Data Summary

Dataset name: Belize Salud Mesoamérica Initiative Second Follow-Up Household Survey 2017

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) and second operation (2017) data were collected at health facilities and from community interviews with women of reproductive age (15-49 years) in intervention areas. The first operation (2014) data collection took place at health facilities only. Second operation measurements were also conducted in El Salvador, Guatemala, Honduras, Nicaragua, Costa Rica, Panama, and the State of Chiapas, Mexico. Specific to Costa Rica, school-based questionnaires were administered in order to assess indicators related to sexual and reproductive health and the prevention of pregnancy among teenagers.

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
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**File Inventory**

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<thead>
<tr>
<th>File Name</th>
<th>Description</th>
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<th>Data structure</th>
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<tbody>
<tr>
<td>IHME_SMI_BLZ_HHS_2017_LQAS_Y2023M08D17.CSV</td>
<td>BLZ community survey</td>
<td>August 17, 2023</td>
<td>Each row represents one woman</td>
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<tr>
<td>IHME_SMI_BLZ_HHS_2017_CODEBOOK_LQAS_Y2023M08D17.XLSX</td>
<td>Codebook</td>
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<tr>
<td>IHME_SMI_BLZ_HHS_2017_QUESTIONNAIRE_Y2023M08D17.PDF</td>
<td>Questionnaire</td>
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<tr>
<td>IHME_SMI_BLZ_HHS_2017_DATA_RELEASE_INFORMATION_SHEET_Y2023M08D17.DOCX</td>
<td>Data Release Information Sheet</td>
<td>August 17, 2023</td>
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**Methodological statement**

**Data Collection**

Data collection for the SMI-Belize Second Operation Community Survey was conducted by UNIMER. All surveys were conducted using a computer-assisted personal interview (CAPI). The CAPI was programmed using DatStat Illume and installed onto computer netbooks. 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 September 16, 2017 and December 15, 2017. 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 second 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 23 and 27 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 second follow-up, a few communities were selected for the market survey, but did not have a large community space where a full market sample could be obtained in one day. Due to this, at the second follow-up there were 6 communities where the survey took place in a market and 10 communities where the survey took place in households.

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 20 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.

There are nine major types of questions found in the data dictionary: calculated, checkAllItem, checkAllSummary, comment, hidden, poplist, preload, radioGroup, 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 checkAllItem or checkAllSummary
- **Single response option**: The single response options are labeled as either poplist, preload, or radioGroup. These are defined by the type of table that was used in the DatStat survey.
- **Text response**: The text response is labeled as either text or comment

**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 calculated or hidden. For the purposes of this study, no birth dates or identifiable information is collected, but internal survey calculations were done based on the date of birth to determine age in years.
Known Data Quality Issues

- The data dictionaries contain the most accurate list of variables asked 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_BLZ_HHS_2017_CODEBOOK_LQAS_Y2023M08D17.XLSX – 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.

Additional Information

No personally identifiable 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.

Terms and Conditions

http://www.healthdata.org/about/terms-and-conditions

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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.