Data Release Information Sheet

**Data Summary**

**Dataset name:** Belize Salud Mesoamérica Initiative Third Follow-Up Household Survey 2022

**Project name:** Salud Mesoamérica Initiative Evaluation

**Date of release:** October 23, 2023

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

IHME serves as the independent evaluation partner for SMI. Surveys were conducted in both households and health facilities in order to assess coverage of health services, barriers to care, and population health outcomes, alongside health system infrastructure and service delivery components. In Belize, baseline (2013), second operation (2017), and third operation (2022) data were collected at households and health facilities in intervention areas. The first operation (2014) data collection took place at health facilities in intervention areas only. Third operation measurements were also conducted in El Salvador, Honduras, and Nicaragua.

The SMI community survey carried out in Belize covers eligible women’s background characteristics, access to health care, fertility preferences, and knowledge and use of contraceptive methods (including barriers to use). Women who have been pregnant in the last two years answer questions about birth history; antenatal, delivery, and postpartum care; breastfeeding; and infant feeding practices. Caretakers of children aged 0-5 years are asked detailed questions for each child under age 5 on topics such as child’s current health status, recent history of illness, immunization, and supplementation history.
Acknowledgements

Contributing organizations:

- Institute for Health Metrics and Evaluation (IHME)
- UNIMER

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- Bill & Melinda Gates Foundation (BMGF)
- Carlos Slim Foundation
- Global Affairs Canada
- Spanish Agency for International Development Cooperation
- Inter-American Development Bank.

File Inventory

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<td>IHME_SMI_HHS_BLZ_2022_LQAS_Y2023M08D17.CSV</td>
<td>Belize community survey</td>
<td>August 17, 2023</td>
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<tr>
<td>IHME_SMI_HHS_BLZ_2022_QUESTIONNAIRE_Y2023M08D17.PDF</td>
<td>Codebook</td>
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<td>IHME_SMI_HHA_BLZ_2022_CODEBOOK_LQAS_Y2023M08D17.CSV</td>
<td>Questionnaire</td>
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<td>IHME_SMI_HHS_BLZ_2022_DATA_RELEASE_INFORMATION_SHEET_Y2023M08D17.PDF</td>
<td>Data Release Information Sheet</td>
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Methodological statement

Data Collection

Data collection for the SMI-Belize third operation measurement was conducted by UNIMER. All surveys were conducted using a computer-assisted personal interview (CAPI). The CAPI was programmed using SurveyCTO and installed onto touchscreen tablets. CAPI supports skip patterns, inter-question answer consistency, and data entry ranges. The aim of introducing CAPI to the field was to reduce survey time by prompting only relevant questions, maintain a logical answering pattern across different questions, decrease data entry errors, and permit rapid data verification.
Surveys were developed by IHME in collaboration with IDB and including input from relevant health authorities of the region.

Data collection occurred between August 2, 2022 and August 29, 2022. In October 2022, some households already visited in the earlier community survey were re-visited to capture more data on HPV screenings as part of a novel evaluation of cervical cancer screening interventions in Belize.

Data collection teams, consisting of one supervisor and three to four interviewers were deployed to conduct the SMI community survey. Supervisors were responsible for reviewing questionnaires for quality and consistency prior to departing each community.

The research protocol was approved by the Internal Review Board of the University of Washington. All data collection instruments and procedures were approved by the Ministry of Health of Belize.

**Sampling/Population**

The SMI-Belize community survey follows a Lot Quality Assurance Sampling (LQAS) methodology in order to balance the costs of data collection with the need to provide estimates of the coverage of key health interventions and indicators for an aggregate geographic area that approximates the lowest wealth quintile of the population of Belize.

The primary administrative unit in Belize is the district. Belize has six districts. IDB identified three of these districts (Cayo, Corozal, and Orange Walk) for the SMI-Belize initiative on the basis of their high concentration of residents in the country’s lowest wealth quintile. From the three districts selected for the study, we selected a two-stage sample in order to reach a target minimum sample size of women.

The SMI-Belize community survey was conducted in a set of 16 communities where the health facilities selected for the SMI-Belize Health Facility Survey were located, in order to maximize potential of matching individual interview data about health services received with data from the facility attended for care. At the third follow-up, four communities with a hospital or health facility that provides basic- or complete-level Essential Obstetric and Neonatal Care were first selected with certainty and the remaining 12 communities were randomly selected among a list of communities with ambulatory-level health facilities. At the second and third operations, selection of these 12 communities was stratified by district, with four facilities selected per district.

For efficiency, we chose to complete half the total interviews with women approached in markets and town centers, and half with women visited in their homes. This allows for the capture of information from documents stored in the home like the immunization card. Therefore, the 16 selected communities were randomly assigned to receive either the household survey or the marketplace survey. We interviewed between 29 and 31 women per community. In communities selected for the household sample, households were identified for the interview using field randomization techniques. In the case that more than one eligible woman resided in a selected household, one was selected at random to participate. In communities selected for the marketplace sample, interviewers simply approached women in public places, like markets, where eligible women were likely to be found, and checked for age eligibility before beginning the interview. In the third operation measurement, one rural community selected for the market survey did not have a large community space where a full market quota of
interviews could be obtained. Interviews in this community were subsequently collected at households instead of the marketplace.

Following data collection, we compared estimates for key indicators for the sub-sample of randomly selected women interviewed in their households with estimates for the sub-sample of women approached in public places. Because results did not differ substantially between these samples, estimates from these data are assumed by the investigators to be representative of the sampled population of the aggregate study area.

**Weighting**

LQAS methodology is not designed to be representative for disaggregation to lower administrative levels, and sampling weights are not derived given that the probability of selection cannot be calculated at the individual level. The investigators do not account for clustering in analysis of these data, since the sample of 16 communities makes up the large majority of the 22 total communities identified as the study area.

**Imputed Variables and/or Constructed Variables – What was Imputed/Constructed and How**

There are no imputed variables in the data. The constructed variables are labeled in the dictionary as “IHME Generated”.

There are ten major types of questions found in the data dictionary: select_multiple_item, select_multiple, select_one, calculate, calculate_here, integer, decimal, survey_weight, date and text. These question types are determined by the survey software program and can be grouped into the following categories:

- **Check all that apply**: The check all that apply questions are labeled as either select_multiple_item or select_multiple_summary. For select multiple questions, the select_multiple_summary represents the question as it appeared in the survey instrument, with all the possible responses as values. On the backend, the survey software generates a variable for each possible choice, with possible values 1 for selected and 0 for not selected. These system-generated variables are labeled select_multiple_item.
- **Single response option**: The single response options are labeled select_one.
- **Text response**: The text response is labeled text.
- **Calculated or pre-populated variables**: Any variable that is created by the survey software system, such as time it takes to complete the survey, is labeled as either calculate or calculate_here. For the purposes of this study, no birth dates or identifiable information is collected, but some internal survey calculations were done based on the date of birth to determine age in years. Other examples of pre-populated variables include geographic information piped into the survey from external census data.
- **Numeric response**: Numeric responses are labeled as either integer or decimal.
- **Survey weights**: The survey weights that were calculated for use in the construction of weighted estimates are labeled as survey_weight. These variables were created by IHME during analysis and were not present in the survey.
• **Date response:** Some date variables are labeled as date and are usually in the form YYYY/MM/DD unless indicated otherwise.

**Known Data Quality Issues**

• The data dictionaries contain the most accurate list of variables asked in the survey. The PDF surveys produced do not reflect questions that were hidden from participants and interviewers after the initial survey was published for testing and piloting purposes.

**Codebooks**

Variable names, labels, and value coding can be found in the following files:

IHME_SMI_HHA_BLZ_2022_CODEBOOK_LQAS_Y2023M08D17.CSV – This codebook contains variable names pertaining to the community survey

**Public Use Dataset Notes**

This is a public use dataset. The data have been de-identified. Variables determined to contain identifiable private information, or potentially identifiable private information, for health facilities, health workers, and/or other individuals have been removed in accordance with IHME’s microdata release protocol. The protocol’s determination for variables that constitute identifiable private information is based primarily on HIPAA’S De-identification Standard.

**Additional Information**

The data dictionaries contain the most accurate list of variables asked in the survey. The PDF surveys produced do not reflect questions that were hidden from participants and interviewers after the initial survey was published for testing and piloting purposes.

No personally identifying information was collected for this study, however, this data was stripped of comments and information on who conducted the interview. Some variables in the dataset do not contain data, such as date of birth, because this information was not stored on the survey or sent to IHME. The date of birth was entered into the survey and an internal calculation was done to provide age.

Diacritics have been removed from the datasets and data dictionaries for Spanish-language survey content.

**Terms and Conditions**

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**Contact Information**

To request further information about the Salud Mesoamérica Initiative (SMI), please contact IHME:

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These files may be updated periodically, so we appreciate hearing feedback or additional information about how these data are being used.