INVESTMENT GRANT DOCUMENT[1]

I. Basic Information for IGR

▪ Country/Region:	Belize/CID
▪ IGR Name:	Mesoamerican Health Initiative Belize - Third Individual Operation
▪ IGR Number:	BL-G1003
▪ Team Leader/Members:	Ignez Tristao (SPH/CME), Team Leader; Alvaro Gonzalez; Lissie Manrique; Jennifer Nelson; Mauricio Pérez Calvo; Diego Rios (SCL/SPH); Mónica Centeno Lappas (LEG/SGO); Elizabeth Ayala (CID/CBL); John Primo y Brodrick Watson (FMP/CBL)
▪ Beneficiary:	Belize
▪ Executing Agency:	Ministry of Health (MOH)
▪ Donors providing funding:	Mesoamerican Health Facility (MHF)
▪ IDB Funding Requested: Investment tranche (IT) - MHF Performance tranche (PT) - MHF	US$252,000 US$150,000 (25%) US$102,000 (17%)
▪ Local counterpart funding (CP):	US$340,000 (58%)
▪ Disbursement and execution periods:	24 months[2]
▪ Required start date:	May 2018
▪ Types of consultants:	Individual consultants
▪ Prepared by Unit:	SCL/SPH
▪ Unit of Disbursement Responsibility:	CID/CBL
▪ TC Included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality

II. Objectives and Justification of the IGR

2.1 The objective of this project is to improve the access, use, and quality of maternal-neonatal and child health services in Corozal, Orange Walk, and Cayo districts, to contribute to the reduction of maternal and child morbidity and mortality in Belize.

2.2 The *Salud Mesoamerica* Initiative (SMI) is a public-private association between the Bill & Melinda Gates Foundation, the Carlos Slim Foundation, the Government of Spain and eight countries of the Mesoamerican region. The SMI is administered by the Inter-American Development Bank (IDB).[3] The SMI supports the countries to improve reproductive, maternal, neonatal and child health and to reach the Sustainable

[1] According to document "Operational Guidelines for Non-reimbursable Investment Operations" (OP-219-3), paragraph 8.1, *"all Investment Grant Operations of up to US$3 million shall follow the standard documentation, processing and approval procedures for non-reimbursable technical cooperation."* In addition, the Operating Regulations of Mesoamerican Health Facility (OP-276-3) (Annex VI. 3., b.) establishes that SMI operations of up to US$3 million will be carried forward to confirm the process of technical cooperation.

[2] The disbursement period will start once the Bank has declared Elegibility. The period of 24 months applies just for the disbursement of the Investment Tranche and Local Counterpart.

[3] The Mesoamerica Health Facility was approved by Resolution DE-97/09 (September 9th, 2000).

Development Goals for reducing maternal and infant mortality. It focuses on strengthening the supply and demand of quality health services, and on adopting evidence-based and cost-effective interventions to improve the health status of the poorest 20% of the population, and to reduce reproductive and child health inequities. SMI follows a Results-Based Financing model (RBF). At the end of each operation, a Performance Tranche (PT) is a disbursed conditional on the achievement of targets of indicators, included the operation's Performance Framework.[4]

2.3 In Belize, SMI finances three consecutive operations that build upon each other to improve reproductive and child health indicators ranging from increasing the availability of key health inputs and establishing new health norms, to increasing coverage and the quality of health services. This document describes the third individual operation, which, according to design, benefits from the long-term installed capacity and strategies developed in the two previous operations to strengthen the supply and demand of quality health services for women in reproductive age (preconception, pregnancy, partum, and postpartum), and children under 5 years of age.

2.4 **Theory of change.** Since Belize has high levels of coverage for many key maternal and child health services[5], the theory of change used for the SMI operations in Belize is based on the "stages of change" model that focused on improving the quality of services.[6] On the supply side, this involves promoting performance-improving behaviors, like refining clinical processes and procedures, and establishing continuous Quality Improvement (QI) cycles. On the demand side, this involves changing care-seeking behaviors and practices, like for example, using Oral Rehydration Salts (ORS) and Zinc for the treatment of diarrhea and the decision to use modern contraceptives methods.[7] The first individual operation focused on enabling strategies for improvement on the supply side, like introducing the Quality Innovation Fund's incentives, and the promotion of desired behaviors on the demand side by strengthening the Community Health Workers (CHW) Program's reach. The second individual operation used reinforcing strategies, such as refining clinical processes, rapid improvement cycles, and collaboratives[8] to accelerate achievements on the supply side, and continued to promote desired behaviors on the demand side through communication for behavioral change educational materials. The third individual operation will follow in the same line. On the supply side, for instance, by building capacity in managers and health personnel to

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[4] The Performance Framework is presented in Annex 1.

[5] For example, according to the SMI Community Baseline Survey, over 99% of women of reproductive age (15-49 years) had their most recent birth in the last two years in an institutional setting with a skilled attendant and almost 83% had at least 4 prenatal visits with attention by skilled personnel. Of children aged 12-23 months, by their first birthday, 97.6% received tuberculosis immunization; 83.1% received polio immunization and 90.2% received measles immunization.

[6] The "stages of change" theory of health worker practices indicates that individuals pass through stages (pre-contemplation, contemplation, preparation, and action and maintenance), and different interventions are appropriate at each stage (Rowe et al. (2005)). See the Theory of Change for more details.

[7] The Community Baseline Survey revealed that only 5.3% of mothers treated their child's diarrhea with both ORS and zinc and that 47.4% of women of reproductive age were not using or unable to obtain contraception.

[8] Since 2009, the Ministry of Health (MOH) has been using a Collaborative Improvement Model to improve Maternal and Neonatal Care in hospitals. SMI second individual operation helped MOH to standardized and prioritized critical indicators, to incorporate more robust auditing, data analysis and improvement plan methodologies.

analyze their performance in MOH's health indicators dashboard, and incorporate it in their decision making. And on the demand side, continued to promote desired behaviors by implementing a community participation strategy to change care-seeking practices like cervical cancer screening and preconception care.

2.5 **Interventions and achievements of the first and second individual operations.** In line with the theory of change, the first two individual operations join demand and supply-side interventions to improve maternal and child health services' coverage and quality.

2.6 ***First individual operation.*** To build a long-term approach to reach these goals, the first SMI individual operation focused mainly in two strategies: (1) strengthening community health interventions; and (2) introducing a supply-side RBF scheme at the level of the service provider (QI team).[9] In the first strategy, SMI supported MOH to revitalize the CHW Program, by: (i) establishing norms regarding CHW roles and responsibilities; (ii) expanding the number of CHWs; (iii) providing basic supplies (medical kit, educational material, backpack, boots and field clothes); (iv) developing a new training curriculum; and (v) creating new training and educational materials. In the second strategy, SMI supported the creation of the Quality Innovation Fund (QIF), a monitoring and QI mechanism to improve performance, learning, and teamwork within health facilities, and districts.[10] The QIF is a form of "Pay for Performance" (P4P) tool, which provides incentives linked to performance on maternal and child care indicators. To measure performance, SMI provided technical assistance to establish QI teams, developed an improvement process, a software to facilitate data collection and analysis, and the use of tablets by the QI teams.

2.7 Belize met 4 of 12 performance indicators' targets, thereby achieving less than 0.8 in the Performance Framework for the disbursement of the first individual operation PT. Although the country did not receive the PT, there was political and technical commitment from the government as well as substantial progress on all indicators, such as the: (i) adoption of norms for improving the quality of reproductive and child health, and nutrition services; (ii) permanent availability of modern family planning methods, reaching a value of 89.5 [+/-22.6]; (iii) 95% of all eligible health facilities submitted a QIF proposal to the national quality audit team; and (iv) 100% of District's health educator officers monitored community health workers. Within the operation's 24 months, Belize also implemented Quality of Care job aid tools for reproductive health in 55.3% of health facilities in the target area; installed the infrastructure for the Belize Health Information System (BHIS) in all of the 10 eligible facilities; developed sexual and reproductive

[9] The literature identifies several outcomes incentivized by the RBF schemes, including cost containment, the supply of cost-effective interventions, improvement in the quality of health care, increases in health worker productivity, greater utilization of care, and expanded coverage, among others. Recent studies with a strong design and use of statistical methods (Basinga et al., 2010; Basinga et al., 2011; Soeters et al., 2011; Huntington et al., 2010) strengthen the literature suggesting that RBF can have positive effects on quality of care and other variables.

[10] The QIF is being pilot in 20 facilities in the Northern and Western Regions (2 regional hospitals, 2 community hospitals, 12 rural health centers and 4 urban health centers). Each facility can present a proposal and receive in-kind awards valued at up to USD2,500 after 6 months if they reach goals on a series of indicators aligned with the SMI performance framework. This incentive mechanism rewards local goal achievement and motivates facility teams while permitting them to improve their working conditions and the quality of their services.

health educational materials targeted at adolescents reaching 63.9% of health facilities; trained 58.0% of all community health workers; and increased the continuous availability of supplies and equipment for prenatal and postnatal care from 2.9 to 17.2%.

2.8 ***Second individual operation.*** The second individual SMI operation built upon the strategies initiated by the first individual operation, expanding and complementing these strategies with key interventions.

2.9 In terms of health interventions at the community level, the second operation evaluated the CHW Program and identified opportunities for improvement, which could be partially financed by SMI. For instance, the results showed a low number of CHWs, distributed unequally across districts (from 413 to 1,143 people per CHW), and with limited resources to carry out their activities. Another important result of the evaluation was the lack of community organization and awareness for health prevention. Closing some of these gaps in a sustainable way would imply a substantial amount of additional resources, which was not possible, considering the deteriorating fiscal conditions faced by the country.[11] Nevertheless, MOH authorities recognized the importance of reducing the distance between health services and communities, and proposed to the SMI the challenge of supporting the design of a community participation strategy based on local volunteers, identified from among social actors from the communities. These volunteers could take on a key role to establish community health platforms, and expand the reach of the health centers for health promotion and preventive care, working alongside CHWs and rural health nurses. The strategy was developed and it is being piloted in four communities in the Northern and Western District.[12] Under the new strategy, the portfolio of preventive health services offered at the community level is optimized based on the community epidemiological profile and health priorities; and the activities are divided between volunteer social actors, CHWs and rural health nurses; each one covering a different set of complementary actions to deliver a comprehensive package of preventive services and health promotion. To support this, work, a communication for behavioral change strategy was developed with the objectives of promoting care-seeking behaviors in maternal and child health, and building capacity among health personnel for effective educational communication. As part of this strategy, several educational and promotional materials were developed using formative research; it included topics like family planning, and recognition of danger signs during pregnancy. All health educators, rural and urban nurses received training in the use of these materials, and in behavioral change communication techniques.

2.10 In terms of strengthening the supply of health services, the second individual SMI operation continued to support the QIF by aligning its incentives to SMI's performance framework indicators. Nevertheless, in order to accelerate QI and to generate long-term sustainability, this P4P mechanism was complemented with eight critical interventions: (i) the mapping and optimization of maternal and child care clinical processes, both at

[11] MOH suffered a budget cut in 2017 and had to reduce spending.

[12] A feasibility analysis was carried out to confirm if there were enabling conditions for establishing a community health platform based on volunteer social actors. The analysis included a mapping of social actors, intercultural dialogues with community leaders, and consultations at the community level on a sample of diverse communities. The pilot is being carried out in Georgeville, Seven Miles, and Valley of Peace in the Cayo district, and in Little Belize in Corozal district.

ambulatory and hospital levels;[13] (ii) small building improvements of critical hospital space, identified as bottle-necks in the optimization of clinical processes;[14] (iii) the consolidation and capacity building of QI teams at all 4 hospitals in SMI targeted areas; (iv) the introduction of rapid improvement cycles and improvement plans, [15] with defined standards, indicators, targets, protocol, processes of care, measurement criteria, and measurement tool ,[16] (v) the consolidation of external quarterly measurements carried-out by the national level through (2) QI officers;[17] (vi) the implementation of quarterly review meetings to analyze with the national and district level managers and health personnel their performance based on QIF's results; (vii) the implementation of collaborative to exchange best practices between health facilities every six months; [18] and (viii) the elaboration of a National Quality Improvement Strategy, that was approved by a national consultation process (including the private sector) and officially adopted by MOH in 2017.

2.11 In addition, the second individual SMI operation set the basis for promoting evidence-based decision making by developing MOH's first health dashboard. The dashboard combines production and coverage information from the BHIS, with quality data from the QIF auditing measurements, allowing for a more systemic analysis of performance. The dashboard currently has maternal and child health indicators available by month, year, region, district, health centers and hospitals within the SMI targeted area. All managers and health personnel of the targeted area have access to the dashboard and have been trained on its use. Other interventions introduced to strengthening the supply of health services were: (i) the introduction of rapid laboratory tests; (ii) the training of 281 health personnel on optimized ambulatory clinical processes

[13] This intervention consisted on mapping on a flow chart all the steps involved in every key maternal and child health clinical care, followed by contrasting the mapping with the norms, adding best practices and removing bottle necks.

[14] For instance, to assure patient safety against infections in San Ignacio Community Hospital, new exit doors were built in the maternity ward to adjust patient unidirectional flow, and a dirty linen room with an external exit was built to avoid passing unclean linen through the ward. Also, small improvements were made in the nursery and the labor and delivery wards in the Western Regional Hospital, and in the maternity ward of Northern Regional Hospital.

[15] The approach most commonly used for rapid cycle improvement in health care, and the one used by SMI, is the Plan-Do-Study-Act (PDSA) method in which these four repetitive steps are carried out over the course of small time interval, like a month. This method involves a "trial-and-learning" approach, where QI teams conduct self-measurements, analyze gaps between observed and desired practices, and develop improvement plans in which a hypothesis or suggested solution for improvement is made and tested on a small scale before any changes are made to the whole system. A logical sequence of the PDSA steps is carried out over a course of small cycles, which eventually leads to exponential improvements. See Varkey, Prathibha et al., "Basics of Quality Improvement in Health Care", Mayo Clinic Proceedings, Volume 82, Issue 6, 735 – 739.

[16] In the second SMI operation, the QI data collection software was integrated with the MOH's dashboard.

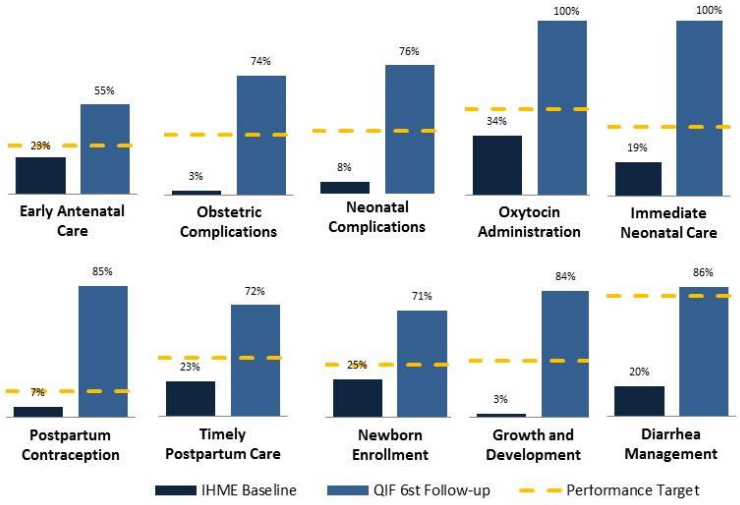
[17] QI officers conduct monthly facility visits to monitor implementation and provide timely feedback and guidance to health facility staff. They act as knowledge brokers by sharing best-practices between health facilities during monthly visits. Quarterly, QI officers carry-out an external evaluation of desired indicators at each health facility, and use this information to discuss successes and define improvement plans with facility teams and regional management.

[18] A health improvement collaborative incorporates teams from different facilities or sites to work in a structured way over a short time (12 to 24 months) to improve a specific area of care and provides them with technical assistance in process analysis, systematic indicator measurement, job aid tools, training and coaching. Catsambas et al. (2008) revealed that collaboratives in several countries produced important gains in compliance with standards (80% or above within 8-18 months) in key technical areas and proved effective in scaling up best practices.

for maternal and child health; (iii) the procurement of vehicles to support: (i) health mobile clinics, one in each region, and (ii) the Community Health Workers program, which did not have a vehicle to carry out supervision visits; (iv) the training of over 24 general practitioners and obstetricians in the use of ultrasound, to expand access and reduce unnecessary referrals to high complexity hospitals; a WhatsApp group was setup to provide continuous training through remote case studies and coaching by a certified instructor;[19] and (v) the first year cost of introducing a MOH's family plan of prepaid cell phones to strengthen communication between CHWs, rural and urban nurses, and maternity wards.[20]

2.12 The second individual SMI operation reached a 100% of financial and technical execution. The external verification of the PT indicators is being conducted by the Institute for Health Metrics and Evaluation (IHME), and the results will be available in January 2018. However, the results of the QIF auditing process shows a significant improvement in all indicators over time, surpassing the performance targets (see Figure 1). Nevertheless, those results should be taken only as proxies since they are based on internal measurements which are methodologically different from the external verification conducted by the IHME.

Figure 1. Last QIF Measurement and IHME Baseline[21]



[19] This intervention was part of SMI response to the zika infectious epidemic in a way that created institutional capacity and strengthen Belize's health system. Prior to this intervention, Belize had only a handful of health personnel in the public health system trained in the perform ultrasound exams. Most patients in the public sector had to pay out-of-pocket to have for this exam in the private sector. The newspaper *El País* published an article about this experience on 26th of January 2017. https://elpais.com/elpais/2017/01/26/mamas_papas/1485436680_482442.html

[20] An example of how this intervention helps to improve coverage is that now maternity wards can inform rural health nurses when a mother and newborn child have been discharged from the hospital, so they can do postnatal care follow-up. Also, rural health nurses can call CHWs to remind mothers of postnatal and early newborn visits before 7 days.

[21] Annex 1 provide a detail description of each indicator.

2.13 **Current Maternal and Child Health challenges in Belize.** As previously mentioned, Belize has high levels of coverage for many key maternal and child health services. However, two challenges remain: improving coverage of critical services that depend greatly on care-seeking behaviors; and improving the quality of care.

2.14 The first challenge is mostly related to information, beliefs, cultural practices, and economic barriers. Among the most relevant health challenges faced by the country in this regard are improving coverage for cervical cancer screening, preconception and early prenatal care. Cancer of the cervix is the second leading cause of deaths in women of reproductive age (WRA) in Belize.[22] Maternal mortality from indirect causes, and neonatal morbi-mortality related to prematurity and malformations are still high, and both are linked to complications that could be prevented by preconception and early antenatal care. Indirect causes of death include the effects of pre-existing disorders, such as HIV infection, mental disease, anemia, malaria and noncommunicable diseases (NCDs) such as diabetes and heart disease, when aggravated by pregnancy. There is evidence showing that NCDs are a growing cause for maternal mortality.[23] In Belize, NCDs are the leading cause for mortality, responsible for 65% of overall mortality.[24] The cause of premature births and malformations often cannot be identified. However, a pregnant woman with diabetes, high blood pressure, heart and kidney disease is more likely to have a premature birth. Pregnancy-related factors associated with premature birth and/or malformations include: poor nutrition before and during pregnancy, smoking, using illegal drugs and alcohol, urinary tract and amniotic membrane infections, among others. All these risks can be identified, prevented or significantly reduced before pregnancy occurs if WRA pass through preconception care. Some of these risks can be significantly reduced or managed by early antenatal care. In a few cases, pregnancy will not be recommended. In all cases, access to modern family planning methods is crucial to be able to plan optimal time for pregnancy, or avoid it altogether in the cases where the life of women and/or fetus could be at risk. Cervical cancer screening, preconception and antenatal care are available in Belize with no out of pocket payment required. However, the demand for them are still low. For instance, according to the last QIF measurement,[25] early antenatal care coverage was around 55%. At the same time, 47.4% of WRA were not using or unable to obtain contraception, even though they permanently available at any health facility for free.[26]

2.15 Regarding improving the quality of care, there has been a substantial improvement in several maternal and child health indicators. Comparing the last QIF measurement in 2017, with IHME baseline in 2012, the management of obstetric and neonatal emergencies improved from 2.6% and 7.5% to 76.2% and 91.5%, respectively. Immediate newborn care is now 100% compared to 19.4% at baseline. However, there

[22] Cervical cancer is the second leading cause of cancer mortality among women in Belize, with an Age-Standardized Rate (ASR) of 14.9 per 100,000 (GLOBOCAN 2012). Its incidence and mortality rates in Belize are 1.5 and 1.7 higher than the Latin American and Caribbean region's average, and 4.9 and 5.7 higher than North America, respectively.

[23] See Kassebaum, NJ, Bertozzi-Villa, A, Coggeshall, MS et al. Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. Institute for Health Metrics and Evaluation. (published online May 2.) *Lancet*. 2014.

[24] World Health Organization - *Noncommunicable Diseases (NCD) Country Profiles*, 2014.

[25] Regarding health services provided between May and July 2017.

[26] QIF routine measurement of critical health inputs show permanent availability of modern contraception methods.

is still a significant room for improvement with indicators that are very low, or that need to be made stricter, following the continuous QI approach, which recommends incremental enhancement of measurement criteria. An example of indicators were improvements are needed is postnatal care management, which was 1.7% at the baseline; examples of those that require more demanding measures are obstetric and neonatal complications' management, that although are high under current measurement criteria, are expected to be lower after incorporating additional stricter criteria.[27] An adequate and timely management of obstetric and neonatal complications is critical to prevent avoidable deaths; as it is proper immediate postnatal care to avoid maternal mortality by sepsis, eclampsia, and postpartum hemorrhages, which are still a challenge for Belize.

2.16 In terms of children's health, childhood infections are still an important cause for child morbidity and mortality. The prevalence of acute respiratory infections and acute diarrheal diseases is 3.4% and 6.2%, respectively[28]. Childhood infections is the 2nd leading cause for under 5 deaths.[29] According to IHME baseline survey, there is still significant margin for improving child (0 to 59 months) vaccination for age, which was at 72.9%, and adequate management of diarrhea in the household, which was at 2.4%.

2.17 **Proposed interventions and expected results of the third individual operation.** In line with the theory of change, the third individual SMI operation in Belize will build upon the strategies initiated by the first two individual operations, consolidating and/or expanding these strategies with key interventions to assure long-term sustainability. On the demand-side, to improve coverage of critical services that depend greatly on care-seeking behaviors, such as the ones mentioned in paragraph 2.12, the operation will expand the Community Participation Strategy; on the supply-side, it will consolidate and expand the quality improvement processes, now under the umbrella of the National QI Strategy.

2.18 The third individual operation will strengthen community health by expanding and implementing the Community Participation Strategy to communities in the Northern and Western regions. The strategy follows an intercultural adaptation approach that starts with intercultural dialogues at the community level to reach agreements about the constitution and operation of a community health platform, tailor-made to the characteristics of each community. Each platform operates at two levels, individual and collective. At the individual level, the volunteer community health promotors (like CHWs, midwifes, traditional doctors, and other individuals that self-identify as wanting to become a volunteer), working in collaboration with the CHWs and rural health nurses; they will conduct household visits to deliver, face-to-face, defined portfolio of maternal

[27] For instance, the QIF currently measures whether magnesium sulfate was administered for severe pre-eclampsia/ eclampsia in obstetric complications; stricter criteria will measure if the adequate doses were administered, and within the expected timeframe. Another example is sepsis in neonatal complications; currently the QIF measures whether antibiotics were administered; stricter criteria will check if the right combination of medications were administered.

[28] Statistical Institute of Belize and UNICEF (Emergency Relief for Children) Belize, "Belize Multiple Indicator Cluster Survey, 2015-2016", UNICEF.

[29] The information of Lower Respiratory infections (LRI) was obtained of the GBD Result Tool of the Institute for Health Metrics and Evaluation (IHME). Institute for Health Metrics and Evaluation (IHME), 2015, "GBD Result Tool of the Institute", IHME, (Consulted on 4th September 2017), https://vizhub.healthdata.org/gbd-compare/

and child health preventive services,[30] referring cases to the health center, when appropriate.[31] At the collective level, community based organizations or groups, like the village council, schools and different denomination of churches, that are willing to participate to support the community health platform by delivering key health promotion messages, will make the necessary adaptation to their context, during their organized activities.[32] The implementation of the strategy will require: (i) intercultural dialogues with social actors and community leaders; (ii) identification of community volunteers (individuals and organizations); (iii) capacity building at the individual level (leadership, personal motivation, and organization), and at organization level (portfolio of services, health messages, and communication for behavioral change techniques) to health personnel (rural health nurses and CHWs) and community volunteers; (iv) provision of tools, like women of reproductive age (WRA) screening tool, and inputs, like rapid pregnancy tests and ORS/Zinc, to volunteers; (v) implementation of a family census, identifying priority groups, like WRA, pregnant women, and children under five years, and risk factors, like diabetes; (vi) zoning of the community between identified health volunteers; and (vii) application of supervision tool, integrated with MOH information system, to monitoring progress (process and results indicators). Some of the main expected results are: (i) an increase in coverage of preventive services that will be promoted by the community health platform, like cervical cancer screening, family planning, preconception and early antenatal care; (ii) an improvement in maternal and child health indicators, like child (0 to 59 months) vaccination for age, and adequate management of diarrhea in the household; (iii) identification of several risk factors, like anemia, diabetes, and high blood pressure; and (iv) an increase in CHWs by facilitating the recruitment among new volunteers.

2.19 In terms of strengthening the supply of health services, the third individual SMI operation will consolidate and expand the QI processes, which is the operational arm of the National QI Strategy. In practical terms, this means: (i) expanding the indicators included in the rapid improvement cycles (defining measurement criteria, standards, targets, and programming and updating auditing tools); (ii) mapping and optimizing new maternal and child care clinical processes related to new performance indicators, both at ambulatory and hospital levels (for instance, cervical cancer screening and treatment, preconception, antenatal and postnatal care); (iii) improving diagnosis recording and classification by training health personnel in the use of the International Statistical Classification of Diseases (ICD) and Related Health Problems 10th version (ICD-10 codes); (iv) supporting the rapid improvement cycles and quarterly central level auditing by providing continuous technical assistance for capacity building of the QI local and central level teams through QI's officers and workshops; (v) providing technical

[30] It will cover topics along the life cycle, for instance, from family planning to child immunization.

[31] For instance, applying a WRA screening tool and offering rapid pregnancy test to identify early pregnancies and unmet needs for family planning, and refer them to the health centers for family planning counseling and antenatal care; or providing ORS and zinc sachets and training mothers with children younger than 5 to proper manage diarrhea.

[32] An example of the potential impact that working with the organized groups of the community can have is an episode that happened during the intercultural dialogues with the elders from the Mennonite communities in Little Belize, where the use of preventive services in health centers historically were almost inexistence. After the eldest religious leader decided to support the community health platform by bringing his decedents to the health center, all the community followed, bringing their children to vaccinate, or for other critical preventive services, like antenatal care.

assistance in the implementation of new collaborative workshops to accelerate progress through the exchange of best practices; (vi) supporting the QIF, by financing its incentives and attaching them to meeting the targets on the third individual SMI's performance framework indicators. An important step in creating long-term sustainability for the National QI Strategy, is the establishment of QI Unit at the MOH,[33] which will provide leadership, technical support and follow-up to the practice of improving the quality of health services in the country's health networks, in accordance with MOH's policy and legal framework. The SMI operation will support MOH in implementing the QI Unit, and training its personnel to lead, provide technical assistance to local teams, and to carry-out activities related to all aspects of the QI process established in the national strategy, like the rapid improvement cycles, collaborative, and the district and national QI committees and Technical Advisory Group. Some of the main expected results are: (i) an increase in the adequate management of obstetric and neonatal complications; (ii) an increase in postnatal care according to the norms; and (iii) an increase in the percentage of hospitals that uses health information system and QI processes adequately.

2.20 In addition, the third individual SMI operation will continue to support evidence-based decision making by expanding the MOH's health dashboard to display information for all country's regions, and to incorporate new health indicators from the BHIS and from quality measurements[34]. In addition, the operation will provide continuous technical assistance to build capacity of health personnel and managers to incorporate data analysis in decision-making. SMI will also support training and capacity building activities for health personnel in topics like, Visual Inspection with Acetic acid (VIA) for cervical cancer, optimized ambulatory processes for cervical cancer, preconception, antenatal and postnatal care; which will complement the previously mentioned supply-side interventions.

2.21 **Lessons learned**. An analysis of the positive and negative aspects of the second individual operation, bottlenecks in implementation, and potential new activities allowed for the identification of the main "lessons learned" to improve the preparation of the third operation. The stakeholders in Belize felt that several interventions should be continued and strengthened in the third individual operation, like the QIF with indicators adjusted according to the performance framework for the third operation. In the stakeholders' opinion, the QI processes that are being applied in SMI areas need to be extended rapidly to other areas of the country that are still facing higher obstetric and neonatal complications' management challenges. This expansion would require the establishment of a QI Unit, and technical assistance from SMI to train new personnel to carry out all activities of the QI process established in the national strategy. These lessons learned have been incorporated in the design of the third operation.

2.22 **Policy Dialogue and Learning:** During the first individual operation, SMI focused on two policy dialogues in Belize: (i) setting norms for improving the quality of reproductive and child health and nutrition services; and (ii) introducing performance-based incentives, QIF, to promote innovation and allow for more decentralized

[33] SMI has provided technical assistance to the MOH to develop a concept note for the organizational and functional structure of the QI Unit. The proposal is under MOH's approval process.

[34] For instance, including the third individual SMI's performance framework indicators, and expanding the list of critical health inputs and cold chain operation indicators for routine monitoring.

decision-making. In the second individual operation, SMI concentrated on two policy dialogues which are critical for long-term sustainability: (i) establishing and officially approving a National QI Strategy; and (ii) designing and approving a community platform strategy. During the third individual operation, SMI policy dialogue with Belize will focus on the sustainability of: (i) establishing a QI Unit, alongside the complementary processes, like the rapid improvement cycles, and collaboratives; (ii) incentives for health care providers through the QIF, while the MOH continues to discuss the scale up of the National Health Insurance, and (iii) the expansion of SMI interventions to other districts of the country[35]. In terms of learning, the third operation will focus on documenting two experiences: (i) the community participation strategy's results and expansion; and (ii) a QI tool kit so the QI Unit at MOH can expand the "package of QI interventions" to the rest of the country, and to a broader range of clinical care.

2.23 **Alignment with IDB strategies and country priorities.** This operation is consistent with the Update to the Institutional Strategy 2010-2020 (AB-3008) and is aligned with the development challenge of Social inclusion and Equality, by: (i) promoting policies that provide accessible quality health services to all segments of the population; and (ii) enhancing investments in human capital throughout the life cycle, ranging from women in reproductive age, pregnant women, newborns and children in early childhood development. Also, the Country Strategy with Belize 2013-2017 (GN-2746) identifies SMI as an important platform for dialogue with the government regarding the health sector. Additionally, the operation is aligned with the Health and Nutrition Sector Framework Document (GN-2735-2) which aims to: (i) lowering noneconomic barriers to access to health services, promoting self-care and preventing risky behaviors; (ii) directing supply-side investments (infrastructure, human resources, inputs, technology, clinical and health management processes) to ensure effective universalization of high quality health services; and (iii) supporting institutional capacity-building of the health sector in the design and implementation of RBF mechanisms. The operation is the third in a series that addresses key priorities of the Belize Health Sector Strategic Plan 2014-2024: (i) to improve the quality of care according to defined standards by assuring that 100% of the health care facilities use protocols, guidelines, and quality monitoring tools; (ii) to use the BHIS for decision making based in data; (iii) to develop a QI framework to ensure stakeholder accountability through QI teams, with periodical monitoring.

III. Description of Activities, Components and Budget

3.1 The third individual SMI operation in Belize will finance, with the Investment Tranche and Local Contribution, three type of costs: (i) the marginal variable costs associated with the expected increase in demand that will be generated with the health promotion activities, like additional health inputs, and materials; (ii) the marginal variable costs associated with expanding the service supply capacity, like training additional doctors to offer VIA for cervical cancer; (iii) the direct costs of new interventions which are not yet part of MOH health's budget, like the QIF incentives and the community platform volunteer materials; and (iv) the administration and operational costs, like project financial statement audit. SMI will not substitute government finance for the provision of health services that are included in MOH health's budget. In addition, SMI Coordinating Unit will

[35] For more details see Activities to promote sustainability.

continue to provide technical assistance with their regional technical advisers and experts, as in the previous operations, to complement the technical assistance included in this operation.

3.2 **Component 1: Strengthening the supply and demand of quality health services for women in reproductive age (preconception, pregnancy, partum, and postpartum), neonates (0 to 27 days) and children under 5 years of age (US$255,450).** The objective of this component is to strengthen the supply and demand of maternal and child health services through the main following activities: (i) promotion of preconception care and cervical cancer screening at the community and institutional levels; (ii) application of cervical cancer screening tests; (iii) treatment of VIA positive cases (pre-cancerous lesions); (iv) training of doctors and nurses in VIA for early detection and treatment of cervical cancer precancerous lesions; (v) routine screening of WRA at the community level to increase early antenatal care rate and family planning counseling and referrals; (vi) development of guidelines for family planning counseling, and preconception; (vii) training health personnel in family planning counseling, preconception, and antenatal care guidelines; (viii) implementation of additional bilateral tubal ligation outreach to women with limited access;[36] (ix) development of health educational and communication materials for promoting cervical cancer screening, preconception care, dehydration warning signs, use of ORS and zinc, among others; (x) printing health educational and communication materials; (xi) acquisition of additional family planning methods, rapid laboratory tests, medicines, vaccines, and other surgical and health inputs and equipment costs associated with the expected increase in demand that will be generated with the health promotion activities; (xii) acquisition of materials for CHW and social actors (like backpacks, booklets, etc.); (xiii) implementation of intercultural dialogues at the community level to identify local social actors and establishing agreements to create community health platforms; (xiv) capacity building of health personnel and social actors to create and implement community health platforms; and (xv) development or improvement of instruments, like family census and screening tools, for the community health platforms implementation. These activities include the procurement of goods, non- consulting services[37], and consulting services to provide technical assistance. The main expected results of this component are:[38] (i) increasing the number of WRA screened for cervical cancer; (ii) reducing the number of women with unsatisfied demand for family planning; (iii) increasing the number of WRA who received preconception care; (iv) increasing the number of pregnant women who received early antenatal care by a doctor or a nurse according to the norms; (v) increasing the number of children with full vaccination for age; and (vi) increasing the number of diarrhea cases in children younger than 5 that were correctly managed at the household.

3.3 **Component 2: Strengthening the support systems and cross-cutting strategies for maternal and child health services (US$234,550).** The objective of this component is to accelerate QI of health services through the following transversal interventions: (i) implementation of a QI Unit at the MOH; (ii) capacity building of the QI teams (including national auditing team) through technical assistance by QI officers; (iii) expansion of

[36] In Belize, there are unmet needs for this type of family planning method since demand surpass number of campaigns.

[37] Non-consulting services include printing of educational materials.

[38] Taking into consideration that Component 1 finances additional marginal costs as mentioned in paragraph 3.1.

indicators that are part of self-measurements in the rapid improvement cycles; (iv) mapping and optimization of maternal and child care clinical processes related to new performance indicators; (v) implementation of collaborative workshops among health establishments to share best practices in improving quality of care for WRA, neonates and children under 5 years of age; (vi) finance of QIF incentives; (vii) expansion of the health dashboard to include new indicators and to display information for all regions in the country; (viii) capacity building activities for health personnel in the use of ICD-10 codes, and data analysis for decision making based on the dashboard indicators; (ix) procurement of computer equipment for BHIS expansion; (x) routine monitoring and maintenance of the cold chain; (xi) expansion of the list of critical health inputs which availability is continuously monitored by the QIF; and (xii) finance of administrative costs, like financial statement audit and the cost of key human resources from the Project Management Unit. These activities include the procurement of goods, operational costs, non-consulting and consulting services [39] to provide technical assistance. Since the activities under this component are cross-cutting, they impact several indicators, including the ones mentioned under Component 1. Nevertheless, the most direct expected results of this component are: [40] (i) an increase in the number of obstetric and neonatal complications that are handled according to the norms; (ii) and increase in the percentage of patients in immediate postpartum period that are managed according to the norms; and (iii) an increase in the number of hospitals that use the information system and the quality measurement results for decision making.

3.4 **Monitoring and Evaluation Arrangements.** The third individual operation in Belize has three levels of monitoring: (i) indicators for the disbursement of the PT of SMI RBF model and target compliance verification; (ii) SMI general indicators of implementation at the regional level; and (iii) implementation and progress of the operation (routine monitoring).

3.5 **Monitoring indicators for disbursement of the Performance Tranche and verifying compliance with targets.** The Performance Framework includes indicators and targets committed for the disbursement of the third individual operation PT. Target will be verified through external evaluators and/or independent population and health facility surveys. Table III-1 presents the performance framework indicators. Initial Performance Framework with indicators and targets were negotiated in 2012 for the first, second and third individual operations. Nevertheless, given progress expected by Belize in the second individual operation and changes in priorities initially defined, the Performance Framework for the third individual operation was reviewed: two targets in the performance framework were modified, five indicators were replaced, and two indicators were eliminated.[41]

[39] Non-consulting services include the QIF's performance-based incentives.
[40] Taking into consideration that Component 1 finances additional marginal costs as mentioned in paragraph 3.1.
[41] For a detailed description for these changes, see Table 1 in Monitoring and Evaluations Arrangements.

Table III-1. Performance Tranche Indicators

Indicators	Unit	Goal	Means of verification
Women in reproductive age (25-49 years) that were screened for cervical cancer and received the results in the last two years	%	+10PP	LQAS Survey[42]
Women of reproductive age (15-49 years) who were not using/unable to obtain contraception during last year	%	-5PP	LQAS Survey
Women in reproductive age (15-49 years) who received preconception care	%	+20PP	Health Facility Survey
Women in reproductive age (15-49 years) who received 5 antenatal care visits by doctor or nurse according to the best practices in the last two years	%	+20PP	Health Facility Survey
Obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) handled according to the norms in the last two years	%	+15PP	Health Facility Survey
Neonatal complications (prematurity, low birth weight, asphyxia and sepsis) handled according to norms in the last two years	%	+15PP	Health Facility Survey
Postpartum patients evaluated and registered in clinical records, at least every 15 min during the first hour and every 30 min during the second hour and at discharge in the last two years	%	+20PP	Health Facility Survey
Children 0-59 months identified as having received full vaccination for age	%	+10PP	LQAS Survey
Mothers who gave their children (0-59 months) ORS and zinc supplements during the last episode of diarrhea in the last two weeks	%	+40PP	LQAS Survey
Health facilities that report, access and use quality data for decision-making from the health information and quality management systems	%	+40PP	HIS / HFS[43]

3.6 **Monitoring SMI's general indicators for implementation at the regional level.** In addition to indicators included in the Performance Framework, additional indicators will be measured to evaluate country performance, track the operation progress and compare results with other SMI countries. These indicators are included in the Result Matrix.

3.7 **Routine monitoring of the implementation progress of the operation.** As indicated in the Monitoring and Evaluation Arrangements, progress on output, outcome and impact indicators will be monitored using administrative data, population surveys and national statistics; the relevant information will be maintained in the operation dashboard.

3.8 Belize was not among the SMI countries chosen for impact evaluation with experimental design, and the project evaluation will be reflexive, comparing indicators before and after intervention but not measuring contribution.

3.9 This third individual operation has a total cost of US$592,000, consisting of investment tranche (IT) resources in the amount of US$150,000 (Table III-2) financed by the MHF, and Local Contribution (LC) resources in the amount of US$340,000 (Table III-3), and a Performance Tranche (PT) for US$102,000. The PT will be disbursed subject to the following conditions: (i) achievement of minimum score (0.8) regarding the goals of the Performance Framework (in accordance with the SMI RBF scheme); and (ii) fulfillment

[42] Lot Quality Assurance Sampling (LQAS) survey.
[43] Health Information System (HIS) and Health Facility Survey (HFS).

on conditions set forth in Section 3.1 and 3.3 of the General Conditions for the Programs and Operations of the SMI.

Table III-2. Third Individual Operation Investment Costs (US$)

Activity/Component	IDB (MHF)	Local Contribution	Total
Component 1: Strengthening the supply and demand of quality health services for women in reproductive age (preconception, pregnancy, partum, and postpartum), neonates (0 to 28 days) and children under 5 years of age	14,610	240,840	255,450
Component 2: Strengthening the support systems and cross-cutting strategies for maternal and child health services	135,390	99,160	$234,550
Sub-Total	**150,000**	**340,000**	**$490,000**
Performance Tranche (PT)	102,000	-	102,000
Total	**252,000**	**340,000**	**592,000**

3.10 The operation will be supervised by the Social Protection and Health Division (SPH), with the support of the Country Office of Belize (CID/CBL), which will be the Unit of Disbursement responsibility.

IV. EXECUTING AGENCY AND EXECUTION STRUCTURE

4.1 As with the first and the second individual operations, the MOH will implement this third individual operation through its Project Management Unit (PMU), which will be responsible for tasks relating to project administration, procurement and financial management. The technical inputs required for the execution of the operation will be coordinated by the QI Manager under the supervision and technical oversight of the Policy Analysis and Planning Unit and the MOH technical advisors.

4.2 The MOH will adhere to the general norms for the public sector in terms of financial management and will also comply with respective Bank policy. The IT will follow Bank procurement policy and procedures in the implementation of the Procurement Plan. The Local Contribution will follow Govern of Belize´s Selective Tendering Procedure. If the PT is disbursed, the resources will be used in the health sector but will not be subject to the Bank's procurement policies. The resources of the PT cannot finance the list of excluded expenses set forth in Section 7.2 of the General Conditions for the Programs and Operations of the SMI.

4.3 **Financial Management Policy and audit arrangements**. Final financial statements of the project, audited by a firm of independent public accountants acceptable to the Bank, are to be submitted to the Bank within 120 days following the last disbursement. The audit will cover the entire project period and will be conducted in accordance with the content and scope established in the Terms of Reference agreed with the Bank. For purposes of determining the equivalency of expenditures incurred in local currency of the reimbursement of expenditures chargeable to the TC, the agreed exchange rate shall be the effective exchange rate used to convert the funds denominated in the project's currency to the local currency at the date of disbursement. During the period of 3 years after the disbursement of the performance tranche, the IDB may request an audited financial report. The audit will cover the use and destination of the resources of the performance tranche and will be conducted in accordance with the terms of reference approved by the IDB. Belize should submit this audited financial report within 90 days after the IDB´s request. The provisions of the governing policies shall be applied to retroactive expenses. The auditing could be financed by resources from the IT or the LC.

4.4 **Supervision reports**. Semiannual progress reports should be submitted to the IDB 60 days following the end of each calendar semester during the execution of the third individual operation. This report will have to describe the achievements and advances using the indicators reflected in the Results Matrix of the Third Individual Operation. Belize shall remit annually to the IDB, up to 2 years after the disbursement of the Performance Tranche the amount of resources expended by the Ministry of Health´s activities regarding general interventions to help improve health indicators.

4.5 **Other reports**. An unaudited financial report regarding the activities financed by the Investment Tranche and the Local Contribution is to be submitted to the IDB, when at least 50% of the Investment Tranche has been disbursed or within another period agreed upon by Belize and the IDB.

4.6 **Conditions to be fulfilled prior to first IT disbursement:** (i) that the Operations Manual has been reviewed, updated, agreed upon and put into effect, to the satisfaction of the Bank; and (ii) fulfillment of conditions set forth in Section 3.1 and 3.3 of the General Conditions for the Programs and Operations of the MHF.

V. MAJOR ISSUES

5.1 The Project Risk Analysis categorized risks in execution according to probability and impact, and in the cases where the risks were classified as “medium” or “high,” the risk management plan proposes appropriate mitigation measures. For instance, resistance to change and limited clinical skills from health services personnel to follow norms and clinical guidelines can result in inadequate care leading to complications which can produce poor obstetric and neonatal outcomes. This risk will be mitigated by several complementary interventions which builds capacity and reduce resistance like the monthly rapid improvement cycles, quarterly external auditing, the exchange of best practices through peer-to-peer collaborative, and technical assistance during implementation. Another high impact risk is the under use of the BHIS due to lack of enforcement and insufficient training. To mitigate this risk, MOH will reinforce training, and implement performance indicators on the use of the BHIS, attached to the QIF incentives. The relationship between MOH and social actors presents another high impact risk, which can be mitigated by identifying community leaders and engaging them into the community health platform.

VI. EXCEPTIONS TO BANK POLICY

6.1 The operation does not consider exceptions to any Bank policy.

VII. ENVIRONMENTAL AND SOCIAL CLASSIFICATION

7.1 According to the Environment and Safeguards Compliance Policy (OP-703), this individual operation classifies as category “C” (Safeguard Screening Filters). No current or potential safeguard policy items were identified and there are no negative social or environmental effects expected from the program. On the contrary, this individual operation is expected to produce positive social benefits for the poor, rural population, which is composed disproportionately of ethnic minorities. This will be achieved by increasing the access to higher quality health services for these beneficiaries.

Required Annexes

- Annex 1 - Monitoring and Evaluation Plan - Including the Performance Framework
- Annex 2 - Project Execution Plan (PEP)
- Annex 3 - Procurement Plan
- Annex 4 - Financial Plan
- Annex 5 - Project Risk Analysis
- Annex 6 - Theory of Change
- Annex 7 – Result Matrix
- Annex 8 - Preparation Mission Aide Memoir

A DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BELIZE

SALUD MESOAMERICA INITIATIVE

BL-G1003

MONITORING AND EVALUATION PLAN

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CONTENTS

ACRONYMS AND ABBREVIATIONS

CDC	Center of Disease Control
CU	Coordinating Unit
DALYs	Disability Adjusted Life Years
IHME	Institute of Health Metrics and Evaluation of the University of Washington
LQAS	Lot Quality assurance Sampling
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
NHI	National Health Insurance
PEU	Project Execution Unit
PEP	Project Execution Plan
POD	Proposal for Operations Development
QIF	Quality Innovation Fund
RBF	Results-Based Financing
SMI	Salud Mesoamerica Initiative
SPD	Office of Strategic Planning and Development Effectiveness
SPH	Division of Social Protection and Health
TL	Team Leader

I. Introduction

1.1 The objective of the SMI program in Belize is to contribute to the reduction of maternal, infant and child mortality in the poorest districts of the country through interventions that strengthen primary health care services within the framework of the SMI Initiative. The specific objective is to improve maternal, infant, child and reproductive health in terms of access, usage and quality. In order to achieve these objectives, the third operation follows a demand and supply side perspective. On the supply side, the operation seeks to build capacity in managers and health personnel to analyze their performance in MOH's health indicators dashboard, and incorporate it in their decision making. And on the demand side, it aims to continue promoting desired behaviors by implementing a community participation strategy to change care-seeking practices like cervical cancer screening and preconception care.

1.2 In Belize, part of the Salud Mesoamérica Initative (SMI) project will be financed through non-reimbursable funds provided to the country (the investment tranche) while the remaining cost of the Project will consist of a counterpart contribution provided by the country. As a complement to this arrangement, SMI will use a results-based financing (RBF) model, in which a percentage of the performance tranche may be disbursed subject to the attainment of certain pre-established targets, for unrestricted use of the Ministry of Health. This model of financing requires a monitoring and evaluation strategy that not only guarantees the monitoring of the progress of the Project, but also, the monitoring of those indicators, which determine the performance achieved and therefore, that will be used as the basis for the disbursement of the performance tranche. It is also of interest for the Initiative to document the effect of the implementation of this RBF model through impact evaluations as well as the effect of innovative and promising interventions by carrying out effectiveness studies in selected countries.

1.3 The RBF model is used in each of Mesoamerican countries participating in the Initiative. In order to monitor the progress of SMI at regional level, all countries monitor a standard set of indicators that allow for a comparative regional analysis.

1.4 SMI's monitoring and evaluation strategy in Belize will be implemented at three different levels with the objective of: (i) monitoring the attainment of targets for the disbursement of the performance tranche linked to the RBF model; (ii) monitoring SMI's general indicators for comparison at regional level; and (iii) monitoring the implementation and progress of the operation.

1.5 SMI has developed a General Monitoring and Evaluation Plan that provides a framework for the monitoring and evaluation activities specific to each country. This document describes the general mechanisms of the Initiative and sets out the proposed specific strategy for the monitoring and evaluation of the operation to be carried out in Belize.

II. MONITORING

A) Monitoring of the indicators for disbursement of the performance tranche

2.1 *Baseline:* For the evaluation of the operation's performance, two types of surveys were carried out in Belize: health facility surveys and a population survey using Lot Quality Assurance Sampling (LQAS). The Performance Framework contains the indicators established for the disbursement of the performance tranches for each operation. The final

assessment will take place at the end of the third operation and will consist of a health facility survey and a population survey with LQAS design.

2.2 LQAS is a method of monitoring the performance of health services in small health areas and identifying areas that fail to meet a specified threshold level of performance (a target).[1] The advantage of using an LQAS survey design in Belize is that, given the few indicators captured at the population level, and the type of indicators chosen, it requires assessing far fewer interviews and therefore is more feasible giving the financial constraints on the M&E arrangements for this operation. Using this survey, it is possible to determine whether or not the target values for the indicators in the performance framework are met. The disadvantage is that it is not be possible to estimate the absolute values for all indicators, as LQAS can only give a binary value to an indicator (corresponding to whether the threshold level has been reached or not), nor will the data be comparable to the rest of the region.

2.3 The design of the independent health facility surveys, along with the audits, quality control of field work, the analysis of the data collected and a technical recommendation for the definition and achievement of goals, were carried out by the Institute of Health Metrics and Evaluation at the University of Washington. The measurements for the population-based indicators consider a sample of women aged 15 to 49 years of age and children under 5 years living in the geographic area receiving SMI funds. As previously mentioned, in Belize this sample was taken using the LQAS method. The measurements at the level of the health services and community health units were taken in all the health facilities in the targeted areas, and thus constitute a “census” of the health facilities. Some of the indicators defined in the Performance Framework have been selected to reflect changes in the country's health policy. The sources of verification for the definition of baseline and targets for these indicators will be the official standards and protocols of the MOH.

2.4 *Performance Evaluation:* In order to determine the achievement of the goals set for the disbursement of the performance tranche, SMI has developed a set of guidelines that are set out in the Operating Regulations for the Initiative.

2.5 Each operation lasts 18-24 months, at the end of which a performance evaluation is conducted. The data to determine achievement of goals and the disbursement of the performance is collected from population and health facility surveys carried out with the same design as the baseline. This document presents the performance framework for the entire duration of the Initiative, including the indicators for the first, second and third operations. All three operations are carried out in Belize with the same evaluation requirements. That is, independent evaluations will be carried out to determine the achievement of the targets for the disbursement of the performance tranche for the third operation, as has been performed with previous operations.

2.6 Each of the indicators of the performance framework has a weight (score) assigned at the start of the project that is stated in the contract between the IDB and the MOH. The minimum weight for each indicator is 0.04 and the maximum is 0.2, with the initial total sum of all weights adding up to 1. At the end of each operation the weight or score of the indicators where the targets originally set were achieved are added up and the

[1] In LQAS maximum sample size is defined along with the maximum number of allowed "defects” (in this case, individuals that did not receive the intervention of interest) before the health area is classified as “under-performing” (based on the performance target). Measurements are taken from the sampled individuals until either the maximum sample size is reached - in which case the area is classified at having met the performance target - or the number of allowed defects is reached and the area is classified as not having met the target (Lanata et al. 1990; Myatt et al. 2003).

performance tranche is disbursed only if the total value of the scores is greater than or equal to 0.8.

2.7 Although some of the indicators for disbursement of the performance tranche are monitored by the Ministry of Health using administrative data, the final evaluation is based solely upon the data reported in independent surveys and/or by external evaluators conducted in health facilities and using LQAS.

B) Target Setting

2.8 A review of the literature on results-based financing at the national, sub national and service provider level, revealed that various approaches to target-setting are available. Although most of the concrete experiences in less developed countries have not been documented extensively, they do serve as a starting point. Targets are usually expressed in percentages, units or percentage points.

2.9 To establish targets for the disbursement of the performance tranche, the SMI proposes a hybrid approach in which the following inputs and qualitative and quantitative data are taken into account:

a. An economic model based on a simple cost-benefit framework.
b. A review of the literature, international experiences and historical trends of national health indicators.
c. Operational requirements of the country, consultations with experts and intuition.
d. SMI in-country and reginal experiences

The following section is an explanation of these key components for establishing targets:

2.10 Economic model- A simple cost-benefit framework serves as a starting point the target-setting so that the benefits of projects funded by the Initiative outweigh the cost. The cost benefit framework is described in a publication by Cruz-Aguayo & Martinez (2016)[2].

2.11 Literature, international experience and historical trends - An extensive literature review was carried out for each indicator used for the disbursement of the performance tranche in order to obtain an estimate of the expected range of impact, which can be obtained from selected interventions. In addition, hisotrical trends showing changes in indicators were computed. This information helped guide the target-setting to establish the magnitude of change possible considering similar interventions in other populations and countries.

2.12 Operational requirements of the country, consultations with experts and intuition. In addition to the quantitative inputs described above, the final phase of the target setting considers the operational context of each country, including the type of interventions proposed for funding, the capacity for disbursement and execution, operational issues such as procurement policies and other aspects specific to the national context that may affect the attainment of the targets. These considerations included the views of the government, fiduciary and procurement specialists, technical specialists at the IDB and international experts in results-based financing.

2.13 SMI in-country and reginal experiences. After concluding two operations in Belize and seven other countries, SMI has gained considerable data and experience about indicators

[2]See:https://publications.iadb.org/bitstream/handle/11319/7581/Setting-Targets-for-Results-Based-Financing-Programs-A-Simple-Cost-Benefit-Framework.pdf?sequence=1

and health system performance. This new data has been considered to review targets for the third operation.

2.14 In the orginal performance framework, targets were established before baseline results were available. Further, preliminary data from measurements collected by the MOH shows that the country's performance may be higher than expected in several indicators. Therfore, the MOH and IDB country team reviewed the Performance Framework for the third operation, replacing two indicators, removing six indicators, adding four indicators, and modifying two targets.Table 1 explains the change and rationale for changes in each indicator.

Table 1: Proposed Changes to the Third Operation Performance Framework

Indicator Number	Indicator	Original 3rd Operation target	New 3rd Operation target	Rationale
4120	C-sections as a proportion of childbirths in the last two years	-10 PP	Remove indicator	This indicators was removed from the second operation. Nevertheless, it will continue to be monitored. A goal to reduce C-sections for payment may create a perverse incentive for providers to avoid or delay needed c-sections, endangering life. In 1985, WHO established that the rate of c-sections had to be between 10-15% of C-sections of all deliveries.However, this recommendation has been relaxed as there is no empirical evidence for an optimum percentage[3].
2400	Female health facility patients of reproductive age that are given family planning counseling according to the norms in the last two years	50PP	Remove indicator	This indicator was found to be unliable for measurements using medical record reviews. The indicator was replaced on the second operation.
5040	Infants 0–5 months of age who were fed exclusively with breast milk the previous day	10PP	Remove indicator	This indicators was removed from the second operation. The sample size required to measure this indicator reliably was too big to make it a performance indicator. The MOH agreed to address other prioritary interventions.
4103	Institutional deliveries for which immediate neonatal care (within 24 hours) was provided to the infant according to the norms in the last two years for the most recent pregnancy	40PP	Remove indicator	Internal measurements performed by the MOH show that Belize may be able to obtain close to 100% in the second operation. Given that the indicator will continue to be monitored, the MOH

[3] World Health Organization (2009). Monitoring emergency obstetric care: a handbook. P. 25.

				agreed to address other prioritary interventions.
4115	Mothers with a child 0-23 months that that can recognize 3 out of 5 signs of danger	40PP	Remove indicator	The MOH agreed to address other prioritary interventions which may have a higher impact saving lives.
5070	Percentage of children aged 6-23 months that consumed 60 sachets of micronutrients in the last 6 months	30PP	Remove indicator	The intervention to include micronutrient supplementation was not implemented due to budgetary constrains. During the third operation, the timeframe would be too short to modify the norms, procure, distribute and encourage behavior change a the population level. Therefore, it was agreed to address other prioaritary areas.
3040	Pregnancies for which the woman attended at least one antenatal care visit during the first trimester that was carried out according to the norms for the most recent pregnancy in the last two years	14PP	Replace indicator	Internal measurements performed by the MOH show that Belize may be able to surpass the target for the thid operation. Thefore, it was decided to make this indicator a criterion for the quality antental care indicar. Hence, measuring quality antental care would increase the bar and continue measuring early catchment for antental care.
3030	Women of reproductive age (15-49) who received 5 antenatal care visits by doctor or nurse according to the best practices in the last two years	Not previously included	20PP	This indicators would not only measure early catchment for antental care, but also quality criteria on the care provided.
4095	Institutional deliveries for which oxytocin was administered immediately following birth as part of Active Management of the Third Stage of Labor (AMTSL) in the last two years for the most recent delivery	15PP	Replace indicator	Internal measurements performed by the MOH show that Belize may be able to obtain close to 100% in the second operation. Given that the indicator will continue to be monitored, the MOH agreed to address a higher priority area by looking into immediate postpartum care.
4050	Postpartum patients evaluated and registered in clinical records, at least every 15 min during the first hour and every 30 min during the second hour and at discharge in the last two years	Not previously included	20PP	The MOH currently does not require continous checkups of women postpartum, which could prevent deaths from undetected hemorrhage. The baseline for this indicator was 1.7%.
	Women in reproductive age (15-49 years) who received preconception care	Not previously included	20PP	In order to address neonatal mortality due to congenital defects, and maternal mortality due to pre-existing conditions, it is necessary

				that women who want to become pregnant attend preconception care. This indicator measures key quality interventions, such as family, personal and gynecological gistory, folic acid supplementation, and screening for diabetes and hypertension.
	Women in reproductive age (15-49 years) that were screened for cervical cancer and received the results in the last two years	Not previously included	10PP	Cervical cancer is one of the main causes of preventable deaths in Belize. This indicator seeks to ensure that all women in reproductive age are screened at least once every two years, as required by country norms.
5020	Children 0-59 months identified as having received full vaccination for age	Not previously included	10PP	The MOH considers vaccination a priority, and the baseline survey showed that only 73% of children had full immunization for age acccording to vaccination cards.
	Health facilities that report, access and use quality data for decision-making from the health information and quality management systems.	Not previously included	40%	To sustain quality improvement across Belize, an indicator, and indicator has been included encouraging the reporing, access to and use of data for decision making at the health facility level.
4080	Obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) handled according to the norms in the last two years	70PP	15PP	Internal measurements performed by the MOH show that Belize may be able to surpass or reach very close to the target for the thid operation. Therfore, adjusting the target is needed so that it is not above 100%.
4070	Neonatal complications (prematurity, low birth weight, asphyxia and sepsis) handled according to norms in the last two years	75PP	15PP	Internal measurements performed by the MOH show that Belize may be able to surpass or reach very close to the target for the thid operation. Therfore, adjusting the target is needed so that it is not above 100%.

C) Monitoring of SMI's general indicators of implementation at regional level

2.15 The general indicators for monitoring of implementation of SMI are measured through the same independent surveys of health facilities and LQAS surveys that are carried out to assess the indicators defined for the disbursement of the performance tranche. These general monitoring indicators are not included for the evaluation of performance linked to the mechanism of results-based financing and therefore are not be assigned a weight or score, however they are monitored throughout the operation. The general monitoring

indicators of the Initiative are included in the Results Matrix in Annex II. This list includes output indicators, coverage of health care services and quality of care indicators.

2.16 The Results Matrix (Annex II) includes indicators of impact, outcome and output as described below (Tables 2a-c), including the purpose of measurement according to each of the levels of evaluation of the project and the data source for each one. These indicators make up the Results Matrix that the Initiative has developed in order to monitor and evaluate implementation over the entire period of project execution and are described in detail in the SMI Monitoring and Evaluation Plan. The indicators established for the disbursment of the performance tranche are included in the following list and are part of the Performance Framewok. To facilitate their identification, the Performance Framework that is included as an annex to this document, contains only those indicators selected for disbursement of the performance tranche.

Table 2a. Impact indicators

	Indicator[4]	Description	Source[5]
1.	Maternal mortality rate	Number of maternal deaths per 100,000 live births	Vital Statistics
2.	Neonatal mortality	Number of deaths during the first 28 completed days of life per 1,000 live births in a given year or period	Vital Statistics
4.	Infant mortality	Number of deaths during the first year of life per 1,000 live births in a given year or period	Vital Statistics
5.	Under 5 mortality rate	Number of deaths under five year of life per 1,000 live births in a given year or period	Vital Statistics
6.	Total Fertility Rate	The sum of the age specific fertility rates for each of the five year age groups between 15 and 49 years.	Vital Statistics
7.	Adolescent Fertility Rate	The number of births to women aged 15-19 in a single year per 1,000 women	Vital Statistics

[4] The numerator and demonitor for each indicator will be included in the Operations Manual, including definition of inputs and norms

[5] All verifications are independent surveys. Health facility surveys include revision of medical records and verification of inputs, in agreement with the definitions in the Operations Manual

Table 2b. Results indicators

Indicator[6]	Description	Formula	Measurement Frequency	Source[7]
Contraceptive prevalence rate	Percentage of women of reproductive age (15-49 years) who currently use (or whose partner is using) a modern method[8] of family planning	Number of women of reproductive age (15-49 years) who currently use (or whose partner is using) a modern method[5] of family planning / Number of women of reproductive age (15-49 years) [5] who can get pregnant	Baseline and 3rd Operation	LQAS
Unmet need for family planning	Percentage of women of reproductive age (15-49 years) who were not using/unable to obtain contraception during last year	Number of women of reproductive age (15-49 years) who were not using/unable to obtain contraception during last year / Total number of women of reproductive age	Baseline and 3rd Operation	LQAS
Coverage of family planning counseling	Percentage of female health facility patients of reproductive age that are given family planning counseling according to the norms in the last two years	Number of female health facility patients of reproductive age that are given family planning counseling according to the norms in the last two years /Total number of female health facility patients of reproductive age in the last two years	Baseline and 3rd Operation	Health Facility Surveys
Minimum 4 antenatal care visits	Percentage of women of reproductive age (15-49 years) who attended at least 4 antenatal care visits by skilled attendant for their most recent pregnancy during the last two years[9]	Number of women of reproductive age (15-49 years) who have been pregnant and who report having at least 4 antenatal care by skilled attendant visits for their most recent pregnancy during the last two years / Total number of women aged 15-49 years who have been pregnant in the last two years	Baseline and 3rd Operation	LQAS

[6] The numerator and demonitor for each indicator will be included in the Operations Manual, including definition of inputs and norms.
[7] All verifications are independent surveys. Health facility surveys include revision of medical records and verification of inputs, in agreement with the definitions in the Operations Manual.
[8] Includes the following methods: sterilization, IUD, injections/implants, OCP, barrier methods, emergency contraception, or “other modern method”; excludes the following methods: lactation amenorrhea, rhythm method, withdrawal (coitus interruptus), or “other traditional method.”
[9] At least one visit by skilled attendant.

Indicator[6]	Description	Formula	Measurement Frequency	Source[7]
Antenatal Care before 1st trimester	Percentage of pregnancies for which the woman attended at least one antenatal care visit during the first trimester for the most recent pregnancy in the last two years	Number of pregnant women that attended at least one antenatal care visit during the first trimester for the most recent pregnancy in the last two years / total number of pregnancies	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Skilled attendance at birth in institutional setting	Percentage of women of reproductive age (15-49 years) whose most recent birth in the last two years was attended by a skilled attendant in an institutional setting	Number of women of reproductive age (15-49 years) whose most recent birth in the last two years was attended by a skilled attendant in an institutional setting / Total number of women of reproductive age (15-49 years) who have given birth in the last two years	Baseline , 2nd and 3rd Operations	LQAS and Health Facility Surveys
Postnatal care coverage according to best practices	Percentage of institutional deliveries for which immediate neonatal (within 24 hours) care was provided to the infant according to the norms in the last two years	Number of institutional deliveries for which immediate neonatal (within 24 hours) care was provided to the infant according to the norms in the last two years / Total number of institutional deliveries in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Management of neonatal complications	Percentage of neonatal complications (prematurity, low birth weight, asphyxia and sepsis) managed according to the norms in the last two years	Number of neonatal complications (prematurity, low birth weight, asphyxia and sepsis) managed according to the norms in the last two years / total neonates with complications in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Management of obstetric complications	Percentage of obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) managed according to the norms in the last two years	Number of obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) managed according to the norms in the last two years / total number of obstetric complications in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys

Indicator[6]	Description	Formula	Measurement Frequency	Source[7]
Partograph	Percentage of deliveries for which a partograph was carried out and correctly interpreted according the norms for the most recent delivery in the last two years	Number of deliveries for which a partograph was carried out and correctly interpreted according the norms for the most recent delivery in the last two years / Total number of births in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Active management Of third stage of labor	Percentage of institutional deliveries for which oxytocin was administered immediately following birth as part of Active Management of the Third Stage of Labor (AMTSL) in the last two years for the most recent delivery	Number of institutional deliveries for which oxytocin was administered immediately following birth as part of Active Management of the Third Stage of Labor (AMTSL) in the last two years for the most recent delivery / Number of institutional deliveries in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Use of Cesarean sections	C-sections as proportion of childbirths in the last two years	Number of C-sections that were carried out in the last year / Total number of births in the last year	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Management of malnutrition	Percentage of children 0-23 months with low weight-for-age managed according to norms in the last two years	Number of children 0-23 months with low weight-for-age managed according to norms in the last two years / Total number of children 0-23 months with low weight-for-age registered in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Postnatal care within 7 days of delivery	Percentage of live births for which the women received post-partum care before the first 7 days of birth in the last two years for the most recent pregnancy.	Number of live births for which the women received post-partum care before the first 7 days of birth in the last two years for the most recent pregnancy./ total number of live births in the last two years	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Prevalence of exclusive breastfeeding	Percentage of infants 0–5 months of age who were fed exclusively with breast milk during last day	Number of infants 0–5 months of age who were fed exclusively with breast milk during last day / Total infants 0-5 months	Baseline , 2nd and 3rd Operations	LQAS

Indicator[6]	Description	Formula	Measurement Frequency	Source[7]
Danger signs	Percentage of mothers with a child 0-23 months that can recognize 3 out of 5 signs of danger.	Number of mothers with a 0-23 months that can recognize 3 out of 5 signs of danger / total number of mothers with a child 0-23 months	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Enrollment in child health services	Percentage of newborns enrolled for child health services within seven days of birth in the last two years	Number of newborns enrolled or child health services within seven days of birth in the last two years / total number of live births in the last two years	Baseline , 2nd and 3rd Operations	LQAS
Full vaccination for children for age	Percentage of children 0-59 months identified as having received full vaccinations for age	Number of children (0-59 months) with full vaccination for age/ Total number of children 0-59 months	Baseline , 2nd and 3rd Operations	LQAS
De-worming treatment	Percentage of children (12-59 months) who received two doses* of de-worming treatment in the last year according to facility records	Number of children (12-59 months) who receive two doses of de-worming treatment in the last year / Total number of children 12-59 months	Baseline , 2nd and 3rd Operations	Health Facility Surveys
Early initiation of breastfeeding.	Percentage of children born in the last 24 months who were put to the breast within one hour of birth	Number of children born in the last 24 months who were put to the breast within one hour of birth / Total of children born in the last 24 months	Baseline , 2nd and 3rd Operations	LQAS
ORS treatment	Percentage of diarrhea cases in children 0-59 months that were treated with Oral Rehydration Solution (ORS) and ZINC in the last two weeks	Number of diarrhea cases in children 0-59 months that were treated with Oral Rehydration Solution (ORS) and ZINC in the last two weeks / total number diarrhea cases in children 0-59 months that were treated with Oral Rehydration Solution (ORS) and ZINC in the last two weeks	Baseline , 2nd and 3rd Operations	Health Facility Surveys

Indicator[6]	Description	Formula	Measurement Frequency	Source[7]
Micronutrient powders	Percentage of children aged 6-23 months that consumed 50 sachets of micronutrients in the last 6 months	Number of children aged 6-23 months that consumed 50 sachets of micronutrients in the last 6 months / total number of children aged 6-23 months	Baseline , 2nd and 3rd Operations	LQAS
ORS treatment	Proportion of mothers who gave their children (0-59 months) ORS and zinc supplements during the last episode of diarrhea in the last two weeks	Number of mothers who gave their children (0-59 months) ORS and zinc supplements during the last episode of diarrhea in the last two weeks / Number of mothers who have children 0-59 months and reported a diarrhea episode in the last tw weeks	Baseline , 2nd and 3rd Operations	LQAS

Table 2c. Product indicators

Indicator[10]	Formula	Frequency of measurement	Source[11]
Percent of health facilities that have the necessary inputs for providing emergency obstetric and neonatal care according to the norms	Number of health facilities that have the necessary inputs for providing emergency obstetric and neonatal care according to the norms / Total number of health facilities	1st Operation	Health Facility Surveys
Percent of health facilities that have the necessary inputs for providing pre- and post natal care according to the norms	Number of health facilities that have the necessary inputs for providing pre- and post natal care according to the norms / Total number of health facilities	1st Operation	Health Facility Surveys
Percent of health facilities that have submitted a Quality Improvement Fund (QIF) proposal to the national quality audit team	Number of health facilities that have submitted a QIF proposal to the national quality audit team / Total number of health facilities	1st Operation	Expert Review
Percent of health facilities that have the necessary inputs to provide child health care according to the norms	Number of health facilities that have the necessary inputs to provide child health care / Total number of health facilities	1st Operation	Health Facility Surveys

[10] The numerator and demonitor for each indicator will be included in the Operations Manual, including definition of inputs and norms.

[11] All verifications are independent reviews and surveys. Health facility surveys include review of medical records and verification of inputs, in agreement with the definitions in the Operations Manual.

Indicator[10]	Formula	Frequency of measurement	Source[11]
Percent of health facilities that have implemented Quality of Care job aid tools for reproductive health	Number of health facilities that have implemented Quality of Care job aid tools for reproductive health / Total number of health facilities	1st Operation	Health Facility Surveys
Percent of health facilities that can submit and receive data from the Belize Health Information System (BHIS)	Number of health facilities that have the necessary inputs to can submit and receive data from the BHIS / Total number of health facilities	1st Operation	Health Facility Surveys
Percent of health facilities that have permanent availability of all 5 types of modern family planning methods (injectable, barrier, oral, IUD, permanent)	Number of health facilities that have permanent availability of all 5 types of modern family planning methods (injectable, barrier, oral, IUD, permanent) / Total number of health facilities	1st Operation	Health Facility Surveys
Percent of health facilities that have sexual and reproductive health (SRH) educational materials specifically targeted at adolescents	Number of health facilities that have SRH educational materials specifically targeted at adolescents / Total number of health facilities	1st Operation	Health Facility Surveys
Norms for improving the quality of reproductive and child health and nutrition services and for the establishment of a community platform of services developed, adopted and implemented in health facilities	N/A	1st Operation	Norms approved
Percent of Community Health Workers trained in the community platform	Number of Community Health Workers trained in the community platform / Total number of Community Health Workers	1st Operation	Expert review
Percent of district HECOPAB[12] Officers that are currently monitoring the CHWs	Number of district HECOPAB Officers that are currently monitoring the CHWs / total number of HECOPAB Officers	1st Operation	Expert review
Percent of health facilities with a mechanism in place for carrying out patient satisfaction surveys	Number of health facilities with a mechanism in place for carrying out patient satisfaction surveys / total number of Health facilities	1st Operation	Health Facility Surveys

[12] Health Education and Community Participation Bureau.

2.17 *Sample Size:* In Belize, health facility surveys are performed to measure input indicators and quality indicators.

2.18 To measure coverage indicators, Lot Quality Assurance Sampling (LQAS) will be used to determine whether the population has achieved the targets of the third operation. LQAS requires a sample size of 19 in order to assess each health indicator.

2.19 *Data Collection and Analysis:* As part of the LQAS, women of reproductive age and mothers of children 0-5 will be interviewed to evaluate the coverage of health services and to determine whether targets were met. The main objective of the facility based surveys is to measure the quality of service provision, which includes reviewing medical records and other qualitative assessment techniques.

D) Routine monitoring of the implementation and progress of the operation

2.20 To determine the progress of the operation's executions product, results and impact indicators are routinely monitored using administrative data and national statistics. This activity is performed through three main instruments: (i) Project Execution Plan (PEP), (ii) Dashboard, and (iii) external verification of targets.

2.21 The PEP is the basic management tool, as it is described in the "Guide to use PEP as an integrated management tool." The dashboard is a tool to manage SMI information for timely decision making to improve the performance of the Initiative at a global level and their contents include: (i) Monitoring the project plan and execution, (ii) Monitoring progress, and (iii) Results verification. The dashboard has three levels of information: the regional portfolio of the Initiative, the Coordination Unit and the eight country operations.

2.22 Monitoring the progress of the execution is performed according to the guidelines established in the Monitoring Strategy of the operations of the Salud Mesoamerica Initiative. This monitoring is performed in three key moments: (i) routine monitoring: (ii) internal monthly monitoring; and (iii) Trimestral monitoring.

2.23 *Routine monitoring:* The Project Execution Unit (PEU) and the Team Leader (TL) routinely monitor the overall performance of the project. The objective of this monitoring is to verify and follow the completion of activities in the estableshied timelines and according to the project plan, which have been established in order to meet the targets of the project within the given timeframe. Monitoring gives priority to those activities identified as "milestones," in order to build the critical path towards the achievement of performance indicators. For Belize's operation, the TL and PEU meet weekly to review milestone, identify bottlenecks, risks and update the PEP. Constant communication between the Team Leader and the Execution Unit allows for timely decision making, either to change the line of action or to implement actions to mitigate risks.

2.24 **Monthly internal monitoring:** The Divisin Chief established a monthly meeting with Team Leaders and SMI CU for each operation. The goal of this process is to ensure the monthly monitoring of the operation. The meeting centers in monitoring previous agreements, milestones of the PEP organized by their dropdate trimester, in the early identification of alerts and agreements are reached with regards to corrective measures performed by the three stakeholders, completing the monthly follow-up sheet that is automatically updated in the Initaitve's dashboard, with restricted access to the Bank.

2.25 **Quaterly follow-up:** Durning the course of the operation, 6 quarterly missions take place, ending with the signature of the aide memoire and the submission of a trimester progress report fo the operation that is updated in the Dashboard from the PEU to the TL.

a. *Quarterly comprehensive supervision missions:* The objetive of quarterly comprehensive supervision missions is the technical, fiduciary and management follow-up of the operation. The frequency of the missions will be established in the operations contract. The quaterly supervision mission takes advantage of the actions, decisions and information collected on the routine follow-up and monthly internal monitoring by the Bank to analize the technical, fiduciary and management progress and the bottle necks or risks that could have limmited the achievement of objectives. This follow-up allows for the assessment of progress and decision making to confirm or correct the strategic direction by agreeing eventual corrective measures. The mission is prepared and executed according to the SMI Operations Monitoring Strategy.

b. *Trimester report to the dashboard and aide memoire:* The Contracts include the submission to the Bank of the Trimestrer Report of the Dashboard to perform the monitoring of progress towards the achievement of performance indicators. Jointly with country authorities, monitoring indicators have been selected for trimerster progress (denominated for this purpose also as proxy) related to performance indicators. Since the health information sistems in countris do not collect the same indicators as those in the Performance Tranche, alternative indicators that were available in the information sistems were selected that allowed for indirect measurement of progress (mapping of performance indicators). The indicator selected for monitoring measures factors or conditions that are related to activities and processes that advance towards the achievement of performance indicators, even when they do not represent a direct measuremnt of these.

E) Dissemination of information

2.26 The main instrument for disseminating the data obtained to monitor the implementation of the operation is the SMI Dashboard. Dashboard data will be available for use by the country, the Bank and the Donors Committee. Monitoring indicators made public on the Initiative's website will be agreed upon in collaboration with the MOH.

2.27 In addition, IHME will generate a report on the results of the baseline and follow-up surveys. These reports will be made public on the Initative's website.

2.28 Descriptive and epidemiological analyses will be carried out using data from the LQAS and health facility surveys, which will contribute to peer-reviewed articles in published international journals throughout the duration of the Initiative.

F) Coordination of work plan and budget monitoring

2.29 The responsibility of implementing the monitoring plan rests on the project implementation unit in the MOH, the IDB team, the SMI Coordinating Unit (SMI CU) and IHME. The MOH is responsible for reporting the indicators to monitor the implementation on the dashoards, which will then feed into the PMR to generate semi-annual reports for the IDB.

2.30 All components of the monitoring and evaluation plan, including external surveys to measure performance indicators, will be financed by SMI. Activities related to routine monitoring of the execution and progress of the implementation are performed by the Ministry of Health and are considered as part of the operating cost of the program. The

Initiative has committed additional funds to perform the measurement of performance indicators for disbursement of the performance tranche and general monitoring of the implementation of the Initiative. The total resources allocated for the thirdindividual operation for this purpose are US$100,000.

Table 4. Workplan for the monitoring strategy

	2014				2015				2016				2017				2018				2019				2020					Responsible
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Development of the Dashboards																													*	
Reporting of indicators to the Dashboard																													*	SMI
Collection of data for 1st operation target verification																													*	SMI
Analysis of the data from the facility-based for 1st operation target verification																													*	SMI
Final report for 1st operation target verification																													*	SMI
Collection of data for 2nd operation target verification																													*	SMI
Analysis of the data from the facility-based for 2nd operation target verification																													*	SMI
Final report for 2nd operation target verification																													*	SMI
Collection of data for 3rd operation target verification																													100.000	SMI
Analysis of the data for 3rd operation target verification																													*	SMI
Final report for 3rd operation target verification																													*	SMI
																													100,000	

III. EVALUATION

3.1 There is no impact evaluation planed in Belize. As there is no SMI baseline household survey proposed in Belize, and the sampling frames and sizes have been designed for the MICS and Biomakers Surveys, without an additional probabilistic household survey, an impact evaluation is not possible.

Individual Operation's Performance Framework
First Individual Operation
Indicators for disbursement of the Performance Tranche for the First Individual Operation

No.	Indicador[13]	Unit of measurement	Weight	Baseline	Target	Source of verification[14]
7030	Health facilities that have the necessary inputs for providing emergency obstetric and neonatal care according to the norms	%	1/12	0	75	Health Facility Survey
7020	Health facilities that have the necessary inputs for providing pre- and post natal care according to the norms	%	1/12	2.9	85	Health Facility Survey
7200	Health facilities that have submitted a Quality Improvement Fund (QIF) proposal to the national quality audit team	%	1/12	0 *	75	Health Facility Survey
7010	Health facilities that have the necessary inputs to provide child health care according to the norms	%	1/12	0	85	Health Facility Survey
7410	Health facilities that have implemented Quality of Care job aid tools for reproductive health	%	1/12	0 *	85	Health Facility Survey
7465	Health facilities that can submit and receive data from the Belize Health Information System (BHIS)	%	1/12	0 *	85	Health Facility Survey
7050	Health facilities that have permanent availability of all 5 types of modern family planning methods (injectable, barrier, oral, IUD, permanent) according to the norms	%	1/12	73.7	85	Health Facility Survey
7420	Health facilities that have sexual and reproductive health (SRH) educational materials specifically targeted at adolescents	%	1/12	0 *	85	Health Facility Survey
7430	Norms for improving the quality of reproductive and child health and nutrition services and for the establishment of a community platform of services adopted	Yes/No	1/12	No	Yes	Norm Approved
7440	Community health workers (CHW) trained in the community platform	%	1/12	0 *	85	Health Facility Survey

[13] Specific criteria and formulas for all indicators are described in the Operations Manual.
[14] Performance verifications are independently measured. Health facility surveys include the review of medical records, equipments, medicines and supplies, in agreement with the definitions in the Operations Manual.

No.	Indicador[13]	Unit of measurement	Weight	Baseline	Target	Source of verification[14]
7450	District HECOPAB[15] Officers that are currently monitoring the CHWs	%	1/12	0 *	85	Health Facility Survey
7460	Health facilities with a mechanism in place for carrying out patient satisfaction surveys	%	1/12	0	85	Health Facility Survey

* New intervention: baseline assumed to be 0 %.

[15] Health Education and Community Participation Bureau.

Individual Operation's Performance Framework
Second Individual Operation
Indicators for disbursement of the Performance Tranche for the Second Individual Operation

No.	Indicator[16]	Unit of measurement	Weight	Baseline	Target	Source of verification[17]
4095	Institutional deliveries for which oxytocin was administered immediately following birth as part of Active Management of the Third Stage of Labor (AMTSL) in the last two years for the most recent delivery.	%	1/10	34.1	49.1	Health Facility Survey.
3040	Pregnancies for which the woman attended at least one antenatal care visit during the first trimester for the most recent pregnancy in the last two years.	%	1/10	22.8	29.8	Health Facility Survey.
4103	Institutional deliveries for which immediate (within 24 hours) neonatal care was provided to the infant according to the norms in the last two years.	%	1/10	19.4	39.4	Health Facility Survey.
4070	Neonatal complications (prematurity, low birth weight, asphyxia and sepsis) managed according to norms in the last two years.	%	1/10	7.5	37.5	Health Facility Survey.
4080	Obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) managed according to the norms in the past two years.	%	1/10	2.6	37.6	Health Facility Survey.
4410	Children 0-23 months with growth and development checkups according to the norms	%	1/10	2.7	37.5	Health Facility Survey.
2500	Female health facility patients of reproductive age that receive post-partum contraception in the last year	%	1/10	7	17	Health Facility Survey (of patients).
5135	Diarrhea cases in children 0-59 months presenting in health facilities that were treated with Oral Rehydration Solution (ORS) and zinc during their last visit.	%	1/10	20	80	Health Facility Survey.
4420	Newborns enrolled for child health services within seven days of birth in the last two years.	%	1/10	25.3	35.3	Health Facility Survey.

[16] Specific criteria and formulas for all indicators are described in the Operations Manual.
[17] Performance verifications are independently measured. Health facility surveys include the review of medical records, equipment, medicines and supplies, in agreement with the definitions in the Operations Manual.

No.	Indicator[16]	Unit of measurement	Weight	Baseline	Target	Source of verification[17]
4030	Live births for which the women received post-partum care before the first 7 days of birth in the last two years for the most recent pregnancy.	%	1/10	-	37.8[18]	Health Facility Survey.

[18] Target set as a gold standard.

Individual Operation's Performance Framework
Third Individual Operation
Indicators for disbursement of the Performance Tranche of the Third Individual Operation

No.	Indicator[19]	Unit of measurement	Weight	Baseline	Target [20]	Source of verification[21]
3000	Women in reproductive age (15-49 years) who received preconception care	%	1/10	(1)	20PP	Health Facility Survey
6000	Women in reproductive age (15-49 years) that were screened for cervical cancer and received the results in the last two years	%	1/10	(1)	10PP	LQAS
2020	Women of reproductive age (15-49 years) who were not using/unable to obtain contraception during last year	%	1/10	47.4	42.4	LQAS
3030	Women of reproductive age (15-49) who received 5 antenatal care visits by doctor or nurse according to the best practices in the last two years	%	1/10	(1)	20PP	Health Facility Survey
4080	Obstetric complications (sepsis, hemorrhage, severe pre-eclampsia and eclampsia) handled according to the norms in the last two years	%	1/10	(1)	15PP	Health Facility Survey
4070	Neonatal complications (prematurity, low birth weight, asphyxia and sepsis) handled according to norms in the last two years	%	1/10	(1)	15PP	Health Facility Survey
4050	Postpartum patients evaluated and registered in clinical records, at least every 15 min during the first hour and every 30 min during the second hour and at discharge in the last two years	%	1/10	(1)	20 PP	Health Facility Survey
5020	Children 0-59 months identified as having received full vaccination for age	%	1/10	(1)	10 PP	LQAS

[19] Specific criteria and formulas for all indicators are described in the Operations Manual.
[20] All targets were negotiatied as changes in percentage points with respect to the baseline. The only exception is indicator 7500 for which no baseline could be calculated and a golden standard was established. When the baseline value is available, the values for the baseline and target are presented as percentages. When the baseline value is pending, the target es presented as percentage points.
[21] Performance verifications are independently measured. Health facility surveys include the review of medical records, equipments, medicines and supplies, in agreement with the definitions in the Operations Manual.

No.	Indicator[19]	Unit of measurement	Weight	Baseline	Target [20]	Source of verification[21]
5060	Mothers who gave their children (0-59 months) ORS and zinc supplements during the last episode of diarrhea in the two weeks	%	1/10	5.3	45.3	LQAS
7500	Health facilities that report, access and use quality data for decision-making from the health information and quality management systems	%	1/10	N/A	40	Health Information System / Health Facility Survey

(1) Baseline will be calculated considering the Second Operation follow-up surveys; results are expected to be available on Janaury 20, 2018.
PP: Percentage Points.
LQAS: Population survey using a Lot Quality Assurance Sampling (LQAS) methodology.

Project: Mesoamerican Health Iniciative - Belize III Operation

Period Comprised in this Procurement Plan: From March 2018 to March 2020

Ref. No (WBS)	Ref. No.	Description	Estimated Cost in (US$)	Procurement Method	Review (Ex ante/Ex-Post)	Source of Financing		Pre-qualification (Yes/No)	Estimated Dates				Status (pending, in process awarded, cancelled)	Comments
						IDB	GOB		Publication of Specific Procurement Notice	Bids/RFP Submission Date	Contract Signing	Completion of contract		
GOODS														
1.5.1.2	BZ/MHI3/G/001	Equipment for BHIS	$ 39,105	GOB's Selective Tendering Procedure	N/A	0%	100%	No	Mar-18	Apr-18	Jul-18	Aug-18	Pending	
2.1.2.3.2	BZ/MHI3/G/002	Personal kit for CHW and social actors	$ 24,000	GOB's Selective Tendering Procedure	N/A	0%	100%	No	Mar-18	Mar-18	Jul-18	Aug-18	Pending	
2.1.2	BZ/MHI3/G/003	Family planning method, medicines and other surgical inputs	$ 108,395	GOB's Selective Tendering Procedure	N/A	0%	100%	No	Mar-18	Mar-18	Mar-18	Jul-18	Pending	This activity will be done by the MCH procurement department. Except personnel kit and printing that are separated
		SUB-TOTAL - GOODS	**$ 171,500**											
NON-CONSULTI														
1.1.3.1.1.1	BZ/MHI1/NCS/001	Printing of family planning materials	$ 3,500	GOB's Selective Tendering Procedure	N/A	0%	100%	No	Mar-18	Mar-18	Mar-18	May-18	Pending	
1.4.2.3.1	BZ/MHI1/NCS/002	Printing information on warning signs and the use of ORS and zinc to household	$ 5,000	GOB's Selective Tendering Procedure	N/A	0%	100%	No	Mar-18	Apr-18	Apr-18	Jul-18	Pending	
2.1.2.3.3	BZ/MHI1/NCS/003	Education and information materials for households	$ 30,000	GOB's Selective Tendering Procedure	N/A	0%	100%	No	Mar-18	May-18	May-18	Jul-18	Pending	
2.2.6.1	BZ/MHI1/NCS/004	Performance based incentive 1 (retreat)	$ 22,500	PC	Ex ante	100%	0%	No	Sep-18	Oct-18	Oct-18	Dec-18	Pending	
2.2.6.2	BZ/MHI1/NCS/005	Performance based incentive 2 (retreat)	$ 22,500	PC	Ex ante	100%	0%	No	Sep-19	Oct-19	Oct-19	Dec-19	Pending	
		SUB-TOTAL NON-CONSULTING SERVICES	**$ 83,500**											
CONSULTING SERVICES														
1.1.3.2.1	BZ/SM2/CS/001	Training doctors and nurses on VIA for cervical cancer treatment	$ 14,610	SSS	Ex-ante	100%	0%	No	Apr-18	May-18	May-18	Aug-18	Pending	
3.1.1	BZ/SM2/CS/002	PMU Staff: Project accountant	$ 18,600	N/A	N/A		100%	No	Mar-18	Mar-18	Mar-18	Feb-20	Pending	
3.1.1	BZ/SM2/CS/003	PMU Staff: Procurement manager	$ 12,000	N/A	N/A		100%	No	Mar-18	Mar-18	Mar-18	Feb-20	Pending	
3.3	BZ/SM2/CS/004	Quality improvement manager	$ 41,220	SSS	ex ante	100%	0%	No	Jul-18	Jul-18	Jul-18	Jul-19	Pending	Continuation of service of Armelle Gillet.
3.4	BZ/SM2/CS/005	Quality improvement officer	$ 27,384	IICQ	Ex-ante	100%	0%	No	Jul-18	Jul-18	Jul-18	Jul-19	Pending	
3.5	BZ/SM2/CS/006	Driver	$ 21,786	SSS	Ex-ante	100%	0%	No	Mar-18	Mar-18	Mar-18	Feb-20	Pending	Continuation of service of Palacios.

Ref. No (WBS)	Ref. No.	Description	Estimated Cost in (US$)	Procurement Method	Review (Ex ante/Ex-Post)	Source of Financing		Pre-qualification (Yes/No)	Estimated Dates				Status (pending, in process awarded, cancelled)	Comments
						IDB	GOB		Publication of Specific Procurement Notice	Bids/RFP Submission Date	Contract Signing	Completion of contract		
3.4	BZ/SM2/CS/007	External Audit	$ 10,000	N/A	Ex-ante		100%	si	Sep-19	Oct-19	Nov-19	Apr-20	Pending	
		SUB-TOTAL - CONSULTING SERVICES	**$ 145,600**											
OPERATING COST														
1.1.3.1.4	BZ/HMI/OP/001	BTL (mini lap) campaigns	$ 12,000	N/A	N/a	0%	100%	No	Mar-18	Mar-18	Mar-18	Feb-20	Pending	
1.3.3.2	BZ/HMI/OP/003	8 Collaboratives- sharing best practices	$ 7,000	N/A	N/a	0%	100%	No	Apr-18	Apr-18	Apr-18	Feb-20	Pending	
2.3.3.2	BZ/HMI/OP/004	gas and other transportation cost for the community platform strategy implementation	$ 11,840	N/A	N/a		100%		Mar-18	Mar-18	Mar-18	Mar-20	Pending	
3.2	BZ/HMI/OP/005	Coordination operative costs	$ 58,560	N/A	N/a		100%		Mar-18	Mar-18	Mar-18	Mar-20	Pending	
		SUB-TOTAL - OPERATING COST	**$ 89,400**											
		GRAND TOTAL	**$ 490,000**											

Goods and works: CB: Competitive bidding; PC: Price comparison; DC: Direct contracting.
Consulting firms: CQS: Selection Based on the Consultants' Qualifications; QCBS: Quality and cost-based selection; LCS: Least Cost Selection; FBS: Selection nder a Fixed Budget; SSS: Single Source Selection; QBS: Quality Based selection.
Individual consultants: IICQ: International Individual Consultant Selection Based on Qualifications; SSS: Single Source Selection.
Ex ante/ex post review: In general, depending on the institutional capacity and level of risk associated with the procurement, ex post review is the standard modality. Ex ante review can be specified for critical or complex process.
Technical review: The PTL will use this column to define those procurement he/she considers "critical"or "complex"that require ex ante review of the terms of reference, technical specifications, reports, outputs, or other items.

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