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Healthy, Wealthy and Wise: How Microfinance Institutions Can Track the Health of Clients

Health Outcome Performance Indicators (HOPI)
Project Report

May 2015

freedom
from Hunger



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This pilot test of indicators, while a simple exercise, would not have been possible without the input and participation of many people. First of all, we are grateful to Johnson & Johnson for their support of this project as it has provided us with a platform on which to engage multiple stakeholders in developing the health outcome performance indicators. These stakeholders were involved in providing input into the types of indicators to be included, the criteria with which we evaluated the possible success of the indicators, and input into the interpretation of the data. Many thanks to my colleagues at the following organizations:

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—Bobbi Gray, Research Director, Freedom from Hunger, May 2015



For over six decades, Freedom from Hunger has brought innovative and self-help solutions to the fight against chronic hunger and poverty. Freedom from Hunger develops and disseminates innovations that increase food security and improve health and nutrition of the poor. The organization is recognized for successful initiatives that combine financial services and health to improve health knowledge and access to health care and use of health services and products. Freedom from Hunger conducts extensive research and evaluation and has a growing a body of knowledge and evidence demonstrating the success of the cross-sectoral integration of health and financial services for the world's poor.

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Executive Summary

For microfinance institutions (MFIs) with social missions, understanding changes in client well-being has become more important as MFIs are held to task to demonstrate both outreach to the poor and improvements in their lives. Because the majority of clients served by MFIs are women, health outcomes are of particular concern since women primarily take charge of their family's health. For this reason, some MFIs directly provide or link their clients to health services and therefore have a particular interest in tracking client health outcomes over time. Others who do not provide health services see health as a contributing factor to the overall performance of the client (i.e., prompt loan repayment, increased savings), which can have a direct impact on the overall financial portfolio of the MFI. They believe that providing households with financial services to improve their livelihoods and smooth their income should also result in clients improving their health outcomes. In short, a healthy person with a healthy family is a strong client, which can make for a strong institution.

In order to know whether changes are occurring along an MFI's articulated theory of change, it is necessary to establish meaningful indicators, data-collection processes and tools that provide actionable data to an institution's management. With an educational grant from Johnson & Johnson, Freedom from Hunger and the Microcredit Summit Campaign, through their strategic alliance, set out to define and test health indicators that practitioners in the microfinance sector could use for performance management purposes. This paper has been written with microfinance practitioners in mind as well as other stakeholders, such as technical assistance providers, donors, social investors and health practitioners interested in monitoring and evaluating health outcomes of MFI clients. This paper has three primary goals:

- Share experiences in selecting and pilot-testing a minimal set of health indicators among four MFIs.
- Help MFIs choose among a set of tested indicators for monitoring client health outcomes over time.
- Summarize key recommendations for developing "standardized" client outcome monitoring indicators.

A multi-stakeholder, collaborative process was used to develop a list of possible indicators and criteria on which to evaluate the strength of each individual indicator. Three main criteria for selecting the indicators were utilized. Indicators needed to be feasible (MFIs could measure and collect data on the indicator), usable (could inform decision making of the MFI to help improve services) and reliable (could be benchmarked and be a consistent measure of the behavior or status of the client). Six main indicator dimensions were tested: poverty measurement; food security and nutrition; preventive health care; curative health care; water and sanitation; and attitudes. Various indicators were tested under each domain and varied by context. Four MFIs across India, Peru and the Philippines participated in the field-testing of the indicators. Each individual health indicator was compared to poverty status and food security status using statistical analysis and compared to available national benchmarks. Food security, while a health indicator in its own right, is also used here as a proxy for poverty given its connection to a household's ability to pay for food.

The results from the four MFIs highlighted the added value of health indicators when combined with poverty measurement in helping MFIs understand client well-being. While collecting the data was fairly simple, the bigger test will come from an MFI's ability to analyze and interpret the data so that action can be taken. Summaries of key findings, including highlights from both client outcomes and experiences with collecting the data for each of the survey categories, are synthesized below:

1. **Poverty:** In all four MFIs, extreme poverty levels established by the USAID Extreme Poverty Line, which measures the median number of people living below a country's established national poverty line, were below 30 percent. Yet in India and the Philippines, most clients were estimated to live below the international

\$2.50 USD per day poverty line at 2005 purchase-power parity. In Peru, very few clients fell under any of the chosen poverty lines assessed in this pilot. Which poverty lines chosen by the MFI to monitor obviously carry important implications, depending on government regulations, donor restrictions, etc.

2. **Food Security and Nutrition:** Food insecurity levels ranged between 30 and 70 percent across the four partners. In most contexts, the food security measure was useful to detect vulnerability that might not be fully captured by such poverty measurements as the Progress out of Poverty Index® (PPI®).¹ For example, while very few clients in Peru fell under any of the poverty lines, 40 percent of them scored as food insecure. However, food security data was found to be difficult to benchmark at the national level. Also, assessments using this measure need to occur at the same time each year for direct comparability.
3. **Preventive Health Care:** Summarizing key findings from the preventive health care questions is difficult given the variability of the types of questions asked across the four MFIs. The indicators in this dimension will also be difficult to standardize across multiple contexts and presents the greatest challenges with respect to finding the right questions for the context; however, as a dimension it is important because it could be predictive of future health outcomes. Questions relevant to the context, such as those pulled from existing national health surveys, are the most promising as they can include indicators from those seeking general medical checkups to specific diagnostic or health exams of interest within the country or region, or of interest to the MFI.
4. **Curative Health Care:** Questions tested here were related to whether clients delayed seeking medical treatment due to cost. In some contexts, up to 60 percent of clients had forgone seeking treatment due to cost. Questions related to curative care hold much promise for future surveys in health because of their broad applicability.
5. **Water and Sanitation:** Whether clients treated their water was the one indicator most frequently associated to poverty levels, which might be useful for MFIs to consider; however, without understanding drinking-water sources, this indicator can be confusing and should not be used without assessing household drinking-water sources.
6. **Attitudes:** The attitude questions assessed a client's perception of her ability to cover future health care expenses or to receive adequate health care. The results in Peru and the Philippines showed that clients were not very confident about their ability to cover future health costs or to receive adequate medical care. Adjustments to the questions tested will be necessary for future assessments and additional indicator alternatives should be further explored in this area as it holds much promise.

While not tested during this particular pilot, questions on domestic violence and mental health (such as depression), particularly those indicators associated with the poverty that might impact the capacity of families to become more self-sufficient, are strong candidates for inclusion in future assessments. While questions related to child and maternal health were tested under the preventive health care indicators in India, further exploration will be necessary to find stronger indicators than the ones tested, given their importance to the Millennium Development Goals and the post-2015 Sustainable Development Goals.

Ultimately, each indicator must make an important contribution to understanding overall client well-being because client monitoring must be cost-effective for MFIs as for any institution. The process for choosing the right indicators does not need to be complicated; however, each indicator must provide value, be worth the cost of tracking it, and provide information that helps an institution monitor and manage its performance so that decision-making opportunities are clear. A few additional considerations and recommendations that MFIs and others might consider when developing survey tools to measure client outcomes include the following:

¹ For more information, please see *Progress out of Poverty* at <http://www.progressoutofpoverty.org>.

1. **Standardization where possible:** While an attempt has been made to provide specific indicators for each dimension, such as food security, preventative health care, curative health care, etc., it may be better to standardize the dimensions (and not the specific indicators) since context, type of organization, motivations and poverty levels of clients are important factors that influence which indicators are most relevant. Further testing and use of indicators will ultimately determine whether and where standardization is possible.
2. **Careful interpretation of results:** Theories of change established by an MFI need to be built on the clear understanding of their context to ensure that the right decisions are being made when interpreting and using the data. The issue raised about water treatment (without understanding drinking-water sources) is a prime example of challenges that are anticipated when tracking some indicators over time. While it was theorized that water-treatment efforts should improve over time, regardless of country, local-level efforts either to improve water sources or the fact that households simply might prefer to drink bottled water were not taken into account. Lack of water treatment cannot in all cases be considered a negative outcome and could in fact be a positive outcome if water treatment is no longer needed due to basic water utilities providing people with safe drinking water.
3. **Baseline values are very important to establish:** While it would have been valuable to restrict data-collection to only incoming clients for this pilot, the inclusion of mature clients in the sampling frames presented important challenges for further consideration. It was found to be quite difficult to interpret the data, even when comparing client outcomes to national averages, without understanding clients' starting points. While tracking changes in representative samples of clients over time is considered an alternative solution, such that mature and incoming clients make up the sample, this approach requires much more analysis to support data interpretation. While population-based studies track representative cross-sections of the population over time, MFIs that have clients moving in and out of their institution will find it difficult to make meaning from representative cross-sections of clients without more intensive data analysis. Therefore, for MFIs with simple data analysis requirements, it would be useful to establish a baseline with a cohort of incoming clients.
4. **Value of indicators with already high levels of performance at baseline:** If baseline levels for any indicator already have very high performance, it might not be as useful to track as those with low performance. An MFI should ask whether an indicator that already shows high levels of performance at baseline will provide them actionable data over time. Since an MFI will not know whether there are initial high levels of performance, an MFI could consider developing a baseline survey with all potential indicators of interest and then once the baseline is completed, choose a subset of indicators worthy of tracking over time. The baseline itself provides important information on client health that can be used as market research or for product development.
5. **Value of statistical analysis—comparing health indicators to poverty and/or food security indicators:** Statistical comparisons, where the health outcomes were compared and contrasted by poverty and food security levels of clients, were most useful in helping refine the theories of change for each organization. For example, could an MFI confidently predict that the longer a client stays in the program, the more likely she would be to invest in and drink safe water? Would the assumption hold that as clients become less poor, they would be more likely to report seeking medical treatment when needed? Associations of the health indicators with poverty did not necessarily help us determine whether one indicator provided more valuable information than another because in some cases, one can argue that if an indicator is measuring something very different from household poverty status, then this is more valuable than an indicator that should improve as poverty levels improve. This suggests that having a mix of indicators that serve both purposes—some that track with poverty and some that do not, as long as they provide other helpful and meaningful information—would be a useful combination.
6. **Which clients to track and for what time frame:** For this pilot, only one round of data-collection exists. Some institutions choose to collect poverty data every year and may find that tracking health indicators every

year makes sense. Expected rates of client attrition and frequency of data-collection also influence which indicators will be the most useful to include. It might be useful to connect client outcome measurement to strategic planning cycles to be the most meaningful when thinking about strategy for the future. This provides the opportunity to track one cohort of client for a set period of time, make decisions about future strategy, consider improvements, and then begin anew. The choice of who will be interviewed and for how long will determine which indicators are going to provide the most useful information.

7. Tracking changes in client outcomes requires patience: While the destination is clear—reducing poverty, improving health and well-being—the journey to understanding whether that is occurring and improving over time may not be as clear-cut as desired. Monitoring changes in client well-being over time needs as much patience as changes in poverty itself requires. This process is going to need to be iterative until more and more data are collected and shared within the industry.

This report attempts to share some early findings that might be useful for efforts in standardizing or simplifying the decision-making process for choosing health indicators to track over time. This experience has also shown that choosing the best health outcome performance indicators (HOPIs) is not a simple task, but it is possible. Even tracking a few indicators could create real value in helping MFIs understand whether clients' health status is improving—with or without health services—and even in unpredictable ways.

Part I: Introduction to Health Outcome Performance Indicators



Introduction

Why health matters for microfinance practitioners

Significant progress towards the Millennium Development Goals (MDGs) has been made globally, reducing extreme poverty and hunger, child and maternal mortality, the burden of HIV/AIDS and malaria and increasing access to water and sanitation. However, progress has been uneven. One billion people still live in extreme poverty with associated health risks, including avoidable morbidity and mortality, as well as persistent undernutrition and malnutrition (WHO 2013). Poor health and malnutrition remain both symptoms and causes of poverty.

Economic-strengthening efforts have made tremendous inroads within poor and isolated communities over the past few decades. Microfinance institutions (MFIs)² in their various forms currently reach hundreds of millions of poor people, 83 percent of whom are women (Reed 2014), with safe places to save, appropriate loan sizes and terms, increasingly more efficient and convenient access via mobile phones, complementary business and financial training, and valuable risk protection. Yet, microfinance clients and institutions alike cite health as a major barrier to overcoming poverty. MFIs report that ill health is a major contributor to client loan delinquency and negatively affects the capacity to save and ability to weather financial shocks. Freedom from Hunger has found that 11 to 48 percent of female microfinance clients have used enterprise loans for health expenses (Reinsch 2011) and that health is one of the top contributing factors for clients dropping out of village banking programs (Bardsley, Gray, Gash 2015 *forthcoming*).

Microfinance alone may not be enough for improving health outcomes. While health is a top reason for clients dropping out of microfinance programs, Gertler et al. have also shown that in Indonesia, access to microfinance alone helps families deal with adverse health shocks (2001). Literature reviewed by Dupas (2011) suggests that improving access to credit and savings increases a household's ability to invest in potentially health-enhancing products that improve health behaviors, particularly preventive health care behaviors such as purchasing insecticide-treated mosquito nets. A study conducted by Dupas and Robinson (2013) in Kenya found that providing households with simple informal savings technologies could also increase investment in preventive health and reduce vulnerability to health shocks. However, six randomized control trials (RCTS, Banerjee 2014) recently conducted on microcredit have shown stagnant health outcomes, as measured by child morbidity, household health expenses and the prevalence of severe illnesses experienced. Health microinsurance, on the other hand, has been shown to provide clients with access to better health care, lower out-of-pocket expenses, less reliance on "burdensome" financing strategies, improved peace of mind, and the promotion of preventative measures (Dalal

Primary audience for this paper

This paper has been written with microfinance practitioners in mind as well as other stakeholders, such as technical assistance providers, donors, social investors and health practitioners interested in the monitoring and evaluation of health outcomes of MFI clients.

Goals of this paper

- Share experiences in selecting and pilot-testing a minimal set of health indicators among four MFIs
- Help MFIs choose among a set of tested indicators for monitoring client health outcomes over time
- Summarize key recommendations for developing "standardized" client outcome monitoring indicators

² We have opted to use the term "microfinance and MFIs (microfinance institutions)" as a broadly inclusive term to refer to the sector and practice also known as "inclusive finance," "financial services for the poor" and "financial access," among others. We view microfinance as encompassing financial services provided to people (especially poor women) via banks, MFIs, self-help groups, savings groups and supporting institutions.

et al. 2014, Holtz et al. 2014). The use of various financial services may play very different roles in improving health outcomes. Therefore, MFIs that do not provide health services can also see health as a contributing factor to overall client performance, which can in turn directly impact the overall portfolio of the MFI, depending on the financial services provided. In short, a healthy person with a healthy family is a strong client, which can make for a strong institution.

Microfinance combined with health services has a growing evidence-base showing effectiveness in improving health outcomes. Because the majority of clients served by MFIs are women, health outcomes are of particular concern since women primarily take charge of their family’s health (Abozar 2009). For this reason, some MFIs provide some type of health service or link their clients to existing health services. Results from a wide range of studies, methods and contexts indicate positive impacts on client health knowledge, behaviors and access to health services following participation in integrated health and microfinance programs (Leatherman et al. 2011, Metcalfe 2012, Isangula 2012). Integrated microfinance, health education and promotion activities have resulted in reduced HIV/AIDS risk (Pronyk et al. 2008, Spielberg 2010, Kim et al. 2008, 2009) and domestic violence (Pronyk et al. 2008, Kim et al. 2008, 2009); improved malaria knowledge and prevention behaviors (De La Cruz et al. 2009, Final 2013); improved breastfeeding behaviors (Flax et al. 2014); improved birth outcomes and decreased maternal depression (Tripathy et al. 2010); improved household food security (Final 2013); improved health knowledge related to treatment-seeking behaviors for childhood illnesses (Hamad et al. 2011) and improved child nutritional outcomes such as improved height-for-age, weight-for-age and body-mass-index for age (Marquis 2015). Research conducted by Freedom from Hunger has also shown that there is a strong business case for MFIs to provide health services due to their low marginal cost (Metcalfe 2014) and positive impacts.

Figure 1 below, supported from the literature summarized above, demonstrates the various pathways—or theories of change—that organizations can use to improve client health as well as monitor and measure changes in client health outcomes.

Figure 1. Multiple Roads to Improving Client Health



Why measuring and monitoring health indicators matter for microfinance practitioners

For MFIs with social missions, understanding changes in client well-being has increasingly become more important as MFIs are increasingly held to task to demonstrate both outreach to the poor and improvements in their lives. Efforts of the Social Performance Task Force, the SMART Campaign and Truelift, among many others, have garnered this industry energy by developing frameworks for measuring institutional performance as well as changes in client outcomes. The increasing use of the Progress out of Poverty Index (PPI) and other poverty measurement tools has resulted in MFIs developing systems for collecting, analyzing and using client outcome data to improve their performance. While poverty measurement alone is a complex effort and often includes various measures associated with income and asset poverty, it only provides one lens on client well-being. Understanding health outcomes, as they relate to organizational missions and theories of change, is an additional useful and dynamic dimension for gaining a greater understanding of client well-being.

In addition, for MFIs that integrate health programs, linking their interventions with client outcome data is even more imperative as it provides them data with which to make decisions regarding the success of their products and services and an opportunity to link their work more directly to other local or global health initiatives. FHI 360 studied the evidence on integrated health programs, which included microfinance and economic strengthening as one integrated approach (Petruney 2014). Their study found that while some integrated health approaches can have positive impact (the integration of microfinance and health as one), there is generally a lack of convincing evidence on integrated programs in general. They recommend not only greater efforts and resources for evaluating the impact of these approaches, but also more efforts to developing the right indicators. Standardized indicators used for evaluation in each sector may be inefficient given multi-sectoral interventions are complex and their causal pathways even more so. A relevant example for this need to develop the right indicators relates to the lack of evidence of transformative effects from the use of microcredit alone, per six RCTs mentioned above. These rigorous studies found that household access to microcredit alone led to no transformative effects, particularly in relation to health; however, these studies also relied on child morbidity rates and household spending on health as key outcomes to measure the impact of household access to and use of microcredit. On the one hand, one could argue that these were the right indicators because they represent important health outcomes; on the other hand, measuring change in child morbidity rates during a short one- to three-month window may not be the most relevant and useful indicator to use to detect impact for MFIs, and it is not clear whether seasonality issues were taken into account. Changes in household spending on health may also not reveal important impacts if the local health system is not easily accessible or a desirable place from which to seek health care or if people tend to rely on traditional medicine. Yet, it is also important to note that until more information exists from MFIs collecting data on health, it is unclear which indicators will likely be the most useful for understanding impact (through use of evaluations) and understanding changes in client well-being over time (through use of impact monitoring processes).

With these considerations in mind, Freedom from Hunger and the Microcredit Summit Campaign set out to define and test health indicators that practitioners in the microfinance sector could use for the latter purpose—for impact monitoring or performance management. While indicators could also be useful for establishing causality for improved health if used in randomized control trials and other rigorous research methods, the primary goal of the Health Outcome Performance Indicator (HOPI) project was to provide monitoring indicators that institutions could track over time along with poverty and other client outcome data. It is anticipated that HOPIs will therefore serve three purposes: 1) provide MFIs with client outcome data that supports their ability to make decisions to improve their products and services, 2) facilitate more communication between the microfinance and health sectors regarding the health status of their shared populations, and 3) fill the evidence gap and contribute to the development of indicators that can be shared across the microfinance and health sectors.

Background on the Health Outcome Performance Indicators Project

Development of the Health Outcome Performance Indicators

In 2006, Freedom from Hunger received a grant from the Bill & Melinda Gates Foundation to test the integration of health services into existing microfinance programs with five MFIs. This initial funding also gave Freedom from Hunger the opportunity to work with these MFIs to evaluate their programs. Subsequent funding from Oikocredit in Latin America and Johnson & Johnson in India and the Philippines has provided and is providing the opportunity to expand the offer of integrated health and microfinance service packages and to refine the monitoring and evaluation tools that MFIs could use to measure and track the progress of their integrated services.

In partnership with Johnson & Johnson, Freedom from Hunger and Microcredit Summit Campaign formed a strategic alliance in 2010 to further expand integrated health products and services in India. An additional educational grant from Johnson & Johnson in 2014 supported the development of a refined list of health indicators that could serve the broader microfinance sector in their monitoring of client health outcomes. The goal of the HOPI project was to provide MFIs, those with and without health programs, the opportunity to build upon poverty measurement efforts with health performance indicators, therefore expanding their understanding of client well-being. To this end, Freedom from Hunger worked from refined lists of indicators that were commonly used across program evaluations that assessed the effectiveness of integrated health and microfinance programs in India, Latin America, the Philippines and West Africa. Various stakeholders, listed in the Acknowledgements section, were engaged to identify indicators and criteria to assess their strengths. These stakeholders represented microfinance practitioners, donors, social investors, health practitioners, academics and organizations and individuals who had experience with developing similar types of standardized indicators.

Three main criteria were ultimately used to determine the strength of each indicator:

- **Feasibility:** Can MFIs collect and analyze the data (without relying on external resources, both financial and human)?
- **Usability:** Can the data collected be used in the short term to assist MFI decision making to improve services over time for clients?
- **Reliability:** Can the data as collected provide a consistent measure of the behavior or status of the client and can this reliability be strengthened by available benchmarks?

Under each of these three main criteria are sub-criteria for specific measures of feasibility, usability and reliability. In total, there are eight criteria as defined below:

Table I. HOPI Criteria

Criteria		Definition
Feasibility	Is measurable by an MFI	MFI's need to be able to collect and analyze the data to address the indicator and the resulting questions need to be ones for which MFI's can actually collect and analyze. For example, the indicator chosen would not require the MFI to request data from a source other than the client, such as clinic data, and would not require outside researchers to make meaning of the data.
	Can be reported in client survey	MFI's can gather the data through loan or other financial service documentation already in existence or through periodic surveys conducted by the MFI. The goal would be to attach the HOPI to a poverty assessment (PPI, Poverty Assessment Tool [PAT], etc.).
Usability	Can change in the short term	Many health indicators, such as mortality and morbidity rates, require years to any meaningful change. Indicators for this project should feasibly be able to change in a short period (1–3 years).
	Addresses relevant measures for MFI's	The indicators should be such that they respond to the general capability of an MFI to influence the health outcome. The indicators should address improved knowledge, attitudes or health behaviors that are aligned most with the MFI's theory of change.
	Must not be dependent on a specific intervention to change outcomes	Because some MFI's might see health as a general “well-being” indicator, the goal for the HOPI's was to provide a short set of “generic” health indicators that could provide meaningful health outcome data without relying on the MFI providing a health program. Some MFI's do provide specific health interventions, but the goal of the HOPI's was also to ensure that the indicators chosen could have broad applicability across the microfinance sector.
	Is applicable for both women and men	While gender neutrality is not relevant for all MFI's, as some MFI's work only with women, the short set of indicators should be relevant for men and women alike.
Reliability	Can be benchmarked to other data (MDGs, regional data, etc.)	Having valid benchmarks would strengthen the usability of the data and assist in decision-making.
	Provides consistent measures	The answers provided should be trusted by the MFI as providing dependable results. The data-collection method and the way respondents answer should be consistent over time.

After an initial draft of indicators was developed through numerous consultations, the indicator was evaluated on its own merit using the criteria above. An analysis matrix is provided in Appendix I demonstrating the initial assessment. Not shown in this table is an indication of the likelihood that an indicator would be a strong candidate for inclusion in the survey for pilot testing. This was not a criterion, per se, but was a final rating that classified whether the indicator was highly likely, somewhat likely or not likely to be included in the survey. This is covered further in Table 3 later in this document.

From the initial assessment, some indicators were immediately found to meet very few of the criteria while others met some, but not all, criteria. Those that met the largest number of criteria were selected for inclusion in the pilot survey tools. Given that the initial funding was targeted for programs in India, indicators were also immediately adapted to this context. The final set of indicators included those that fell under the following indicator dimensions: poverty measurement,³ food security and nutrition, water and sanitation, preventive health care, curative health care, and attitudes. It was found, in subsequent adaptations made for Peru and the Philippines, that although these dimensions remained relevant, some of the individual indicators that fell under these dimensions changed drastically with complete substitutions or required some changes, such as altering terminology to ensure key indicators could be interpreted correctly. The draft survey used for India is provided in Appendix 2.

Piloting the Health Outcome Performance Indicators

Four MFIs pilot-tested the HOPIs: Equitas and Evangelical Social Action Forum (ESAF) Microfinance in India, the Center for Agriculture and Rural Development (CARD) in the Philippines and the Adventist Development and Relief Agency (ADRA) in Peru. The survey instrument was designed first for India and both Equitas and ESAF implemented it. The completed instrument from India was adapted for use in the Philippines, and then both instruments were used to adapt measures for Peru.

Each institution worked with Freedom from Hunger and the Microcredit Summit Campaign to finalize the sample size and location where the survey would be pilot-tested and then independently implemented their respective survey either with their own staff or, in the case of ADRA, with a consultant. Table 2 presents the number of clients interviewed at each partner location and the institution's estimated number of clients reached through their microfinance services.

Table 2. MFIs Participating in the Pilot

MFI	Country	No. of clients being served by MFI	Sample size
ESAF	India	450,000	700
Equitas	India	1,344,361	551*
CARD	Philippines	1,828,052	472
ADRA	Peru	17,039	95

*Equitas had completed 234 surveys by the time we began data analysis. Therefore, this report will only cover analysis for the first 234 data points.

Data-collection took approximately one to three months to complete and often corresponded with an already-scheduled poverty assessment or program evaluation. For example, Equitas and ESAF timed their pilots to coincide with an already-scheduled poverty assessment. CARD pilot-tested the indicators during an already scheduled client satisfaction assessment. ADRA scheduled their assessment during a scheduled food security and health program follow-up assessment. ESAF is the only organization that pilot-tested the survey with new clients (those in their first loan cycle). The other three, Equitas, ADRA and CARD, conducted the survey with mature clients.

3 While this pilot was not developed to test poverty measurement through the PPI and its focus was on health indicators that could be added to the PPI, poverty measurement is also an important indicator for understanding health outcomes. Therefore, for much of this report, poverty measurement is also assessed on its own merit and is considered a foundation upon which the HOPI were built.

Each MFI entered data into an MS Excel spreadsheet and then shared this data with Freedom from Hunger. Freedom from Hunger engaged a team of students from Brigham Young University School of Health Sciences. Under the direction of Professor Benjamin Crookston, the students computed the descriptive statistics for each indicator and compared them to national benchmark measurements that were found in a literature review.

National benchmark measurements were included from official government websites, independent research studies and/or findings from independent organizations. The likelihood of living below the national poverty line, the likelihood of living under the \$1.25 USD per day international poverty line and the likelihood of living under the \$2.50 USD per day international poverty line were computed based on PPI guidelines.

The PPI was calculated by adding scores for each of ten standard questions on household demographics. Missing values for individual questions resulted in a missing value for the PPI score. For further information on how to calculate the poverty likelihood scores for each of the India, Peru and Philippines surveys, please see <http://www.progressoutofpoverty.org>. Health indicators were defined as those other than poverty measurements, including food security. In order to run the appropriate tests to compare each health indicator to the various poverty line indicators, questions with multiple response options were re-coded as dichotomous. For example, the food security question provided four response options: 1) Enough of the kinds of food we want to eat; 2) Enough but not always the kinds of food we want; 3) Sometimes not enough to eat; and 4) Often not enough to eat; these were re-coded into two options: food secure (answer response 1) and food insecure (answer responses 2–4). Using the PROC TTEST procedure in SAS, health indicators (independent variable) were compared with the PPI (dependent variable). A chi-squared test was also conducted comparing food security to other health indicators. Food security, while part of the health indicators set, was also considered as an additional dependent variable since Freedom from Hunger often uses food security as a proxy indicator for poverty. Prior Freedom from Hunger research has shown statistical association of the PPI to food security (Crookston et al. 2014).

Using SAS (statistical software package, version 9.4), survey data were analyzed to ascertain relationships among poverty and various health measures with an alpha level of 0.05. The initial hypotheses assumed that the more financially better-off the client (meaning, less poor), the more likely she would report positive health attitudes, behaviors, and status. For example, the better-off client (less poor) would be more likely to be food secure, consume dairy and fruit, treat her water, and report seeking preventive care (as defined for each countries surveys); feel more confident about her ability to meet health needs; less likely to report defecating in the open; and less likely to forgo medical treatment or forgo purchase of medicines due to cost.

While this report will not provide all documentation of these various tests for each organization, it will summarize the findings for each indicator and the implications of these findings.

Partner Dashboards

This section will summarize the key findings in a dashboard format for each pilot partner. Since exploring the relationship between each health indicator and poverty was the primary objective of the statistical analysis to test whether our original hypotheses would hold true, these dashboards only incorporate poverty comparisons. The individual indicators outlined in Part 2 will address statistical associations involving both poverty and food security.

ESAF

ESAF Microfinance, headquartered in Kerala, India, has a client base of 450,000 low-income women in five states of India. In addition to its microfinance services, ESAF runs two hospitals and two health clinics where ESAF clients and other low-income people can access health services at reduced rates. They also facilitate community-based

health camps where clients can receive medical checkups and receive timely medical treatment as well as health education within their self-help groups (Saha 2014). Monitoring the health outcomes of ESAF clients is therefore of strategic importance to the organization.

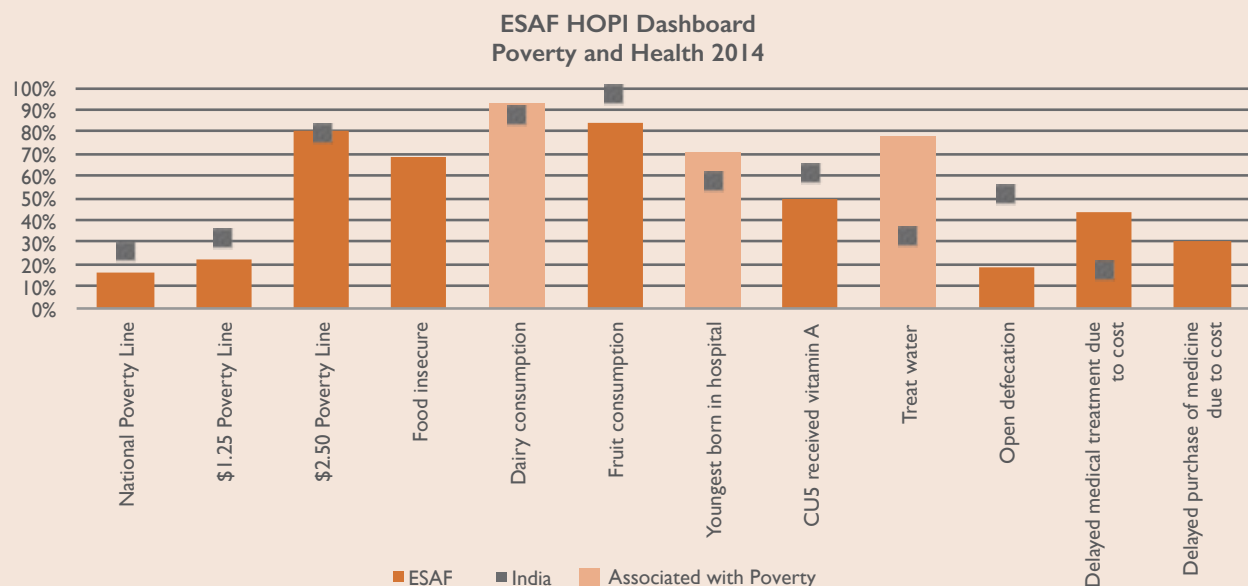
For the health indicator survey, ESAF loan officers randomly selected 700 new clients across all of its branches; 100 new clients from seven different branches across India located in Chhattisgarh (Mahasamund), Kerala (Chalaky, Koilandy, Kottayam, Venjaramoodu), Maharashtra (Wardha) and Tamil Nadu (Maduranthakam). Each branch consists of ten loan officers. Each officer was responsible for interviewing ten clients (7 branches x 10 loan officers x 10 clients=700 clients). Clients were included in the survey if they were in their first loan cycle so that baseline measurements could be obtained. These clients will be re-interviewed when they reach their fourth year as a client.

Figure 2. Map of ESAF Branches



Twelve of the health indicators measured are provided below in Figure 3. The indicator on child food insecurity was omitted in the dashboard because the indicator performed similarly to the woman food insecurity indicator and did not add to the understanding of the household's food security level. National benchmarks were available for seven indicators; food security and delayed purchase of medicines lacked a relevant national benchmark for comparison. The national averages are depicted by a gray box aligned with each indicator. The dark orange bars represent the average performance for each indicator while the light orange bars signify an association with at least one of the poverty levels represented in the dashboard. For the ESAF data, if there was an association between the health indicator and at least one of the poverty line indicators, the results showed that the poorer the client, the less likely she reported positively on the health indicator. For example, the poorer the client, the less likely her youngest child was born in a hospital.

Figure 3. ESAF HOPI Dashboard⁴



Children of new ESAF clients were slightly less likely to eat fruit than children nationally, and they consumed slightly fewer dairy products. ESAF participants were more likely than women nationally to deliver their youngest child in a hospital. Roughly one-half of the children under the age of five (CU5) represented in this survey received vitamin A oil, while nearly 60 percent of children nationally receive vitamin A oil. Technically, all children should be receiving a vitamin A supplement when they receive their vaccinations, but not all mothers are aware that their child has been given this supplement without referencing the child’s vaccination card. Compared to the national average, ESAF participants were more than twice as likely to treat their water and less likely to defecate in the open. ESAF participants were also more likely to delay seeking medical attention due to cost compared to the national average. The indicators associated with the poverty level (i.e., the PPI) were dairy consumption, the youngest child being born in the hospital and treatment of drinking water. For all three indicators, the less poor the client, the more likely she consumed dairy, had her youngest born in a hospital and treated her drinking water. ESAF, consequently, sees opportunities for improvement in health outcomes among this cohort of incoming clients.

4 Poverty benchmarks: PPI for India. Washington, DC: Grameen Foundation. (<http://www.progressoutofpoverty.org/country/india>); Dairy and fruit consumption benchmarks: Nutrition in India. 2007. National Family Health Survey (NFHS-3). (http://www.rchiips.org/nfhs/nutrition_report_for_website_18sep09.pdf) Ministry of Health and Family Welfare. India; Youngest born in hospital and delayed medical treatment benchmark: 2005-06 Indian National Family and Health Survey of Women. (<http://www.rchiips.org/nfhs/NFHS-3%20Data/NFHS-3%20NKF/Report.pdf>) National Family Health Survey (NFHS-3) Ministry of Health and Family Welfare. India; Vitamin A Benchmark: WHO Nutrition Landscape Information System (NLIS) Profile: India. 2014. (<http://apps.who.int/nutrition/landscape/report.aspx?iso=ind>) World Health Organization; Water-treatment benchmark: UNICEF India: Water, environment, sanitation. 2014. (<http://www.unicef.org/india/wes.html>) The United Nations Children’s Fund; Open Defecation benchmark: WHO, UNICEF. Progress on Sanitation and Drinking Water. 2010. (http://www.who.int/water_sanitation_health/publications/9789241563956/en/) World Health Organization & UNICEF.

Equitas

Equitas in India works in Tamil Nadu (headquarters), Pondicherry, Rajasthan, Maharashtra, Madhya Pradesh, Karnataka and Gujarat and reaches over 1 million low-income clients. Equitas provides both financial and nonfinancial services. Health care tops Equitas' nonfinancial services and includes health education, telemedicine services, linkage to hospitals for subsidized treatment, regular health camps and pharmacies for discounted medicines. They also provide a health helpline that guides clients to the nearest hospitals (Saha 2014). Monitoring and measuring the client health outcomes is therefore of strategic importance to the organization.

The Equitas HOPI questionnaire was administered to 551 participants by 20 Equitas Corporate Social Responsibility officers in 176 branches within the states of Pondicherry and Tamil Nadu. This report only includes 234 participants, since only 234 of the 551 interviews had been analyzed at the time of generating this report. Mature clients were randomly selected to take surveys when they came to visit branches for second-, third- or fourth-cycle loans.

Figure 4. Map of Equitas Branches

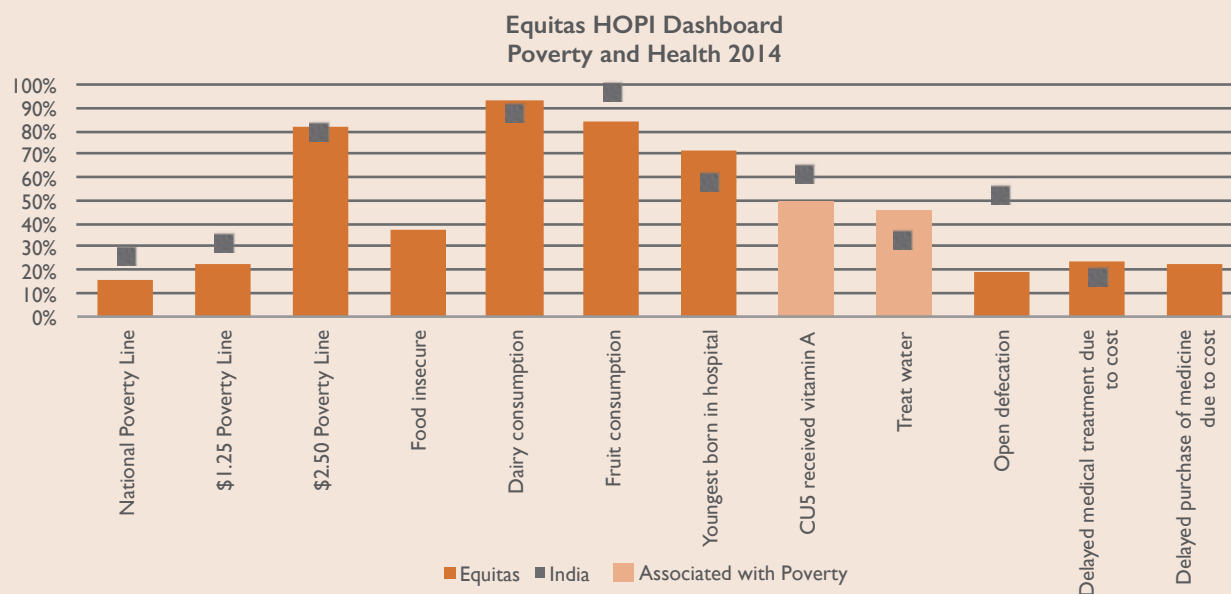


Equitas client poverty levels in Tamil Nadu and Pondicherry are equal to the national average or slightly under, which may be indicative of the sample consisting of mature clients. As will be stated elsewhere, given the location of the pilot, primarily in Tamil Nadu, comparing the pilot data to state-level averages would likely be more useful, as Tamil Nadu in particular is an economically stronger state compared to other states in India. In general, Equitas clients are better off health-wise than the average citizen: fewer reported defecating in the open, more reported consuming dairy, more of their youngest children were reported to have been born in the hospital, more reported treating their water and fewer indicated they delayed medical treatment due to cost. However, Equitas clients consumed less fruit than the national average; they were also below the national average for vitamin A supplementation. Like ESAF, this low reporting may have something to do with mothers not being aware of the supplementation when given at health clinics

during vaccination visits. Validation of the accuracy of the report would most likely require reference to the vaccination card to know whether it is a recall or reporting issue or actually poor vitamin A supplementation rates.

The only indicator that was associated with poverty with a $p \leq 0.05$ level of significance was whether the household treated their water (indicated by the light orange shading). Receipt of vitamin A was almost associated with the PPI, but was over the $p \leq 0.05$ level of significance set for the project (but under $p \leq 0.10$). In both cases, the poorer the client, the more likely she reported treating her water and that her children received vitamin A supplementation. This might suggest there are local initiatives that are intentionally targeting poorer populations. This is something worth exploring further.

Figure 5. Equitas HOPI Dashboard⁵



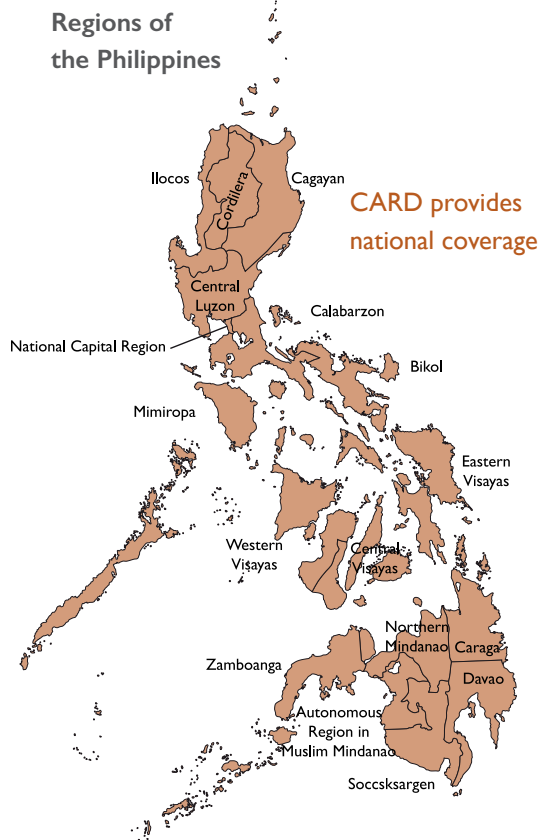
CARD

CARD serves all regions of the Philippines and reaches over 1 million clients through its bank, CARD Bank, Inc. and non-governmental organization (NGO) CARD Inc.; combined it is known as CARD Mutually Reinforcing Institutions (CARD MRI). CARD MRI is one of the largest groups of social development institutions in the Philippines, including the largest MFI, and is a convening actor of the Philippine Microfinance and Health Consortium, which is a collaboration of CARD, the Microfinance and Health Alliance, and 18 Filipino MFIs (Rivera 2014). CARD also provides clients with health education, loans for the PhilHealth national insurance payments as well as support for enrollment in PhilHealth and provides medicine points and linkages to local health providers that serve clients with discounted rates.

CARD clients throughout the Philippines were the sampling universe for this survey. Researchers used a multistage, simple random-sampling protocol; first among the country's regions, then CARD branches, then the branch units and then among clients of those units. The total sample size consisted of 472 participating mature clients. The clients chosen as part of the sample frame included those who had been with CARD for at least two years. Fifty-three percent had been members for two to four years; 39 percent had been members for five to seven years; and 10 percent had been members for eight years or more.

⁵ Please see India benchmarks for Equitas from footnote 4 under the ESAF section.

Figure 6. Map of CARD Branches

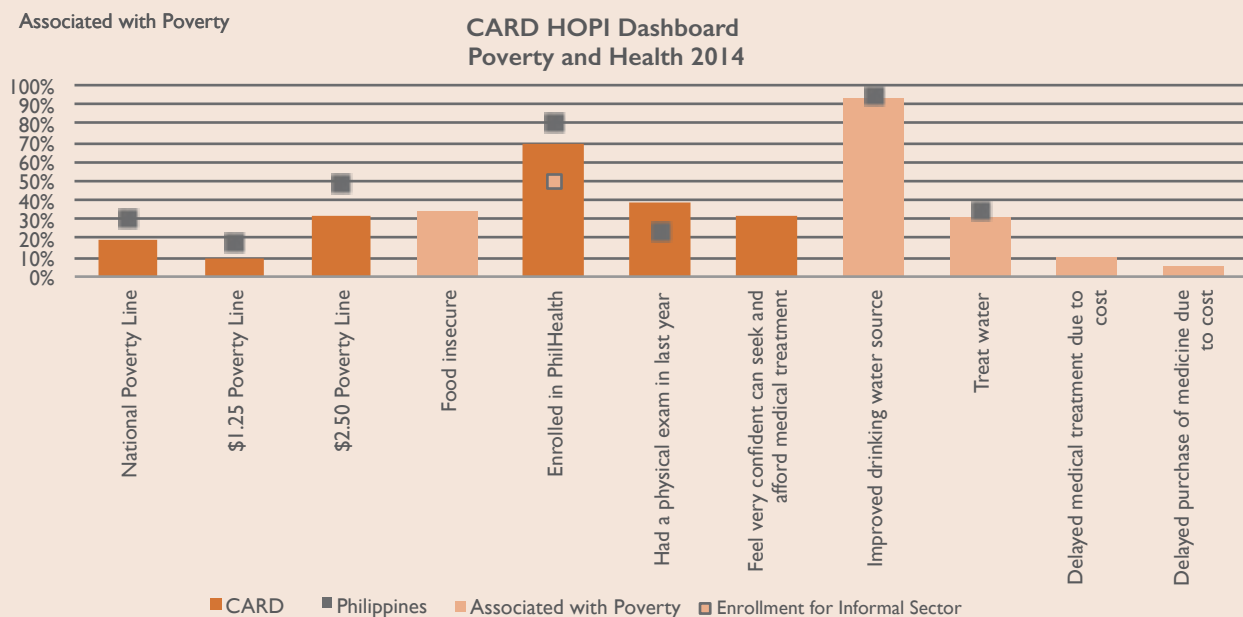


The poverty levels of mature CARD clients are less than the national average for the national poverty line, the \$1.25 per day and the \$2.50 per day international poverty lines. Fewer CARD clients are enrolled in PhilHealth than the national average (shown in Figure 7 as gray box similar to other benchmarks) but a greater number of CARD clients are enrolled compared to the percentage of the national population who represent the informal sector, or those representing migrant workers, micro and small entrepreneurs and other self-earning individuals (shown in Figure 7 as light orange box with a gray outline, but informal sector is estimated to be no more than approximately 50 percent enrollment—Quimbo 2013). More CARD clients have reported seeking a physical exam in the past year compared to the national average. (This should be interpreted with some caution because the national benchmark is based on physical exams conducted in the last 30 days, not in the last year as is referenced in the HOPI tool). CARD clients are consistent with national averages when it comes to drinking safe water (whether they treat or drink from an improved water source).

The indicators that were associated with poverty are food security status, whether clients drink from an improved water source or treat their water and whether they have

delayed medical treatment or purchase of medicines due to cost; thus the poorer the client, the more likely she is to be food insecure, fail to drink from improved water sources, fail to treat her water and delay medical treatment and purchase of medicines due to cost.

Figure 7. CARD HOPI Dashboard⁶



ADRA

ADRA Peru, headquartered in Lima, Peru, reaches almost 20,000 borrowers. ADRA, along with its village-banking financial services, provides health education and has recently piloted a prepaid health services package for its clients. Given ADRA's NGO roots and its focus on providing services to underserved communities in Peru and internationally, monitoring the health outcomes of its clients not only helps the MFI arm of the institution understand client outcomes, but also assists in the overall health focus of the populations being served.

ADRA conducted its HOPI survey in Juliaca in the Puno Region of Peru. Nineteen clients were surveyed from each of the five branches for a sample total of 95 respondents. Data for the health indicator project was collected in 2014; however, in 2011 and 2012, ADRA had also conducted a pre- and post-test program evaluation of their women's health program, and several questions used in those surveys were repeated in the HOPI survey. Therefore, there is a strong focus on women's health measures, which does not correspond with the original goal this project had of seeking out indicators that would be applicable to both men and women. The results from the prior two surveys are provided in Part 2 for some indicators to show change over time, where interesting.

⁶ Poverty benchmarks: PPI for the Philippines (<http://www.progressoutofpoverty.org/country/philippines/>); PhilHealth national benchmark 80%: Balena, RT & AL Buted. PhilHealth.gov.ph/news/2014/phic@19.html; PhilHealth informal market benchmark at 50%: Quimbo SA. 2013. *Moving from Universal Health Coverage to Effective Financial Protection: Evidence from a Health Insurance Experiment in the Philippines*. University of the Philippines School of Economics. (https://partos.nl/webfm_send/671972); Water treatment and sources, medical checkup benchmarks: Philippines National Demographic and Health Survey 2013. <http://dhsprogram.com/pubs/pdf/FR294/FR294.pdf>

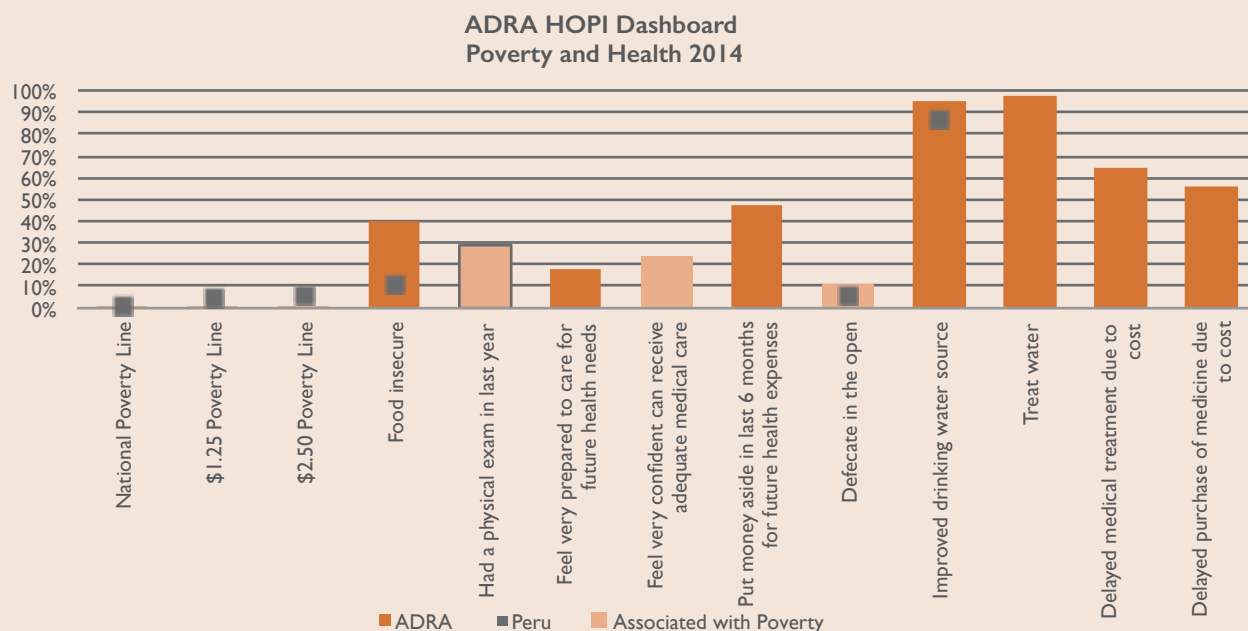
Figure 8. ADRA Branches



Peru poverty levels are quite low compared to the other two countries studied. The ADRA poverty levels of the participating mature clients in this survey are below national levels and less than 1 percent. Prior poverty assessments conducted by ADRA during the same month as this survey suggest that poverty levels of incoming clients are as high as 11 percent for those falling below the national poverty line. Food insecurity, compared to the poverty measures, depicts a much higher level of vulnerability among the mature ADRA clients, which is greater than the national average. Compared to the national averages, a larger proportion of ADRA report defecating in the open, even though both the ADRA and national levels are quite low. A higher proportion of ADRA clients compared to the national average drink from an improved water source and treat their water. A substantially higher proportion of ADRA clients report delaying medical treatment and purchase of medicines due to cost compared to clients in India and the Philippines. This may be due to new regulations in Peru that block clients who receive microcredit from participating in the free public health system or could be indicative of higher medical costs for seeking treatment; this is something to explore further.

In the ADRA survey, clients were asked a series of questions related to the types of medical exams they sought during the past year, which included a general physical exam, Pap smears, breast exams, blood tests and blood pressure tests. While the indicator of seeking out a general physical exam itself is not associated with poverty, it has been highlighted here in a light orange with dark gray border to represent a relationship between breast exams and poverty among female clients; the less-poor or better-off client is more likely to report seeking out a breast exam in the past year. Poorer ADRA clients were more likely to indicate they defecated in the open and felt less confident they could access appropriate medical care when needed.

Figure 9. ADRA HOPI Dashboard⁷



Final Indicator Assessment Based on Pilot Tests

The prior section provided a “dashboard” view of the data for each partner that compared each indicator to national benchmarks where they were available as well as an indication of which indicators were associated with poverty. In some cases, the relationships between poverty and the individual health indicators were opposite of what we expected. For example, with ESAF in India, the less poor or better-off the client, the more likely she was to treat her water. With Equitas, which is also in India, the opposite relationship exists—the poorer the client, the more likely she reported treating her water. While not all MFIs will have the capacity or interest in conducting statistical tests on their indicators, this was a useful exercise for this pilot for testing the various theories of change for each of the client health outcomes. These associations also help determine how reliable the data might be for an institution if tracking the data over time.

Table 3 below summarizes the assessment provided for each indicator tested during the pilot phase. A more in-depth description of the strength of each indicator is provided in Part 2 of this report. The green shading below indicates that the indicator fully met the criterion established prior to the pilots, yellow means the indicator only partially met the criterion and red means the criterion was not met.

The final column called “Likelihood of standardization” is a final classification that rates the likelihood that the indicator could be used across multiple contexts and could eventually become a standardized health indicator

7. Poverty benchmarks: PPI for Peru (<http://www.progressoutofpoverty.org/country/peru>); Food Security benchmark: Vigo, M. February 28, 2013. “Peru reduces food insecurity by half, UN agency says.” *Peru this Week*. <http://www.peruthisweek.com/news-peru-reduces-food-insecurity-by-half-agency-says-13668>; Open defecation benchmark and Water source benchmarks: Encuesta Demografica y de Salud Familiar. Instituto Nacional de Estadistica e Informatica. 2013. <http://dhsprogram.com/pubs/pdf/FR299/FR299.pdf> and Estimates on the Use of Water Sources and Sanitation Facilities. 2014. World Health Organization & UNICEF Joint Monitoring Program. <http://www.wssinfo.org>;

for MFI impact monitoring purposes. A “high” rating means it meets a majority of the criteria and could likely become a standardized indicator; “medium” means it is somewhat likely to become a standardized indicator and “low” means it is not likely to be a standardized indicator. Please note that a red indicator does not necessarily mean total exclusion from future indicator candidacy; it highlights a particular challenge that needs to be taken into consideration for that particular indicator. For example, “treats drinking water” is rated as red for not meeting the reliability criterion of “provides a consistent measure” but is rated as medium in its likelihood for standardization. At this stage, since the statistical tests showed that it did not have the same relationship to poverty across two organizations in India, it might not provide a consistent measure alone and would need to be used in conjunction with a question related either to water source or an explanation for the type of water treatment used. The “likelihood of standardization” rating is further explained for each indicator in Part 2.

Table 3. Pilot Indicator Assessment

Criteria Options	Feasibility		Usability				Reliability		Likelihood of standardization
	Is measurable by an MFI	Can be reported in client survey	Can change in short term	Addresses relevant measures for MFIs	Cannot rely on specific interventions to change outcomes	Is applicable for both genders	Can be benchmarked to other data (MDGs, regional data, etc.)	Provides a consistent measure	
Poverty Measurement									
PPI/PAT	Green	Green	Yellow	Green	Green	Green	Yellow	Yellow	High
Food Security and Nutrition									
Food security index (long)	Green	Green	Green	Green	Green	Green	Yellow	Yellow	High
Food security index (short)	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Medium to High
Fruit consumption	Green	Green	Green	Red	Green	Green	Green	Green	Low
Milk consumption	Green	Green	Green	Yellow	Green	Green	Green	Green	Low
Water and Sanitation									
Treats drinking water	Green	Green	Green	Green	Yellow	Green	Yellow	Red	Medium
Has an improved water source	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	Medium
Defecates in open	Green	Green	Red	Red	Yellow	Green	Green	Green	Low to Medium
Preventive Health Care									
Youngest child born in a hospital	Green	Green	Yellow	Yellow	Red	Green	Yellow	Yellow	Low to Medium
CU5 received vitamin A oil	Yellow	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Low

Criteria Options	Feasibility		Usability				Reliability		Likelihood of standardization
	Is measurable by an MFI	Can be reported in client survey	Can change in short term	Addresses relevant measures for MFIs	Cannot rely on specific interventions to change outcomes	Is applicable for both genders	Can be benchmarked to other data (MDGs, regional data, etc.)	Provides a consistent measure	
Poverty Measurement									
Covered by PhilHealth insurance									Medium to High for the Philippines only
Availed themselves of preventive health service									Medium to High
Saved money for health care in last 6 months									Medium to High
Curative Health Care									
Have delayed health care due to cost									High
Have delayed purchase of medicine due to cost									Low
Attitudes									
Feels prepared for future health care needs									Medium to High
Feels confident can receive adequate health care									Low to medium

When considering the original purpose of the pilot tests—the goal of establishing indicators that all MFIs, with or without health programs, could utilize to track client outcomes over time—several indicators stand out for consideration according to the following indicator dimensions:

1. **Poverty measurement:** As has already been emphasized, it has been assumed that the most successful application of the health indicators is likely among MFIs that already have a system in place to measure and track the poverty status of their clients. Here, the PPI was tested; however, similar tools that are available, such as the Poverty Assessment Tools from USAID, could be substituted here.

- 2. Food security:** Several variations of food security questions and indices were tested. The most accurate measure of food security is provided by the full food security survey, which was only tested with ADRA-Peru clients. This is a modified version of the USDA food security survey and has been used in many contexts by Freedom from Hunger and other practitioners (Melgar-Quinonez 2006). It is approximately 17 questions long and is provided in Appendix 3. This might be a prohibitive length for an organization already using the PPI that has ten questions, but it is the most standardized for use across many contexts and is the most used among nutrition or food security practitioners. However, the shorter variants tested with the Indian partners and with CARD in the Philippines (provided in the India survey example in Appendix 2) were equally useful as associations between food security and other health outcomes were detected even using the short version and presented a very different picture of vulnerability compared to the poverty measurement alone.
- 3. Water and sanitation:** The key finding from these pilots is that it was difficult to interpret whether the high or low number of reports of clients treating their water was due to having an improved water source and it was unclear whether the treatment used was considered an appropriate method for treating water to make it safe for drinking. Alternatively, using only the water source question might hide the fact that people are still drinking unsafe water. Therefore, it is recommended to use both questions to best understand whether people are drinking safe water.
- 4. Preventive health care:** Two indicators stand out for assessing use of preventive health care services—whether the client availed herself of a medical checkup in the last year and whether the client saved money for health in the prior six months. This latter indicator was only used in Peru, but it could be useful for organizations interested in a client's preparation for future health costs and emergencies in general. It may be likely that changing this to simply ask whether clients have put money aside for an emergency would make it more attractive for an MFI because it could demonstrate effectiveness of any financial education messages being shared about saving, disaster preparedness, etc. While the question about whether a client has PhilHealth hospitalization insurance is very likely to be included for the Philippines, this is not applicable to other countries; however, where national health insurance schemes exist, a generic question about having hospitalization or health insurance would likely be a very strong candidate for inclusion.
- 5. Curative care:** Only the indicator related to whether a client has forgone medical treatment due to cost is a strong candidate for inclusion in future studies. In some contexts, up to 60 percent of clients had forgone seeking treatment due to cost. The other question related to forgoing purchase of medicines did not seem to add extra value because compared to forgoing treatment, fewer clients reported forgoing purchasing medicine. The indicator related to forgoing medical treatment due to cost holds much promise for future surveys in health because of its broad applicability.
- 6. Attitudes:** While the two attitude questions were tested only in Peru and the Philippines, these questions have been tested elsewhere by Freedom from Hunger. As a result of this pilot, however, the only indicator that has promise for being used in many contexts is whether the client reports feeling confident about her ability to cover future health costs or meet future health needs.

While **domestic violence** indicators were not tested in the HOPIs, it was agreed that they should be part of future assessments. Also, questions related to **mental health**, such as happiness or satisfaction with life and/or depression should also be considered. In addition, **child and maternal health** are key MDGs; therefore, finding strong specific indicators related to them are important. A recommendation is provided here, but further refinement and testing of the indicators in this particular area are anticipated for the future. (See Part 2 of this report for further information on the types of questions that might be considered for future testing related to these three dimensions.)

In conclusion, for future pilots, the following list of health questions is suggested. Please note that while the use of the PPI or other poverty measurement tools are highly recommended, they will not be provided here since these require using country-specific tools (available from the PPI website). For space purposes, the short version of the food security survey will be used below. The full version is provided in Appendix 3.

Table 4. Final List of HOPIs for Future Consideration

Category	Question	Answers	Notes
Food Security	I will read 4 choices for your response. Please tell me, which of the following best describes the food consumed by your household in the last year:	<ol style="list-style-type: none"> 1) Enough and the kinds of food we wanted to eat. 2) Enough but not always the kinds of food we wanted to eat. 3) Sometimes not enough food to eat, was sometimes hungry. 4) Often not enough to eat, was often hungry. 	<p>In India, the word nutritious was used; for future studies, it is recommended to drop this word.</p> <p>Must apply survey at same time each year. Difficult to benchmark this indicator to national averages.</p>
Water and Sanitation	What is the main source of drinking water for members of your household?	<ol style="list-style-type: none"> 1) Piped water (piped into dwelling, yard/plot, public tap/standpipe) 2) Tube well or borehole 3) Dug well (protected) 4) Dug well (unprotected) 5) Well spring (protected) 6) Well spring (unprotected) 7) Tanker truck 8) Rainwater 9) Cart with small tank 10) Bottled water 11) Surface water (river, dam, lake, pond, stream, canal, irrigation channel) 12) Other (specify) _____ 	Please use water sources as provided by national Demographic and Health Surveys (DHS) for each country (http://dhsprogram.com/)
	Do you do anything to treat your water to make it safer to drink?	<ol style="list-style-type: none"> 1) Yes 2) No 	
	If yes, what do you do to treat your water to make it safe to drink?	<ol style="list-style-type: none"> 1) Let it stand and settle/sedimentation 2) Strain it through a cloth 3) Boil 4) Add bleach/chlorine 5) Water filter (ceramic, sand, composite) 6) Solar disinfection 7) Other 8) Don't know 	<p>This may require some adaptation based on availability of water treatment options. An MFI also might consider dropping the water source question and using this question if an answer option were added that indicated: "not needed/ drink from improved water source" and remove the "if yes" part of the question so that everyone answers the question.</p>

Category	Question	Answers	Notes
Preventive Health Care	In the past 12 months, did you or any member of your household visit a doctor or other health provider for a preventive health service (for example, medical checkups, blood pressure checks, vaccinations, breast exams, Pap smears, etc.)?	1) Yes 2) No	Can break this out into individual medical exams of interest or simply ask whether they have had a medical checkup. Can find benchmarks normally in a DHS survey.
	In the last 6 months, did you use a strategy to save money specifically for health?	1) Yes 2) No	Generally does not have a national benchmark.
Curative Health Care	In the past year, did you delay seeking medical treatment for any person in your household because of concern about the cost?	1) Yes 2) No	Generally does not have a national benchmark.
Attitudes	Which of the following best describes your household:	1) I feel very confident that I can afford appropriate medical care for my household when needed 2) I feel somewhat confident that I can afford appropriate medical care for my household when needed 3) I am not very confident that I can afford appropriate medical care for my household when needed 4) I don't know	Generally does not have a national benchmark.
Domestic Violence	In the last 12 months, were you ever afraid of your husband/partner): Most of the time, some of the time, never?	1) Most of the time 2) Some of the time 3) Never	Possible recommended indicator; it was not yet tested in the original HOPI survey. Comes from existing DHS questions. Could be benchmarked.
	In your opinion, is a husband ever justified in hitting or beating his wife?	1) Yes 2) No	
Mental Health	In the past year, I felt hopeful for the future.	1) Yes 2) Somewhat 3) No	Possible questions from studies looking at the psychology of poverty as well as included in World Values surveys.
	On the whole, how satisfied are you with the life you lead?	1) Not satisfied at all 2) Not very satisfied 3) Fairly satisfied 4) Very satisfied	

Category	Question	Answers	Notes
Maternal and Child Health (<i>continued</i>)	How old is your youngest child?	__ age	All three questions here would need to be used in combination. The last question should look for a correct answer of 4 or more visits.
	Did you receive any antenatal care with the pregnancy of your youngest child?	1) Yes 2) No 3) Don't remember	
	How many times did you receive antenatal care for the pregnancy of your youngest child?	__ # antenatal visits (99 = don't remember)	

Considerations and Recommendations for Choosing Health Outcome Performance Indicators

From a broad overview, the health indicators previously mentioned show a very different dimension of client well-being compared to the indicators that measure the poverty status of clients; moreover, this report highlights the value of including health indicators in addition to poverty measures to better understand client vulnerability. This report also attempts to assist practitioners in considering and choosing among many different types of health indicators that could be used to track changes in client well-being over time. Each indicator needs to stand on its own merit because client monitoring must be cost-effective for MFIs as for any institution. The process does not need to be complicated in order to choose the right indicators, but each indicator needs to be worth the cost of tracking it and provide information that helps an institution manage and monitor its performance so that decision-making opportunities are clear. For this project, there was no opportunity to track these indicators over time to truly test their value; however, statistical associations among variables at one time point were calculated to assess possible value of an indicator. However, Freedom from Hunger has found the value in tracking certain health indicators with some of its partners over time, particularly if MFIs feel they have an influence over the results and can continue to make improvements in that area.

This section provides a few final considerations and recommendations that MFIs and others might consider when developing survey tools to measure client outcomes:

- 1. Standardization where possible:** While many efforts will likely be made to standardize indicators across the globe in order to assist in drawing broader conclusions about changes in client outcomes, this should proceed with caution. As has been shown here, the same indicators were often tested in each location, particularly if they seemed to be applicable to all contexts. However, in some locations, performance on these indicators could already be high, making them less valuable for some MFIs to track over time. The dimensions that have been presented here (poverty measurement, food security, curative care, preventive care, attitudes, etc.) offer a useful construct in which to consider individual indicators; dimensions may be easier to “standardize” than the individual indicators themselves.
- 2. Careful interpretation of results.** Theories of change established by an MFI need to be built upon the clear understanding of their context to ensure that the right decisions are being made when interpreting and using the data. The issue raised about water treatment (without understanding drinking-water sources) is a prime example. While it was theorized that water-treatment efforts should improve over time, regardless of country, local-level efforts either to improve water sources or the fact that households simply might prefer to drink bottled water were not taken into account. Lack of water treatment cannot in all cases be considered a

negative outcome and could in fact be a positive outcome if water treatment is no longer needed due to basic water utilities providing people with safe drinking water.

- 3. Baseline values are very important to establish:** While it would have been valuable to restrict data-collection to only incoming clients for this pilot, the inclusion of mature clients in the sampling frames presented important challenges for further consideration. It was found to be quite difficult to interpret the findings, even when comparing client outcomes to national averages, without understanding the clients' starting point. While tracking changes in representative samples of clients over time is considered an alternative solution, such that mature and incoming clients make up the sample, this approach requires much more analysis. While population-based studies track representative cross-sections of the population over time, MFIs that have clients moving in and out of their institution will find it difficult to make meaning from representative cross-sections of clients without more intensive data analysis. Therefore, for MFIs with simple data analysis requirements, it would be useful to establish a baseline with a cohort of incoming clients.
- 4. Value of indicators with already high levels of performance at baseline:** If baseline levels for any indicator have a positive performance of 80 percent and higher, it might not be as useful to track those indicators as those below 80 percent. While 80 percent here is being chosen arbitrarily, an MFI should ask themselves whether an indicator that already shows high levels of performance at baseline would provide actionable data over time. Since an MFI will not know whether there are initial high levels of performance, an MFI could consider developing a baseline survey with all potential indicators of interest; once the baseline is completed, choose a subset of indicators worthy of tracking over time. The baseline itself provides important information on client health that can be used as market research or for product development.
- 5. Value of statistical analysis—comparing health indicators to poverty and/or food security indicators:** Statistical comparisons, where the health outcomes were compared and contrasted by poverty and food security levels of clients, were most useful in helping refine the theories of change for each organization. For example, could an MFI confidently predict that the longer a client stays in the program, the more likely she would be to invest in and drink safe water? Would the assumption that as clients become less poor, they would more likely report seeking medical treatment when needed? Associations between the indicators and poverty did not necessarily help us determine whether one indicator provided more valuable information than another because in some cases, one could argue that if an indicator is measuring something very different from household poverty status, then this is more valuable than an indicator that should improve as poverty levels improve. This suggests that having a mix of indicators that serve both purposes—some that track with poverty and some that do not as long as they appear to be compelling and meaningful—would be a useful combination.
- 6. Which clients to track and for what time frame:** Which clients should be tracked over time and for what period? These are considerations organizations need to address when choosing indicators. In this case, there was only one round of data-collection. Some institutions choose to collect PPI data every year and may find tracking health indicators every year makes sense, allowing every client to be interviewed every year. Other institutions conduct poverty measurement less frequently, such as every two to five years. In this case, client dropout needs to be considered as well as the institution's ability to interview the same person or to develop an entirely new sample from a cohort of clients each time. The frequency of data-collection should also influence choosing indicators that make the most sense. For example, for an institution wanting to track a sample of the same clients over time, monitoring whether their children are born in a hospital will only be valuable if these clients are young and have the chance to give birth during the period of interest. MFIs could connect client outcome measurements to their strategic planning cycle (for example, a five-year cycle) to make the most meaning of the data when thinking about strategy for the future. This provides the opportunity to track one cohort of client for a set period, from one to five years, make decisions about future strategy and consider improvements, then begin anew.

7. Tracking changes in client outcomes requires patience: While the destination is clear—reducing poverty, improving health and well-being—the journey to understanding whether that is occurring and improving over time may not be as clear-cut as desired. As the randomized control trials conducted on microcredit have shown, “transformation” has not been detected so far (Banerjee 2014), but there are promising changes in some dimensions of a person’s life and, in particular, for those who already had microenterprises and show a strong propensity for entrepreneurship. Monitoring changes in client well-being over time requires as much patience as changes in poverty itself. This process is going to need to be iterative until more and more data are collected and shared within the industry and will require several years of experience in collecting health outcome data to make sense of its value. While there was an attempt to choose the strongest indicators and anticipate the types of decisions that an MFI could make with the data, it may not be until several data points over several years have been collected that the data is trusted and valued. For example, tracking people over time also tracks people as they age. With health, this presents an interesting puzzle to consider because some health indicators chosen today may become irrelevant for some people in five to ten years.

In conclusion, getting the perfect set of indicators for tracking clients is going to take time and experimentation. This report attempted to share some early findings that might be useful for efforts in standardizing or synchronizing which indicators to track over time. This experience has also shown that choosing the best health outcome performance indicators is not a simple task, but it is possible. Even tracking a few indicators could create real value in helping MFIs understand whether clients’ health status is improving—with or without health services—and even in unpredictable ways.

Part 2: Health Outcome Performance Indicators Assessment



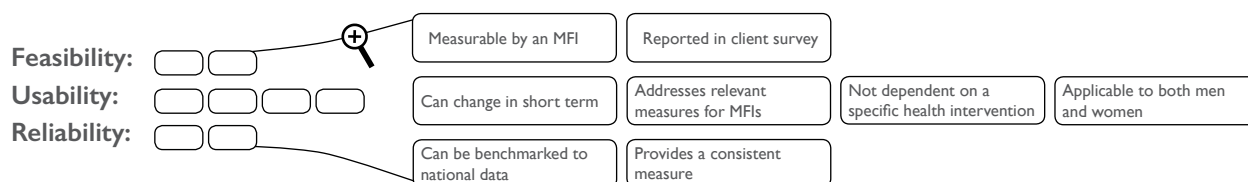
Using this Report

The rest of this report highlights key findings for each individual indicator that was pilot-tested. These indicators are organized by their dimension. For each dimension, the rationale for the types of indicators included is articulated. The basic theory of change is included as well as a rating system that takes the original criteria (Table 1) and assesses the indicator based on the experience in it. A red light, green light and yellow light system will be used to share when an indicator fully meets the criteria (green light), partially meets (yellow light) or fails to meet the criteria (red light). Only yellow and red indicators will be examined in detail.

 = criteria met  = criteria partially met  = criteria not met

The boxes next to each primary criterion correspond with the criteria articulated in Table 1 and will be structured like this using the color-coding above:

Indicator Criteria Rating:



Notes on the statistical associations with poverty and food security will also be summarized to share when there were consistent or inconsistent findings based on our original assumptions and taking into account differences across the contexts. These are simply shared to help guide decision making in the choice of indicators for future client outcome assessments. For example, in some cases, it was predicted that as poverty rates decrease, health outcomes should improve. The statistical tests for the sample populations help explain whether there are relationships between indicators that can help validate the various theories of change.

Finally, two additional assessments are included:

Likelihood of standardization: Each indicator will be rated as either high, medium or low based on whether the indicator could be standardized or considered useful regardless of context. For example, the PPI could be considered to have a high likelihood of standardization because the questions chosen for the survey are calibrated to that country's specific poverty lines and can result in the same measures across contexts (for example, national poverty rate, \$1.25 per day and \$2.50 international poverty rates). Those indicators with a low likelihood of standardization are those that would not work for the majority of MFIs without significant adaptations and might only be relevant to the practitioner or the country, such as the average number of CARD clients with PhilHealth national health insurance.

Likelihood of inclusion for future client outcome assessments: Each indicator will be rated as high, medium or low based on whether it is believed the indicator could continue to be considered for future assessments in various contexts. This rating takes all experiences as well as assessments against the established criteria into account.

It is our hope that institutions interested in health outcomes as a key measure of client well-being will be able to adopt some of the HOPIs presented in this manual. While it is not assumed all MFIs will be interested in health as an outcome of their programs, they may find these compelling and useful measures. It is only through measuring client well-being will MFIs—both those with and without health services—know whether they are achieving their missions to improve poverty and client lives.

Poverty Measurement

Rationale: Improving household poverty is a key goal and metric for microfinance practitioners. Poverty measurement, while necessarily complex, has in recent years been simplified by the development of various scorecards that are meant to measure a set of indicators, that when combined, are used to develop a score that is then associated with a household's income or consumption. This facilitates an organization's ability to estimate whether the household lives above or below any established poverty line. The HOPI project utilized the Grameen Foundation's PPI as a foundation for the survey since the PPI and other poverty measurement tools are key to measuring and monitoring client poverty status and are increasingly popular among MFI practitioners.



Indicator: Household Poverty

Percentage living below the national poverty line

Percentage living below the \$1.25 per day international poverty line

Percentage living below the \$2.50 per day international poverty line

Theory of Change

MFI's assume that poverty levels will be high when clients join the institution to demonstrate depth of outreach to poor households. Over time, poverty levels are predicted to decrease.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

The PPI is a set of 10 questions whose answers hold various weights. When the weights are summed, the household receives a score that can then be translated into a set of poverty likelihoods that the household lives above or below established poverty lines. When individual household likelihoods are averaged, this estimates the poverty rate for the client cohort interviewed.

Locations Tested

India, Peru, Philippines

Statistical Associations

Used as an independent variable in most cases; findings are discussed in the individual indicators that follow.

Likelihood of Standardization

High, based on qualification of poverty tool accurately measuring poverty within the country context.

Likelihood of Inclusion for Future Client Outcome Assessments

Very High

Experiences in Implementation

For the purposes of this pilot, the PPI survey from Grameen Foundation was used for each country, but other instruments, such as the PAT from USAID/the IRIS Center, could be substituted for household poverty measures. Current PPI tools for countries around the world, as well as supporting documentation, can be found at <http://www.progressoutofpoverty.org>.

Use of the PPI makes poverty measurement feasible for MFIs. The tool's sensitivity in measuring short-term changes (less than a year) is low, but the tool is very accurate over longer periods and is able to show changes in client poverty. Correlating PPI data with other demographic data and information on client use of services can also help organizations make changes to existing offerings to better suit the needs of different poverty segments. The PPI poverty measures partially meet the reliability criteria. While it is assumed that the poverty rates for the MFI can be easily benchmarked to national or regional poverty data, finding the most current and reliable poverty benchmarks was not necessarily easy. Grameen Foundation provides national and regional poverty rates in their tool documentation for each country that can be used for benchmarking, but these rates can be difficult to find⁸ and may not contain the most current poverty rates, whether measured by the country's government or international organizations, such as the World Bank. However, it is important to note that the benchmarks provided in the PPI

⁸ Grameen Foundation is available to assist with finding relevant poverty rates. For help, go to www.progressoutofpoverty.org.

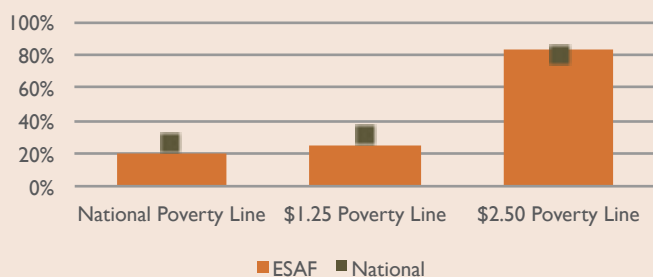
documentation should be used because they are the most comparable to PPI measurements generated by the PPI survey tools.

Pilot-test Findings

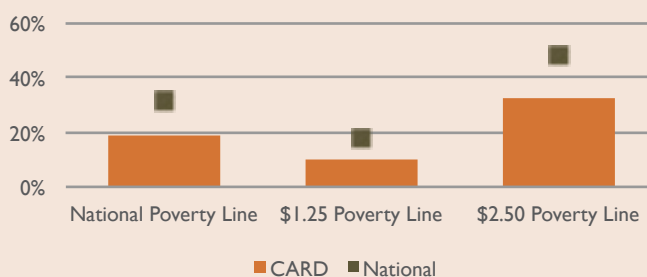
Poverty rates of the participating MFI partners often appear to mimic national poverty levels. In some cases, the average MFI-client poverty level is lower than national poverty incidence, which may be explained by the sample of mature clients interviewed. For example, the clients interviewed at ADRA had been members of ADRA for three to four years. Since the poverty likelihoods of when they joined the MFI were unknown, it is unclear whether their current poverty levels represent an improvement in their lives due to the program or whether this is indicative of Peru's drastically different economy from when the PPI poverty tool was developed for Peru.

Household Poverty

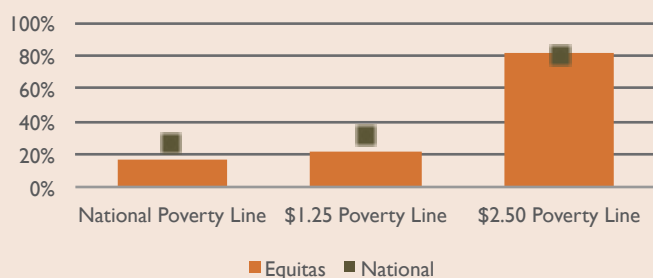
ESAF India: New Clients



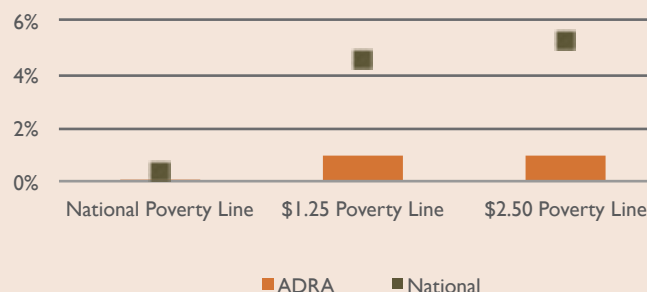
CARD Philippines: Mature Clients



Equitas India: Mature Clients



ADRA Peru: Mature Clients



Food Security and Nutrition

Rationale: While understanding food security is not an interest of all MFIs, it has long been an indicator of interest to organizations serving the very poor given the compelling connection between household poverty and a household's ability to feed its family members. It is generally assumed that an improvement in household income leads to improvements in food consumption. Freedom from Hunger has long utilized an adapted version of the United States Department of Agriculture (USDA) food security survey to understand a partner MFI's outreach to chronically poor households and to monitor whether there are improvements in food security status over time. It has also been used as a proxy indicator for household poverty for this reason. Like the PPI, food security measurements benefit from years of efforts by food security and health organizations in the development of standardized food security measurement tools. Prior Freedom from Hunger research (Crookston, 2015 *forthcoming*) examined the statistical association between poverty status, as measured through the use of the PPI, and food security, as measured through the Food Security Scale, from two large studies conducted in Mali and India as well as 18 smaller studies conducted in several low- and middle-income countries. The study found that poverty status and food security were associated, such that the less poor the person, the more likely they were food secure; the poorer the person, the more likely they were food insecure. However, the magnitude and significance of the association varied by location. The PPI and food security appeared to present different pictures of household well-being at any given time and were complementary measures for monitoring household well-being over time. For these reasons, food security was further explored in the HOPI project. It is both tested as a health indicator as well as a proxy for poverty measurement.



Indicator: Household food security (full version)

Percentage who are food secure

Percentage who are food insecure

Percentage who are food insecure without hunger

Percentage who are food insecure with moderate hunger

Percentage who are food insecure with severe hunger

Theory of Change

MFIs assume that food insecurity levels will be high when clients join the institution to demonstrate depth of outreach to food-insecure households. Over time, food insecurity should decrease and food security should increase.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 

Usability: 

Reliability: 

Survey Question Tested

The survey consists of nine core questions and eight supporting questions and results in two key scores: seasonal food insecurity and chronic food insecurity. The full survey instrument is provided in Appendix 3 and outlines how a household is categorized as food insecure.

Locations Tested

Peru (among many other Freedom from Hunger partners)

Statistical Associations

Association with Poverty Not in Peru but has been found elsewhere.

Likelihood of Standardization

Medium/High, the food security survey is one among several standardized tools used by many practitioners. There are some country- and region-specific tools in use that make the measure more accurate, but the resulting indicators are the same.

Likelihood of Inclusion for Future Client Outcome Assessments

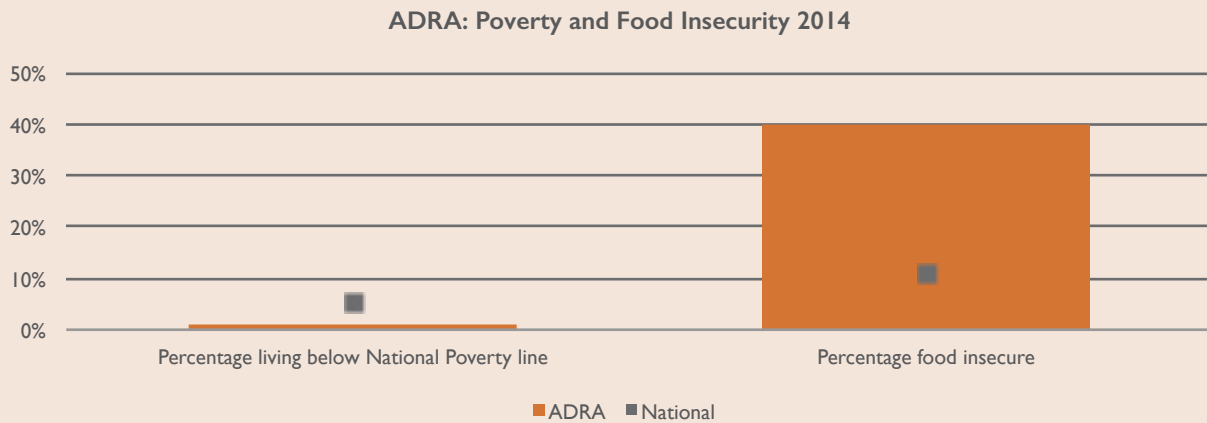
High, main challenge is with finding strong benchmarks.

Experiences in Implementation

As a result of the pilot test and prior experiences using the full food security survey, it is feasible for MFIs to collect food security data. It meets all usability criteria and it should be noted that the measurement of food security is highly sensitive to seasonality. Therefore, if it is chosen as a tracking indicator, the survey should be conducted at the same time each year to avoid comparisons between lean/hunger seasons and non-hunger seasons. For this reason, food security is marked as partially meeting one of the reliability criteria because while it accurately measures food security, it is important to pay attention to the timing of the survey and the national benchmarks used to make comparisons. Finding benchmarks is possible, but they are not always comparable since food security of a population can be measured in different ways and is often measured by different types of organizations. For example, the Global Hunger Index (2014) provided by the International Food Policy Research Institute (IFPRI), is a consistent resource, but does not measure food security in the same way and is not directly comparable. For ADRA below, the food security measure established by the Peruvian Family Demographic and Health Survey of 2010 was used (INEI 2010).

Pilot-test Findings

While ADRA had very few of their mature clients living below the national poverty line, 40 percent of them measured as food insecure. Food security was not associated with poverty for ADRA clients, which suggests it may measure a very different dimension of well-being. In this case, the data here suggests that while ADRA clients may not appear poor by poverty standards, they still find it difficult to find enough food for the family. These findings might also demonstrate how tracking food security in countries where poverty levels are improving could be beneficial because it depicts a type of vulnerability not being captured by poverty measures.



Indicator: Household food security, women and children

Percentage of women/children who are food secure

Percentage of women/children who are food insecure

Percentage of women/children who are food insecure without hunger

Percentage of women/children who are food insecure with moderate hunger

Percentage of women/children who are food insecure with severe hunger

Theory of Change

Household food security is affected by income, liquidity and the capacity of households to weather income and food supply fluctuations. Mothers are known to shield their children from being food insecure; therefore, the measurement of the mother's food security is a more accurate and sensitive measure of household food security. Clients who join and actively participate in microfinance will, over time experience improvements in food security for women and children in their households.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

I will read four choices for your response. Please tell me, which of the following best describes the food consumed by you (female head of household/children in household) in the last year:

1. Enough and the kinds of nutritious food we want to eat
2. Enough but not always nutritious food
3. Sometimes not enough food to eat, was sometimes hungry
4. Often not enough to eat, was often hungry

Locations Tested

India, the Philippines. In the Philippines, the word nutritious was dropped from the question.

Statistical Associations

Association with Poverty

India

ESAF: No

Equitas: No

Philippines

Yes, for both woman and child food security

Likelihood of Standardization

Medium, this is a shortened version of the long survey and is likely less accurate than the full food security survey (see Household food security- Full Version indicator above).

Likelihood of Inclusion for Future Client Outcome Assessments

High/Medium, the word nutritious will not likely remain in future versions and will likely be replaced with a description of what is meant by nutritious. It is also recommended to only use the question related to the female head of household's food security and not include the question as it relates to children's food security.

Experiences in Implementation

The experiences in implementation for this food security indicator are very similar to those experienced with the longer food security survey, referenced above. However, there are a few variations of the findings from the full food

security survey version. For India and the Philippines, these questions were administered only to women and were therefore directed at their personal food security and the food security of their children.

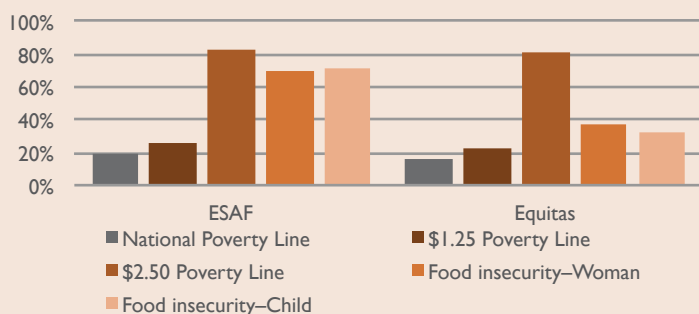
This question can be made more generic by asking whether the food consumed by the household matches any of the answer options. These questions face even more challenges when it comes to reliability since there are even fewer directly comparable benchmarks. Also, the word nutritious found in this question requires additional definition for what constitutes nutritional foods; therefore, this particular question should be used with caution and at a minimum provide guidance on how to define nutritious. This was included given India’s context and the high levels of malnutrition experienced there and may not be as applicable to other contexts. The word nutritious was not included in the Philippines. Finally, the child food security question does not appear to add as much value as the woman food security question and it is therefore recommended to only use the woman head of household question given the measures were often very similar.

Pilot-test Findings

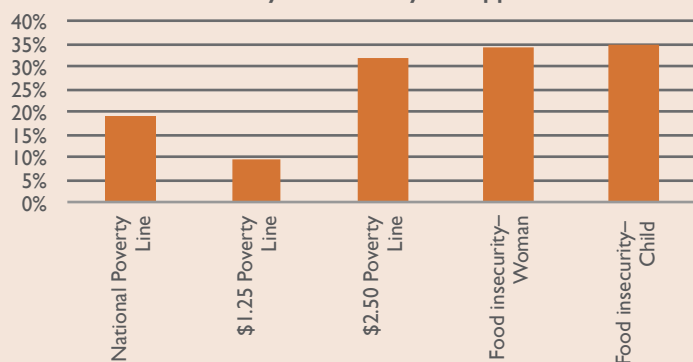
In India, food security and poverty were not associated. Food insecurity was more prevalent at ESAF than at Equitas, which may be explained by the ESAF sample that covers several states of India versus the Equitas sample that mainly represented Tamil Nadu, a state is stronger economically compared to other states.

In the Philippines, food security was associated to poverty—the less poor the household, the more likely the household members were to be food secure.

Food Security and Poverty: India



Food Security and Poverty: Philippines



Who is food secure in the Philippines?



Indicator: Consumption of fruit in the past week, women and children

Percentage of women/children who consumed fruit in the past week

Theory of Change

In the last Indian national demographic and health survey (DHS), it was found that household consumption of fruit was associated with household poverty levels—the less poor the household, the more likely they were to consume fruit (Arnold 2014). For this reason, this indicator was chosen for the pilot test for India to determine whether it would be a valuable nutrition indicator.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Association with Food Security

India
ESAF: No
Equitas: Yes

Survey Question Tested

In the past week, have the women and children in your household consumed fruit? Yes or No.

Likelihood of Standardization

Low, while the idea that certain foods could be indicative of poverty level, this is an area to explore for each country, but this indicator would not be a candidate for standardization.

Locations Tested

India

Likelihood of Inclusion for Future Client Outcome Assessments

Low, both for India and elsewhere since levels are already high.

Statistical Associations

Association with Poverty
None

Experiences in Implementation

Fruit consumption was fairly high for both Equitas and ESAF: 83 percent at Equitas and 93 percent at ESAF. While this indicator might have been associated with poverty in the 2004-2005 India DHS survey (“Nutrition” 2007), it does not appear to be valuable in understanding current client well-being. It also was associated more to food security than to poverty for either organization; the more food secure the household, the more likely members reported consuming fruit in the household in the prior week.

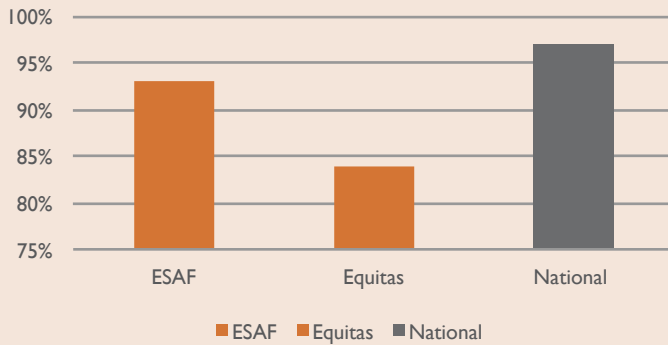
This indicator meets all criteria except for the criterion about being a relevant measure. It is relevant for MFIs that likely have outreach to food-insecure populations in India, but might not be as relevant for a broader population. For this reason, this criterion was coded red since the averages are already high and because it might not be a relevant measure outside of India.

Given the high level of consumption, any MFI that finds fruit consumption a relevant measure might consider altering this question such that fruit consumption is based on the past 24 to 48 hours, and not the past week.

Pilot-test Findings

Both organizations see lower than national average consumption of fruit, with Equitas representing over 10 percentage points less fruit consumption. Some of these results should be interpreted with caution since they may represent food preferences more than financial access to fruit. However, in the Equitas case, fruit consumption was associated with food security, which might suggest that the lower rates of fruit consumption speak to a household's ability to purchase fruit.

Fruit Consumption



Who consumes fruit in India?



Indicator: Consumption of milk products in past week, women and children

Percentage of women/children who consumed milk products in the past week

Theory of Change

In the last Indian national demographic and health survey, it was found that household consumption of milk products, such as milk, paneer, or curd, was associated with household poverty levels—the less poor (or better off) a household, the more likely they were to consume dairy products. For this reason, this indicator was chosen for the pilot test for India to determine whether it would be a valuable nutrition indicator.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

In the past week, have the women and children in your household consumed milk products, such as milk, cottage cheese, paneer, or curd? Yes or No.

Locations Tested

India

Statistical Associations

Association with Poverty

ESAF: Yes

Equitas: No

Association with Food Security

ESAF: Yes

Equitas: Yes

Likelihood of Standardization

Low, while the idea that certain foods could be indicative of poverty level, this is an area to explore for each country; however, this indicator would not be a candidate for standardization.

Likelihood of Inclusion for Future Client Outcome Assessments

Low, given already-high levels of consumption.

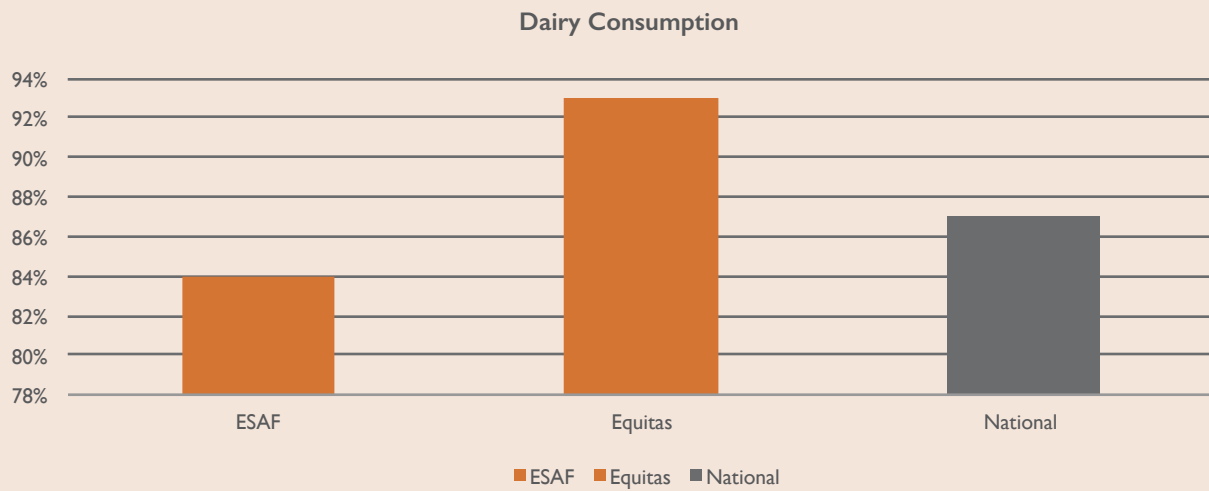
Experiences in Implementation

Dairy consumption was fairly high for both Equitas and ESAF: 92 percent at Equitas and 84 percent at ESAF. Unlike fruit, dairy was associated with poverty and food security for ESAF, and only with food security for Equitas. For example, the more food secure and less poor the ESAF household, the more likely they reported consuming dairy products.

This indicator meets all criteria except for the criterion about being a relevant measure. It has the same challenges as the fruit consumption indicator; however, dairy consumption has a relationship to food security and poverty. For the specific cases of ESAF and Equitas, they might proceed with caution with this indicator since over 80 percent of clients at both locations are already consuming dairy. Given the high level of dairy consumption, any MFI that finds dairy consumption a relevant measure might consider altering this question such that dairy consumption is based on the past 24 to 48 hours, and not the past week.

Pilot-test Findings

Equitas clients consumed more dairy than the national average; whereas ESAF was slightly below the national average. Dairy consumption was associated with food security for both organizations, but only for ESAF was it associated with poverty. Equitas is located in Tamil Nadu, which might also explain the high levels of milk consumption as Tamil Nadu is a large milk-producing state in India.



Who consumes dairy in India?
(by Poverty)



Who consumes dairy in India?
(by Food Security)



Safe Water and Sanitation

Rationale: Access to safe drinking water and basic sanitation is essential to human health; for the poor, these services are often out of reach. Inadequate water and sanitation policies and practices fuel the spread of disease (GLASS 2014). Some MFIs provide financing for the purposes of safe water and sanitation products and services, some provide education and others facilitate access to safe water and sanitation products. Even if MFIs do not provide specific services related to safe water and sanitation, they are a part of the Millennium Development Goals (MDG 7) and can be seen as important indicators of a household's financial ability to cover their basic human needs. Smith and Haddad (2014) have shown in meta-analysis using data collected over the past 40 years for 116 countries that access to safe water and sanitation are key drivers of the global reduction in child undernutrition and stunting.



Indicator: Treatment of Drinking Water

Percentage of households that treat their water to make it safe to drink

Theory of Change

Over time, an increase in percentage of clients (living in areas where clean water is limited) reporting treating their water should occur. It is important to note that while an original assumption of the pilot is that one should expect water treatment to increase because it would indicate households being able to purchase tablets or other water purification systems, this may not always be the case and use of water treatment as an indicator should be considered with some caution and likely in combination with information regarding drinking-water sources.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

Do you do anything to treat your water to make it safer to drink? Yes or No.

Locations Tested

India, Peru, Philippines.

Statistical Associations

Association with Poverty

India

ESAF: Yes

Equitas: Yes

Peru

Not applicable. All but two clients reported treating their water.

Philippines

Yes

Association with Food Security

India

ESAF: Yes

Equitas: Yes

Peru

Not applicable.

Philippines

No

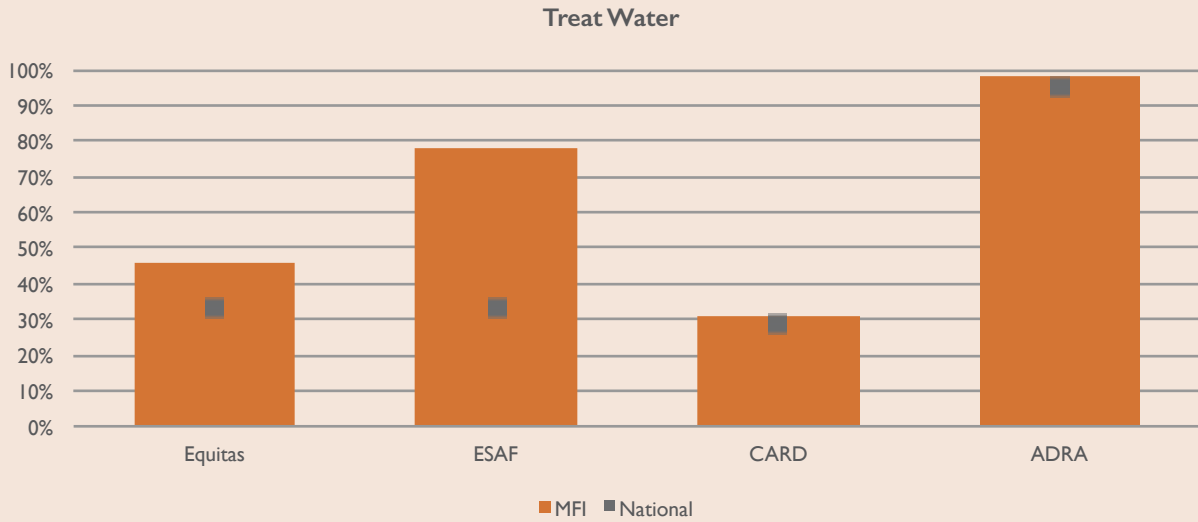
Experiences in Implementation

While the treatment of drinking water was assumed to be a fairly simple indicator to track whether households were likely drinking safe water, this pilot test demonstrated that assumptions about water treatment may vary and may require a deeper understanding about the water sources households have for drinking. For this reason, it meets the feasibility criteria and most of the usability criteria. Where it does not meet usability reflects the fact that one needs to understand the household drinking-water sources for this indicator to be valuable to the MFI. In addition, an MFI might add a follow-up question that asks what they do to treat their water to make sure the methods used help predict whether they are indeed drinking safe water. It is suggested to proceed with caution with this indicator in terms of the ability to benchmark it. Regional data is likely most accurate; national data can be important, but clouds local and regional decisions made regarding local water sources. The indicator is highlighted in red for reliability because with one MFI in India, the poorer the client, the more likely she treated her water while for the other MFI, the less poor the client, the more likely she treated her water. In the Philippines, very few clients reported treating their water and this aligns with the national average.

Pilot-test Findings

The MFI clients participating in this survey appear to treat their water more than the national average. When it comes to associations with poverty and food security,

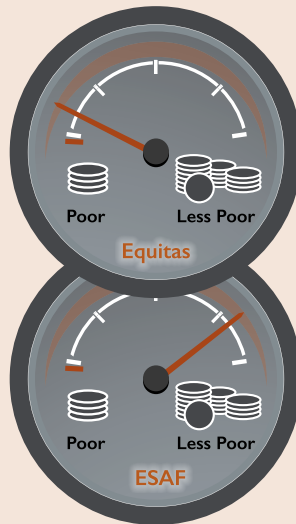
Treatment of Drinking Water



Who treats their water in the Philippines?



Who treats their water in India? (by Poverty)



Who treats their water in India? (by Food Security)



Indicator: Drinking-water source

Percentage of households with improved drinking-water sources

Theory of Change

Over time, more households should report drinking water from improved water sources as they gain the financial means to upgrade or improve their drinking-water sources.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

What is the main source of drinking water for members of your household? Piped water, tube well, borehole, protected dug well, protected well spring, rainwater, unprotected dug well, unprotected well spring, tanker truck, cart with small tank, survey water, bottled water.

Locations Tested

Peru, Philippines

Statistical Associations

Association with Poverty

Philippines

Yes when excluding and No when including bottled water as an answer response.

Peru

Not applicable. See water-treatment indicator above.

Association with Food Security

Philippines

Yes when excluding and No when including bottled water as an answer response.

Peru

Not applicable

Likelihood of Standardization

High to Medium, while the question is simple, and analysis simple as well, the context is quite important for interpreting this indicator, which also appears to require understanding more than one water source for the household.

Likelihood of Inclusion for Future Client Outcome Assessments

Medium to Low, if this question can be used in conjunction with water treatment, it will be a much stronger candidate for inclusion.

Experiences in Implementation

The World Health Organization (WHO) has established criteria for classifying drinking-water sources as improved or unimproved. WHO typically classifies piped water, tube well or borehole, protected dug well, protected well spring and rainwater as improved drinking-water sources while classifying unprotected dug well, unprotected well spring, tanker truck, cart with small tank and surface water as unimproved drinking-water sources (2014). Bottled water may be classified as an improved drinking-water source if the household uses an improved source for cooking and personal hygiene. When information on the secondary source of water is not available, WHO classified it as unimproved as was the case with this dataset. In this pilot test, questions regarding secondary sources of water were not included; therefore, when applying WHO rules for classification, it was difficult to accurately depict improved drinking-water sources in order to accurately benchmark the data with national averages. It should be noted that using this question can be fairly simple, but to adhere to international practices, questions should follow

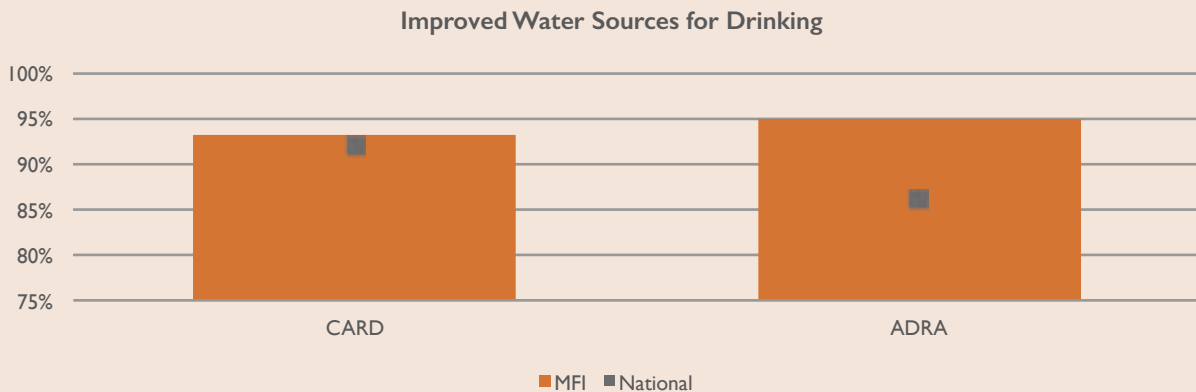
the WHO classification protocols, which includes primary and secondary water sources. For these reasons, this indicator alone partially meets the usability and reliability criteria. Understanding the local context is important to being able to use this indicator correctly and for benchmarking the indicator to national averages and interpreting the responses correctly.

Pilot-test Findings

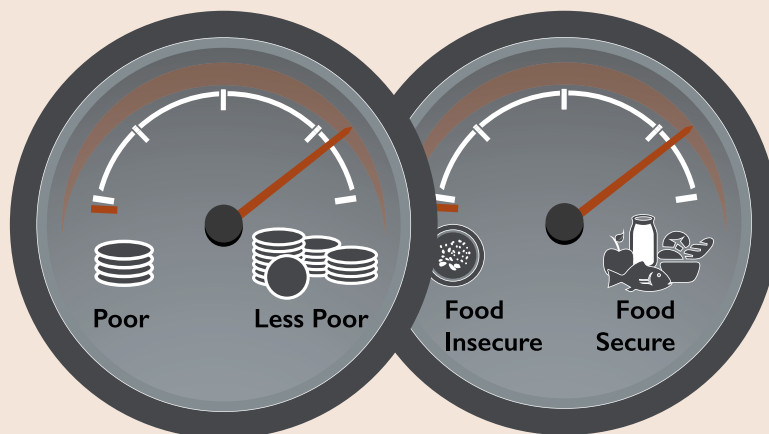
In the Philippines, CARD clients meet the national average for having improved water sources for drinking. ADRA clients exceed the national average.

In the Philippines, when the definition of improved water source includes “bottled water,” water source is not associated with either poverty or food security. However, those who drink bottled water are more likely to be food secure and less poor. Those who have an improved drinking-water source, excluding bottled water, are also more likely to be food secure and less poor. For the Philippines, this might suggest either asking whether they only drink bottled water or asking them about their water source, but any use of this indicator should include an analysis that excludes bottled water as a response as well as an analysis that includes bottled water to monitor the variation.

Treatment of Drinking Water



Who drinks from improved water sources in the Philippines? (excluding bottled water)



Indicator: Open defecation

Percentage of households that have had a member defecate in the open or dispose of feces in the open in the past day

Theory of Change

Over time, fewer households should report defecating or disposing of feces in the open, which would be indicative of their ability to purchase and upgrade their sanitation facilities.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

In the past day, has anyone in your household defecated in the open or disposed of feces in the open?

Yes or No.

Locations Tested

India, Peru

Statistical Associations

Association with Poverty

India

ESAF: No

Equitas: No

Peru

Yes

Association with Food Security

India

ESAF: No

Equitas: No

Peru

No

Likelihood of standardization

Medium, context matters for how relevant this indicator is.

Likelihood of Inclusion for Future Client Outcome Assessments

Medium to Low, the MFI clients are below national average or very few report defecating in the open, thus, it might not be valuable to track this indicator going forward without specific interest in tracking change over time.

Experiences in Implementation

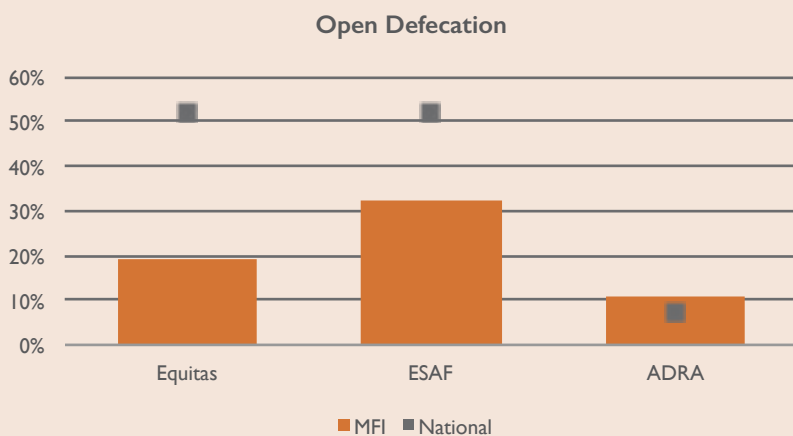
This indicator meets the feasibility and most reliability criteria but suffers when trying to meet the usability criteria. In terms of reliability, an MFI might find it more useful to benchmark their data to regional or local data. For example, in India, the state of Tamil Nadu is an economic powerhouse compared to a state like Bihar. National averages mask the wide variability in access to and use of sanitation facilities that occurs across states. Also, differences between rural and urban access to sanitation facilities is important to consider when making comparisons of the MFIs data to other data sources. In terms of usability, while change in this indicator can occur in the short term, there is more concern that it may not change much in the short term if the averages who report defecating in the open are low. For example, in Peru, less than 10 percent reported defecating in the open. This may not make it a very relevant measure if averages at baseline are low, or in India's case, much lower than the national average. But this measure would be relevant for countries in Africa and Southeast Asia where open defecation rates are high. Whether an MFI is working to influence this indicator directly or indirectly, they would need to be aware of local efforts to improve local sanitation facilities to insure accurate interpretation of the data. As with the combination of water treatment and drinking-water source, this question would be stronger if used in conjunction with the sanitation facility used by the members of the household. However, significant research has recently shown

that behavior-change communication related to sanitation is more important than simply building improved sanitary facilities (Clasen 2014). What may be required for the most reliable measure would be to consider the Safe San index, which is a series of questions that reviews sanitation practices through the use of several related questions (Jenkins 2014)

Pilot-test Findings

Open defecation was not found to be associated with food security or poverty in India, suggesting that it is measuring a construct very different from a household’s financial capability (on an asset or cash-flow basis). This means while it is assumed that as a household’s income increases, clients might more likely improve their sanitation facilities, this may not be the case. In countries like India where demand for use of toilets is known to be low, income may not be the primary barrier to improving a household’s sanitation facility. The results for ESAF show that for their incoming clients, 30 percent reportedly defecated in the open. This is relatively high; it might therefore be of interest for ESAF to track this indicator, along with indicators related to the sanitation facility used. While both ESAF and Equitas are below the national average on this indicator, they could indeed be higher than the state or local averages. At the time of this report, this data was not available for comparison.

While open defecation is associated with poverty in Peru—the poorer the client, the more likely she reported defecating in the open—so few report this that it may not be valuable to track. To reiterate, however, this pilot test was conducted among fairly mature clients. Since it is unclear whether this represents the total population of ADRA clients, establishing a baseline would be beneficial to determine whether this indicator could be useful.



Who defecates in the open in Peru?



Preventive Health Care

Rationale: Often when MFIs facilitate linkages to health providers, the goal is to help their clients prevent illness or provide them with early detection diagnostic tests, such as early detection of cervical cancer, diabetes, etc. Prior Freedom from Hunger's research has found that a household seeking preventive care was one of the most promising indicators since it is generally uncommon for the poor to seek medical care when they are not ill (Metcalf 2014). Therefore, particularly for MFIs that emphasize preventive health care, understanding whether clients seek general medical checkups is of great interest to them and can reflect their efforts to improve household access to and use of preventive health care services. For MFIs not providing preventive health care services, the fact that a household seeks care when members are not sick can indicate a higher level of household income or interest in preventive care since they are seeking health care that may not be perceived as critical to them as curative health care services.



Indicator: Youngest child born in a hospital




Percentage of households who reported that their youngest child was born in a hospital

Theory of Change

Over time, more clients should report giving birth to their children in hospitals because they have the financial means to do so.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

Think about the youngest child in your household. Was this child born in a hospital? Yes or No.

Locations Tested

India

Statistical Associations

Association with Poverty

ESAF: Yes
Equitas: No

Association with Food Security

ESAF: Yes
Equitas: Yes

Likelihood of Standardization

Low to Medium

Likelihood of Inclusion for Future Client Outcome Assessments

Low to Medium

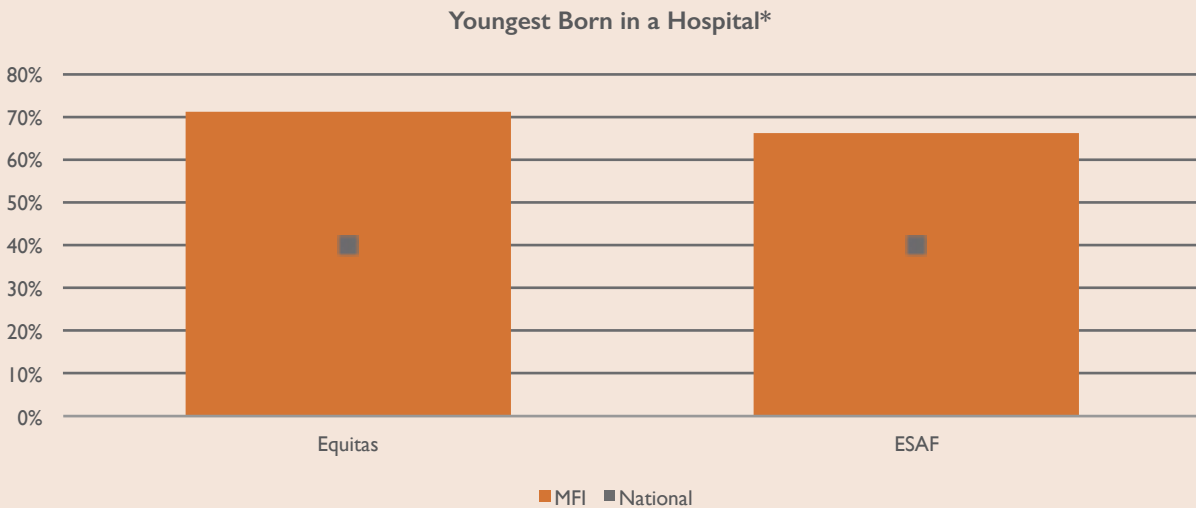
Experiences in Implementation

The desire to track indicators related to infant and maternal health stems from the interest among MFIs and their health collaborators to understand the MFI's contribution to MDGs 4 which is related to child health outcomes, particularly the reduction in child mortality. However, from the outset, the indicator for hospital births faced challenges. For responses to be reliable, this question needs to be asked of recently pregnant women. One must also consider how to track this over time as there will only be so many women pregnant at any given moment; as women age, they will give birth to fewer children. This indicator, while meeting the feasibility criteria, does not meet the usability and reliability criteria. Given the way the question is currently asked, it might not change in the short term if clients are asked to reflect on their youngest child (who may be an adolescent or adult now). It might not be particularly relevant to all MFIs unless they have specific interventions to encourage births attended by skilled birth attendants (SBAs) or in health facilities. This indicator does not fully meet the benchmark criteria because of the way the question was asked. National-level surveys typically ask where the woman gave birth and often differentiate among public, private and NGO health facilities, not specifically hospitals. Overall, this indicator is in question since a woman's or family's preference for where to give birth also influences the decision to give birth in a hospital.

Pilot-test Findings

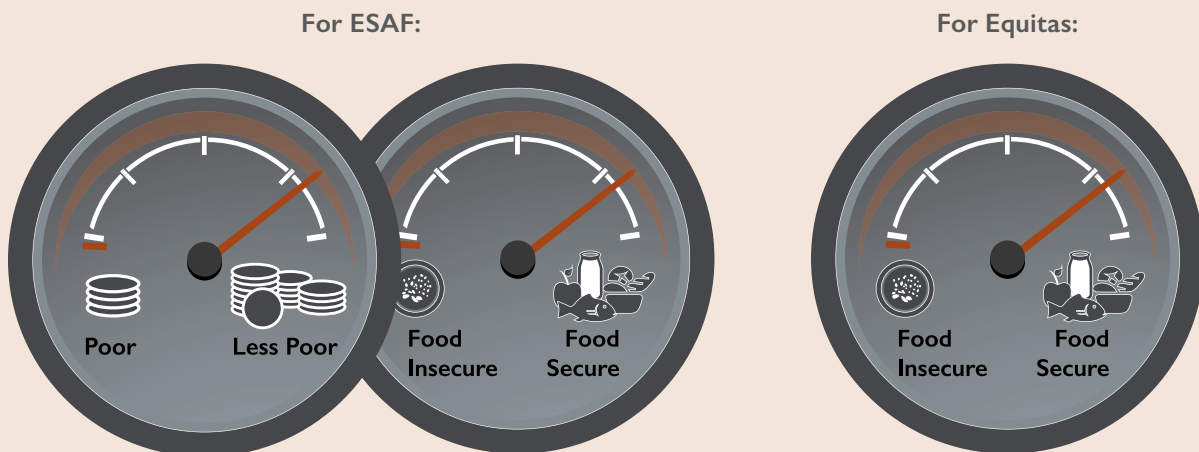
Both ESAF and Equitas surpass the national average in terms of those who have their birth attended by a skilled birth attendant, particularly since the averages represent those who actually gave birth at a hospital. At ESAF, the more food secure and the less poor the client, the more likely she reported giving birth to her youngest child in a hospital. However, at Equitas, only food security was associated with youngest child being born in a hospital.

Hospital Birth



*Benchmark provided here reflects national average of those reporting to have given birth in a health facility (includes public, private, NGO facilities).

Who gives birth in a hospital in India?



Indicator: Children under five receive vitamin A oil

Percentage of children under the age of five (CU5) in the household who received vitamin A oil in the past year

Theory of Change

Over time, more clients should report that their children aged five or younger are receiving vitamin A oil.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

For any children 5 and under in your household, have they received vitamin A oil in the past year? Yes or No.

Locations Tested

India

Statistical Associations

Association with Poverty

ESAF: No

Equitas: Yes, the poorer the client

Association with Food Security

ESAF: Yes

Equitas: Yes

Likelihood of Standardization

Low

Likelihood of Inclusion for Future Client Outcome Assessments

Low

Experiences in Implementation

This question can be asked in a survey; however, it is a less feasible indicator since it relies on also determining the number of households with a child under the age of 5. Both indicators are needed to get a sense of whether the household is in a position to put a particular practice into action. This indicator is challenged to meet the usability and reliability criteria as it needs to be tracked among households that may not have CU5 and so coding of “not applicable” is important and makes the analysis a bit more complicated. While the results show that the MFI averages are close to the national averages, the reliability of this indicator is called into question given the poorer the Equitas client, the more likely they reported receiving vitamin A supplementation and only 20 percent of the sample had a child under the age of 5.

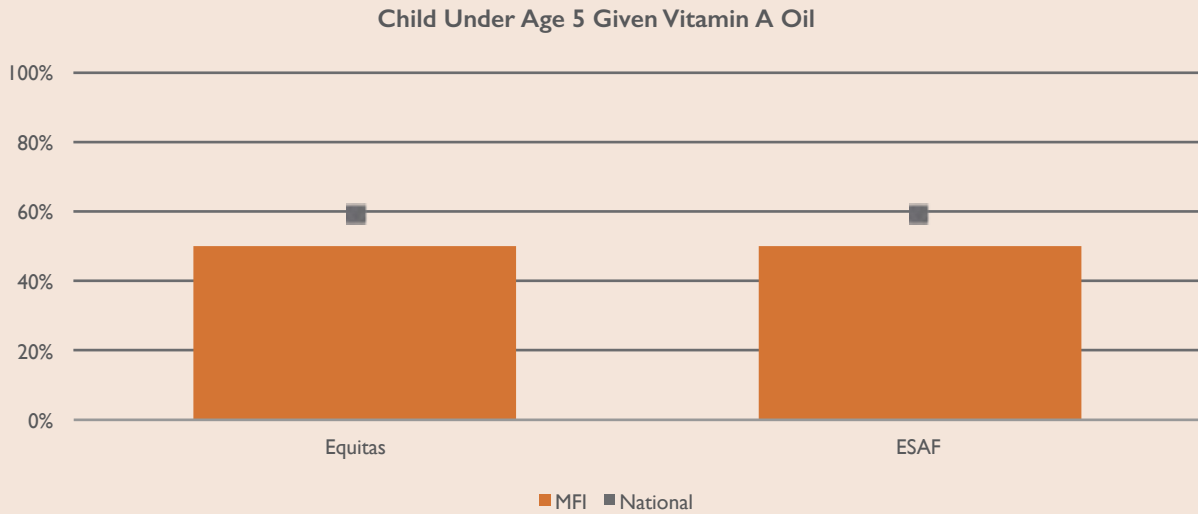
Pilot-test Findings

Between 20 and 46 percent of households had a CU5 among Equitas and ESAF, respectively. Among those children, approximately 50 percent of them received vitamin A oil supplementation. This is slightly below the national average of 59 percent.

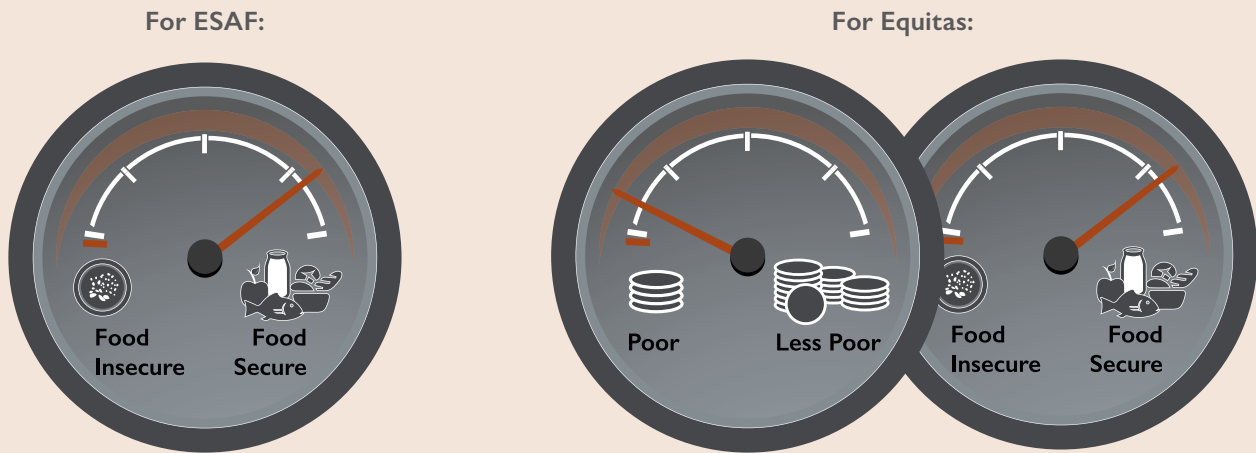
This indicator, like water treatment, has some counter-intuitive, but logical, findings. The more food secure the client, among both ESAF and Equitas, the more likely she reported a child under the age of 5 in the household received vitamin A oil supplementation. This was associated with poverty among Equitas clients but not among ESAF clients. However, the poorer the Equitas client, the more likely she reported receiving vitamin A oil supplementation. This might suggest that poorer clients are often targeted for receiving vitamin A supplementation or that the public

health system might be working better in some places compared to others, which might make this indicator difficult to interpret if you assume that the number reporting vitamin A oil treatment should improve over time if they have more financial resources to comply with the treatment.

Vitamin A Supplementation



Which children under the age of 5 in India receive Vitamin A oil supplementation?



Indicator: Coverage under PhilHealth national hospitalization insurance

Percentage covered by PhilHealth insurance

Theory of Change

Over time, more clients should report being enrolled in PhilHealth hospitalization insurance.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

Are you covered by PhilHealth insurance?
Yes or No.

Locations Tested

Philippines

Statistical Associations

Association with Poverty

No

Association with Food Security

Yes

Likelihood of Standardization

Low

Likelihood of Inclusion for Future Client Outcome Assessments

High/Medium

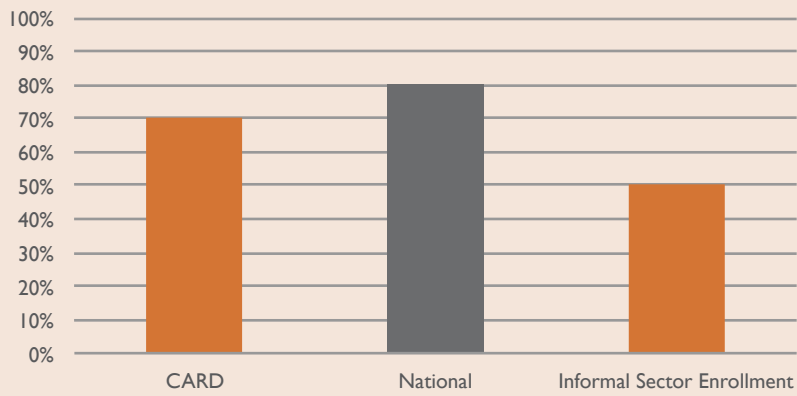
Experiences in Implementation

PhilHealth is national hospitalization insurance that has fairly high coverage across the Philippines. CARD facilitates their client access to this insurance by providing health loans to cover the premiums and by helping fill out the necessary paperwork. It is therefore an active engagement on CARD's part to ensure their clients are enrolled in the insurance. This indicator is quite simple and meets almost all criteria except for the usability criteria, which would require some engagement on the part of the MFI to actively work to improve enrollment rates, which not all MFIs will desire to do. For this reason, it will likely be included in future client outcome surveys for CARD, in particular, but has very low likelihood of standardization until national health insurance schemes or insurance enrollment becomes more common across the globe.

Pilot-test Findings

CARD clients are slightly below the national average in terms of enrollment in PhilHealth; however, since most of CARD's clients would be considered those living in the informal sector, CARD enrollment could be significantly higher compared to the overall informal-sector enrollment that is estimated to be no higher than 50 percent (Quimbo 2013). While enrollment is associated with food security, it is not associated with poverty.

Enrolled in PhilHealth



Who is most likely to enroll in PhilHealth?



Indicator: Used preventive health service

Percentage who used preventive health care services in the past year

Theory of Change

Over time, more clients should report using preventive health care, such as general medical checkups, Pap smears and other diagnostic exams such as those to detect diabetes, high blood pressure, etc.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested in Philippines

In the past 12 months, did you or any member of your household visit a doctor or other health provider for a preventive health service (for example, checkups, blood pressure checks, vaccinations, breast exams, Pap smears, etc.)? Yes or No.

Survey Questions Tested in Peru

In the past 12 months: Did you have a general physical exam?; Did you have a Pap smear?; Did you have a breast exam?; Did you have a blood pressure test?; Did you have a blood test for diabetes? Yes or No.

Statistical Associations

Association with Poverty

Philippines

No

Peru

Only for the breast exam and only for national poverty line

Association with Food Security

Philippines

No

Peru

Only for the glucose test

Likelihood of Standardization

Medium, need to find the types of exams relevant to context but could also simply ask whether they have seen a doctor in the prior year for a checkup. In some contexts, preventive health care is not part of primary health care services.

Likelihood of Inclusion for Future Client Outcome Assessments

Medium to High, this depends on whether organizations intentionally work to improve access to preventive medicine.

Experiences in Implementation

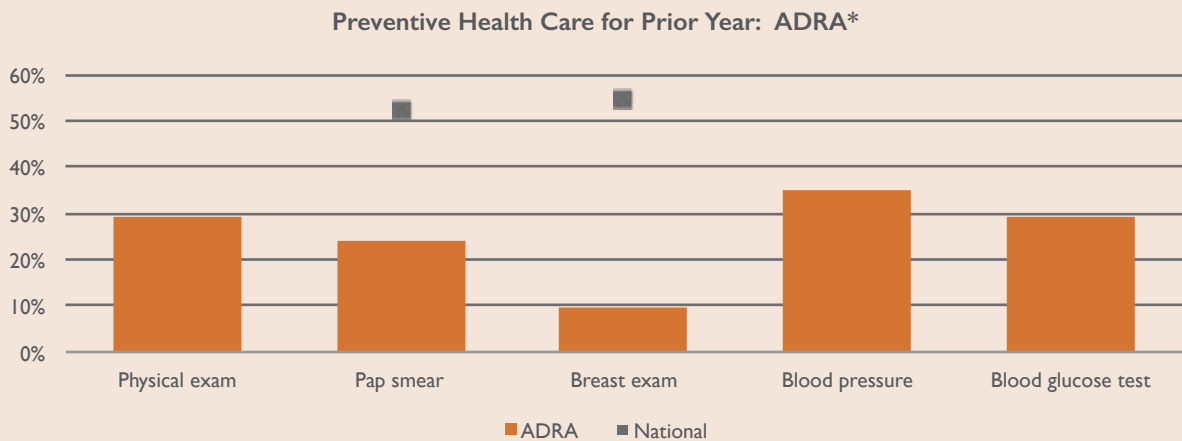
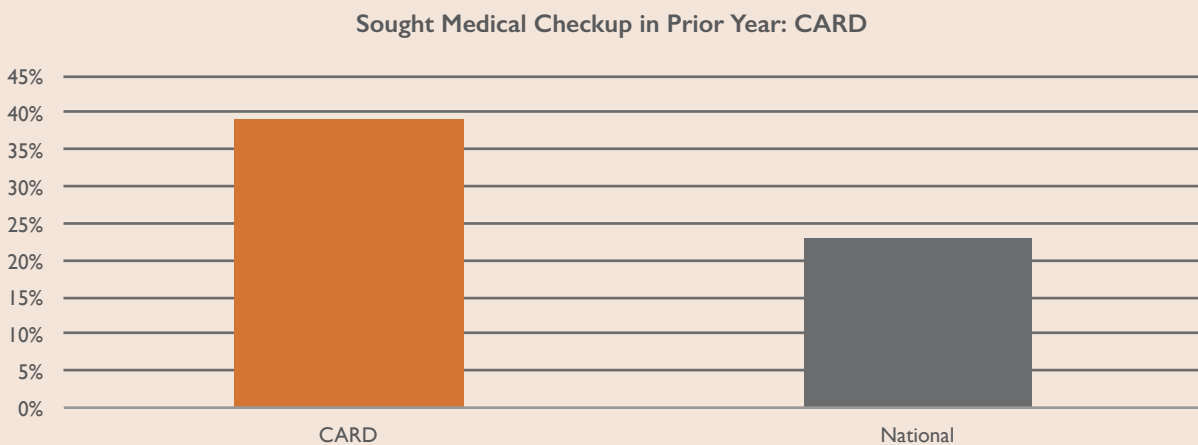
The sets of questions used in the Philippines and Peru meet many of the criteria except for the need to be relevant to all MFIs and to be independent from the need for specific interventions to change the outcomes. This means that indicators related to use of preventive health services will be most useful to MFIs that directly try to improve client behaviors related to preventive health care. Benchmarking of this indicator can be challenging depending on how the questions are asked on national-level surveys. For example, most national health surveys ask about health-seeking behavior in the prior 30 days whereas these questions asked about seeking preventive care in the prior year.

Pilot-test findings

CARD first asked the client whether she visited the doctor for a preventive health care service and she was to identify the service. The majority of the 39 percent who sought care did so for basic physical exams. Neither poverty nor food security was associated with preventive care.

Two years prior to this assessment ADRA implemented a linkage to a local health clinic that provided their clients with a set of preventive care exams, including the exams mentioned in the graph. While very few national averages were available, it is clear there is much room for improvement in the rate of those seeking preventive health care services.

Preventive Health Care



*Pap smear and breast exam national averages are based on report of the past five years, based on 2008 data:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3724344/> and http://webinei.inei.gov.pe/anda_inei/index.php/catalog/168/data_dictionary

Indicator: Saved money for health in last six months

Percentage who reported saving money for health expenses in the last six months

Theory of Change

Over time, more clients should report saving or putting money aside for future health care expenses.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

In the last six months, did you use a strategy to save money specifically for health? Yes or No.

Locations Tested

Peru

Statistical Associations

Association with Poverty

Only with national poverty line, not for \$2.50 and \$1.25

Association with Food Security

Yes

Likelihood of Standardization

Medium to High, standardization is likely high if the question is more generic. For example, do clients have money set aside for emergencies?

Likelihood of Inclusion for Future Client Outcome Assessments

Medium to High, depends on whether MFI is interested in improving savings behaviors as related to health.

Experiences in Implementation

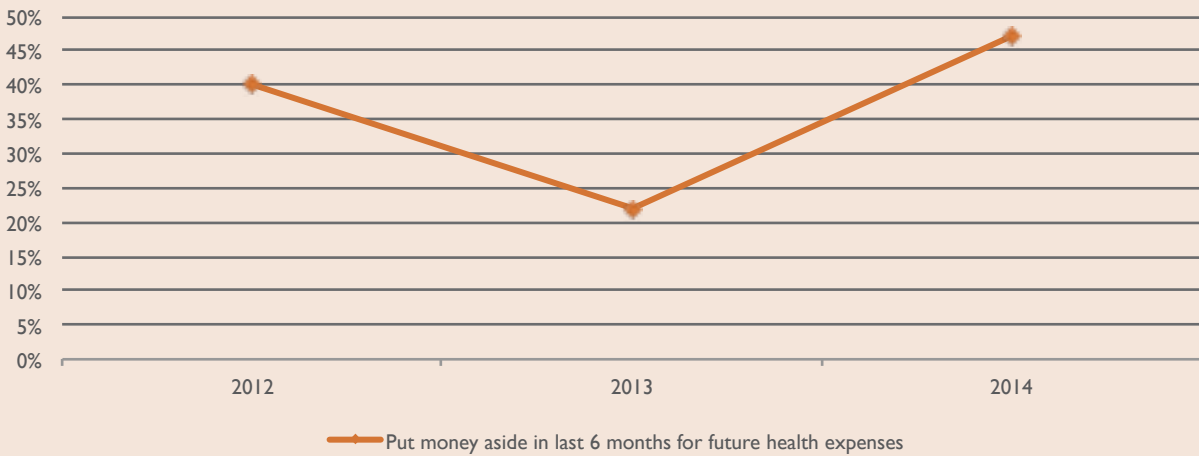
While this indicator was only tested with ADRA in Peru, prior Freedom from Hunger studies have inquired about clients setting money aside for health as this is the emphasis of some education sessions provided by partner MFIs. For this reason, it is likely most relevant for organizations that emphasize the importance of setting aside savings for health or for emergencies. This indicator is also greatly challenged by not having national benchmarks and would therefore need to rely on changes over time within the same organization to provide the most meaning. It meets all other criteria. This indicator could be more standardized across MFIs if clients were asked about setting aside money for emergencies in general instead of just for health, particularly since many MFIs might provide financial education on emergency preparation.

Pilot-test findings

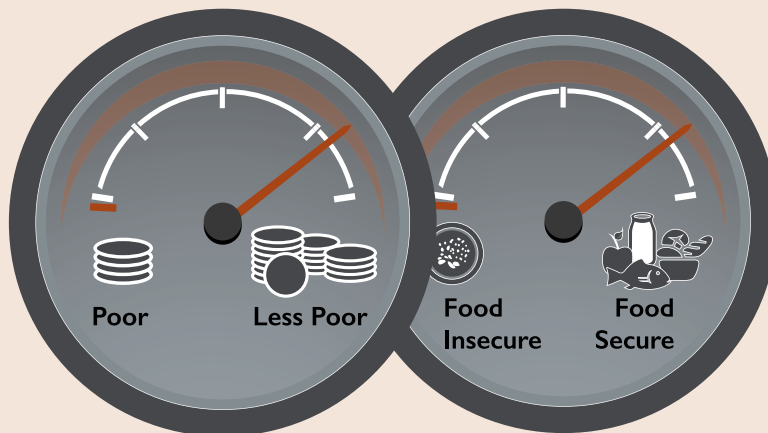
In 2012, in a prior evaluation, ADRA clients were first asked whether in the prior six months, they had set money aside for health. In 2012 and 2013, 40 percent and 22 percent reported setting money aside, respectively. In 2014, this had jumped back to 47 percent. The first two data points were collected as part of a pilot project in which ADRA was helping facilitate savings so that clients could pre-pay for and access a series of preventive health services with a partner health organization. The drop in the savings for 2013 might be explained by this alignment with a program period where clients had completed their saving obligation in late 2012 (much like paying an

insurance premium meant to cover any expenses covered through the year) but were continuing to use the health services for which they had prepaid in 2013. This might explain fewer clients reporting to have saved in 2013. Between 2013 and 2014, ADRA was revamping their health saving and prepaid health service project to enable them to expand it, and the savings services and linkages to the health services were delayed at the time of the 2014 survey. Therefore, 2014 might be indicative of clients choosing to save on their own.

Put Money Aside in Last 6 Months for Future Health Expenses



Who is most likely to set money aside for future health expenses?



Curative Health Care

Rationale: While national-level demographic and health surveys often measure morbidity—the incidence or prevalence of disease and illness—this is generally a difficult indicator for MFIs to track because it can be highly dependent on seasonality issues. National population-based surveys often use morbidity as a way to understand health-seeking behavior when a person is sick, such as how long they wait to seek medical care after falling ill, the cost to seek treatment, etc. In lieu of asking questions related to morbidity, two questions were asked related to a household forgoing treatment or purchase of medicine due to cost concerns. Prior Freedom from Hunger research (Leatherman 2012), supported by other health-cost research (McIntyre et al., 2006; Russell, 2004), have shown that medications often make up the largest share of costs for seeking treatment and that the cost for seeking treatment for one episode of illness can account for 2 to 16 percent of a household’s annual household income, which by some standards is considered catastrophic. It is for this reason that questions related to forgoing treatment and the purchase of medicines could serve as proxies for understanding health-seeking behaviors as they relate to illness.

For the pilot test, two indicators were originally tested under a dimension of “financial stress” because they were perceived to reflect a household’s inability to seek health care when it was needed for illness. The dimension name has been changed to reflect access to curative care for the purposes of this report.



Indicator: Delay in seeking medical treatment due to cost concerns

Percentage who delayed seeking medical treatment in the past year for any person in the household because of cost concerns

Theory of Change

Increases in financial resources (and other possible MFI interventions) over time will decrease numbers of clients reporting foregoing medical treatment due to cost.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

In the past year, did you delay seeking medical treatment for any person in your household because of concerns about the cost? Yes or No.

Locations Tested

India, Peru, Philippines

Statistical Associations

Association with Poverty

India

ESAF: No

Equitas: No

Philippines

Yes

Peru

No

Association with Food Security

India

ESAF: Yes

Equitas: No

Philippines

Yes

Peru

No

Likelihood of Standardization

High

Likelihood of Inclusion for Future Client Outcome Assessments

High

Experiences in Implementation

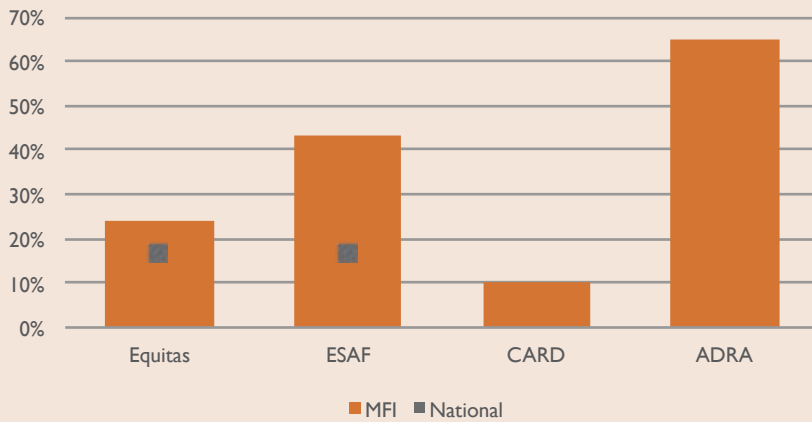
This question was tested in all three countries. This indicator meets all usability criteria except one. In many countries, primary health care is free and clients only pay for medicines or for secondary care, which can be very expensive. However, in some cases, there are preferences for seeking health care from private health care providers because public health care is not always consistent. For this reason, one may want to proceed with caution in using this indicator if there is strong use of the public health care system. This indicator was particularly difficult to benchmark, which is why it does not fully meet the reliability criteria.

Pilot-test Findings

Benchmarks for delayed treatment due to cost were found only for India, and both Equitas and ESAF had clients who were more likely than the national average to delay seeking treatment due to cost. Only at ESAF was this

indicator associated with food security but not with poverty. This may mean that improving one's financial capability is not always directly related to the decisions she makes about seeking medical treatment. CARD had very low levels of delayed treatment due to cost and those who did delay treatment were more likely to be poorer and more food insecure. Over 60 percent of ADRA clients indicated they delayed seeking medical treatment due to cost; those who did delay were more likely to be poorer.

Treatment Delayed Due to Cost



Who is most likely to delay seeking treatment in India among ESAF clients?



Who is most likely to delay seeking treatment in the Philippines?



Who is most likely to delay seeking treatment in Peru?



Indicator: Delay of purchasing needed medication due to cost concerns

Percentage who did not purchase needed medicines in the past year because of concerns about the cost

Theory of Change

Increases in financial resources (and other possible MFI interventions) over time will decrease numbers of clients reporting foregoing the purchase of medicines for ill family members.

Indicator Strengths

Indicator Criteria Rating



Survey Question Tested

In the past year, did you not purchase needed medicines because of concerns about the cost? Yes or No.

Locations Tested

India, Peru, Philippines.

Statistical Associations

Association with Poverty

India
ESAF: No
Equitas: No

Peru
No

Philippines
Yes

Association with Food Security

India
ESAF: No
Equitas: No

Peru
No

Philippines
Yes

Likelihood of Standardization

High

Likelihood of Inclusion for Future Client Outcome Assessments

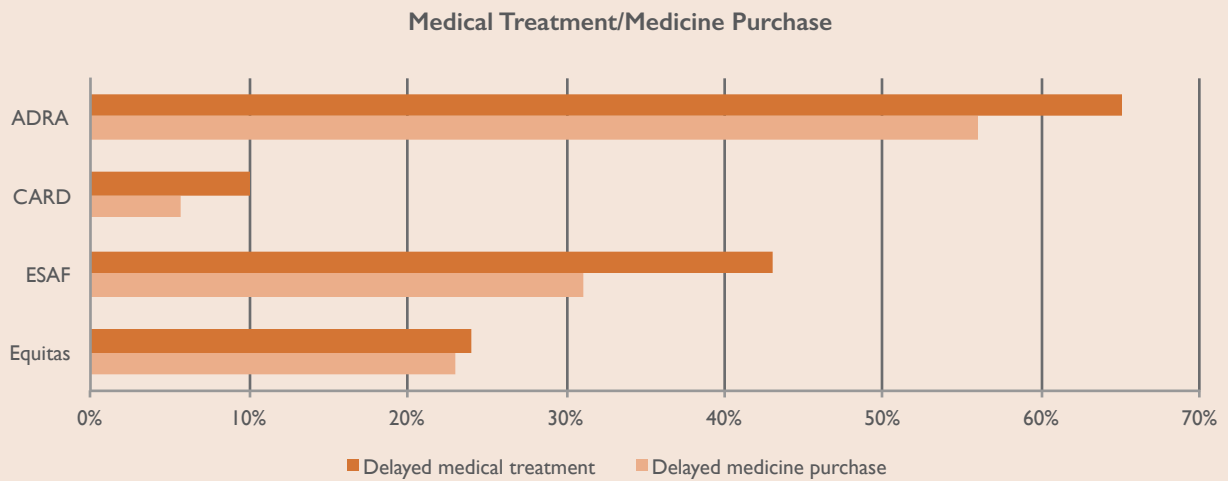
Low

Experiences in Implementation

This indicator meets all criteria except for those related to reliability because of the difficulty of finding national benchmarks because this is not a common question found in demographic and health surveys. While the indicator is useful, the indicator related to delaying treatment (prior indicator) may be a stronger indicator given that in the pilot tests, clients reported less often that they delayed purchasing medicine compared to delaying medical treatment. Therefore, it is recommended that the indicator related to the delaying treatment be prioritized over the use of this indicator. This question is easy to standardize but will not likely be included in future studies in which the question is related to treatment.

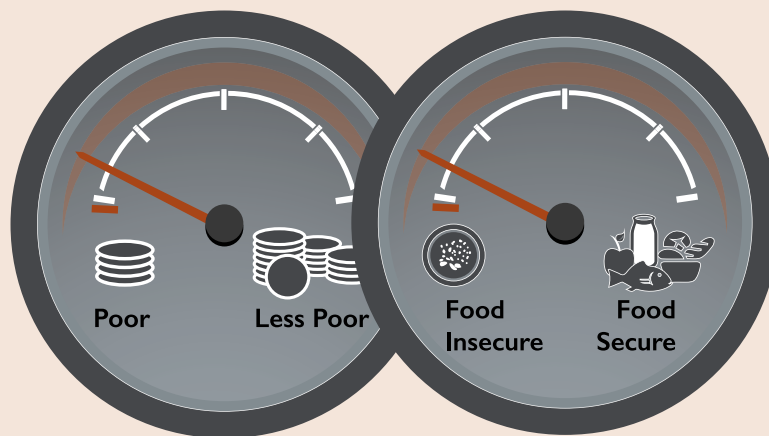
Pilot-test Findings

Clients of all the MFIs reported delaying purchasing medicine at lower rates than those reporting to have delayed seeking treatment due to cost concerns. For this reason, this indicator should either be used alone or the indicator regarding delayed treatment should instead be used as an indicator of financial capability of seeking medical treatment when needed.



This indicator was only associated with poverty and food security in the Philippines.

Who is most likely to delay purchasing medicine in the Philippines?



Attitudes

Rationale: Attitudes and perceptions towards one's life are not often considered as important indicators for tracking well-being over time. However, in many of Freedom from Hunger's research projects, they are often useful indicators because they can simply detect and reflect fairly complicated situations. For example, a client's perception of her ability to cover health care costs might be a more accurate indicator than a researcher's attempt to measure the client's income, savings and financial capability to predict whether she can actually cover future health costs. A growing body of evidence related to the psychological consequences of poverty suggests that it is important to understand the relationship of poverty, its psychological impacts (attitudes and perceptions) and the impacts on economic choice (Haushofer 2014).



Indicator: Level of preparation to care for one's future health needs

Percentage who feel prepared to care for one's future health needs

Percentage who feel confident they can afford and seek appropriate medical care for household when needed

Theory of Change

Over time, clients should feel more prepared and more confident of their ability to address health care costs when a family member becomes ill.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

Peru

How prepared do you feel you can care for your health when confronted by an illness? Very prepared, Somewhat prepared, Not prepared.

Philippines

Which of the following best describes your household:

1. I feel very confident, I can both afford and seek appropriate medical care for my household when needed.
2. I feel somewhat confident, I sometimes can both afford and seek appropriate medical care for my household when needed.
3. I am not very confident, I really cannot both afford and seek appropriate medical care for my household when needed.
4. I don't know.

Locations Tested

Peru, Philippines

Statistical Associations

Association with Poverty

Peru

No

Philippines

No

Association with Food Security

Peru

No

Philippines

Yes

Likelihood of Standardization

Medium to High

Likelihood of Inclusion for Future Client Outcome Assessments

Medium to High

Experiences in Implementation

This indicator meets all criteria except for those related to reliability. No national benchmarks were available. As with all or most attitude questions, which are based on emotions, answers might not necessarily measure a person's capability of truly covering future medical expenses, which is actually more a measure of validity that was not one of the original criteria. Nevertheless, it could accurately gauge a person's feeling of preparation without needing to determine the sources of money she has access to for this purpose.

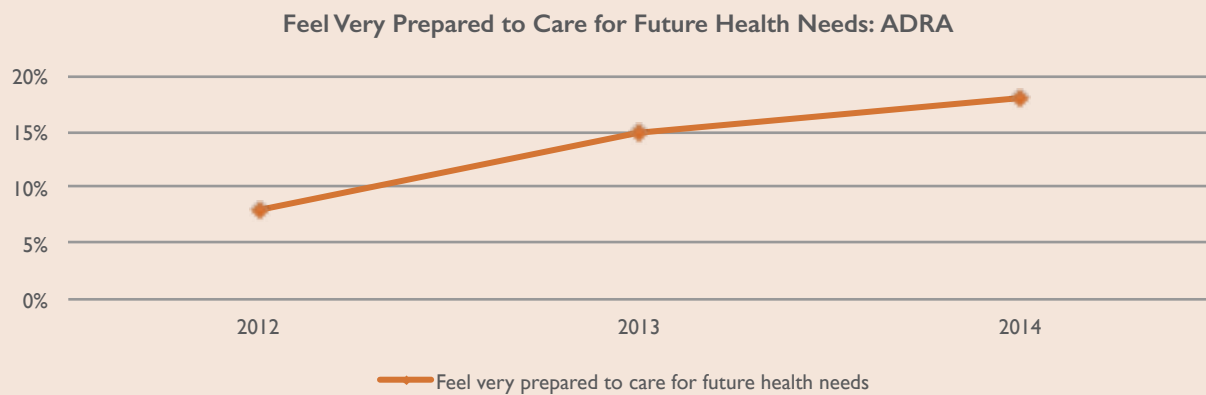
Pilot-test Findings

The indicator used with ADRA was measured two prior times during a pilot project. While the client was given the option of answering “very prepared,” “somewhat prepared” and “not prepared,” only the option for “very prepared” was analyzed. Analyzing all answer options might be more useful because it is unknown how much the results might have changed if also measuring “somewhat prepared.” However, this also makes the analysis more complicated. See the CARD figure as an example of how this might break down. This indicator was not associated with food security or poverty, suggesting that people’s feeling of preparation may have little to do with their actual financial status and could mean it has more to do with the health services available to them or the trust they have in these services.

With CARD, this indicator was only associated with food security—the more food secure, the more likely clients indicated they were very confident. Most clients fell within the somewhat confident and very confident range in their ability to seek and afford medical care.

This indicator would be stronger if it only asked about confidence to afford or confidence to find appropriate medical care, but not both in the same question.

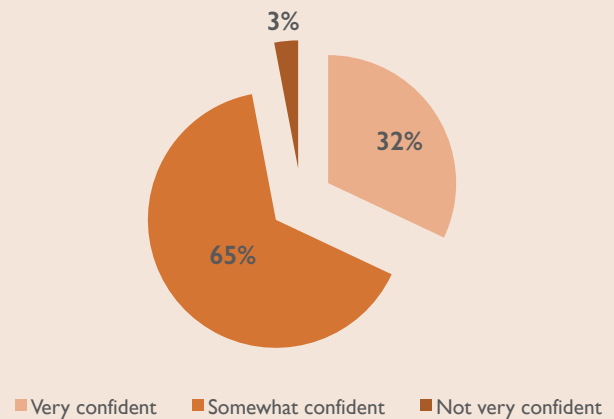
Preparation/Confidence for Future Health Needs



Who is most likely to feel very confident in her ability to seek and afford medical care in the Philippines?



Level of Confidence To and Seek and Afford Appropriate Medical Care: CARD



Indicator: Level of confidence in ability to receive adequate health care when family needs it

Percentage who feel confident that they can receive adequate health care when family needs it

Theory of Change

Over time, more clients should report feeling very confident in their ability to access adequate health care when the family needs it.

Indicator Strengths

Indicator Criteria Rating

Feasibility: 
Usability: 
Reliability: 

Survey Question Tested

How confident do you feel you can receive adequate health care when your family needs it? Very confident, Somewhat confident, Not confident at all.

Locations Tested

Peru

Statistical Associations

Association with Poverty

Yes

Association with Food Security

Yes, the more food insecure were more likely to feel confident.

Likelihood of Standardization

Low

Likelihood of Inclusion for Future Client Outcome Assessments

Low to Medium, for ADRA, it would be Medium.

Experiences in Implementation

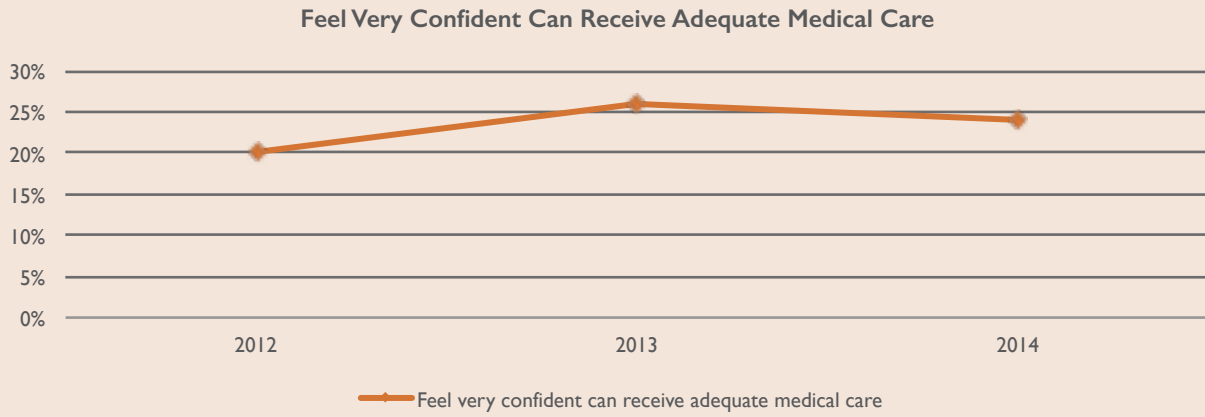
The motivation behind this question is to understand whether the health service linkages ADRA made with a local health provider resulted in clients feeling more confident they could receive adequate health care when the family needed it.

This question is most useful for organizations that are intentionally working to improve the types and quality of health services that clients have access to and would not be very relevant for organizations that are not intentionally addressing this, unless they are seeking to better understand barriers to health care for clients, which could serve as a proxy for understanding health status. For example, if clients do not feel confident in their ability to receive adequate health care, they are not likely to seek it when really needed, resulting in delayed treatment or poor health outcomes. For this reason, this indicator is at risk of not being usable for MFIs that do not provide the services themselves or do not focus on linkages to health providers. This indicator also does not have any national benchmarks to compare to and therefore does not meet all the reliability criteria.

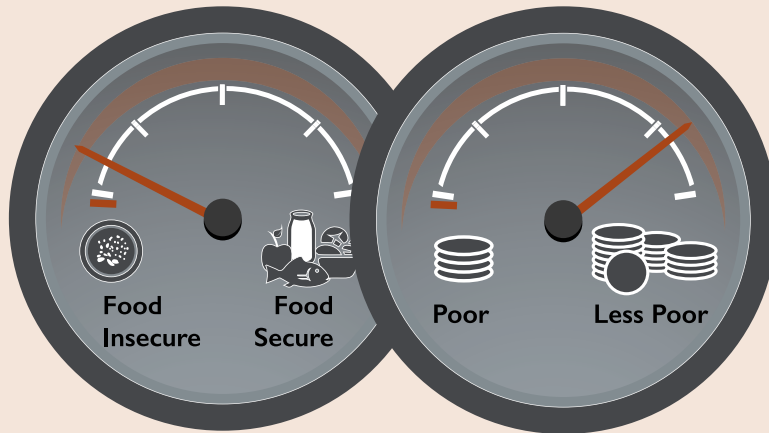
Pilot-test Findings

Like the prior indicator, the data for ADRA only includes the response of being “very confident,” which may mask important changes among clients who move from feeling not confident to feeling somewhat confident. While this approach simplifies analysis, it may not be the most useful way to track change over time. Because a prior survey had been conducted with ADRA clients in 2012 and 2013, this provides the opportunity to see the sort of information this indicator can provide over time. Also of note is that the clients most likely to say they were very

confident are those who are the most food insecure and those above the poverty line. This may suggest that food-insecure clients who gained access to the health linkages were the ones to benefit the most. Those who lived above the poverty line also felt most confident.



Who is most likely to feel very confident in ability to receive adequate health care when the family needs it?



Indicators for Future Consideration

This section addresses indicators that were not tested, but might be applicable across many regions of the world or that might be of interest to some MFIs. The suggested indicators may not represent all indicators that should be considered, but are provided as examples.

Domestic violence

Rationale: When the HOPI project was presented at the 18th Microcredit Summit in Merida, Mexico, in September 2014, one dimension that was thought to be missing was domestic violence. Since many MFIs work only with women or consider themselves to be concerned about gender issues, domestic violence seems to be a theme to explore when tracking women clients over time.

Theory of Change: Many MFIs actively engage their female clients in domestic violence education. Microfinance professionals have also long been interested in domestic violence because it was theorized that microfinance would either reduce domestic violence, due to a woman's increasing financial contributions, or increase domestic violence for the very same reason. The results are not definitive: some studies have shown that as a result of participating in microfinance, domestic violence decreases (Pronyk et al. 2008, Kim et al. 2008), while some have found that domestic violence increases (Kishor 2009). Kishor, for example, found that women in India who were employed and had earnings were much more likely to experience domestic violence, especially if they reported making decisions alone on the use of their own money or if they earned more than their husbands did. However, the less poor the woman, the less she was likely to experience any type of violence. This directly relates to health, as children of mothers who experienced domestic violence had a higher prevalence of being underweight. Joint decision-making, rather than making a decision alone, appeared to be more protective of women with respect to violence.

Indicators: Unlike some of the other indicators, domestic violence enters a very private and sensitive area. However, standardized questions used in national surveys across the globe are available and the resulting data provides national benchmarks for this indicator. Domestic violence is also fairly prevalent in society. For example, in India, 27 percent of women in the national survey had experienced domestic violence in the prior year. Some Indian states had a 50 percent prevalence rate for domestic violence (Kishor 2009). It is advisable to consider the questions in country-specific Demographic and Health Surveys (<http://dhsprogram.com/>). The following questions, for example, were used in India's last demographic and health survey:

1. In the last 12 months, were you ever afraid of your husband/partner? Most of the time, some of the time, never
2. In your opinion, is a husband ever justified in hitting or beating his wife? Yes or No
3. Is a husband ever justified in hitting or beating his wife for the following reasons:
 - a. If she neglects the house or the children? Yes or No
 - b. If she goes out without telling him? Yes or No
 - c. If she argues with him? Yes or No
 - d. If she refuses to have sex with him? Yes or No
 - e. If she doesn't cook food properly? Yes or No
 - f. If she cheats on him? Yes or No

Although not directly related to domestic violence, another question to consider, given its focus on both decision-making and health is

- Who makes the decision in your household as to whether or not you seek health care for yourself? (Makes decision alone, jointly, husband makes decision, other).

Mental Health

Rationale: Recent research has suggested that poverty may have particular psychological consequences that can lead to economic behaviors that make it difficult to escape poverty (Haushofer 2014). Haushofer points out that it is important to increase our understanding of the relationship between poverty, its psychological impacts, and the effects on economic choice. This refined understanding of poverty could contribute to more effective solutions for the poor.

Theory of Change: As financial access and economic outcomes improve, so should a person's outlook on life and her future.

Indicators: Various measures related to resilience have been tested in the past 20 years in health, mental health, and psychology fields (Windle et al. 2011). Measures of happiness have also been tested (Haushofer 2014). As a result, the measures below, drawn from these areas, may hold promise for MFIs and other practitioners:

1. In the past year, I felt hopeful for the future.
 - a. Yes
 - b. Somewhat
 - c. No
2. Overall, how satisfied are you with the life you lead?
 - a. Very satisfied
 - b. Fairly satisfied
 - c. Fairly unsatisfied
 - d. Very dissatisfied
3. Do you tend to agree or disagree with the following statement: "The future is so uncertain that it is best to live day by day."
 - a. Agree
 - b. Disagree
4. In the past two weeks, I felt capable of meeting my financial obligations.
 - a. Yes
 - b. Somewhat
 - c. No

Maternal and Child Health

Rationale: The Millennium Development Goals 4 and 5 focus on decreasing the under-five child mortality rate and the maternal mortality rate, respectively. While most MFIs see themselves contributing to MDG 1, which focuses on reducing poverty and hunger, some microfinance organizations see themselves as important contributors to MDGs 4 and 5 because of their efforts to link clients to health services, the provision of financial services that facilitates clients' access to health care, and direct provision of health education focusing on maternal and child health (Tripathy et al. 2010, Johnson et al. 2014, Saha and Rao 2014). For these reasons, measuring changes in maternal and child health is an important dimension not only for understanding improvements in client (and household) well-being, but also for demonstrating the role that MFIs are playing in relation to the associated MDGs. Yet, as was indicated earlier, finding the right types of indicators for this dimension is not easy, particularly for MFIs that do not have specific interventions meant to directly influence progress in this area.

MDGs 4 and 5 often rely on data from vital statistics systems, which may be ineffective due to incomplete registrations of citizens, deaths, births, etc. As a result, most countries rely on the use of national Demographic and Health Surveys (<http://www.dhsprogram.com>), which are household-based surveys, to monitor progress toward achieving these two goals. Countdown to 2015 (<http://www.countdown2015mnch.org>) and the Health Metrics Network (<http://www.healthmetricsnetwork.org>) are a global movement and working group, respectively, that are working to develop metrics that could be used to effectively measure whether countries and various stakeholders are achieving these MDGs. They have identified 11 core indicators that they would recommend be tracked to measure progress. These hold promise for comparing MFI data to relevant national and global benchmarks. Table 5 below summarizes the indicators as well as the associated data sources (WHO 2011).

Table 5. Current primary data sources and preferred data sources for the 11 core indicators of women's and children's health

Indicator	Current primary data source	Preferred data source
1) Maternal mortality ratio	Surveys	Vital registration
2) Under-five child mortality (with the proportion of newborn deaths)	Surveys	Vital registration
3) Stunting prevalence	Surveys	Surveys
4) Demand for family planning satisfied (met need for contraception)	Surveys	Surveys
5) Antenatal care (four or more visits)	Surveys	Surveys and facility reports
6) Antiretrovirals for HIV-positive pregnant women*	Facility reports	Facility reports
7) Skilled attendant at birth	Surveys	Surveys and facility reports
8) Postnatal care for mothers and babies within two days of birth	Surveys	Surveys and facility reports
9) Exclusive breastfeeding (0–5 months of age)**	Surveys	Surveys

Indicator	Current primary data source	Preferred data source
10) Three doses of combined diphtheria-tetanus-pertussis vaccine (DTP3) immunization coverage	Surveys and facility reports	Surveys and facility reports
11) Antibiotic treatment for childhood pneumonia	Surveys	Surveys and facility reports

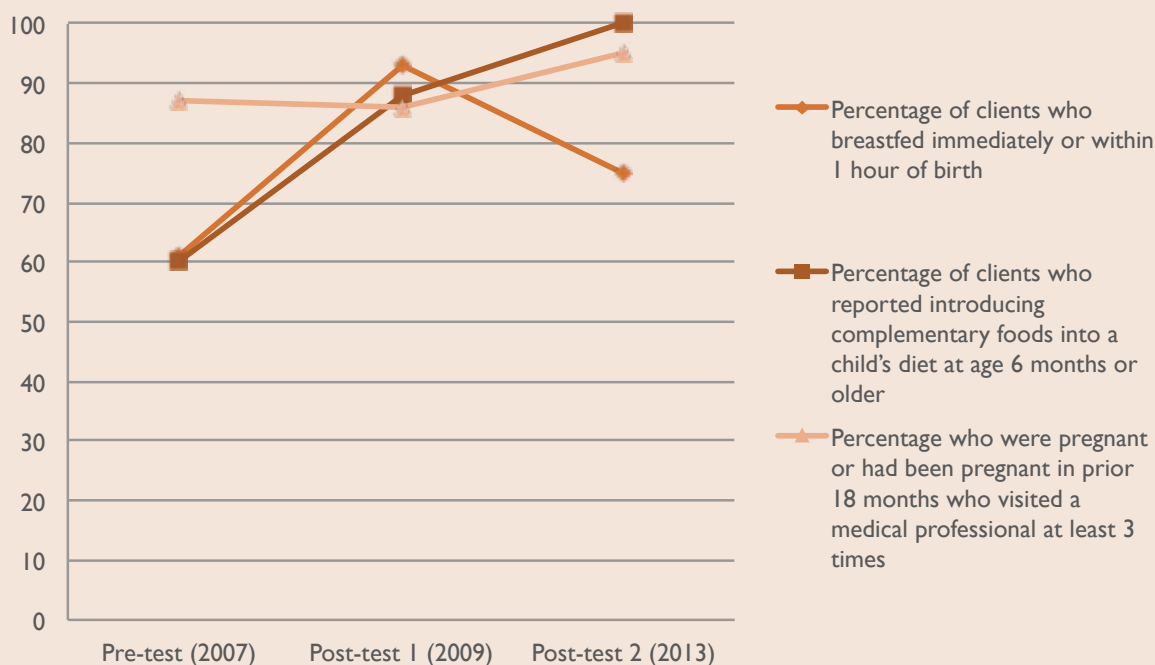
**This indicator comprises antiretroviral drugs for HIV-positive pregnant women to both reduce the risk of mother-to-child transmission of HIV as well as transmission of their own.*

*** Up to the last day of the fifth month of life.*

As the table suggests, only a small subset of the list of 11 indicators could likely be tracked by an MFI, those that rely on household survey data and not vital statistics or facility reports. The indicators related to “skilled attendant at birth,” “antenatal care,” “DTP3 vaccination” and “exclusive breastfeeding” likely hold the most promise but also face the same challenges: these indicators are only relevant for women of reproductive age, are currently pregnant, and/or women who have recently given birth or have children young enough to receive the DTP3 vaccine. This means only a subset of an MFI’s clientele will be in a position to answer these questions, and the MFI will have to segment their data accordingly. Also, while mothers keep up with vaccination cards they may not necessarily know whether their child has received a DTP3 vaccination without referring to the card, making it difficult to provide accurate information on this indicator without reviewing the card itself. If MFIs conduct their surveys at the clients’ households, this might not be an obstacle even though it would require additional training on how to assess the vaccination cards accurately.

Experience has so far shown that indicators are most useful if the MFI directly tries to influence change in the indicator. For example, Freedom from Hunger has prior experience tracking some of these indicators as part of a program evaluation with Bandhan, in India (Johnson et al. 2014). Bandhan is one of the largest MFIs in India. They provide a community-level health program, in addition to their village-banking financial services, that consists of a) maternal and child health education (breastfeeding, antenatal care, infant and child feeding, women and adolescent girl nutrition, etc.); b) health community volunteers who reinforce the education messages within their community and actively link pregnant women to the health centers to ensure antenatal care as well as encourage hospital births; and c) health loans to assist the clients in covering preventive or curative care costs. The figure below summarizes findings for three key health indicators that were tracked at three points over a seven-year period among Bandhan’s health program participants.

Figure 10. Bandhan Health Outcome Program Evaluation Indicators



Over time, there was an increase in the percentage of clients who reported introducing complementary foods at six months (which was used as a proxy for exclusive breastfeeding for six months). From 2007 to 2013, there was also a small increase in the percentage of pregnant women who reported visiting a health provider at least three times during their pregnancy. The drop in breastfeeding between 2009 and 2013 is likely because the sample size also decreased due to a smaller number of women in the group who had children under 12 months of age.

One final note, given the difficulty in tracking these particular indicators, recent research has shown how some proxy indicators may just as easily predict a child's health. Smith and Haddad (2015) used survey data from 1970 to 2012 for 116 countries to show that safe water access, sanitation, women's education, gender equality and quantity and quality of food available have been key drivers of past reductions in child stunting. They suggest that prioritized funding in these areas will accelerate reductions in undernutrition. For this reason, where direct maternal and child health measures are complicated for an MFI to apply, tracking access to and use of safe water and sanitation may serve as useful proxy indicators. Drinking-water treatment is also considered an indicator under the USAID's Office of Global Health strategic objective for child health (KIS 2015).

Theory of Change: As financial access and economic outcomes improve, maternal and child health will improve. More women will survive childbirth due to having the financial means to seek antenatal care as well as have their birth attended by a skilled birth attendant. Their young children will have greater survival rates due to their mothers' breastfeeding behaviors and her ability to seek preventive care treatment and lifesaving vaccinations. For MFIs with health programs, their efforts towards improving breastfeeding rates and infant- and child-feeding behaviors will result in improvements in client behaviors over time.

Indicators: The measures below are provided for consideration. The best resources for commonly used and tracked health indicators are those provided by the national Demographic and Health Surveys. (See <http://dhsprogram.com/> for country-specific questions and surveys.) The questions below have been somewhat adapted for inclusion in an MFI survey.

Breastfeeding

1. Do you have a child 12 months of age or younger:
 - a. Yes
 - b. No
2. For your child 12 months of age or younger, or the one you care for, was this child breastfed?
 - a. Yes
 - b. No
3. How long after birth was the child first breastfed?
 - a. Within one hour
 - b. Within 12 hours
 - c. Within one day or longer
 - d. Don't know
4. For how many months was this child breastfed exclusively and given no other foods or liquids except breastmilk?
 - a. Less than 6 months
 - b. 6 months
 - c. More than 6 months
 - d. Don't know

Safe birth

1. How old is your youngest child? _____
2. Did you receive any antenatal care with the pregnancy of your youngest child?
 - a. Yes
 - b. No
3. How many times did you receive antenatal care for the pregnancy of your youngest child?
____ No. of times
4. Who assisted in the birth of your youngest child?
 - Health personnel
 - a. Doctor
 - b. Nurse/midwife
 - c. Auxiliary midwife
 - Other person
 - a. Traditional birth attendant
 - b. Relative/friend
 - c. Other (specify _____)
 - d. No one

Appendices and References

Appendix I: Original Indicator Assessment: Indicators Evaluated by Established Criteria

Criteria Options	Feasibility		Usability				Usability/Reliability	Reliability	Likelihood of inclusion
	Is measurable by an MFI	Can be reported in client survey	Can change in short term	Addresses relevant measures for MFIs	Cannot rely on specific interventions to change outcomes	Is applicable for both genders	Can be benchmarked to other data (MDGs, regional data, etc.)	Provides a consistent measure	
PPI/PAT	Yes	Yes	Maybe	Yes	Yes	Yes	Yes	Yes	High
Food security index	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Maybe	High
Hunger index	Yes	Yes	Maybe	Yes	Yes	Yes	Yes	Maybe	High/Low
Use of preventive health services	Yes	Yes	Yes	Maybe	Maybe	Yes	Maybe	Maybe	High/Moderate
Value of health services	Yes	Yes	Maybe	Maybe	No	Yes	No	Yes	Low
Access to safe drinking water (MDG 7)	Yes	Yes	Maybe	Yes	Maybe	Yes	Yes	Maybe	High/Moderate
Access to basic sanitation (MDG 7)	Yes	Yes	Maybe	Yes	Maybe	Yes	Yes	Maybe	High/Moderate
Access to affordable drugs (MDG 8)	Maybe	Maybe	Maybe	Maybe	No	Yes	Maybe	No	Moderate/Low
Have forgone or delayed health care because of cost	Yes	Yes	Yes	Yes	Yes	Yes	No (?)	Yes	High/Moderate
Portion of loan used for health care	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Moderate/Low

Criteria Options	Feasibility		Usability				Usability/ Reliability	Reliability	Likelihood of inclusion
	Is measurable by an MFI	Can be reported in client survey	Can change in short term	Addresses relevant measures for MFIs	Cannot rely on specific interventions to change outcomes	Is applicable for both genders	Can be benchmarked to other data (MDGs, regional data, etc.)	Provides a consistent measure	
Children under 5 sleep under bednet	Yes	Yes	Yes	Yes	Maybe	Maybe	Yes	Maybe	High/ Low
Perception of Health status	Yes	Yes	Yes	Maybe	Maybe	Yes	No	Maybe	Moderate/ Low
Perceived ability to pay for health expenses	Yes	Yes	Yes	Yes	Yes	Yes	No	Maybe	Moderate
Days lost from work due to personal or family member illness	Yes	Yes	Maybe	Maybe	Yes	Maybe	Maybe	Maybe	Low
Child with diarrhea in last month treated with ORS	Yes	Yes	Yes	Maybe	Maybe	Yes	Yes	Yes	Moderate to Low
Report having experienced a serious medical condition/ illness in the last 6 months within their household	Yes	Yes	Yes	Maybe	Maybe	Maybe	Yes	Maybe	Low
No. of times clients or her family members visited hospital in the last 6 months	Yes	Yes	Yes	Maybe	Maybe	Maybe	Maybe	Maybe	Low

Criteria Options	Feasibility		Usability				Usability/Reliability	Reliability	Likelihood of inclusion
	Measurable by an MFI	Can be reported in client survey	Can change in short-term	Addresses relevant measures for MFIs	Cannot rely on specific interventions to change outcomes	Be applicable for both genders	Can be benchmarked to other data (MDGs, regional data, etc.)	Reliability	Likelihood of inclusion
GENDER-SPECIFIC INDICATORS									
Has had an annual checkup (Pap smear) in past year	Yes	Yes	Yes	Maybe	Maybe	NA	Yes	Yes	High
Proportion of births attended by skilled health personnel (and in an appropriate health institution) (MDG 5)	Yes	Yes	No	Maybe	Maybe	No	Yes	Maybe	Moderate/ Low
Antenatal care coverage (at least one visit and at least four visits) (MDG 5)	Yes	Yes	No	Maybe	Maybe	No	Yes	Maybe	Moderate/ Low
Contraceptive prevalence rate (MDG 5)	Yes	Yes	Yes	Maybe	Maybe	No	Yes	Maybe	Moderate/ Low

Appendix 2: India HOPI Survey Tool

Client Health Outcomes Quantitative Survey-India

Note for interviewers: italicized words are interviewer instructions; do not read them aloud to the respondent.

Do **NOT** read aloud answer options unless the directions say “Read Out Options”.

Mark only one answer code per question unless the direction say multiple responses possible.

A. Identification (<i>Write in answers</i>)	
1. Branch	
2. Village	
3 Panchayat or Block	
4. Self-Help Group	
5. Respondent ID	
6. Date joined MFI	Month: __ Year: _____
7. Gender	Female = 1 Male = 2
8. Age	_____ (in years)

B. Interview Details					
	A. Name of the Interviewer	B. Date DD/MM/YR	C. Start time (24 hour format)	D. End time (24 hour format)	E. Interview Successfully Completed?
1. First visit		__/__/__	__:__	__:__	Yes1 No2
2. Second visit		__/__/__	__:__	__:__	Yes1 No2

C. Introduction and Permission

Namaste. My name is _____. We are conducting a survey about the well-being of our clients, focusing particularly on your family's health.

Participation in this survey is voluntary. However, we hope that you will participate because your views are important. This information will be used to help us plan and improve our services as well as understand whether the products and services we provide to you contribute to your household's well-being. The survey usually takes about 15 minutes to complete. Your identity and your answers will remain confidential.

Do I have your permission to continue? (If client says yes, start the interview)

Yes 1 No 2

For any additional information and queries on the issues discussed, please contact: (PUT RELEVANT CONTACT HERE).

Section I. Progress out of Poverty Index

Read aloud the following statement before proceeding: "I would like to begin this survey by asking you a few questions about you and your household."

I.01	How many people ages 0 to 17 are in your household?			
	Zero 26	One 17	Two 11	Three 7
	Four or more 0			
I.02	What is the general education level of the male head/spouse?			
	No male head/spouse ..0	Not literate, no formal school, or primary or below 0	Middle 3	
	Secondary or higher 5	Diploma/certificate course, graduate or post-graduate and above 7		
I.03	What is the household type?			
	Laborers (agricultural, casual, other) 0	Self-employed (agriculture or non-agriculture), regular wage/salary-earning or other 5		
I.04	What is your household's primary source of energy for cooking?			
	Firewood and chips, dung cake, kerosene, charcoal, coke or coal, gobar gas or others 0	LPG or electricity 3	No cooking arrangement 9	
I.05	Does the household possess any casseroles, thermos or thermaware?		No 0	Yes 5

1.06	Does the household possess a television and a VCR/VCD/DVD player?			
	No, neither one0	Yes, only one.....4	Yes, both.....9	
1.07	Does the household possess a mobile handset and a telephone instrument (landline)?			
	No, neither one0	Yes, only a mobile.....4	Yes, a landline, regardless of mobile 15	
1.08	Does the household own a sewing machine?		No0	Yes 1
1.09	Does the household possess an almirah/ dressing table?		No0	Yes5
1.10	Does the household possess a bicycle, motorcycle/scooter or motor car/jeep?			
	No, none.....0	Yes, bicycle only, no motorcycle/scooter or car 1	Motorcycle/scooter, but no car (regardless of bicycle)..... 13	Motor car/jeep (regardless of others) 18

For information on use of the Progress out of Poverty Index, please see <http://www.progressoutofpoverty.org>.

Section 2. Food Security and Nutrition

2.01	I will read 4 choices for your response. Please tell me which of the following best describes the food consumed by you (woman head of household) in the last year:		
	Enough and the kinds of nutritious food we want to eat..... 1	Enough but not always nutritious food..... 2	
	Sometimes not enough food to eat, was sometimes hungry.....3	Often not enough to eat, was often hungry 4	
2.02	I will read 4 choices for your response. Please tell me which of the following best describes the food consumed by the children in your household in the last year:		
	Enough and the kinds of nutritious food we want to eat..... 1	Enough but not always nutritious food2	
	Sometimes not enough food to eat, was sometimes hungry.....3	Often not enough to eat, was often hungry4	
2.03	In the past week, have the women and children in your household consumed fruit?	Yes 1	No2
2.04	In the past week, have the women and children in your household consumed milk products, such as milk, cottage cheese, paneer, or curd?	Yes 1	No2

Section 3. Preventive Health Care Services

3.01	Do you have a child age 5 or under in your household?	Yes 1 No 2	
3.02	Think about the youngest child in your household. Was this child born in a hospital?	Yes... 1 No 2	Not applicable..... 3
3.03	For any children 5 and under in your household, have they received vitamin A oil in the past year? (Note to interviewer: If there are more than two children under the age of 5, and only some have received vitamin A, mark as Yes)	Yes 1 No 2	Not applicable/do not have a child under age of 5 in household 3

Section 4. Sanitation & Safe Water

4.01	Do you do anything to treat your water to make it safer to drink?	Yes 1 No 2	Don't know..... 3
4.02	In the past day, has anyone in your household defecated in the open or disposed of feces in the open?	Yes 1 No 2	Don't know..... 3

Section 5: Curative Health Care

5.01	In the past year, did you delay seeking medical treatment for any person in your household because of concern about the cost?	Yes 1 No 2	Don't know..... 3
5.02	In the past year, did you not purchase needed medicines because of concern about the cost?	Yes 1 No 2	Don't know..... 3

Say to the respondent: “Thank you for your time and cooperation in helping gather information. If there is anything you would like to ask me, please do so now. If you have no further questions, then I would like to say thank you again and good-bye.”

Appendix 3: Full Food Security Survey

I am going to ask you questions about the food eaten in your household in the last 12 months; in other words, from January of last year until now.

	SCORE
1. Were you ever worried that your food would run out before you had money to buy more? You may answer “yes” or “no.” 1) Yes 2) No – Go to Question 2	<input type="checkbox"/>
1a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	<input type="checkbox"/>
2. Was the food you had ever not enough and you did not have enough money to buy more? You may answer “yes” or “no.” 1) Yes 2) No – Go to Question 3	<input type="checkbox"/>
2a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	<input type="checkbox"/>
3. Did you have to eat the same foods daily because you did not have money to buy other foods? You may answer “yes” or “no.” 1) Yes 2) No – Go to Question 4	<input type="checkbox"/>
3a. How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	<input type="checkbox"/>
4. Did you ever serve yourself or any other adult in your household less food because you did not have enough money to buy food? You may answer “yes” or “no.” 1) Yes 2) No – Go to Question 5	<input type="checkbox"/>
4.a How often did this happen? 1) Often (frequently) 2) Sometimes 3) Rarely	<input type="checkbox"/>
5. Did you ever miss any meals (breakfast, lunch or supper) because you did not have enough money to buy food? You may answer “yes” or “no.” 1) Yes 2) No – Go to Question 6	<input type="checkbox"/>

<p>5a. How often did this happen?</p> <p>1) Often (frequently)</p> <p>2) Sometimes</p> <p>3) Rarely</p>	<input type="checkbox"/>
<p>6. Did you ever eat less than you felt you should because you did not have enough money to buy food? You may answer “yes” or “no.”</p> <p>1) Yes</p> <p>2) No – Go to Question 7</p>	<input type="checkbox"/>
<p>6a. How often did this happen?</p> <p>1) Often (frequently)</p> <p>2) Sometimes</p> <p>3) Rarely</p>	<input type="checkbox"/>
<p>7. Were you ever hungry and did not eat because you did not have enough money to buy food? You may answer “yes” or “no.”</p> <p>1) Yes</p> <p>2) No – Go to Question 8</p>	<input type="checkbox"/>
<p>7a. How often did this happen?</p> <p>1) Often (frequently)</p> <p>2) Sometimes</p> <p>3) Rarely</p>	<input type="checkbox"/>
<p>8. Did you or a member of your family ever lose weight because you did not have enough money to buy food? This weight loss should not be caused by stress (worrying), hard work or sickness. You may answer “yes” or “no.”</p> <p>1) Yes</p> <p>2) No</p>	<input type="checkbox"/>
<p>9. Did you or another adult in your household ever not eat for an entire day because you did not have enough money to buy food? You may answer “yes” or “no.”</p> <p>1) Yes</p> <p>2) No</p>	<input type="checkbox"/>
<p>9a. How often did this happen?</p> <p>1) Often (frequently)</p> <p>2) Sometimes</p> <p>3) Rarely</p>	<input type="checkbox"/>
<p>FOOD-SECURITY SCORE (Key:Yes = 1, No = 0)</p> <p>Prevalence Score: Only score questions in shaded cells or those with whole numbers (do not score sub-questions, ex. 1a, 2a, 3a, etc.)</p> <p>Chronic Score: For all questions shaded questions coded as 1 for Yes, recode the question to a 0 if the person responded “rarely” to the sub-questions (ex. 1a, 2a, 3a, etc.)</p> <p>Food Secure = Scores 0-2 Food Insecure = Scores 3-9</p>	<p>P-Score</p> <input type="checkbox"/> <p>C-Score</p> <input type="checkbox"/>

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