiapas, MSH has been working in three complete EONC-level facilities, four basic-level facilities, and 4 ambulatory-level facilities. Their technical assistance process involves creating standards for quality improvement starting with gap identification, improvement plan design, and then implementation. One focus of MSH's work is on cultural adaptation of service delivery for family planning and obstetric and neonatal care. They also work on optimization of processes related to service organization as well as performance monitoring and creation of a users' referral and counter-referral system.

MSH's strength has been the fact that they are an organization external to ISECH with expertise and experience that lends them credibility and lets them unify others. As a result of their work, Hospital staff feel that they are part of a network rather than each part of an individual unit. Despite these positive factors, MSH faces two main challenges: one is the high staff turnover at ISECH, which delays MSH work as each new ISECH employee must be re-trained and informed on SMI's activities and processes. The other main challenge is the social and political upheaval in Chiapas that can, at times, pose life-threatening risks to the consultants and delays implementation. An MSH informant has stated that in order for this context to be properly addressed, a more flexible design of SMI and a continuous adjustment of the indicators and goals are needed.

Facilitation and follow-up role of the PCU helps keep SMI on track

Domain	Topic	Sources	Robustness of finding
Implementation	Technical assistance	PCU, ISECH	B

The role of the project coordinating unit (PCU) of SMI in Chiapas is to support the execution of the initiative. According to interviewees from ISECH and from the PCU itself, the PCU builds ministry of health ownership over SMI activities and processes, acts as a liaison between all of the

SMI actors in Chiapas, and ensures that timelines and goals are maintained. They also play a role in implementation by creating technical and procurement records, providing technical assistance, and paying attention to financial flows for the project. The PCU coordinates and manages SMI activities, monitoring their progress.

Respondents describe the added value of the PCU by mentioning the ways the PCU has gotten ISECH administration to respond more quickly and smoothed the way for SMI through legal changes and visits to state authorities and to the secretary of revenue. Respondents also note that the PCU has a fresh perspective on ISECH operations, enabling them to make recommendations, and that the PCU has introduced new technologies and software.

EFFECTIVENESS: CHANGES IN THE HEALTH SYSTEM

LEADERSHIP AND GOVERNANCE

Business not as usual in Chiapas with SMI

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Leadership and governance	SSA, ISECH, Jurisdictions	B

In Chiapas, significant changes in leadership and management have cultivated accepted new culture of health.

Decision-making processes are currently undergoing significant changes at the state and national level. The partnership between SSA and ISECH illustrates this change; the two entities now hold regular meetings and have established a collaborative environment to expedite the decision making process. However, the changes in the decision-making mechanism resulted from not meeting the target indicators, and because of this, the sustainability of this process is uncertain.

There have also been some improvements in leadership and management practices that were not directly planned for SMI. For example, SSA more consistently accompanies ISECH on jurisdiction visits, and compliance with norms is being monitored closely.

Within ISECH, previously siloed areas are now coordinating common activities together thanks to heightened communication. For example, HIV tests were previously purchased and delivered by three distinct programs: the HIV/AIDS program, the women's health program, and the laboratory

program. Under SMI, representatives from these three programs meet so that HIV testing activities and supplies are coordinated across all three areas. An annual work plan was created that connects four different coordination areas: Medical Care, Public Health, Health Risk, and Seguro Popular, and jurisdiction leaders are required to meet with the coordinators in charge of each area. Additionally, SMI strategies have succeeded in improving collaboration with those typically outside the government health system, particularly midwives.

Stronger management practices within health facilities with SMI (HCP)

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Leadership and governance	HCP	B

Many HCP working in SMI areas believe that SMI has helped reinforce stronger management practices throughout the healthcare system, including improved communication, organization, and supervision. At the health facility level, protocol changes introduced by SMI have improved internal working protocols and management, including introducing flow charts and work processes, and standardizing record keeping practices. Several HCPs report that services were reorganized to improve efficiency and task delegation. In a few cases, information and decision making are now more widely shared within the facility. In addition, there has been increased attention to following guidelines. As one provider states: "we have always had medical standards and protocols for obstetrics and pediatrics, but to be honest, we weren't following them closely. Since the SMI was implemented, we began following these guidelines." For example, there is much closer monitoring of norms for the timing of women's antenatal care visits. While many of these changes are attributed to SMI, certain individual directors are also given some credit. However, there are also some facilities that have not seen any changes in terms of management.

In non-SMI areas, systematic improvements made across the healthcare system are uncommon and sporadic. With little to no change over time, poor management and oversight from Jurisdictions has exacerbated dwindling resources and reinforced poor service provision. The changes that are made vary by facility, but include improvements to administrative processes, resource management, and communication among staff. Reasons for why these improvements have come about are also varied. One facility credited the hiring of a new director for the improvements seen, while another credited SMI. The latter is of high interest because it suggests a positive spillover effect from SMI. The respondent specifically credited SMI, stating "It has a lot to do with the initiative…This is related to prioritization and attention, a change in behavior, a

patient safety culture." However, the sustainability of these improvements are challenged by poor oversite and lack of assistance from Jurisdictional leaders.

SERVICE DELIVERY

Primary change in service provision has been in the availability of supplies

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Service provision	HCP, women, men	C

This includes biologics, family planning, and drugs, which leads to greater satisfaction among users, whose great complaint about health facilities is often the lack of supplies. HCP report that increases in the supply of medical equipment was shown to have an improvement in the provision of services. One JL feels that more deliveries are being attended, but feels that the care is still bad.

Indeed, significant persistent needs in service provision were identified by both HCP and community level respondents.

These included increasing health outreach campaigns for communities (in 2013, only 14% of women surveyed in Chiapas reported being visited by a community health worker in the last month); 24/7 health care services; increasing physical space for waiting and treatment rooms; more equipment; and, most importantly, increasing cultural competency training and respectfulness of health care staff. Many health facilities still lack many of the accommodations needed to provide proper care to indigenous patients. For example, many facilities still do not have translators available for indigenous patients who do not speak Spanish.

Improvements in processes give hope in outputs achievement

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Outputs	IDB, PCU, MSH, SSA, ISECH, Jurisdictions	B

Current levels of progress in improving processes suggest that SMI countries have the potential to achieve targets outlined by SMI. Even though improvements in processes are underway and paint a successful picture, each country has its own weaknesses and bottlenecks that affect the initiative to a certain extent.

While still too early to speak about output or target achievement, stakeholders have conclusively agreed on a new set of process improvements; improved monitoring and evaluation processes aimed at women and newborns; established quality improvement processes, development of standards, and inter-institutional processes for preventative care; held high level discussions with more participation at the local level; and implemented interventions with a systematic focus geared towards sustainability.

There are several other process improvements that also contribute to reaching SMI output goals, including empowering community level actors; increased ownership and accountability among health workers (e.g. building habit to check the necessary inputs every day among health care workers); conducting censuses of women; and taking vaccines to the field.

Community outreach is similar between SMI and non-SMI areas

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Service delivery	HCP	A

Community outreach activities are conducted almost exclusively by lower level facilities and include: seeking out patients; vaccination campaigns; visiting pregnant women; and conducting annual census. Similar activities are reported in SMI and non-SMI areas. Limited healthcare staff at local facilities are one an obstacle to expanding community outreach.

Despite not being universal, efforts in community outreach are satisfactory in a number of significant categories. In 2013, 80% of women surveyed in Chiapas and who had received community outreach activities were satisfied with the following evaluation criteria; Number of visits received from community health workers; Knowledge and training of community health workers; Information provided by community health workers; Respectfulness shown by community health workers.

A similar situation is depicted in non-SMI areas: Facilities conduct outreach activities, including campaigns for NCDs and nutrition, international Days (eg- TB, HIV), community talks about preventive care, vaccination and family planning promotion, school visits, visiting pregnant and chronic disease patients at home, and other workshops.

Engaging midwives is key to increase institutionalized obstetric care

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Service delivery	HCP, Midwives, Women, Men	B

Increasing institutional obstetric care is an important pillar of SMI, but socio-cultural and economic barriers stand in the way of this development, including: a culture of motherhood built around the midwife (household data from 2013 indicates that over 60% of women in Chiapas who gave birth in the last two years received care from a midwife); general distrust in institutional care; and inefficiencies at health centers (e.g. long wait times, medicine stock outs, inadequate staff). At the local level, many HCPs believe that increasing the engagement and integration of midwives will be key to increasing institutional deliveries. In application, engaging midwives can include activities such as training sessions to detect complicated pregnancies and deliveries; systems for midwives to refer patients to the clinics; and providing midwives with supplies to conduct clean and safe deliveries.

> *"MIDWIVES DIDN'T USE TO SEE US AS AN ALLY, AND THEY ARE VERY IMPORTANT IN THE REGION. THIS NEW CLOSENESS IS VERY IMPORTANT."*

Midwives play a central role in the maternal and birthing process and have an extremely influential voice directly connected to mothers. Utilizing this influence has been key to changes in emergency obstetric care. Almost unanimously, focus group discussion participants prefer to see a doctor when pregnancy or delivery complications rise. This same sentiment was expressed among midwives as well and aligns with local health facilities who are encouraging midwives to bring in high risk pregnant women before complications arise or worsen. Midwives can also play an important role in finding and identifying women who are missing prenatal appointments. With shifts towards increased institutionalized obstetric care already underway, HCP see that the potential for success of this concept can be increased if the following is done: collaborate with the midwife; give them good training so they can identify risk signs; and incentivize them (especially those living far away) to accept the training.

Non-SMI areas have adopted similar ambitions regarding midwives, hoping to increase engagement with and integration of them in local health systems. In non-SMI areas, midwives are being integrated at the community level, through facilities and jurisdictions, but not at upper level facilities such as hospitals. Akin to the goal of SMI areas, non-SMI areas use trainings and incentives like free medical equipment to encourage midwives to refer women with complicated pregnancies to institutions for further delivery care. Though they are not integrated into the actual delivery services at the facility midwives assist patients at home, and will inform the facility afterwards if they conduct a follow up visit.

MEDICAL PRODUCTS AND TECHNOLOGIES

Significant but uneven supply improvements in SMI areas

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Medical products and technologies	HCP	B

Despite the social and economic challenges Chiapas faces, supply tracking and stock availability have still improved at some facilities. It is not fully clear from the HCP interviews whether this is due to SMI or not. As supply tracking has improved, supply requests and deliveries have also become more efficient.

As reported by respondents, it is also important to note though that some SMI facilities, especially those in remote areas, still report significant stock outs of drugs, vaccines and lab supplies. The severity and duration of shortages vary based on what type of supply is being monitored, and family planning methods tend to be more consistently stocked in comparison to lab tests and vaccines. Vaccines in particular have gone through severe shortages this year and stock has reportedly worsened in some facilities. These shortages are ascribed to a lack of logistics improvements; social instability; teacher-led strikes; and, according to one respondent, poor management and planning by directors, chiefs of jurisdiction, and the Minister of Health.

Improvements in supply generates demand

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Medical products and technologies	HCP, ISECH, women, men	B

The facilities that have successfully improved availability of medical resources are now shifting focus to demand generation. Demand generation has been particularly successful in regards to family planning methods. Facilities that have introduced the implant method are not only reporting increased demand for this method, but also have seen shifts towards greater cultural acceptance of family planning in general. This is critical, seeing that around 60% of currently married or partnered women aged 15-49 were not using any method of family planning, and 50% of women who would like to use family planning still did not have access to a method in the 2013 baseline study.

"I WOULD LIKE THE SMI TO UNDERSTAND THAT IF WE ARE OFFERING SOMETHING TO THE INDIGENOUS POPULATIONS, WE HAVE TO BE ABLE TO KEEP THAT PROMISE PERMANENTLY. IF THIS IS ALL A SOCIAL EXPERIMENT, IT WILL RESULT IN A VERY SERIOUS PROBLEM. I CAN'T TELL MY PATIENTS THAT WE WILL ONLY BE ABLE TO OFFER THIS SERVICE FOR A WHILE. IF WE SUDDENLY STOP OFFERING ALL OF THIS, IT WILL BE A PROBLEM."

The effects of increased supplies at facilities can be observed in the care seeking behaviors expressed by individuals of these communities. How individuals select a particular facility to attend for treatment is one such behavior. Both HCP and FGD respondents note that individuals tend to seek care at facilities when it is known that drug and vaccine stocks are available. One HCP reports: "When people hear that there are supplies in the hospital, everyone comes back to ask for medicine." The same provider also notes the importance of sustaining these improvements: "I would like the SMI to understand that if we are offering something to the indigenous populations, we have to be able to keep that promise permanently. If this is all a social experiment, it will result in a very serious problem. I can't tell my patients that we will only be able to offer this service for a while. If we suddenly stop offering all of this, it will be a problem."

Indeed, sustaining improvements in supply availability is a concern at some facilities, where demand is exceeding capacity. This may be in part from patients seeking care outside of their own communities due to their own supply shortages. Additionally, it is important to consider how increased demand for services might affect quality. As one JL notes: "*increase in the number of deliveries does not necessarily reflect on the quality of the care provided*."

New equipment introduced to SMI areas, though some equipment and training needs persist

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Medical products and technologies	HCP	C

For many facilities, broken, old, or missing equipment has been an obstacle to providing holistic and effective treatment. Aligned with SMI health system strengthening objectives, facilities have or are receiving new equipment such as thermal cribs and stethoscopes. Most facilities have received some new equipment, but several comment that the equipment provided is not

sufficient in covering their needs, especially at higher level facilities that provide specialized services. In particular, a few doctors specifically request ultrasounds.

On the whole, HCP are grateful to have new equipment, and have steadily adapted to caring for and using it. For several facilities, the equipment they receive is basic enough that no training is needed. Most facilities that received highly technical equipment received training as well. However, equipment still lies unused in some facilities, due to lack of training or installation. For instance, at once facility computers were received but never installed. In rare cases, equipment has broken due to inadequate training. In a few cases, HCP report that some of their colleagues do not appear to appreciate the new equipment, and therefore do not properly care for it.

A more challenging situation in non-SMI areas

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Medical products and technologies	HCP	C

Non-SMI areas propose a much more difficult challenge when approaching logistic and medical supply issues; some respondents believe these shortages might be an unintended consequence of SMI. The majority of facilities did report that through Prospera, many of them are receiving a wide range of new equipment and tools. However, many have noted that integration of new equipment has been poor leaving some facilities with uninstalled equipment or missing related objects not delivered. On a positive note, facilities receiving more advanced equipment did report receiving appropriate training as well. As for supplies, generally, reports suggest that availability of supplies has worsened in the previous two years with significant shortages currently affecting the region. There are fewer reported improvements to product management and the availability of essential medicines, vaccines, family planning methods, and lab tests.

HEALTH WORKFORCE

Limited new hires

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Health workforce	SSA, ISECH, HCP	B

Overall, human resources have not seen any major improvements in most jurisdictions. Efforts to bolster staff counts, particularly for specialists, have been almost non-existent with limited new hires and current staff roles remaining stagnant. At this point in time, about a third of facilities in

Chiapas SMI areas have reported new staff since the beginning of SMI, but nearly all hires were unrelated to SMI. There are some exceptions though, such as one facility that hired a SMI coordinator. A HR diagnosis currently underway at hospitals will hopefully provide a better understanding of what human resources are needed for the second stage of SMI. The diagnosis should provide information regarding where staff should be placed, how they will be hired, their schedules, and more.

At rural facilities, staff turnover can be a problem. Several HCPs suggest that this could be addressed by hiring staff who are from the communities where the health centers are located. One center is able to recruit nurses from a local training center. However, local staff at most rural facilities are limited to auxiliary positions such as security or cleaning, and it is rare to find medical providers from the area, especially doctors.

HR training improves management and service provision

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Human workforce	HCP	B

Although SMI has not seen any significant increases in new hires, staff trainings have shown signs of improving management and service provision. Almost all HCP respondents had received at least some training, primarily focused on maternal and child health. Many HCP have responded positively to the trainings and several respondents felt the need for increased frequency and continuous training.

HCPs credit trainings for: improving record keeping knowledge and practices; encouraging providers to be more persistent about family planning; teaching specific methods for managing obstetric cases and complications; expanding service coverage and improved quality and outcomes; increasing focus on maternal and pediatric health; reorganizing services to increase efficiency and delegate tasks; placing a person in charge of quality management; and improving health outcomes due to improved service provision. Some trainings have also focused on addressing widespread patient complaints of rude treatment by medical staff. Staff trainings have been introduced to increase cultural competency, responsiveness, and respect for patients. However, there are certainly still many challenges regarding staff and patient interactions.

Staff training is typically conducted by the health facility they work at. Some hospitals have developed training departments. Others have implemented a model in which medical staff who receive training from external sources or from their own professional background replicate this

for staff within their own facility. Staff performance is evaluated by written and practical assessment immediately after a training; checking medical records; supervision; monthly evaluation of compliance with indicators; and committee meetings to assess staff. It should be noted that these sorts of assessment are usually done only at upper level facilities, such as hospitals.

HEALTH INFORMATION

System-wide improvements in health information systems

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Information	HCP	B

Information systems throughout the region have seen various improvements in tracking, storing, and using data in general. In addition to these improvements, data is now being analyzed more effectively to provide better care for patients in a variety of applications. Among the examples we've been given, health professionals reportedly use this patient information to identify high-risk patients; evaluate the root causes of deaths; measure progress and productivity; detect problems in care; make management decisions; and request supplies and drugs. Facilities typically analyze data on a monthly or bi-monthly basis, though there are some who reported conducting analysis as frequently as every day or week with SMI taking off.

The introduction of new processes and input registries have assisted efforts to improve information systems in Chiapas. The benefits of these new processes are reflected in increased efficiency of patient tracking, monitoring of SMI indicators like maternal and neonatal indices, and most significant, the monitoring of supply stocks. Although these positive changes have had an immediate effect on local health systems, HCPs have neglected to mention any reform in terms of supply delivery logistics.

A debut of a patient tracking and referral system

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Information	HCP, ISECH	B

A major problem that both HCP and FGD participants identified is the lack of communication between health facilities. The *Mesored* (health network reorganization) system has begun to address this challenge, and where it is functioning well, HCPs are pleased with the results. However, the *Mesoredes* are not yet functioning well everywhere, especially as it pertains to

referrals. In some cases, a patient could be sent to one hospital expecting treatment there, but arrive there to be sent to another facility because the current one does not have the appropriate materials to treat this patient. This highlights the lack of standardization in regards to patient data sharing across facilities. Lacking an official referral system, many health facilities have worked around this issue by WhatsApp to pass patient information from one facility to another.

At lower level facilities, health assistants are entering communities to actively search for pregnant women, while debuting a new tracking and referral systems. These active searches are conducted by clinic staff such as field nurses, or by health committees and promoters in support these sorts of clinical activities. In comparison, hospitals typically only see pregnant women who are at high risk for pregnancy or delivery complications and do not conduct community outreach or follow-up.

In non-SMI areas, changes to information systems are not systematic

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Information	HCP	C

Opposed to the systematic approach taken in SMI areas, non-SMI areas have had less organizational capacity to introduce system wide changes in such a manner. This is notable when looking at changes in the information system, which vary across non-SMI facilities. Some of these changes include the introduction of various electronic forms, a new form to track pregnant women, new requirements for daily monitoring of patient flow, and epidemiological diseases. As mentioned previously, collected data is used to track resource needs, analyze and improve productivity, analyze programs and coverage, identify high risk patients or those needing follow up, and goal setting/monitoring. However, little is known whether the introduced forms and requirements are simplifying processes or making them more complicated.

DEMAND GENERATION AND RESPONSIVENESS

Sub-optimal but improving responsiveness across the health system from ISECH down to the community

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Demand generation and responsiveness	Donors, IDB, ISECH, Jurisdictions, HCP	B

Recently, ISECH has had difficulties meeting the needs of the jurisdictions as the health system is inundated by increasing demand. This places pressure on the minimal resources ISECH currently has, and is compounded by the effects of the financial crisis. The jurisdictions themselves are also struggling to meet their population's needs due to this crisis. Although ISECH has been unable to meet all the needs of the jurisdiction, communication between the two entities has greatly increased. It should be noted from our field visits that while some health facilities were overcrowded with patients, whether waiting or being served, others were almost empty.

The majority of HCPs describe increased supervision and responsiveness from ISECH and their jurisdiction due to SMI's organizational and management components. Most facilities report that supervision from the jurisdiction has increased since SMI began. Jurisdiction's supervisors conduct both scheduled and surprise visits; the frequency varies by facility, ranging from every week to every several months. KIs did not provide detailed information about the specifics of supervision, but general activities include reviewing patient charts, supervising the cold chain, and checking various departments of the facility. Supervision has also included a great focus on SMI areas such as maternal health. In addition to these visits, regular reports are also submitted to the jurisdiction by most facilities.

However, the service improvement changes that ISECH has attempted to introduce at the local level have not yet fully permeated the community. While the majority of HCP respondents felt that ISECH and the jurisdiction are more responsive to their needs, a significant number, particularly those in the more remote areas, have yet to see any improvements in supply and staff shortages. One respondent reported that the Jurisdiction was very attentive during the first stage, but has since tapered off. In addition, recent social unrest has prevented JLs from conducting supervisory visits due to roadblocks from protestors.

Some HCPs report that ISECH has had particularly inadequate responsiveness and adaptability to the different preferences of Chiapas' indigenous populations. However, field observations in SMI areas provide some promising evidence, such as the existence of maternal homes and alternative delivery method policies at health facilities. It is important to note that SMI has not yet entered the 3rd operation of demand generation, and some of these issues may be addressed at that time.

According to HCPs, SMI has increased the responsiveness of some facilities to their communities by establishing standard systems for service provision and training of staff. As standardization becomes more normalized within the health care system, some facilities report major improvements that include accepting all patients, shortened wait times, and extended service

hours. In regards to care for women, some facilities report improvements in treatment and sensitivity, including improved privacy while waiting and being treated, acceptance of midwives during delivery, and increased education around family planning. However, these changes are sporadic and not collective in a meaningful way. They are also not reflected in the comments of community members, many of whom report poor responsiveness from providers.

Community engagement and demand slowly parallel the health system strengthening

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Demand generation and responsiveness	ISECH, HCP, women, men	C

As health system strengthening continues through SMI, efforts put into community engagement have also followed. For ISECH, success has been mixed when attempting to involve communities. They have conducted outreach activities with midwives and other respected community members in order to build connections with the population. They have also established rules that ensure health committee approval is needed before any novel or innovative health programs are implemented. The extension of the SMI timeline has placed further expectations on ISECH to fully engage communities.

Demand levels vary from one facility to another and are influenced by many factors. From the community perspective, hospitals are more frequently used when stocks have been replenished (e.g. vaccines, medicines, family planning), wait times are not long, and service provision is good. Demand is increasing in facilities where improvements to these problems are being made. Although some facilities are having difficulty keeping up with increasing demand, others are keeping up with demand while also seeing improvements in service provision and quality of care. For other facilities, no change has occurred.

As SMI continues, ISECH is preemptively acting to handle the current rise in demand from the population. One strategy ISECH has implemented to do this is utilizing maternal homes, ANC, delivery plans, and early detection to inform women and families about complicated pregnancies (e.g. maternal hemorrhage) and how to detect them.

UNINTENDED CONSEQUENCES

Unintended consequences mostly positive and at a higher than the local level

Domain	Topic	Sources	Robustness of finding

Changes in health systems	Unintended consequences	Donors, ISECH	B

The unintended consequences of SMI are mostly positive and generally occur at higher levels of the health system as opposed to the local. Countries continue to affirm their commitment to SMI by funding services in their purview during gap periods. In addition, countries showed a vigorous recommitment to SMI after first round results showed that all countries failed at least one or two indicators. Subsequently, governments have become much more involved in the second stage despite no real punishment for not meeting targets and the small size of the SMI grant. In the case of Guatemala and Mexico, the commitment to meet the indicators after not having met them during the first operation was a matter of pride. Other positive unexpected consequences include knowledge from SMI experience being transferred to other IDB projects in non-SMI countries and growing coordination inside ISECH despite this not being part of original plans. Finally, most stakeholders do not see the focus on SMI as detracting from other programs and areas, despite this being a concern. However, some do hypothesize that women from non-SMI areas are seeking care in SMI areas.

Successes are paralleled with some caveats

Domain	Topic	Sources	Robustness of finding
Changes in health systems	Unintended consequences	IDB, MSH, SSA, ISECH	B

Along with these positive benefits, some partners have expressed that SMIs successes are paralleled with caveats. While IDB's extensive traveling is seen by some KIs as essential for collaboration, others believe this is to be an unnecessary financial constraint on countries, without improving efficiency. While in fact IDB covers its own traveling expenses and does not come out of the country grant, this perception demonstrates a lack of communication. This reflects the fact that major communication gaps still exist regarding the structure of financial flows to and from IDB.

Another unintended caveat of SMI is the perception of inequality in SMI efforts. Indeed, by design, SMI support and accompaniment was provided exclusive to only a sample of health units. The SMI design also did not account for circumstances like the social unrest in Chiapas or high staff turnover. As one HCP explains: "There have been social conflicts, and I think this has reduced the quality of the service and the productivity. Last September, there was a problem where "ejido" members burnt down the municipal presidency office, now they don't work here

in the town and they took away all resources, ambulances and the DIF office. It's a big problem with no solution, and I think this also causes the SMI to not be followed as it should."

Although some of the unintended consequences were positive, there were negative effects as well. For example, the focus on SMI indicators reportedly meant taking resources away from other interventions. In SMI hospitals, certain aspects of the initiative's design created difficulties, such as having two fund administrators at the hospital, one for SMI funds and another for regular administration.

SMI also caused countries to shift extra focus to maternal and child health, while others still need care as well. Many countries prioritize maternal and child health, as is the case of SMI participating countries. However, several KIs mentioned that SMI has led to additional focus on this area. For instance, lab tests could be a potential issue due to guidelines dictating that resources be used by women only, leaving the potential that a citizen outside that group could be denied a test.

COMMUNITY INPUT

HEALTH: GENERAL KNOWLEDGE AND PRACTICES

Health is a state of well-being and absence of symptoms

Domain	Topic	Sources	Robustness of finding
Community input	General perceptions of health	Women, Men, Midwives	B

Among respondents met in the community in Chiapas, health was widely perceived as a state of well-being and absence of symptoms. For instance, being active and happy, eating well, living in harmony with family, and being stress-free. Conversely, participants view sickness as the presence of symptoms such as fever, cough, headache, vomiting, and diarrhea. People are also aware of a few specific diseases, most commonly diabetes, AIDS, STIs, cirrhosis, and vector-borne diseases (Zika, chikungunya). A minority of respondents also note that there can be 'silent diseases' such as cancer, which can only be detected by a doctor. A handful also state that in society, a person is never truly healthy.

Age and lifestyle are also contributing factors to the way in which health is defined. Generally, young children and adults are seen as healthy regardless if they have actually been sick or not, while older individuals are seen as more disease prone.

Such an environment has the inconvenience of the spread of undiagnosed conditions. As people think they are healthy as long as they have no symptoms, diagnoses often come at a late stage of the disease. This finding highlights the urgent need for awareness campaigns, specifically around non-communicable diseases that can be silent for a period of time.

FAMILY PLANNING

Many factors contribute to acceptability of pregnancies

Domain	Topic	Sources	Robustness of finding
Community input	Pregnancy	Women, Men, Midwives	A

Preferences and perceptions for when a pregnancy is acceptable are varied and susceptible to many factors. Responses from community level participants suggest that ideal age for women to attempt pregnancy ranges from age 15 – 40. Unfortunately, data from 2013 show that nearly 60% of pregnancies in Chiapas occur in women who are under the age of 19. Pregnancies that occur outside of marriage or at minimum a stable partnership are often seen as irresponsible, especially teenage pregnancies. This opinion was nearly universally expressed by all FGD participants. Additionally, both women and men expressed that a pregnancy should be wanted by both parents, and that the family should be financial stable and ready to support a child. However, household data from 2013 show that about 25% of women who were pregnant in the last two years or currently are, did not, or do not desire the child. Many participants indicate that cultural norms are shifting to favor smaller family sizes, especially in urban areas but also among rural respondents. In some cases, participants expressed negative perceptions of those with large families, especially if they are economically incapable of taking care of children. Women, especially in urban areas, want to finish their education and be stable before having a child so they are able to support them. However, in some rural and indigenous communities, respondents expressed it was normal for women as young as 15 to become pregnant.

Higher acceptability of family planning in urban areas

Domain	Topic	Sources	Robustness of finding
Community input	Family planning	Women, Men, Midwives	B

Acceptability of family planning varies between urban and rural populations, and depends on the particular circumstances. In urban areas, most respondents supported family planning, and see it as a responsible choice.

In rural areas there are more mixed opinions. While many women and men expressed support of family planning, they were more likely to report negative attitudes in their communities as compared to urban areas. They worried that they would be judged, gossiped about, or seen as lazy if they delayed pregnancy. Older community members in particular sometimes hold a sentiment that childbirth is part of a woman's purpose in life. Several women also felt indigenous beliefs conflicted with family planning, and reported that "chauvinistic" men were one of the main reasons women are unable to use family planning. However, these negative male attitudes were not found in the men's focus groups.

Regardless of whether FGD participants do or don't support family planning, most agree that a desired pregnancy is much more acceptable culturally than an unintentional one. There are certain scenarios that make family planning more acceptable, including if the woman already has many children; if she has a health risk such as a prior high-risk pregnancy or infectious disease; and if she is a teen or otherwise unable to support the child. Finally, in both urban and rural areas, some respondents worried about the short and long-term effects of family planning on fertility.

Widespread knowledge of family planning methods and preference for long-term methods

Domain	Topic	Sources	Robustness of finding
Community input	Family planning	Women, Men, Midwives	B

"I HEARD THAT IF YOU USE THE IMPLANT FOR THREE YEARS, IT'S NOT EASY TO GET PREGNANT AFTERWARDS. IT ALTERS THE UTERUS…WITH THE MORNING AFTER PILL, IF YOU TAKE THEM MORE THAN THREE OR FOUR TIMES, THEY DAMAGE THE UTERUS."

"BUT PILLS CAN BE HARMFUL AND THAT'S WHY DOCTORS RECOMMEND WOMEN ONLY TO TAKE THEM FOR ONE YEAR, IF WOMEN TAKE THEM FOR LONGER THAN THAT, THEIR PERIOD CHANGES, AND THEY EITHER GAIN OR LOSE WEIGHT. SOMETIMES THEY END UP VISITING A MIDWIFE SO SHE CAN HELP THEM. CHEMICALS ARE HARMFUL… THE ADVANTAGE IS PREVENTING UNWANTED PREGNANCY. THE DISADVANTAGE IS HARMING THE UTERUS AND THE OVARIES, JUST LIKE WHEN WE USE ANTIBIOTICS, AND THIS HARMS OTHER ORGANS. HORMONAL METHODS ALTER OUR MENSTRUAL PERIOD."

Women exhibit basic understanding and knowledge surrounding family planning methods (FPM), although some younger women feel uniformed in this area. When asked what methods women prefer, implants and injections are the most popular, followed by the pill, IUD and female sterilization. Women evaluate which method is best for them based on a variety of indices such as their body's response to different prescriptions, counseling by doctors, affordability, husband's opinion, and the duration of intended effects. The implant is preferred because it is long-lasting. The injection also has a long-lasting effect, though shorter. The IUD is long-lasting, but many women disliked the insertion process and worried about side-effects.

Women express substantial concerns about the health impacts of hormonal methods. There is a common conception that some methods can alter the uterus, and affect a woman's ability to conceive after stopping use of the method. In addition, women worried about physical symptoms such nauseas, bleeding, weight gain etc.

Women have a much better understanding of family planning methods than men. Typically, women with children are familiar with family planning methods. Doctors, nurses, and schools are the main source of information on family planning methods. Other sources include community talks, TV, social media sites, online, brochures on the streets, friends, neighbors, government workshops, and parents.

While men grasp the general concept of family planning, they do not seem to possess any specific knowledge regarding different methods, and are exposed to less information on family planning.

Younger women face unique social and supply barriers to family planning

Domain	Topic	Sources	Robustness of finding
Community input	Family planning	Women, Men	B

Unmarried or young women report fearing judgement for an unplanned pregnancy and are influenced by this fear to use family planning if sexually active. However, young women also face unique social and supply barriers when attempting to access family planning methods. Some facilities only provide information regarding family planning, but not the methods themselves, if they believe women are 'underage'. In some cases, facilities might only provide condoms to men, and refuse them to young women. Young women worry about the potential judgement they could face from their mothers and others if they learned they were using a family planning method. One woman also reported that because she lives at home, it would disrespect her parents to use a method; therefore, she must rely only on male methods. Young women are particularly embarrassed to ask a doctor for family planning methods, and are concerned they may run into someone they know if trying to purchase methods at a pharmacy instead.

PREGNANCY AND ANTENATAL CARE

Awareness of the importance of antenatal care, though urban/rural divide exists

Domain	Topic	Sources	Robustness of finding
Community input	Pregnancy	Women, Men, Midwives	A

When discussing the factors involved in a health pregnancy, many community informants mentioned that a healthy pregnancy is one where the woman attends regular checkups. In 2013, over 90% of women in Chiapas with a birth in the last two years attended at least 1 antenatal visit and of that 77% attended at least four antenatal care visits. Women also define a good pregnancy by the pregnant woman's healthy behaviors, including exercising, taking

vitamins, and not lifting heavy things. In contrast, at least among older midwives, a healthy pregnancy is about absence of symptoms.

When asked to describe a pregnancy that is not going well, women were aware of many physical warning signs of an unhealthy pregnancy, and tended to mention bleeding, pain, preeclampsia, tinnitus, flashing lights in the field of vision, edema, dizziness, vomiting, the baby not moving, high blood pressure, headache, leg cramps, and being very tired. Men's awareness of signs that a pregnancy is not going well tended to be limited to pain, exhaustion, and anemia.

Most women and men in urban areas value the skills and tools that doctors are able to use during ANC visits, including instruments, such as ultrasounds, used to detect complications. Some families use a combination of midwives and doctors when seeking ANC. Less commonly, a handful of women believe that their own intuition is their best tool, stating "Doctors can tell us what to look for, but we are the only ones who know how the baby is evolving."

Monthly prenatal care, including receipt of ultrasounds and tests, is more common among urban women. In rural areas, midwives play a robust role in ANC, and women have additional confidence in midwives who have received formal training. Many women rely on their midwife to perform a variety of services, such as giving herbal remedies for discomfort and to stabilize the pregnancy, repositioning the baby through massages both for the mother's comfort and the baby's health, and advising on diet. In 2013, almost 30% of women with a birth in the last two years in Chiapas received some form of antenatal care from a midwife. There are also a variety of checks that midwives perform for women, including determining the baby's position, examining its movement, growth, and heartbeat, and looking for warning signs in the pregnancy. In case there are warning signs, they ask women to go see a doctor, and may even bring women to the clinic if needed.

Midwives recognize role of doctors in ANC and high-risk deliveries

Domain	Topic	Sources	Robustness of finding
Community input	Pregnancy	Midwives	B

Midwives openly expressed their appreciation for the services rendered by doctors. The services and supplies provided by doctors that midwives mentioned and value include:

- calcium, folic acid, vitamins

- vaccines
- glucose tests
- tests for high risk pregnancy
- tests for maternal anemia
- checks on woman's blood pressure
- checks on the baby's growth and heartrate
- IV drips
- C-sections

The midwives also noted that there are other analyses that doctors are able to perform for women during pregnancy. Overall, midwives showed high regard for doctors and their role in a healthy pregnancy. Some even told interviewers that they sometimes talk with women's husbands to make them understand the importance of ANC, and that they help women access medical services by taking them to the health center or hospital in case of a complicated pregnancy or delivery.

However, despite seeing the value of doctors in these situations, medical care may not be accessible even when a midwife refers a woman. One midwife reports "sometimes I bring someone that is sick, we come all the way here only to learn that there are no doctors". Another says "I bring pregnant women to get vaccinated, to receive medicine, and for checkups. When I bring them [to the hospital], they don't have anything, and they can't even get an ultrasound done here."

In contrast to the difficulties observed with accessibility of ANC at health facilities, there are few barriers to accessing a midwife. Women can visit the midwife's home, or the midwife can come to her- The only barrier mentioned is the moderate fee associated with a midwife's services.

DELIVERY

Preference for institutional delivery is more prevalent among urban women

Domain	Topic	Sources	Robustness of finding

Community input	Delivery	Women, Men, Midwives	A

In contrast to their rural counterparts, urban women are far more likely to seek out an institutional delivery. Doctors provide advantages such as early detection and treatment of complications, but women report that there are some midwives who still refuse to refer a woman even if there are complications. Many women are concerned though that midwives cannot handle complications, and therefore prefer to deliver with a doctor. Women report preferring a private provider over public, because the private provider is more likely to have the necessary materials and equipment but might not be affordable. Overall, institutional delivery was still very low in Chiapas in 2013, as 64% of women gave birth in their own or another person's home. Only about 36% of women overall delivered in a health facility (20).

Among female respondents, knowledge of Casa Materna is rare and only one facility in Altamirano is currently known to exist based on participant's responses. It is unclear who runs this facility, but two possibilities are IMSS or the jurisdiction. The few women who have received care at a Casa Materna reflected positively on the treatment and care they received.

It is common to deliver with a midwife in rural areas

Domain	Topic	Sources	Robustness of finding
Community input	Delivery	Women, Men, Midwives	B

Attributable to a variety of shortcomings in the regional health care system, women in rural areas resoundingly favor home deliveries with midwives due to the privacy, comfort, and family participation that institutional facilities either can't or neglect to provide. Informal referrals from neighbors and relatives allow families ease of mind when looking for qualified midwives. Complicated pregnancies are the exception, in which case women, men, and midwives agree that seeking treatment from a doctor is preferable based on the doctor's potential expertise and access to essential equipment like an ultrasound. Gaps in service still remain nevertheless, even during emergency situations. For instance, one midwife reports an instance where a woman was brought to a hospital, but "the doctors didn't receive the woman and the baby was born in the yard".

"EVERYONE KNOWS A MIDWIFE, SO, IT'S JUST A MATTER OF ASKING..."

Community members prefer to see doctors for care during high-risk or complicated pregnancies

Domain	Topic	Sources	Robustness of finding
Community input	Delivery	Women, Men, Midwives	B

In cases of complicated pregnancies, women and men are more comfortable seeking help from doctors rather than midwives. One participant's comment epitomizes this dilemma: "I think midwives have a lot of knowledge, but ideally midwives should work together with doctors, that way the woman has both the ancestral knowledge of midwives and the scientific knowledge of a doctor who can detect problems in the pregnancy through technology." Interactions between midwives and health facilities are not unusual. Numerous midwives interviewed indicated that if complications arise during a delivery it is common to refer or take a mother to a health facility to see a doctor. This referral from midwife to facility does seem to be one way, but one respondent says that doctors will sometimes refer patients to midwives for baby repositioning and pain reduction, tasks very much in line with the standard duties of a midwife.

POST-PARTUM CARE

Not all women follow up with the doctor after delivery

Domain	Topic	Sources	Robustness of finding
Community input	Post-partum care	Women, Midwives	A

Post-partum care with a doctor is not common for most women. Indeed, in 2013, only 50% of women who had a live birth in the last two years reported being checked after delivery, and only 27% were checked one week after delivery (20). Some women follow up with a doctor in

case of pain. If a woman does receive post-partum care, the quality and coverage largely depend on the institution in which the delivery took place. Women are usually kept in observation after a C-section when delivering at a health center, but in some cases discharge can be immediate due to lack of space. Private clinics provide the most extensive and highly rated care, but the high fees can be a barrier to many. Women who deliver at home are cared for by a midwife. Midwives help mothers clean and take care of themselves and newborns during post-partum care. Resting periods after birth range from 6 – 40 days. Among poorer populations, mothers can struggle to receive the recommended amount of rest before having to return to work to support their families.

Women prioritize exclusive breastfeeding for at least 6 months as encouraged by midwives

Domain	Topic	Sources	Robustness of finding
Community input	Post-partum care	Women, Midwives	A

Breastfeeding is almost ubiquitous among mothers according to FGD participants; in 2013, 61% of women reported exclusively breastfeeding their children 0-5 months, and 82% of women continued breastfeeding at 1 year (20). Breastfeeding typically lasts from 6 months – 1 year, but babies are almost exclusively breastfed for 6-7 months.

Midwives highly encourage mothers to breastfeed, and both men and women strongly support breastfeeding. Men, women and midwives favor breastmilk for many reasons. First, it provides protection that formula can't offer and breastfed babies get sick less frequently. Second, it helps babies grow healthier. Third, the water used in formula can be contaminated. Fourth, breastmilk is also always warm so it's also convenient for mothers who don't need to heat water and carry bottles. Finally, it is economical. Although rare, reasons mothers might not breastfeed include the mother not producing enough milk; the baby not latching on; fear of pain from breastfeeding; aesthetic reasons and fear of sagging; mother being sick or on medications; mother's work schedule prohibits breastfeeding; or embarrassment of breastfeeding in public.

USE OF AND ATTITUDES TOWARD THE HEALTH SYSTEM

Health facilities are the last resort for sick individuals

Domain	Topic	Sources	Robustness of finding

Community input	Use of the health system	Women, Men, Midwives	B

In Chiapas, sick individuals utilize health facilities and services as a last resort for treatment. This delay in care seeking stems from a variety of issues, but most notable are pervasive medicine stock outs, high costs for treatment, and inflexible visiting hours that prevent individuals who work during the day to visit a health center. For many, the initial stages of treatment begin at home through self-medication (e.g. painkillers) or use of traditional remedies (eg. herbs). Many participants describe seeking care only when symptoms have become debilitating. For instance, in the case of pregnancy: "when [a woman] feels good and its pain free she doesn't seek care, but when it hurts that means the baby is in the wrong position so she has to seek a midwife's help." Depending on income and accessibility, those with persistent or advanced problems eventually seek care at public health centers, or sometimes a private clinic or hospital.

Demand is reduced by poor perceptions of health facilities

Domain	Topic	Sources	Robustness of finding
Community input	Use of the health system	Women, Men, Midwives	A

When asked what residents of their communities do when afflicted with sickness, participants indicate that most attempt to access a health facility for treatment. Gender differences in accessing care do exist though and in most cases, women are more likely than their male counterparts to use health centers or hospitals for sickness and preventative care. Male participants cite various reasons they forgo treatment, the most common being strict work obligations and financial constraints. These barriers lead many men to seek out help only if illness or injury becomes debilitating.

Parents commonly bring their children in for preventative care, which includes standard checkups and vaccination. However, because of reoccurring medicine stock outs and lack of pediatricians, many parents prefer to use private clinics if financially capable. Mothers surveyed in 2013 in Chiapas reported that only 56% of those who had a sick child in the past two weeks sought care for that recent illness, and, of that group, almost a quarter received care at a pharmacy as opposed to a local clinic or health center (20). In general, midwives encourage mothers to take children in for checkups, but a few believe that these checkups are not helpful for children.

Respondents comments reflect that at some level, most individuals in their communities have interacted with the health system. But, the ubiquitous perception still remains to be that public facilities are not equipped to provide appropriate care, drugs and supplies, and therefore it is not worth the time, effort and money to visit a facility. When asked how satisfied they are with health facilities in their communities, almost entirely across the board participants express extreme dissatisfaction. In a few communities, both women and men say they "don't like anything about" their local health facility. When asked a follow up question regarding the improvement of these weaknesses overtime, respondents indicate that in fact the situation has become worse. The specific concerns are outlined below in terms of the health system building blocks.

For many, private institutions have become a common alternative to the public health care system if they can afford it. Infrequently, respondents mentioned the existence of witchdoctors as another alternative, though these seem to be far less commonly used than other forms of healthcare.

Women have received and want more community outreach work

Domain	Topic	Sources	Robustness of finding
Community input	General perceptions of health	Women	B

Outreach workshops are commonplace in most communities, especially those in rural areas. Community level respondents reveal that most women are familiar with and have attended some form of outreach activities. Some of the topics participants list as being covered are nutrition, sexual health, family planning, cancer, breastfeeding, pregnancy, vaccination, zika, dental health, etc. Programs are generally supported by both women and men, but participants would like an increase in the frequency and breadth of topics covered. In addition, both women and men want more opportunities for men to attend workshops.

Multiplicity of supply barriers to care

Domain	Topic	Sources	Robustness of finding
Community input	General perceptions of health	Women, Men	B

Patients report a number of supply barriers to care, across multiple health system building blocks.

Leadership and governance: At the community level, there is a perception that the government should be doing more to support their health needs. For example, women from the community

state: "the government also needs to understand the need" and "the problem is that the state is not using the funds they receive as they should, they spend so much money in political campaigns, for example...we should demand better administration of funds from the government". There are also concerns about corrupt local leadership: "it's possible that the federal government is sending the resources, but the directors are keeping most for themselves. That's why we hardly ever get medicine."

Health workforce: Both women and men are highly critical of health care staff. Participants perceive health care staff as rude, disrespectful, lazy, and unresponsive to patient needs. In rural areas, constantly rotating staff means they can't develop trusting relationships. Medical negligence was also a common worry for many men, "Sometimes the doctor or nurse say something in Spanish patients give their authorization even if they don't speak Spanish". Patients would also prefer to have more specialized staff available, including pediatricians and gynecologists.

Medical products and technologies: It is widely reported that public health facilities frequently stock out of essential drugs and supplies, and are therefore inadequately prepared to provide care.

Information: The lack of a coherent information for referrals can be a barrier to care, particularly for pregnant women. For instance, women report that they can be turned away from a facility for delivery if they did not receive antenatal care there, perhaps because the facility does not have access to her health records.

Service delivery: A very frequent complaint is long wait times to see a provider. One participant reports the public doctors won't see her child "unless he's almost dying" and this sentiment was repeated in a number of focus groups.

Health care financing: A few respondents stated that lack of insurance was a barrier to care; however, it was not investigated in this study why some people lacked insurances such as Seguro Popular. Lack of funds for private providers as well as transportation were also barriers. Data from the household survey of 2013 provide a closer look at the severity of transportation barriers indicating that around 50% of women in Chiapas traveled over 10km to give birth within an institution in the past two years. Given the isolation of many areas in Chiapas, and the conditions of the roads, a trip of 10 km might take up several hours.

In the few cases where participants have rated their local health facilities as satisfactory, it seems to be largely thanks to a few particularly caring and competent individual doctors and

staff. Other factors that have led to higher appraisal of local health centers are stocked medicines, lab test availability, convenient health facility locations, and translators.

Specific barriers mentioned by community members for family planning, antenatal care, in-facility delivery, post-partum care, and child health care are shown in Table 3.

Table 3: Supply and demand barriers to select maternal and child health services

		Family Planning	ANC	Delivery	Child Health
SUPPLY					
Health Workforce		- Providers deny methods to "underage" women	- Poorly trained staff	- Lack of provider respect - Unresponsive staff reject women	- Lack of provider respect - Lack of pediatricians
Medical Products & Tech	**Drugs & Supplies**	- Method stock outs, especially implant	- Drug stock outs - Lack of tests	- Drug stock outs	- Drug/vaccine stock outs - Lack of growth-monitoring & other supplies
	Equipment & Space		- Bed shortage - Lack of ultrasounds	- Lack of space/beds: o Women made to walk during contractions o Women sometimes forced to leave soon after C-section o Midwives not allowed o No vertical delivery space	
Information				- Women turned away for not receiving ANC there	
Service Delivery				- Long wait times and turned away	- Long wait times
Health Care Financing				- Women turned away for lack of insurance	- Lack of insurance
DEMAND					
Geographic		- Distance & transport	- Distance & transport	- Distance & transport - Some women deliver in transit	- Distance & transport
Financial			- Private facilities better equipped but costly	- Women must pay to purchase stocked-out drugs elsewhere - Private facilities better equipped but costly	
Social & Cultural		- Pressure from family & husband - Religion & tradition - Women embarrassed to see doctor	- Husband dislikes male doctor touching wife	- Husband dislikes male doctor touching wife (sometimes even during complication) - Women embarrassed to see male doctor - Worry baby will become ill at facility - Worry baby will be switched at facility	

SUSTAINABILITY

Definition of success for SMI varied by level of KI

Domain	Topic	Sources	Robustness of finding
Sustainability	Strategies and goals	Donors, IDB, SSA, ISECH	B

Success for SMI is defined uniquely among the various levels of KIs. Local-level health workers characterize success of SMI as improvements in quality of care, care processes, and training for health care workers. In contrast, state-level informants identify health improvement indicators such as reduction and prevention of maternal and newborn deaths as essential indicators of success. In addition to the definitions above, a third of SSA respondents define success of SMI as complying with broader Mexican goals.

High level KIs from IDB and donor groups also have varied definitions of success for SMI. Success for one IDB KI would mean making progress towards the indicator goals even if targets are not met, in addition to increasing demand from the community. Donors define success by the impact of SMI post-initiative in terms of the sustaining health system improvements; and achievement of targets, considering the difficulty they pose for the countries.

Increasing the likelihood of sustainability is possible if the following occur. First, the 3rd phase is needed to transition away from technical assistance in the form it has been used; Second, key support systems in ministries must be strengthened, including management and health information systems. Ministries must also improve their ability to plan for and monitor results. Third, countries must decide how and whether national budgets will continue to align with initiative priorities. Evidence from the second and third operations may be useful to convince decision makers. Additionally, actors on the local level must be continually empowered. Finally, strong social auditing in the form on community involvement and observation is key to sustainability of the initiatives' goals and successes.

SMI financing model brought aligned different sources of funds

Domain	Topic	Sources	Robustness of finding
Sustainability	Financing	Donors, IDB, SSA, ISECH	B

Some KIS report that the SMI financing model brought long lasting changes. Some KIs report that country counterpart funding is coming from external sources, including Belize receiving funding from the World Bank and Panama taking a loan from IDB. Costa Rica is the only established case of a country using pure domestic funding, which was verified by IDB to not be reallocated from any other health area.

In Mexico, SMI has reportedly helped integrate state, federal, and Seguro Popular funds, as well as caused alignment with other IDB funds. Countries such as El Salvador and Belize have begun directly funding other health initiatives with shared interests to SMI. This includes family planning in El Salvador, and Belize having some funding gates for improving health information systems.

Exit strategies are materializing in Chiapas

Domain	Topic	Sources	Robustness of finding
Sustainability	Strategies and goals	Donors, IDB, SSA, ISECH	B

As second round operations are wrapping up, exit strategies are being materialized in Chiapas. These exit strategies will help in building capacity in order to continue SMI activities after the program ends. These capacity building activities include identifying what tactics have been effective in each area of their state to replicate their SMI efforts continuously; utilizing the ISECH quality improvement teams that worked in conjunction with MSH to mirror their strategies; continuing strategies that have been part of SMI using the structures of SMI such as Mesorededs; and shifting some responsibility to municipal authorities and community organizations, and away from the jurisdictions.

Early signs of sustainability not only in Chiapas

Domain	Topic	Sources	Robustness of finding
Sustainability	Financing	Donors, IDB	A

Given that SMI countries are auspiciously fulfilling co-financing requirements such as investment in the poorest 20% of population, sustainability of health system improvements appears to be possible, especially that SMI funding is less than 1% of health budgets in participating countries (Figure 14). The increased accountability placed on countries by SMI also works as a motivator in that removing or dropping programs post-SMI would reflect very negatively on countries and portray a defunct state.

> *"ECONOMISTS HAVE A SAYING THAT "POLICY WITHOUT BUDGET IS POETRY." AND I THINK IN A WAY THAT CO-FINANCING IS AN ATTEMPT TO TRY TO PUT – MINISTRIES ALL HAVE POLICIES ABOUT GETTING SERVICES INTO THE MOST DISADVANTAGED AREAS. BUT IN A WAY, THIS ACTUALLY FORCES THEM TO PUT SKIN IN THE GAME AND PUT MONEY THERE. SO HOPEFULLY THAT WILL HELP THEM LEARN A SKILL AND BUILD A HABIT ABOUT HOW TO DO IT."*

In addition, countries have proved willing to fund SMI activities between the first and second operations, even incorporating interventions into the national package. For example, in Guatemala national environmental safeguards were reviewed and updated based on activities supported by SMI activities. Fund matching not only represents a substantial commitment from countries, but also means countries have the potential capability to finance the procurement and distribution of supplies, equipment, and medicines.

However, there are many significant concerns about the countries' ability and commitment to continuing the full SMI program after the end of the initiative, and it remains a key challenge in the minds of many KIs.

Within ISECH, there is constant turnover among high-level actors. As a result, SMI has struggled to create lasting changes at this level. However, "technical leadership" actors at the middle and local levels have been able to more consistently engage in SMI by generating records and following up on strategies. Jurisdiction leaders also mention that they have been provided with tools to assist in the analysis of stock levels and vaccine administrations.

Additional resources are required to make the changes needed to sustain SMI's gains, but some KIs are unsure where this capital will come from. A handful of KIs do not believe these additional resources are necessary, and emphatically believe the real focus should be on shifting priorities towards stronger social auditing and improvement of communication behaviors that would potentially increase the sustainability of SMI. Still, plans to secure resources are already under way as some countries look towards partners (USAID, PAHO, World Bank) interested in equity in the region as well as grants focused on sustainability.

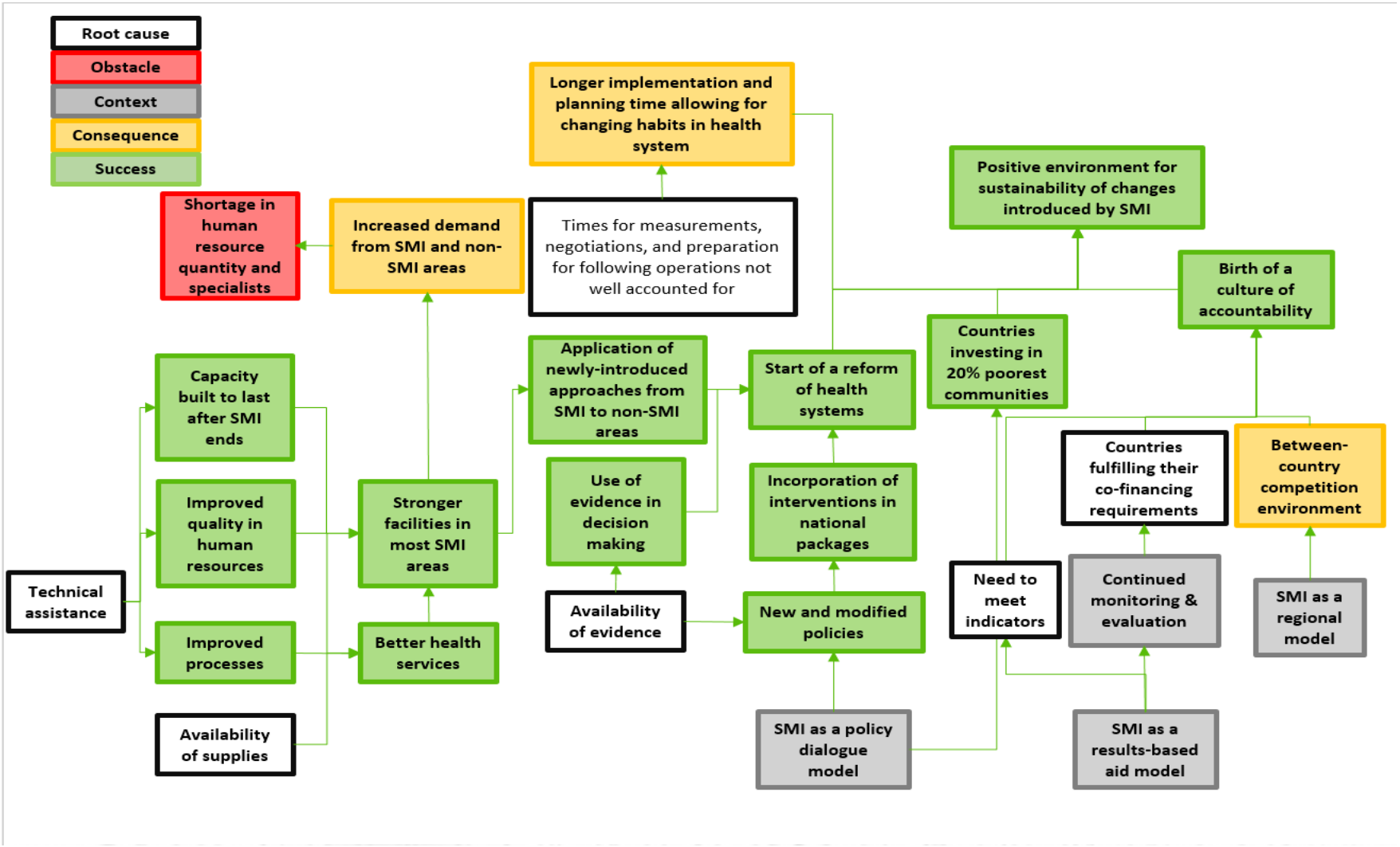

Figure 14: Root Cause Analysis – Potential for Sustainability of changes introduced by SMI

New culture of health in Chiapas, Mexico and the region

Domain	Topic	Sources	Robustness of finding
Sustainability	Culture and standards	IDB, PCU, MSH, SSA, ISECH	B

Within the context of Chiapas, a new culture around health has begun to emerge, subsequently reinforcing many of the objectives included in SMI. For example, accountability among health workers across all levels has become an important component in ensuring that ownership stirred by SMI activities are sustained and continued to be developed.

SMI has created a number of cultural norms and habits, including: checking the necessary inputs every day among health workers; a culture of quality due to the long-term nature of the project; a culture of prioritizing neonatal health, maternal health, and family planning; a culture of prioritizing SMI regions which are part of the poorest 20%; improved communication, coordination, follow-up, and monitoring; enhanced community engagement; and better mechanisms for performance analysis. It is possible that this change is only momentary, and hence it is crucial to monitor and re-assess the sustainability of this change once the initiative has ended.

SMI's capacity to create sustainable health system changes in Chiapas is supported by the fact that interventions are performed by the system itself, including the staff, ministers, vice ministers, directors, providers. State actors are also involved in the design, monitoring, and decision-making, which has allowed for an easier transition to institutionalization of health programs in comparison to those programs executed in parallel by NGOs. Nationally, SSA is learning from SMI in Chiapas and plans on applying these lessons in other states of Mexico.

Incorporating SMI successes in revised and developed technical standards at the national level is not unique to Mexico. There are many examples of this. For instance, in Guatemala, the environmental safeguards requested for health facilities has positively impacted both the Ministry of the Environment and Ministry of Health; In Belize, materials and standards that are being implemented through the initiative have also been implemented at the national level. M&E instruments are being used in areas outside the project. In Panama, as migrant indigenous communities seek better health services, SMI is seeping through to other similar communities. In Honduras, the creation of a hospital support committee proved to be highly effective and has led to the expansion of this activity to non-SMI facilities.

SMI's systemic approach is the key behind improvements and changing culture

Domain	Topic	Sources	Robustness of finding
Sustainability	Culture and standards	IDB, PCU, MSH, ISECH	B

The systemic approach taken by SMI is a key catalyst to current improvements in the health care system as well as the changing culture around health in Chiapas. This approach has fostered a collaborative work environment that has brought a variety of different entities together to implement and improve SMI (e.g. directorates, departments, etc.). For example, ISECH has strengthened many of the activities it conducts due to SMI and has increased efficiency through coordination. This has been reflected in the increased frequency of meetings between departments, which subsequently improved transparency and the efficiency of information sharing between ISECH and HCPs. ISECHs communication has become much more inclusive and has in turn created a stronger sense of commitment from health workers at the local level, a key to the success of the initiative.

These collaborative efforts highlight the efficiency in working together as opposed to segments, as well as the optimization and effective distribution of information and resources. In addition to increased collaboration, there are many other cultural shifts in health attributable to SMI's systemized approach, including: increasing trust among partners through transparency of resource use; measurement of indicators (e.g. identification of low vaccine coverage); ongoing monitoring and analysis of data in order to make corrections and adjust interventions; tailored technical assistance; financial and material resources provided by SMI in the form of equipment and medications; compliance with official Mexican standard, plans, and clinical practice guidelines; and commitment to prioritizing the poorest populations.

Risk management strategies exist at the region, national, and local levels

Domain	Topic	Sources	Robustness of finding
Sustainability	Risks	IDB, SSA, ISECH	C

Social unrests, and many other factors, are a threat to SMI sustainability. Working with donors, IDB, and high-level MOH authorities, countries have developed risk management plans based the top ten risks identified. IDB provides further support by working with countries to provide recommendations twice a year to address these risks.

In Chiapas, KIs see several potential risks. First, Chiapas may not reach its targets in order to receive the performance tranche through SMI; this risk has been addressed through the quality improvement plan. Second is a lack of community engagement and ownership. This perceived risk might not be taking into consideration the third operation, which is focused on demand

generation. However, the biggest risk has been the effect of the political volatility and social unrest on SMI; while these risks were acknowledged, they were considered actively accepted risks outside the scope of what the initiative could address.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

This evaluation showed promising results for SMI, an original global health initiative aimed at reducing maternal and child mortality, as well as health inequities in eight Mesoamerican countries.

The results of this evaluation converged with results from quantitative measurements that have been conducted since the start of SMI. The qualitative methods employed here were valuable in complementing the quantitative ones. They helped explained many of the "Hows" and "Whys" behind important events of the initiative, and uncovered new fields for investigation that will influence the upcoming rounds of quantitative measurements.

Our findings also highlighted the need for process evaluations in remaining countries to account for their particularities. While this evaluation focused on SMI particularly in Chiapas, seven countries remain in some sort of a dark box. Given the success of SMI, it's important for the global health community to fully understand the factors behind this success, especially with the increased need for efficient use of global assistance for health.

This has major implications on our institute, IHME, which aims at employing more pragmatic mixed-methods evaluations to provide better evidence for global health.

RELEVANCE

SMI is a successful global health intervention with a robust design that incorporated relevant input from all appropriate levels affected by the initiative from regional donors to local jurisdiction leaders and even health care staff. While the idea behind SMI originated at BMGF, it was fully developed with the CSF, IDB, and all involved countries down to the local level. Specifically, in Chiapas, the initial operation was designed jointly between ISECH and other players. For most part, ISECH, and not SSA, was the most involved, and had the last word in decision making.

SMI was based on a flexible theory of change but stable goals. The evolution of the TOC mirrored the development of SMI's complex design, moving from a linear, to a multidimensional TOC. Knowledge sharing, the policy dialogue model, and built-in evaluations are at the core of this TOC.

SMI catalyzed national health priorities as reducing maternal and neonatal mortality is a common goal with national health plans. SMI empowers existing country initiatives and revisits important programs. Of the strengths of SMI is the fact that its selected strategies were based on

a multiplicity of assessments, and aimed at addressing the identified bottlenecks in each of the countries. More so, and from the first to the second operation, SMI components and activities were increasingly integrated.

Overtime, SMI partnership became stronger as a shared vision developed between all partners based on mutual trust, and countries' perspectives became more valued.

The success of SMI is driven by each of its models. The regional approach creates peer-pressure that drives inter-country learning and support, allows for economies of scale, specifically for medicine, and supply procurement, and increases efficiency in the use of technical assistance across countries.

The results-based aid model drives success through design and a reported feeling of competition even though countries do not compete for funds. The incentives scheme is highly appreciated by countries as they are free to use the performance tranche as they wish, and the measurement component holds recipients accountable. The success of RBA through SMI means that other domains can be incentivized the same way.

The policy dialogue model has advanced a number of policies, and reinforced existing ones, especially in term of best practices. It shed the light on inequalities, focused the attention on quality improvement, and changed the conversation environment to a results-based conversation one.

Through SMI, an experience-based learning environment has been fostered with the multiplicity of information and its use at every level, and for different purposes. This environment allowed for disseminating tools to non-SMI regions due to proven efficiency and effectiveness. It also allowed for a capacity to draw lessons from and benchmark against other countries.

As compared to other partnerships, SMI incorporated a number of novel features. First, partners were attracted to the result-based design and incentive scheme. This design forces each actor to understand the commitment needed on their end, as the goals can only be achieved through mutual commitment. Additionally, the performance tranche incentive allows for freedom in the utilisation of country contributions. SMI also involves an unusually high level of direct contact and dialogue with ministries and local health actors, coupled with the direct support provided by donors. The regional model was another novel component which led to many unexpected benefits. Further, despite delays in implementation, many partners still view SMI as an exceptionally fast-paced approach to improve health in the region.

In addition to these novel design features, SMI is seen as a success due to the way it is implemented. Partners applaud the extensive planning and execution, which allow for high consistency with clear objectives and methodology. They also value the rigid and detailed monitoring of progress towards these objectives. In Chiapas specifically, the partnership has been strengthened by strong commitments between the state and the IDB. This commitment creates a possibility for success in other types of interventions, and increases all partners' commitments to improving health care quality and equality. A final key to success is state accompaniment at the local level. Though this was not fully realized during the first operation in Chiapas, it improved significantly during the improvement plan and second operation, which can be observed in regular field visits, meetings, and improved communication described by Chiapas stakeholders.

EFFECTIVENESS

IMPLEMENTATION

The SMI idea originated in 2008 but countries were only brought on board in 2010, and implementation of the first operation only started in July of 2012 in El Salvador (21). These delays were mostly driven by the fact that negotiations with countries, baseline measurements, and preparation for following operations were not well accounted for. In parallel, many bottlenecks, at different levels, slowed the financial flows of the initiative. However, we think that these delays drove a cultural change in the region. The long preparation period allowed for mind sets to become attuned to the initiative, differently from most assistance programs that usually happen in a short period of time and are more vertical.

Overall, SMI has been effective on many levels, and through its different components.

Regarding its effectiveness in reaching target indicators, the first operation succeeded in most — 5 — countries. In Chiapas, target indicators were not met, but the state accomplished substantial changes and improvement. Of the root causes behind this situation is the fact that the state is accustomed to receiving unmonitored aid. SMI being a results-based model shed the light on the indicators not being met, and forced the birth of a culture of accountability, as Mexican stakeholders took the results to heart, especially under a peer-pressure environment, and in the light of the competition with the remaining countries. Indeed, this translated into huge efforts invested in the improvement plan at the end of which Chiapas was able to successfully meet the target indicators.

The second operation is being faced by many hurdles that slowed down the implementation significantly. Mainly, the state went through several months on social unrests and political instability that reflected heavily on the implementation. However, with the adaptability of SMI management, an appropriate mitigation plan from the coordination unit at IDB, strong and diverse monitoring system, tailored technical assistance, and increased ownership of the initiative by ISECH, all partners are working towards a 100% implementation plan of activities.

RESULTS

In Chiapas, a new culture of health is born due to SMI, including 1) increased accountability from top levels down to health workers, 2) a culture of quality and improved processes due to the long-term nature of the project, and the focus on quality improvement, 3) a culture of priority of neonatal and maternal health, and 4) a culture of planning. Behind these changes are the systematic approach of SMI, the tailored technical assistance, the adaptability of its management, the exchange of information, the joint decision-making between SSA and ISECH, the coordination and integration of activities across ISECH, and the improved communication, organization, and supervision.

The health system in Chiapas saw improvements in all its building blocks due to SMI. Improvements affected the leadership indirectly as changes that occurred were not planned as part of the initiative, while all other blocks were positively affected.

Management wise, SMI has contributed to standardization, introduction of new policies, and increased use and enforcement of protocols at health facilities. This meant increased efficiency of internal emergency alert systems (specifically, when an obstetric emergency is detected), increased organization while applying existing protocols, implementation of zero rejection policy (for all pregnant women), increased use of clinical practice guidelines, and standardization of staff protocol and procedures from paperwork to patient intake.

Human resources improvements were in term of quality as the frequency of trainings increased and was well received. Trainings are perceived as having a direct impact on health system strengthening as they change attitudes and improve management and service provision. Staff feel that they have better defined roles and that communication and distribution of activities have improved. They also report an increased involvement of jurisdiction to provide human capital. However, shortage of human resources remains a key issue as it poses a barrier to improving health services in the region. Current staff is being stretched across many tasks. The lack of personnel and specialists continue to prevent some facilities from reaching their indicator goals, and increases patient wait times significantly. Understaffing, frequent turnover, and lack of

protocol knowledge is leading to patient dissatisfaction. A human resources diagnosis process has been reported to be taking place in hospitals to understand needs for the second stage of SMI. This diagnosis will help determine where staff will be placed, how they'll be hired, their schedules, etc.

Most improvements were in the term of logistics and supplies, the focus of the first operation. New processes and input registries are put in place to monitor stock of supplies. The increased availability of supplies and equipment has improved operations and processes, and the appropriate equipment has directly affected the quality of service provision. New equipment allowed staff to refine skills when dealing with complicated pregnancies, and the additional materials has led to updated procedures. However, the financial crisis in Chiapas hinders the improvements in logistic and supplies. While improvement of supplies is not universal, it is perceived as having led to demand generation in areas where it is. Nevertheless, there is still a significant supply problem in some facilities. The situation is reported better for family planning supplies but worse for lab supplies and vaccines

In terms of service delivery, availability of supplies is the primary change in service delivery. Availability of supplies is perceived as having led to a greater satisfaction among users. However, limited healthcare staff at many facilities is an obstacle to community outreach.

Improvements in the information system are system wide. Health care workers and key informants reported significant improvements and increased use of registries, improved documentation of processes, reorganization of services and human resources, and increased vaccination record keeping. Record keeping trainings are reported to have improved materials management and reduced stock-outs. Data are collected, analyzed, and put to use in care for patients.

The responsiveness of the health system is being sub-optimal in a difficult situation in Chiapas. The increased demand is stretching ISECH capacity to become more responsive at all levels: the response to the urgent need for supplies is not as robust as jurisdictions had hoped due to the financial crisis.

The changes above have not yet permeated the community. Generally, the community wants to use the health system, but to a lesser extent among indigenous groups. This is prohibited by multi-level barriers. Some of these are systemic, such as the lack of staff, space, supplies, and drugs at facilities, as well as coverage. Others are economic, such as transportation, and finances. Cultural barriers such as the lack of culturally-adapted services, and language barriers

exist as well. However, we need to keep in mind that SMI is not yet at the demand generation phase.

SUSTAINABILITY

The changes introduced by SMI have a real probability of being sustainable. In Chiapas, the constant changes in governance impact public employees at all levels, all the time. This risk is seen as a barrier to sustainability, as priorities are re-evaluated and knowledge is lost with each shift of employees. This also poses hard work on the technical assistance side who have to actively engage newly appointed leaders and key stakeholders. However, policy changes due to SMI are a lasting legacy of the initiative. Potentially sustainable changes include accountability, communication, improved culture of service provision, and close monitoring and data use at the local level.

The potential for sustainability is driven by many factors.

First, the technical assistance through SMI has improved processes, quality in human resources and built the capacity to last after the end of SMI. All this meant better services and stronger health facilities in most SMI areas, and the application of newly introduced effective approaches from SMI to non-SMI areas. However, this also meant an increased demand from SMI and non-SMI areas to these facilities, which exacerbate the shortage in human resources quantity and specialists.

The availability of evidence through SMI infiltrated decision-making processes. The policy dialogue model, along with the availability of evidence, introduced new and modified policies to the health system. This has led to incorporation of SMI interventions in national packages, which, along with the application of the newly introduced approaches from SMI to non-SMI areas, means the start of a reform of health systems. The policy dialogue model also meant that countries invest in the 20% poorest communities which would normally continue at the end of SMI as it is hard for a government to stop a service once it has provided it.

The RBA model means a need to meet indicators, and that continued monitoring and evaluation forces countries to fulfill their co-financing requirements. In parallel, the regional approach created a between-county competition environment. This along with the need to meet indicators, and countries fulfilling their co-financing requirements, led to the birth of a culture of accountability.

In parallel to all this, the delays that SMI faced at the beginning led to longer implementation and planning time, allowing for changing habits in health systems. This, with the reform of health systems, countries investing in the 20% poorest communities, and the newly born culture of accountability provide a positive environment for sustainability of changes introduced by SMI.

Despite the positive environment, stakeholders should pay close attention to several factors that threaten sustainability such as social unrests, shortages in supplies, staff turnover, and financial problems.

However, many steps can be taken to ensure the sustainability of the gains made by the initiative. First, the third phase is essential, especially to help countries transition away from the need to technical assistance by incorporating the needed skills. Second, it's important to keep strengthening key support systems in ministries, such as management and health information systems so that ministries have the ability to plan for, and monitor results on their own. Third, through policy dialogue, countries will have to decide how and whether they want to continue aligning their budgets with the initiative priorities. Hopefully, the second and third SMI operations will provide even better evidence on results to convince decision makers. Fourth, empowering actors at the local level is key to continued success. Fifth, a stronger social auditing is needed to ensure accountability of governments and health systems towards their population.

LIMITATIONS

This study has few limitations. First, memory bias is a key limitation in the investigation of the earlier periods of SMI. Hence, we relied on available documents to account for information that was not easily remembered by relevant key informants. Second, though the process evaluation has planned to gather data from the MOF and MOFA (Secretaría de Hacienda y Crédito Público and Secretaría de Relaciones Exteriores), there was difficulty arranging to interview them, and they do not appear in the final sample. Third, the partnership analysis targeted several key informants outside of the Chiapas analysis presented in the results section. We aimed at including all partners relative to SMI at the regional level. However, and due to limited responses, we preferred to only present the results for the partnership analysis in relation to Chiapas. Fourth, and due to response fatigue, some of the topics were not investigated as deeply as we would have liked to, and had to consider a balanced approach in respect to the time given to us by key informants. Fifth, while data for the partnership analysis were collected from a broad range of regional organizations related to SMI as a whole, the lack of response from partners outside of the operation in Mexico biased the regional network of collaborators. For this reason, we

restricted the results to the network of partners around SMI in Chiapas. Last, we cannot ignore a social desirability bias. KI were aware that the information collected is for the evaluation of the initiative. Although confidence was established and many reported limitations and problems of the initiative, some may have stressed more the positive results.

RECOMMENDATIONS

Based on the results of our investigation, and our observations as independent evaluators, we make the following recommendations to the different stakeholders of SMI.

TO DONORS

- It is essential to fund 3rd operation in order for SMI to reach its full potential. SMI is a unique experience that can be a model for global health financing: no such previous achievements, specifically in health system strengthening, have been observed. The 3rd operation will also allow countries to shift away from the need for technical assistance by transferring the skills to local players. More so, demand generation will be an important component once health systems are stronger.

- Significant improvement in indicators should be considered even if targets not met. The biggest gains achieved through SMI are in culture change of health systems, and this is more relevant than indicators. Specifically, for Chiapas, the results of the second operation should be interpreted in light of the context and circumstances in which ISECH is operating.

TO IDB

- Bureaucratic processes at IDB should be lightened and made easier to speed financial flows. Even if sometimes delays are caused in-countries, IDB should employ their expertise as a financial organization to help alleviate some of the bottlenecks.

- IDB should continue the current support and commitment, specifically through technical assistance, that is valued by stakeholders.

- The Panama coordination unit model can be used for other projects as it has proved its effectiveness managing SMI.

- IDB can also benefit from improving their communication with stakeholders. Some details about SMI components, such as financial volume, etc... are not well understood by many relevant local stakeholders.

TO SSA

- We recommend that SSA continues the current support highly valued by ISECH. This support is essential to the success of the current, and the upcoming operations.
- SSA needs to find solutions around shortages of federally managed supplies such as vaccines, family planning methods, and other products.
- Establish adequate mechanisms to systematize and replicate lessons learnt in other states with similar challenges. For example
    - Establish a task force to work closely with SMI to compile and systematize lessons;
    - Create a structure within SSA with the specific mandate of sharing learning, etc.

TO ISECH

- The enthusiasm shown during the improvement plan will be crucial during the current operation. Despite the current situation, there is still time to achieve targets. Focus should be increased particularly on human resources, supplies availability, and community outreach.
- Establish mechanisms to ensure replication of lessons learnt to non-SMI areas
- Lessons learned from first operation need to be fully accounted for in the current operation, and moving forward.
- The culture of accountability born with SMI should be institutionalized through norms and guidelines to be preserved.
- Become more responsive to the population needs by
    - Addressing the problems of mistreating patients
    - Considering the needs of indigenous communities
    - Supporting midwives' new role
    - Allowing access of family members during the delivery process
- Support even the farthest health facilities, and create and nurture communication channels upward and downward the health system

- Establish actions to address the high turnover of health workers, such as creating stronger on-boarding processes

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APPENDIX A: COMMUNITY TOPIC GUIDE QUESTIONS

The following items represent a sample of the types of questions asked during conversations with women, men, community health committees, and midwives as part of SMIPE.

Topic areas	TG section	Questions
Equity **Quality** **Access** **Coverage** **Safety** **Choice** **Services** **Demand generation** **Better health** **Satisfaction** **Responsiveness**	**Perceptions around health**	Can you describe the community you live in? Who lives in your community? What do people do for a living? Are people healthy in your community? When do you consider a person to be healthy? What are the different sicknesses that people in your community suffer from? When do you consider yourself to be healthy? What sicknesses have you suffered from lately? When you were sick, what did you do?
	Perceptions and practices around pregnancy and family planning	How would you describe a pregnancy that goes well? What does a woman do about her pregnancy when it is going well? Does anyone help her when she is pregnant to make sure that the pregnancy is going well? Who are they and how do they help her? Where can a woman get help from these people? Who do these people work for? Do you think there are other things that can be done to help her? What are these things? How long have they been available? How can women access them? What are the obstacles that prevent women from accessing them? How would you describe a pregnancy that does not go well? What are some signs that the pregnancy might not be healthy? Does anyone help a woman when her pregnancy is not going well? Who are they and what do they do to help her? Where can a woman get help from these people? Who do these people work for? Do you think there are other things that can be done to help her?

		What are these things? How long have they been available? How can women access them? What are the obstacles that prevent women from accessing them? IN INDIGENOUS VOUCHER ACTIVITY AREAS, IN CASE WOMEN DO NOT BRING UP THE VOUCHER PROGRAM: In your area, some pregnant women can get coupons for transportation to health facilities to give birth and to receive care shortly after the baby is born. Have you or anyone you know used this program? How did you or that person know about the coupon program? Do you know who pays for this program? Are there other programs like this paid for by any other agency? Can you describe your or their experience using these coupons? Were you or they satisfied? What were the positives and what were the negatives about using these coupons? What did you or they expect to happen when using this coupon program? How long did you or they stay in the health facility after delivery? Did you or they have to leave and then return again? When is it OK for a woman to get pregnant? Is it acceptable for a woman to avoid getting pregnant? What do the different people in your community think about a woman avoiding getting pregnant? Do you think these opinions influence the decisions the woman makes to avoid pregnancy or not? If a woman wanted to avoid getting pregnant, what could she do? What are the different methods that a woman can use to avoid pregnancy? How did you hear about these methods? How long have these methods been available for women in your community to use? Of these methods, which do women in your community prefer? How do women decide which methods to use to avoid pregnancy?

		What are the benefits and drawbacks of the different methods? If a woman decided to avoid getting pregnant, how easy would it be for her to do so? How can women access the methods she need to avoid pregnancy? What are the obstacles that she might face when she tries to avoid pregnancy?
	Perceptions and practices around delivery	Where do women in your community deliver their babies? Do they have different/other choices where they can deliver their babies? Which do they prefer, and why? How would you describe a delivery that goes well? Does anyone help a woman when she is giving birth to make sure that the delivery is going well? Who are they and how do they help her? Where can a woman get help from these people? Who do these people work for? Do you think there are other things that can be done to help her? What are these things? How long have they been available? How can women access them? What are the obstacles that prevent women from accessing them? How would you describe a delivery that is not going well? What can go wrong during a delivery? Is there someone who can do something about that? Who are they and what do they do to help? Where can a woman get help from these people? Who do these people work for? Do you think there are other things that can be done to help her? What are these things? How long have they been available? How can women access them? What are the obstacles that prevent women from accessing them? Some health facilities have a place for pregnant women to come and stay before they give birth. Have you or anyone you know used this service?

		Who runs this facility? Where is this facility located? Can you describe your or their experience using this service? What did you or they like? What did you or they not like? What could be done to improve this service?
	Perceptions and practices around post-partum care	What happens after a woman delivers a baby? How does she take care of herself? Would she need help to take care of herself? Why might she need help? Who might help her? How does she take care of her baby? Would she need help to take care of her baby? Why might she need help to take care of her baby? Who might help her? What does her baby need to be healthy? What do women feed their babies when they are born? Do they breastfeed their babies? Why do women choose to breastfeed? Why do other women choose not to breastfeed? Does breastfeeding have an effect on the health of babies? How long do they breastfeed their babies? When do they start feeding them other things? What besides breast milk can they give to their babies?
	Perceptions and practices around child care	What do people in your community do to make sure their children are healthy? Are there things that parents can do to prevent their children from getting sick? What are these things? How can you access them? What obstacles might prevent parents from doing these things? Does the local health facility have the resources to prevent children from getting sick? What are these things? What obstacles might prevent parents from getting these resources? How can these obstacles be resolved?

		How do parents take care of their children when they are sick? Who can help parents take care of their sick children? Can the local health facility take care of sick children? Why or why not? What resources does the health facility have to take care of sick children? What obstacles might prevent parents from using these resources? How can these obstacles be resolved?
	Perception and use of the health care system	When people are sick in your community, what do they do to get better? Who are the people who help them get better? Where do they go to get help? When do people in your community go to the local health facility? To the local hospital? Are there obstacles that prevent people from going to the local health facility, if they want to? What are they? What do people like about the local health facility? What do people not like about the local health facility? Do you think the local health facilities can take good care of people who go there for help? Are the health facilities responsive to the needs of the community? Has this changed over time? Do the health facilities have what it takes to provide the care that people need? Has this changed over time? How is the quality of care in your local health facility? Has the quality of care changed over time in your local health facility? What needs to be changed for the care to improve in your local health facility? Does your local health facility send people into the community to teach about health and available services? What do you like or dislike about this resource? What could be done to improve this resource for you?

APPENDIX B: HEALTH CARE PROVIDERS' TOPIC GUIDE QUESTIONS

The following items represent a sample of the types of questions asked during conversations with health facility directors, doctors, and nurses as part of SMIPE.

Topic areas	TG section	Questions
Relevance **Effectiveness** **Better health** **Responsiveness** **Satisfaction** **Equity** **Sustainability** **Quality** **Resource allocation** **Integration** **Organization** **Behavior** **Regulation** **Services** **Health workforce** **Health information** **Technologies and commodities** **Demand generation** **Governance**	**Knowledge of SMI**	Have you heard of the Salud Mesoamérica Initiative? If yes, can you describe it for us? What is your involvement in SMI? Does the Mesored or jurisdiction consult with you regularly about the needs of your community? When was the last time this happened?
	Implementation	To what extent have the activities contained in SMI's plan been implemented as planned (quality, quantity and terms)? What are the factors that affect, positively or negatively, the implementation of activities? Are individual facilities rewarded if they meet their goals, and if so, how? What happens if they don't meet their goals?
	Communication/ responsiveness	Can you compare the responsiveness from ISECH/Jurisdiction toward this facility before and after SMI? Can you compare the responsiveness of this facility toward the community before and after SMI?
	Management and governance	Can you compare the norms and protocols in this facility before and after SMI? BY NORMS AND PROTOCOLS, WE MEAN ANY WRITTEN RULES OR DOCUMENTS THAT GOVERN THE WAYS YOU PRACTICE HEALTH CARE IN THIS FACILITY. How have these changed, if at all? Is this due to SMI? Can you compare the management of this facility before and after SMI? BY MANAGEMENT, WE MEAN THE WAYS THINGS ARE COMMUNICATED AND ACTIVITIES ARE ORGANIZED IN THIS FACILITY. How has management changed, if at all? Is this due to SMI? How is this facility supervised by the jurisdiction? Can you compare the supervision of this facility before and after SMI? Can you compare the decision making process at this facility before and after SMI? How has decision making changed, if at all?

		Is this due to SMI? Can you compare the operation and processes of this facility before and after SMI? What are the changes, if any? Is this due to SMI? Can you compare the processes for Maternal and Child Health service provision before and after SMI? Any changes for vaccine delivery/family planning methods/antenatal care & delivery care provision?
	Service provision	What are the new procedures, activities and services introduced because of SMI? Are these changes aligned with the community's needs? Can you speak specifically to family planning, ANC, delivery care, PNC, nutritional supplements, and vaccination? What is the process in place for pregnant women with complicated pregnancies? Has there been any change in health facility practices based on the preferences of different groups in the community? What can be changed at this facility to satisfy the needs and preferences of different groups in the community? How has the demand for services changed because of the newly introduced procedures, activities and services? How is the demand affected by what services are available? Do you feel that the users are satisfied with the new procedures, activities and services? What affects their satisfaction? What measures have been taken to improve the quality of care in this facility?
	Human resources	Can you compare the human resources in terms of quality and quantity in this facility before and after SMI? Have the personnel here received the training they need to perform the tasks necessary to do their jobs? How have training activities changed as a result of SMI? What are the effects of the trainings they received on record-keeping, family planning, child health care, antenatal and postnatal care, delivery services, management of obstetric emergencies…? Task shifting Has there been a change in tasks and responsibilities as a result of SMI?

		Has there been recruitment of additional employees as a result of SMI? What are the positions for which you recruited as a result of SMI? What are their activities? Are their activities conducted only in the facility? What activities do they conduct outside of the facility? Are there employees at this facility who provide training to other staff members, including training care providers? How are recipients of training tested for new knowledge? Do these employees who provide training also provide care? Do these employees who provide training undergo continued education or training as well? Is any of the training and continued education supported by SMI? How have the midwives been integrated into this new environment due to SMI? What is their role in the process of pregnancy and delivery care? What are the factors of failure and success in engaging them in that process? How have the changes affected health workers? Did you lose or gain health workers due to these changes? How do you incentivize employees to stay at this facility? Do you recruit employees from within your community? How do health workers perceive the changes in tasks, responsibilities, technologies, and services? Has their performance changed due to these changes?
	Logistics and supply	Have new equipment and tools been introduced to your health facility due to SMI? How has the process of integrating new equipment and tools gone? Do the personnel have the right training to use the newly introduced equipment and tools? Have they been able to adapt to the new environment created by the introduction of new equipment and tools? In your opinion, do the health care providers appreciate the newly introduced equipment and tools?

		Has there been a change in the management of medical products as a result of SMI? Has the availability of different medical products changed as a result of SMI? Can you speak specifically to essential medicines, vaccines, the cold chain, family planning products, and lab tests? Are these more readily accessible for use? Has the change in supply of different medical products affected the demand for services at your facility? How is the demand affected by what products are available? How has the resulting change in demand affecting your supply of medical products in return?
	Information systems	Can you compare the way you collect, manage, and use information at this facility before and after SMI? What are the changes introduced to the health information system? Specifically, for medical record keeping? What is the effect of these changes on the service provision and the overall management of care at this facility? What are the different uses of the health information collected at this facility? How often are the collected data discussed between employees at your facility? What is the purpose of these discussions? How are patients tracked over time and followed across facilities? Is there a system to share patient information between facilities? How do you track pregnant women? Does the facility search for pregnant women? Is the search recorded? If a woman stops coming for appointments, is that recorded? What is done if a pregnant woman stops coming for appointments?

APPENDIX C: GLOBAL, NATIONAL, AND LOCAL KI TOPIC GUIDE QUESTIONS

The following items represent a sample of the types of questions asked during conversations with global, national, and local key informants as part of SMIPE.

Topic areas	TG section	Questions
Relevance **Effectiveness** **Impact** **Better health** **Financial protection** **Responsiveness** **Satisfaction** **Equity** **Efficiency** **Sustainability** **Quality** **Access** **Coverage** **Safety** **Choice** **Resource creation** **Resource allocation** **Integration** **Payment** **Organization**	**Partnership**	Who are the different actors for health in Mesoamérica in general, and vis-à-vis of SMI in particular? Who participated in the design of SMI? Who was consulted during this process? What were the different steps that led to the current general design of SMI? Which of these steps were useful and which were not? Do you think the order of the different steps should have been different and if yes, how? What were the reasons behind the adoption of the theory of change? What were the reasons behind the adoption of the regional strategy? Who had the last word for big decisions when designing SMI? Has this changed over time? What are the goals and visions of SMI? Can you describe what SMI's main components are? How are roles defined and designated in this partnership? Why did your organization join this partnership? Has your role changed over time? What else in this partnership has changed over time? How do you compare your experience within this partnership to other partnerships?
Behavior **Regulation** **Services** **Health workforce** **Health information** **Technologies and commodities** **Demand generation**	**Relevance of SMI**	What are the common strategies, objectives, and goals between SMI and Mexico's National Health Plan? Are the timelines aligned? Did you assess the needs and the main bottlenecks towards health in Mexico, and in Chiapas particularly prior to selecting SMI strategies? How was that done? Are the selected strategies integrated and aimed at addressing the bottlenecks? Were the realistic capacities of the country/State to implement the program and in particular in relation to human resources considered during the process of designing SMI?

Financing **Governance**		Was there a rigorous evaluation of the specificities of the different regions of the country, and in particular Chiapas, in order to adapt the strategies for action to their own characteristics? How were the interventions selected? At the onset of SMI, were any strategies or interventions considered and later eliminated? If so, why?
	Use of Information	What are the different uses of the information generated from SMI? How do you use this information to make decisions? Can you give an example? Has the information from external evaluation been useful for you? If yes, why? If no, why not? What was the role of targets and indicators? Is there awareness and buy-in regarding the payment indicators among all stakeholders (from donors to policymakers, to providers)? How realistic are the targets to attain?
	Policy Dialogue Model	Has SMI created new discussions around policies or changed the conversation around policies? What policies have been developed, amended, and implemented due to SMI? Has there been any training of government representatives and employees on these new policies? Has the process of creating, approving, and implementing policies changed due to SMI and how? To what extent is evidence considered when creating new policies? How is input from state and local governments considered during the decision-making process? How has SMI contributed to the visualization and prioritization of the poor in the policy-dialogue agenda at the national and regional level?
	Regional model	What are the advantages and what are the disadvantages of a regional model? What are the positive components of a regional model? Does the model facilitate the coordination of stakeholders at different levels/sectors? If so, how?
	Added value	To what extent has this type of support added value compared to other means of health financing in the region, and in Mexico/Chiapas in particular?

		What was the role of SMI to align funds and actions to achieve common development objectives? (Alignment of funds from loans and other donations; Alignment of interventions from other organizations) Did SMI attract other funds? Are SMI funds complementary to other funds?
	Funds and financial flows	Are there delays and bottlenecks in the availability of funds and financial flows, and at what levels? What are the causes and what has been done to address them?
	Satisfaction with implementation	How satisfied do you feel with the current level of implementation and where things are with SMI? To what extent have the activities contained in SMI's plan been implemented as planned (quality, quantity and terms)? How does your organization monitor the implementation of activities? Is the communication between your organization and partners effective?
	Performance improvement plan	What were the main factors leading to the improvement plan? What was the take of your agency on that situation? How has the process been initiated and led? What has been the role of the partners? What did you have to change for the improvement plan? What are the lessons learned? What went well and what did not go as well? Did the improvement plan take into account the lessons learned from the first operational plan?
	Influences on implementation	What are the organizational and contextual that have influenced (positively or negatively) the implementation of activities? To what extent has the management of SMI proved to be reactive to the difficulties encountered? To what extent were the commitment and the support provided by IDB and partners, both during the preparation phase, as well as the implementation, appropriate and sensitive to contextual changes? Have donor setbacks impacted their participation in the Initiative?
	Technical assistance	What has been the role of MSH in implementation? What has been the added value of MSH in this role? What plan is in place once assistance from MSH ends?

		What has been the role of the SMI coordination unit in Panama? What has been the added value of the SMI coordination unit in Panama in this role? What plan is in place once assistance from the coordination unit ends?
	Resource tracking	How are monitoring and evaluation activities conducted, discussed between partners, and used to take corrective action? What are the lessons learned? What went well and what did not go as well? To what extent have the financial resources been used as planned? To what extent have actual expenditures been aligned with the initial budget? What measures could be taken to improve the effectiveness of SMI? What could be done differently to improve efficiency?
	Outputs of SMI	To what extent were the expected outputs of SMI achieved? What are the contextual factors that might explain the degree of achievement for certain outputs? To what extent can any results be attributed to SMI? What components of SMI influenced on outputs achieved or not achieved according to stakeholders? What components of SMI had the highest impact on the achievement or not of results according to stakeholders?
	Responsiveness due to SMI	Has SMI supported the ministry of health's responsiveness to its population's needs? If yes, how?
	Intervention replication and scale-up	How do you define success for SMI in general and for Mexico specifically? How are the achievements of SMI at different levels (national, State, and operational) sustainable from a financial and program-level point of view? What could be done differently to ensure the sustainability of the gains and changes achieved through SMI? How can successful interventions be sustained through incorporation in policies, budget and healthcare models? What exit plans are in place to sustain the results achieved through SMI? What resources might be required in the future?

	Unintended consequences	What have been the unintended consequences (positive and negative) of SMI?
	Health system contribution	What changed in the ways the ministries of health are conducting business now? Specifically in Mexico and Chiapas? Did you observe a change in the decision-making mechanism in ministries of health before and after SMI? Specifically in Mexico and Chiapas? Do you think these changes could have happened without SMI? Has there been any shift in positions, change in roles, or hiring of new actors? What has changed in governance and management due to SMI? What are the changes that happened to human resources due to SMI? What are the changes that happened to logistics and medicines due to SMI? What are the changes that happened to service provision due to SMI? What are the changes that happened to information system and data usage due to SMI?
	Added value of SMI	To what extent has this type of support added value compared to other means of health financing in the region, and in Mexico/Chiapas in particular? Are SMI funds complementary to other funds? Has SMI created opportunities for additional funding to Chiapas? What are the limitations of risk measures undertaken and how are they applied? Have these risk management measures had any positive or negative results?
	Other messages	Are there any other messages that you would like to share?