

Collecting PEPFAR Essential Survey Indicators: A Supplement to the OVC Survey Tools



Cover photograph by Zahra Reynolds, MEASURE Evaluation, of a girl and children in Liberia.

Collecting PEPFAR Essential Survey Indicators: A Supplement to the Orphans and Vulnerable Children Survey Tools

Guide



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The development of tools for orphans and vulnerable children (OVC) programs was highly participatory. Materials represent the current best practice around the measurement of OVC and caregiver well-being in the context of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR)-funded OVC programs. At the U.S. Agency for International Development (USAID), the development of these tools was shepherded by Dr. Janet Shriberg and Gretchen Bachman, with key input from the wider PEPFAR Orphans and Vulnerable Children Technical Working Group, especially, Dr. Beverly Nyberg at Peace Corps and Dr. Nicole Benham at the Office of the Global AIDS Coordinator. We thank Dr. Krista Stewart for her guidance as USAID's agreement officer representative for MEASURE Evaluation.

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SUMMARY

This document was prepared by MEASURE Evaluation at the request of the PEPFAR OVC Technical Working Group and reflects a legislative mandate to monitor and evaluate PEPFAR-funded programs.

As part of its new monitoring, evaluation, and reporting (MER) guidance, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) launched a set of **outcome indicators for OVC programs**. These outcome indicators reflect internationally-accepted developmental milestones and collectively measure holistic wellbeing for children and their families over time. Indicators track the ways OVC programs gain from and contribute to the broader HIV and child protection response. These outcome indicators are designated as "essential survey indicators", meaning that PEPFAR requires countries to collect these indicators biennially. These indicators are held in country to be used to inform program planning and review, both by country and visiting headquarters staff.

The **purpose** of this document is to provide **U.S. government staff** and others with a high-level understanding of **outcomes monitoring** and approaches to outcomes monitoring to enable effective procurement of data collection services for these new outcome indicators. Information on how to collect the essential survey indicators through evaluation is outlined in the MEASURE Evaluation's [Survey Tools for OVC Programs](#).

Two appropriate methods for outcomes monitoring are briefly described: cluster sample surveys and Lot Quality Assurance Sampling (LQAS) surveys. Like evaluation, outcomes monitoring should be carried out by a group that is independent and external to program delivery. The methodology for outcomes monitoring must be documented in a data collection protocol. Unlike evaluation, outcomes monitoring protocol may be exempt from full ethical review. However, protocols should be submitted to an ethics review board to certify and document exemption. A data collection tool and analysis guidance is provided.

1. INTRODUCTION

Investments in programs to improve the well-being of orphans and vulnerable children (OVC) and their households by the U.S. government and other donors have been substantial, yet the impact of this investment is uncertain (Sherr & Zoll, 2011). Historically, monitoring and evaluation (M&E) of OVC programs has focused on program processes – collecting routine input and output data, with little attention to assessing program outcomes. This is changing in line with PEPFAR’s shift towards monitoring program outcomes.

As part of its new monitoring, evaluation, and reporting (MER) guidance, the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) launched a set of outcome indicators for OVC programs. These outcome indicators are designated as “essential survey indicators”, meaning that PEPFAR requires countries to collect these indicators biennially. These outcome data will support improved, evidence-informed strategic portfolio development, programming and resource allocation decisions at country level, as well as at the headquarters level.

Reporting on the new outcome indicators requires different data collection procedures than those usually employed to report on output indicators. Outcome indicators may be gathered through:

- 1) Program evaluation or;
- 2) Outcomes monitoring.

In the context of the MER, outcomes monitoring is defined as the routine and systematic collection of information on the intended results of program interventions, in the case of OVC programs, well-being of program beneficiaries. Outcomes *monitoring* and *program evaluation* may use the same indicators, and both outcomes monitoring and evaluation rely on surveying a manageable number of beneficiaries to estimate well-being of the larger population. The difference between the two is that monitoring measures change in the indicator, while evaluation aims to attribute observed changes to programs or interventions, usually by comparing program beneficiaries to similar people who did not receive the program or intervention. Differences in program evaluation and outcomes monitoring are summarized in table 1.

This document provides an overview of approaches or options for collecting the essential survey indicators through **outcomes monitoring**. Information on how to collect the essential survey indicators through evaluation is outlined in the MEASURE Evaluation’s [Survey Tools for OVC Programs](#).

The audience for the document includes U.S. government in-country missions and others seeking to support outcomes monitoring. We hope this document enables U.S. government staff to formulate their strategy for collecting essential survey indicators and engage in discussions with partners and data collection firms about outcomes monitoring. This document is not intended to be a comprehensive source of information on outcomes monitoring, nor is this a “how to” guide for outcomes monitoring. We have included a list of resources at the end of this document for readers wanting more information. We have also included responses to “frequently asked questions” about collecting and reporting essential survey indicators for OVC programs in appendix 1.

Table 1. Comparing Program Evaluation and Outcomes Monitoring

Program evaluation	Outcomes monitoring
Depending on the study design changes in outcomes can be attributed to program. Some designs allow for determination of causality.	Changes in outcomes are measured but attribution cannot be established.
Data are generally only valid at a larger population level due to resource constraints.	Depending on survey design, data can be used for program management at the local level.
Information can be gathered on a larger number of indicators.	Information is gathered for a very limited number of indicators.
Multi-year by definition.	Periodic point-in-time measures.
Complex sampling to control for confounders.	Relatively straightforward sampling.
Complex analysis.	Relatively straightforward analysis, depending on the study design.
High cost.	Relatively low cost.

2. THE PEPFAR MER INDICATORS

2.1. About the MER Indicators and Reporting Process

The Monitoring, Evaluation, and Reporting (MER) indicators replace the PEPFAR Next Generation Indicators (NGI). There are Level 1 and MER essential survey indicators. Level 1 MER indicators are output-oriented. All PEPFAR-funded programs are *required* to report on Level 1 indicators every quarter. The MER essential survey indicators are outcome-oriented. U.S. government missions are expected to collect the essential survey indicators but missions are not required to report these indicators to headquarters. The essential survey indicators should be collected and reported *every two years* through a special study. PEPFAR-funded service delivery programs are not expected to collect and report on MER essential survey indicators. Missions are expected to procure data collection services from an appropriate source to enable the tracking of the MER essential survey indicators.

2.2. PEPFAR Essential Survey Indicators for OVC Programs

The PEPFAR MER essential survey indicators reflect the principles, approach, and **move towards outcomes** outlined in the new OVC programming guidance (2012), as well as MEASURE Evaluation's [Survey Tools for OVC Programs](#). The intent of including outcome indicators is to ensure information on overall program effectiveness in improving the wellbeing of children and their families affected by HIV/AIDS.

The PEPFAR MER essential survey indicators for OVC programs reflect internationally-accepted developmental milestones and collectively measure holistic wellbeing for children and their families over time. Indicators track the ways OVC programming gains from and contributes to the broader HIV and child protection response (PEPFAR, 2012; U.S. government, 2012).

A number of criteria were applied in selecting MER indicators. Most importantly, only indicators that are *amenable to change from PEPFAR-funded OVC program interventions in a two year period* were selected. Furthermore, to be included in the MER set, indicators had to be easy to measure by data collectors with different skill levels and relevant across different regions / countries. Indicators that could be verified (by documentation or another person or source) were prioritized.

The PEPFAR MER essential survey indicators for OVC programs are listed in table 2. Data should be disaggregated by age-group (0-4 years, 5-9 years, 10-14 years, and 15-17 years) as appropriate. Indicator reference sheets, developed by the PEPFAR OVC Technical Working Group, are included in appendix 2.

Table 2. PEPFAR MER Essential Survey Indicators for OVC Programs

No.	Indicators	Rationale for Inclusion in MER Indicator Set
NC.1	Percent of children whose primary caregiver knows the child's HIV status	If a child's HIV status is unknown to their caregiver, the child will not have access to life-saving care, treatment and support interventions.
CW.1	Percent of children <5 years of age who are undernourished	Nutrition is a critical factor in reducing infant mortality and builds a strong foundation for a child's health, growth and development.
CW.4	Percent of children too sick to participate in daily activities	PEPFAR OVC programs support critical linkages to health services and treatment, aiming to reduce the number of sick children and improve functional well-being.
CW.9	Percent of children who have a birth certificate	Ensuring children access to basic legal rights, such as birth certificates, enables them to access other essential services and opportunities, including health, education, legal services, and legal employment when they grow older.
CW.11	Percent of children regularly attending school	Despite being important in its own right, efforts to keep children in school have positive impacts on HIV prevention.
CW.12	Percent of children who progressed in school during the last year	Studies in many countries have linked higher education levels with increased AIDS awareness and knowledge, higher rates of contraceptive use, and greater communication regarding HIV prevention among partners.
CW.13	Percent of children <5 years of age who recently engaged in stimulating activities with any household member over 15 years of age	Early childhood cognitive, social and physical stimulation is essential for promotion of long-term learning, growth, and health.
CW.14	Percent of caregivers who agree that harsh physical punishment is an appropriate means of discipline or control in the home or school ¹	Reducing harsh physical discipline, violence and abuse against children is a PEPFAR priority. Perceptions of physical discipline have been linked to actual use of physical discipline against children.
HW.2	Percent of households able to access money to pay for unexpected household expenses	The key goal of household economic strengthening programs is to improve household's resiliency to economic shocks, such as unexpected household expenses.

¹ The indicator reference sheet for this indicator is forthcoming.

2.3. The Genesis of the PEPFAR MER Essential Survey Indicators for OVC Programs

In large part, the MER indicators and questions for OVC programs were derived from the MEASURE Evaluation *Core OVC Program Impact Indicators* (Chapman, 2013). However, not all of the MEASURE Evaluation impact indicators have been included in the MER set and the MER set includes three new indicators.

The development and refinement of the MEASURE Evaluation set of impact indicators, including those elevated to the MER, was rigorous and highly participatory. As a first step, we carried out an extensive literature review, and review of international and national child well-being/OVC tools and indicators, OVC program evaluation tools, national OVC M&E plans, and indicators used in large surveys such as Demographic Health Surveys (DHS), multiple indicator cluster surveys (MICS), etc. Where there were gaps in indicators (for example, the measurement of household economic status or psychosocial status), we conducted targeted research in these areas, and reached out to key experts in the field. The result was a catalogue of over 600 child and household well-being indicators.

Next, we critically assessed indicators against agreed inclusion criteria (see text box) and rejected those that did not fit. The result was a shorter list of measures and survey questions for discussion with a MEASURE Evaluation working group. The MEASURE Evaluation working group re-evaluated each measure against the criteria, discussing and documenting indicator limitations and data dynamics. The result was a list of 15 draft measures for external stakeholder review.

Eight Inclusion Criteria

1. Does the question/measure refer to impact/outcomes? (vs. inputs or outputs)
2. Do program interventions have the capacity to change result?
3. Is the question/measure relevant across a wide range of interventions (PEPFAR/OVC, system strengthening, protection, etc.)?
4. Does the question/measure contribute to a holistic vision of child well-being?
5. Can responses be verified (by documentation or another person or source)?
6. Is the question/measure easy to implement across different data collector skill levels?
7. Is the question/measure relevant across different regions / countries?
8. Is the question/measure relevant (or easily adapted) across age and sex?

Our approach to convening an external working group was to be as participatory as possible. We solicited review from 49 stakeholders and stakeholder groups including implementing partners, donors, national OVC teams, universities, projects, and task forces, and posted the indicators on ChildStatusNet and a notice on OVCSupport.net (<http://ovcsupport.net/>). With these stakeholders, and the PEPFAR OVC Technical Working Group, we reached a final a core set of 12 child well-being indicators and three household well-being indicators. These indicators were first published in 2012.

We pilot tested these indicators in Zambia and Nigeria and have since refined them to incorporate key learning. Findings from the pilot tests and a description of the adjustments made during and after piloting are provide in a MEASURE Evaluation report on the pilot testing (MEASURE Evaluation, 2014).

3. COLLECTING DATA: OUTCOMES MONITORING

In this section we describe procedures for collecting data for **outcomes monitoring**. For information on how to collect these indicators, among others, through program evaluation, please consult the protocol template available at the MEASURE Evaluation [Survey Tools for OVC Programs](#) Web page or other sources of guidance for evaluation.

3.1. Guiding Principles

Like evaluation, outcomes monitoring should be carried out by a group that is independent and external to program delivery. Data collectors, specifically, should be external to the program. Missions should procure data collection services from a group or firm with strong skills in survey design, sampling, statistics, field operations and data analysis. A list of areas of competence is included in appendix 1: Frequency Asked Questions.

The methodology for outcomes monitoring must be documented in a data collection protocol. A checklist for those developing or reviewing protocols for outcomes monitoring is provided in appendix 3. The development of the protocol should be the responsibility of the data collection firm.

Unlike evaluation, outcomes monitoring may not require full ethical review and approval. This is because outcomes monitoring is considered to be routine data collection for the purpose of program management, and procedures described herein do not include direct interviews with children. (Some countries will have laws requiring ethical review and approval of all such data collection.) However, the data collection firm should submit the final protocol with data collection tools to an ethical review committee to certify that the data collection is exempt from ethical review (see text box). This is different than for evaluation which requires full ethical review and approval.

Ethical Review Steps

1. Determine if there are legal or customary requirements to submit all data collection activities for ethical review and approval.
2. If yes: submit the protocol to an appropriate review board for full review.
3. If no: submit the protocol to an appropriate review board to certify that the protocol is exempt from full review.

3.2. Data Collection Tool

The data collection tool for outcomes monitoring has been adapted from the MEASURE Evaluation OVC survey tools, but there are critical differences. Surveyors may adjust the wording of questions to align with local discourse and enhance clarity. Recall periods should not be changed. In many cases, tools will need to be translated into local languages. It is important that the translation maintains the core meaning of the question rather than translating the question verbatim. All suggested changes and translations should be discussed and agreed with the U.S. government in-country mission before they are finalized.

The outcomes monitoring survey tool should be administered to a caregiver in the household (if the sampling frame is households) or the caregiver of the child sampled (if the sampling frame is children). Children will not be interviewed directly. This is different than the process for surveying beneficiaries for

evaluation described within the OVC survey tools. The data collector will still measure the mid-upper arm circumference of children aged 6-59 months.

The outcomes monitoring survey tool has six modules, one for caregivers and one for children in each age group: 0-4 years, 5-9 years, 10-14 years, and 15-17 years. In the first module, caregivers are asked to list all children in their care by age to enable the data collector to select one child randomly in each age group for data collection. We recommend that data collectors apply the Kish Grid (Kish, 1949) to select children in each age group (see appendix 4), but other ways are possible. Data are collected on the randomly selected children only. Note that if the listing is of children (rather than households), we recommend including the sampled child from the initial list (i.e., the child that was sampled from program registries) as the respondent for the appropriate age group.

The outcomes monitoring survey tool has modules for each age group. The tool, including consent forms, is presented in appendix 4.

3.3. Survey Approaches

Again, outcomes monitoring relies on surveying a manageable number of beneficiaries to estimate the well-being of the larger population. Investigators may propose different sampling methods for obtaining this “manageable number of beneficiaries”.² In this section, we describe two appropriate methods for collecting data for the MER essential survey indicators: cluster sample surveys and Lot Quality Assurance Sampling (LQAS) surveys. Only summary information is provided as details of these approaches are available elsewhere. Specifically, we highly recommend that investigators consult the Rapid Household Survey Handbook developed by Davis and colleagues (2009).³

Approach 1: Cluster sampling — In this design, 30 communities or clusters are randomly selected from among the communities served by the program and “n” number of households (often 10) are randomly selected in each cluster. This yields a basic sample size of 300 households.⁴

To increase the precision of the measurement and/or to allow comparing subgroups (for example, rural vs. urban areas), sample size could be increased and communities grouped by location or other characteristic before selecting the sample (a process known as “stratification”). This can be achieved by increasing the number of clusters (which is preferable, since it reduces design effect) or increasing the number of households to be sampled per cluster.

² A prerequisite to outcomes monitoring is a registry of the beneficiary population (either children or households). This registry must include location information for the household to enable sampling and recruitment.

³ See also Foreit & Cummings (2006) (<http://www.cpc.unc.edu/measure/eop/session-xi/annual-monitoring-of-health-outcome-indicators/view>); MEASURE Evaluation (<http://www.cpc.unc.edu/measure/training/materials/outcome-monitoring-and-evaluation-using-lqas>); the Maternal and Child Integrated Program (MCHIP) (http://www.mchipngo.net/controllers/link.cfc?method=tools_mande); the Core Group (<http://www.coregroup.org/our-technical-work/working-groups/monitoring-and-evaluation>).

⁴ Individuals living in the same community or same family are more likely to resemble each other than individuals living in different communities or different families. Concentrating the sample to a small number of clusters and/or families runs the risk of biasing the observations up or down, known as “design effect”. The design effect is a measure of the efficiency of the survey design compared to random sampling. By applying a design effect, we take into consideration the lower variance of responses expected for any given measure within clusters (those within clusters are more likely to be similar to each other than individuals drawn from a simple random sample). Unfortunately, we generally do not have accurate information on the design effect prior to data collection, so this is usually estimated to be 1.5-2 based on previous surveys in the area.

Once the sample has been designed (i.e. number of clusters, number of households per cluster, stratification if any), the eligible population is listed by the smallest geographic unit possible, such as a ward. Clusters are defined and sampled using an appropriate methodology, such as probability proportion to size (PPS).⁵ This process identifies the location of the selected clusters. In each of these clusters, a random sample of 10 households is drawn from program rosters. Data collectors then administer the survey to the caregiver in each household in each cluster.

Approach 2: Lot Quality Assurance Sampling —

LQAS is a form of stratified sampling that allows projects to determine whether an area is performing well or not performing well with respect to certain indicators, while also being able to provide information about program coverage overall.⁶ To conduct LQAS, the program area is first divided into non-overlapping “supervision areas” (SA). SAs are management units that

may or may not coincide with geographic or government administration units. It is critical that the program provide this management information, as the information obtained through the LQAS survey will be specific to each of those areas. Depending on the information needs of the program, and the number of supervision areas in the program, all supervision areas may be included in the survey or supervision areas may be randomly sampled using simple random sampling (Hedt et al., 2008). The survey designers will need a listing of the beneficiary population residing in each SA or each SA randomly sampled (this may require adjustments to the program registry).

LQAS requires a random sample of 19 (or more)⁷ program beneficiaries for each beneficiary group for each SA. If the program wishes to monitor well-being among discrete age groups (i.e., children aged 0-4

A Note on Age Groups

The MER requires age-disaggregated information on children aged 0-4, 5-9, 10-14, and 15-17 years. In order to contain costs, we recommend that surveyors take a household-approach to surveying, in that data are collected on one child in every age group (if there is a child in that age group in the household). This is distinct from drawing parallel samples for each age group from program registries. It is possible that some children about whom data are collected may not be registered to receive services from the program. The assumption is that if any child in the household is receiving services, or if the caregiver or household as a whole is receiving services, then there are beneficial effects for all household members. Some households will have more than one child in a given age group. Survey designers will have to decide how to choose which children in the household to include in the survey. This applies to both types of sampling: cluster and LQAS.

⁵ PPS is a sampling approach applied with cluster sampling to ensure that the sample reflects the actual population. In applying PPS, wards or communities with larger populations will have a greater chance of being selected than smaller wards or communities.

⁶ Prior to survey, the program should set a “threshold” for each indicator such that measures above the threshold indicate adequate performance and measures below the threshold indicate sub-standard performance. For example, for the indicator: Percent of children with a birth certificate, the threshold might be set at 60%; if 19 children are surveyed, 11 need to have a birth certificate for the SA to “pass”. Values in each SA will then be compared against this threshold, and it is likely that some SAs will “pass” and some will “fail”, thus highlighting important geographic areas for program focus.

⁷ LQAS generally requires 19 responses per question. The rationale for this is provided elsewhere: see resource list. Due to skip patterns in the data collection tool, it is highly likely that data collectors will need to obtain data from more than 19 individuals to reach a sample size of 19 for every question. For instance, one of the questions is only asked to children aged 5-9 years who attended school the year prior to the current school year, to enable information on school progression. Clearly, some children in this age group (particularly those aged 5-7 years) may not have attended school previously. The data collectors will need to continue to interview randomly sampled children until they find 19 children in this age group who attended school previously.

years, 5-9 years, 10-14 years, 15-17 years), the sample for each SA must include 19 children aged 0-4 years, 19 children aged 5-9 years, etc. This will usually require visiting more than 19 households as many households will lack a child in one or another group.

To conduct an LQAS, the listing of the beneficiaries in the SA should be randomized. The data collector then approaches the first household on the randomized list and continues to visit households on the list until he/she obtains information on 19 children in each age group.

Considerations in choosing your methods

In choosing between a “30 x n” cluster sample design or a LQAS approach to data collection, the first considerations should be the primary intended use of the information: are you most interested in providing feedback for local program management – specifically to determine which areas are meeting minimum criteria for adequate performance and which are not; or are you most interested in measuring change over time in critical indicators among program beneficiaries? In the former case (feedback for local program management), LQAS would be your first option; in the latter case (measuring change over time), you might look at a cluster sample survey design.

Second, how precise do you need your measures to be – are you looking to assess small changes or fine differences among program units, or do program managers expect to see sizeable differences? How much money do you have to spend? The more precise you need your measurement to be, the more it will cost.

Third, how complex is your program? Do you need measures for different sub-groups, such as urban vs. rural areas? Is the program confined to a small area with a limited number of supervisors/supervision areas or is it nation-wide with many supervisors/supervision areas? The larger and more varied the program area, the larger the sample you will need to assess possible sub-group differences, whether you decide on LQAS or on cluster sample survey design.

Cluster sample surveys generally include a large enough sample to allow for simple two-way sub-group analysis (e.g., rural/urban, male/female). The sample size for LQAS surveys depends on the number of supervision areas. If the number of supervision areas is high (more than 10), then sub-group analysis may be possible. Also, due to the larger sample size, cluster sample surveys generally provide more precise measures. With either type of study, the sample size can be increased to improve precision.

LQAS requires that the program be divided up into supervision areas, which are not necessarily the same as local government administrative areas. Supervision areas must be clearly defined and non-overlapping, and lists of beneficiary households must be available by supervision area. These requirements may be challenging in some programs depending on how they are managed and depending on the types and accuracy of information collected at beneficiary registration. (The accuracy of information collected at household registration, e.g., location, is also a concern for cluster sample surveys.)

Both LQAS and cluster sample surveys rely on random selection of program beneficiary households residing in defined geographical areas – the supervision area in the case of LQAS, and the cluster in the case of cluster sample surveys. LQAS guidance suggests a minimum of five supervision areas and at least 19 households per SA. Cluster sample surveys recommend a minimum of 30 different clusters and 7-10 households per survey.

In most cases, supervision areas (which may be an entire district or province) are geographically larger than clusters (which may be a village or neighborhood). While LQAS may require fewer interviews (e.g. 5 SAs x 19 households/SA = 95 household interviews) than cluster sample surveys (e.g. 30 clusters x 7 households/cluster = 210 household interviews), this advantage may be lost if supervision areas are large and transportation costs high.

The advantages and disadvantages of both cluster sample surveys and LQAS for outcomes monitoring are summarized in table 3.

Table 3. Advantages and Disadvantages of Approaches

Approach	Advantages	Disadvantages
Cluster sampling	<ul style="list-style-type: none"> • Generally the sample is large enough to allow for sub-group analysis (could stratify sample by rural/urban) • Only one sample is drawn; sampling frame is simpler than for LQAS • Sample may not need to be weighted 	<ul style="list-style-type: none"> • Complicated sampling: Statistician is needed to calculate sample size • Generally more expensive due to larger sample size
Lot Quality Assurance Sampling	<ul style="list-style-type: none"> • Provides information on whether the supervision area is performing to pre-defined standards, which is useful for program management and resource allocation decisions • May be considerably cheaper if the number of supervision areas is small (reduced travel budget to new “clusters”) 	<ul style="list-style-type: none"> • Sampling frame required for each (sampled) SA • Data collectors may need to increase the number of households surveyed to find 19 respondents in each age group in some supervision areas • Values may need to be weighted to take into consideration SA population size

3.4. Procedures for Recruiting Participants

Regardless of the sampling method applied, each data collector will have a list of households or children to survey, with location information. Once the geographic areas to be sampled (clusters in the case of cluster sampling, supervision areas in the case of LQAS), the data collection manager will work with the program to identify beneficiary households. The protocol must describe how these households will be identified. The protocol also must describe call-back procedures if the adult caregiver (and/or any selected children under 5 years⁸) are not available for interview at the time of visit.

In the field, local service providers may assist the data collectors to locate the selected households. However, service providers should not be present in the house when consent is requested and interviewing begins. Once data collectors identify the adult caregiver in the household, they should explain the purpose and nature of the survey and its expected risks and benefits. The potential respondent should be made aware that his/her participation is voluntary and does not affect eligibility to receive or continue services. Caregivers should be given the opportunity to ask questions. When there are no more questions and data collectors feel strongly that the caregiver understands what is being requested of him/her, the data

⁸ Again, mid-upper arm circumference data must be collected from children aged 0-4 years.

collection team should request consent from the caregiver (a consent form is included in appendix 2, which may be adapted in line with local regulations and best practice).

3.5. Procedures for Data Collection and Management

The data management team should discuss and document how, when, and where data will be collected, who will collect information (and who may be present during data collection), and how responses will be recorded, stored, transported, and protected. The outcome monitoring tool should only be administered by trained data collectors who have passed child protection screening. All information gained from interviews must be kept confidential. Members of the data collection team should sign a document to ensure that privacy of participants is maintained.

Data may be collected on paper copies of the outcome monitoring tool, or an electronic version of the outcome monitoring tool may be developed to enable data collection using mobile phones or tablets. The survey protocol should specify how completed questionnaires will be transferred securely to the point of data entry and by whom, how, and when hard copies of questionnaires will be destroyed, and how electronic data will be protected.

3.5. Child Protection

Investigators should discuss and document a set of child protection procedures specific to the survey. This should include, at least, screening of data collectors and training of data collectors in child protection (see MEASURE Evaluation's *Child, Caregiver & Household Well-being Survey Tools for Orphans & Vulnerable Children Programs Manual* available at the [Survey Tools for OVC Programs](#) Web page), field work monitoring, and a child protection response system. If a data collector learns of a current abusive situation or if there is evidence that the child is in any serious danger (emergency), then the data collector must report the matter to an appropriate source.

4. ANALYZING DATA FROM THE PEPFAR MER ESSENTIAL SURVEY INDICATORS

The entire questionnaire should be entered into an electronic database and checked for accuracy and consistency using an appropriate program, such as [Epi Info](#), [CSPPro](#), or [Microsoft Excel](#). It is extremely important that geographic information, as well as age-group information, be retained in the computer records. See the [data management guide](#) at MEASURE Evaluation's [Survey Tools for OVC Programs](#) Web page for additional information.

Cluster sample surveys and surveys applying LQAS will yield different data that must be treated differently in analysis. Cluster sample surveys will yield data that is more “typical”. Responses may be simply aggregated, and analysts may follow the analysis guidance in the essential survey indicator reference sheets, and consult the OVC survey tools data management guide mentioned above.⁹ For ease, analyses and dummy tables for each essential survey indicator are presented in appendix 3.

Analyzing data from an LQAS survey is more complex as weights must be applied to address population size differentials between SAs. Surveys using LQAS will yield 19 responses to each indicator, for each age group, in each SA.¹⁰ The numerator may be calculated in the same way as data from a cluster sample survey (see appendix 3), but then data must be stratified by SA. As an example, let us consider the birth certificate indicator. Using LQAS is advantageous as it allows us to determine the SAs of our program that are performing to standard, and those that are not performing to standard, in addition to allowing us to calculate a proportion for the program as a whole. In table 4, we show how data can be aggregated across strata to produce a proportion for the program as a whole.

Table 4. Example of Data Aggregated by Strata

Supervision Area	Child Has a Birth Certificate		Total
	n	%	
SA 1	13	n/a	19
SA 2	8	n/a	19
SA 3	6	n/a	19
SA 4	14	n/a	19
SA 5	11	n/a	19
Total for all SAs	52	55%	95

By aggregating all of the SAs together, we are able to calculate a proportion for the number of children in the program that have a birth certificate: 55%. It is not possible to present proportions for each SA – data is not valid at this level.

⁹ Analysis will be more complicated if investigators have chosen more complex sampling strategies, such as stratification. We recommend that analysts consult appropriate guidance.

¹⁰ It is possible that there will not be 19 responses to all questions. For example, it may be challenging to find 19 children aged 5-9 that attended school the year prior to survey. This is fine as long as the total sample of children aged 5-9 years across all SAs is 95 or more. The overall proportion (for all SAs) may still be calculated. However, without a sample of 19 in each SA, program managers should interpret performance in each SA with caution.

If some SAs are much larger than others, it may be important to weight the SAs prior to calculating the percentage based on their total beneficiary population¹¹ contribution. In table 5, we have included the information from table 4, but also important information about the total beneficiary population size of each SA. In this example, beneficiary population sizes vary from 50 to 400 people. We have calculated weights for each SA based on their contribution to the beneficiary population of all the SAs combined; so for SA 1, this is 100/1000=0.1. In the last column, we have multiplied this weight by a mini proportion (the number of “yes” responses divided by the number of respondents, e.g. 13/19 for SA 1). The values in the final column are summed, and we have an adjusted value for the proportion of children that have a birth certificate: 50.0%. This adjusted value should be presented.

Table 5. Example with Additional Information

Supervision Area	Child Has a Birth Certificate	Total	Mini %	Beneficiary Population Size	Weight (N/ΣN)	Weight*mini %
SA 1	13	19	0.68	100	0.10	0.07
SA 2	8	19	0.42	50	0.05	0.02
SA 3	6	19	0.32	370	0.37	0.12
SA 4	14	19	0.74	80	0.08	0.06
SA 5	11	19	0.58	400	0.40	0.23
Total for all SAs	52	95	0.55 = 55%	1000	1.00	0.50 = 50%

Please refer to Davis (2009) for more information on weighting.

Let us consider a more complex example. The indicator: Percent of children regularly attending school requires us to look at two questions in analysis: Is [NAME] currently enrolled in school?, and During the last school week, did [NAME] miss any school days for any reason? It is best to start by looking at the data for the first question. In table 6, we have data for children aged 10-14 years.

Table 6. Example of Currently Enrolled Children Aged 10-14 Years

Supervision Area	Currently Enrolled in School		Total
	n	%	
SA 1	13	n/a	19
SA 2	8	n/a	19
SA 3	6	n/a	19
SA 4	14	n/a	19
SA 5	11	n/a	19
Total for all SAs	52	54.7%	95

¹¹ By total population, we mean the total number of registered beneficiaries in the SA. Technically, this should be the total number of people in registered beneficiary households (i.e., all household members), but this information may not be available. We can use the total number of registered beneficiaries as a proxy and assume that the distribution of household size is equal across SAs.

As the second question is only asked when the caregiver has reported that the child is in school, we would expect only 13 responses in SA1, eight responses in SA2, six responses in SA 3, and so on. In table 7, we have data for this question. Importantly, here we are looking at the number of “no” responses (no missed school days = regular attendance).

Table 7. Example of No Missed School Days

Supervision Area	No Missed School Days		Total
	n	%	
SA 1	11	n/a	13
SA 2	7	n/a	8
SA 3	5	n/a	6
SA 4	14	n/a	14
SA 5	8	n/a	11

We can then combine the data into one table for regular school attendance, where the numerator is the number of no responses to the second question: During the last school week, did [NAME] miss any school days for any reason?, and the denominator is the total number of responses to the first question: Is [NAME] currently enrolled in school?

Table 8. Example of Regularly Attending School

Supervision Area	Regularly Attending School		Total
	n	%	
SA 1	11	n/a	19
SA 2	7	n/a	19
SA 3	5	n/a	19
SA 4	14	n/a	19
SA 5	8	n/a	19
Total for all SAs	45	47.3%	95

We may then proceed with weighting the “mini-proportions” in each SA as per the earlier example to take into account differences in population size between the SAs.

Although these steps are useful to outline the logic of the analysis, when we are doing the calculation we would skip directly to this final table entering the number of “no” responses to the question: During the last school week, did [NAME] miss any school days for any reason? into the first data column (n), and the total number of respondents to the question: Is [NAME] currently enrolled in school? into the last data column (Total).

5. PRESENTING AND USING DATA FROM THE PEPFAR MER ESSENTIAL SURVEY INDICATORS

5.1. Reporting

PEPFAR requires countries to collect data on the essential survey indicators. These indicators are held in country to be used to inform program planning and review, both by country and visiting headquarters staff. Headquarters may request this information from missions as part of a PEPFAR portfolio review (OGAC, 2013).

5.2. Data Use

At the national level - These outcome data should drive decisions around strategic portfolio development, programming and resource allocation at country level, as well as at the headquarters level. If some indicators are not changing over time, or not changing quickly enough, decision makers should consider alternative types of programming or interventions to improve program impact and beneficiary well-being. If indicators show improvement in population well-being, decision makers may consider scaling up particular interventions.

That said, if we see a change in an indicator over time, we cannot assume that the program under which the data were collected led to that change, or determine the contribution of the program to that change. A number of changes in the program catchment area could affect results, including the contributions of other programs, new policies, natural disasters, war, etc. Remember, as indicated earlier, outcomes monitoring data measures change in an indicator, without seeking to attribute any observed changes to programs or interventions.

At the program level – As programs are now evaluated based on progress against these indicators, data must be used by programs to improve their impact. Programs should actively seek to change these indicators between baseline and endline through their programming and resource allocation decision making. For instance, if at baseline, a low overall prevalence of birth certification is noted, then the program should aim to address this in a revised workplan, targeting more resources to this important issue. Importantly, if the program does not make decisions and direct resources to improving the value of the indicator, there is unlikely to be change in the indicator over time.

At the supervision area level – As noted earlier, in addition to using aggregated, program-level data, LQAS data can also be used to make program management decisions at the level of the supervision area. Please see appendix 4 for an example of this as well as resources cited. Note that data from traditional clusters are not meaningful at the cluster-level; data should not be disaggregated by cluster.

6. CONCLUSION

This document is intended as a tool to support U.S. government in-country staff to procure data collection services for the essential survey indicators, and to ensure a rigorous, standardized approach to data collection. For more information, please contact the Washington-based PEPFAR OVC Technical Working Group and/or MEASURE Evaluation.

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APPENDIX 1: FREQUENTLY ASKED QUESTIONS

What is the difference between outcomes monitoring and evaluation?

Both outcomes monitoring and evaluation rely on surveying a manageable number of beneficiaries to estimate well-being of the larger population. The difference between outcomes monitoring and evaluation is that monitoring measures change in the indicator, while evaluation aims to attribute observed changes to programs or interventions, usually by comparing program beneficiaries to similar people who did not receive the program or intervention.

What is the link between this document and the MEASURE Evaluation OVC survey tools?

Outcome indicators may be gathered through (1) evaluation or; (2) outcomes monitoring. This document provides an overview of approaches or options for collecting essential survey indicators through outcomes monitoring. Information on how to collect the essential survey indicators through evaluation is outlined in the MEASURE Evaluation's [Survey Tools for OVC Programs](#).

Who is responsible for collecting MER essential survey indicators?

Ultimately, U.S. government missions are responsible for collecting essential survey indicators. U.S. government missions should procure data collection services from a group with appropriate skills and capacity. The group tasked with collecting the essential survey indicators should be external to program service delivery to reduce bias and improve data quality.

What should missions look for in a data collection partner? What skills do they need?

Missions should look for data collection partners that are able to:

- Communicate effectively and manage priorities and expectations from multiple stakeholders.
- Understand the differences between different survey design options, discuss options with the program being surveyed and the mission, and lead a decision making process on survey design. Data collection partners should be able to explain measurement principles such as accuracy and precision and the difference between outcomes monitoring and evaluation to a lay audience.
- Work with program staff to develop the sampling frame and calculate the sample size.
- Verify sampling lists.
- Seek ethical approval exemption status and obtain any other approvals specific to the country or region.
- Recruit and contract data collectors, manage staff and consultants including tracking timesheets.
- Train data collectors in ethical and safe survey techniques.
- Understand how to ensure child protection during field work and train data collectors on this.
- Obtain buy-in and support from survey communities prior to field work and maintain communication throughout field work with the program being surveyed and the communities.
- Plan field work, and determine which data collectors are going where, when.
- Manage survey logistics including procuring vehicles and other services.

- Ensure data quality during field work. Quickly identify and implement solutions to challenges encountered in field work, staying in budget and on time.
- Understand and be able to implement processes for recruiting participants and documenting informed consent.
- Maintain participant confidentiality during and after field work.
- Design a database capable of supporting data analysis and enter questionnaire data.
- Analyze data, applying weights and statistical tests, as appropriate.
- Produce tabulations and reports.
- Manage a tight budget.
- Manage a tight schedule.

How often should essential survey indicators be collected?

The essential survey indicators should be collected every two years, at the same time each year to ensure comparability.

Do missions need to collect data for the essential survey indicators from all PEPFAR-funded OVC programs in country?

No. U.S. government agencies in country should, in partnership, determine the most appropriate programs from which to collect data, considering program budget allocations and agency representation. Considerations may include program size and scope, the availability of program registers, and the timeline of the program. To enable comparability, it is advisable to collect data from the same PEPFAR-funded OVC program over a number of data collection cycles, rather than changing the program from which data are collected. For this reason, missions may want to collect essential survey indicators from newer programs with longer timelines (e.g., a program in its first or second of five program years).

If missions wish to collect data from multiple programs in country, independent surveys must be conducted for each program. Data collectors cannot sample across programs in a single survey. If multiple data points are gathered from multiple programs for each indicator, these data should be presented separately. Samples cannot be added to achieve a single value for each indicator.

Is ethical approval required for the collection of essential survey indicators?

Outcomes monitoring is routine data collection for the purposes of program management, and in most cases is exempt from ethical review if children are not interviewed directly. That said, all protocols should be submitted to ethical review committees to certify exemption. This is generally a quicker and less expensive process than seeking full ethical review. Note that some countries require that all survey protocols undergo full ethical review. Missions and data collection firms should submit protocols in line with local legal regulations and best practice.

APPENDIX 2: INDICATOR REFERENCE SHEETS

NC.1	Percent of children whose primary caregiver knows the child's HIV status
<p>Purpose:</p> <p>Given the elevated risk of HIV-infection among HIV-affected children, it is important for a child's primary caregiver to know the child's HIV status. This is the first step for HIV prevention and treatment so it is critical for OVC programs to, at a minimum, link supported children to HIV-testing services, especially in regions with generalized HIV epidemics.</p> <p>This is a direct outcome indicator, which provides information on the degree to which HIV testing services have been accessed by children and their primary caregivers. The recommended levels of disaggregation are intended to show access to testing services in specific age groups. This is important because infants may be at especially high risk for MTCT and adolescents are at higher risk of sexual transmission.</p>	
Numerator:	Number of active beneficiaries aged 0-18 years whose primary caregiver knows the child's HIV status
Denominator:	Number of active beneficiaries surveyed
Disaggregation(s):	Required: <ul style="list-style-type: none"> • Sex: male, female • Age group: 0-4, 5-9, 10-14, 15-18 years Optional: Age group: 0-11 months, 1-4 years
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver report. The suggested survey questions for caregivers are:</p> <ul style="list-style-type: none"> • I don't want to know the results, but has [NAME] ever been tested to see if he/she has the AIDS virus? • I don't want to know the results, but do you know the result of [NAME's] test? 	
<p>Explanation of Numerator:</p> <p>The numerator is the number of active beneficiaries whose primary caregiver reports that the child has been tested for HIV and that they (the caregiver) know the result of this HIV test.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiaries aged 0-17 years surveyed. Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice. Partners will report on the number of beneficiaries on their "active" registries. Partners will not be required to count the number of individuals who have received services at each reporting period.</p>	
<p>Interpretation:</p> <p>This is a reflection of whether a child has ever been tested for HIV.</p>	
<p>Additional References:</p> <p>MEASURE Evaluation OVC Survey Tools</p>	

Indicator: CW.1 Percent of children < 5 years of age who are undernourished	
Purpose: This is a direct outcome measure of the percent of children with physical growth below international growth standards among active beneficiaries under 5 years of age of PEPFAR OVC programs. Nutrition is a critical factor in reducing infant mortality and builds a strong foundation for a child's health, growth and development.	
Numerator:	Number of active beneficiaries <5 years of age with physical growth below international growth standards
Denominator:	Number of active beneficiaries < 5 years of age surveyed
Disaggregation(s):	Required: Sex: male, female Optional: Age group: 6-11 months, 1-4 years
Data Source:	Special Study
Data Collection Frequency:	Biennially
Definitions: <i>Undernourished</i> is defined for the purpose of this indicator to mean those who have been nutritionally assessed using anthropometric measurement and found to be undernourished exhibited by wasting, thinness or presence of bilateral pitting oedema and using the criteria presented in the "Method of measurement" section below.	
Method of Measurement: Mid-upper arm circumference (MUAC) is recommended by the World Health Organization (WHO) as a method of assessment for severe, acute malnutrition among children 6-59 months. MUAC measures the circumference of the left upper arm in millimeters (mm). It is taken at a point midway between the tip of the shoulder and the elbow. MUAC is a proxy measure of nutrient reserves in muscle and fat and are independent of height. There is no internationally agreed threshold for undernourishment among children under 5 years of age however, for reporting purposes, children whose MUAC is < 125 mm should be counted as malnourished.	
Explanation of Numerator: The numerator is the number of active beneficiaries aged 6-59 months that were assessed and found to be undernourished at any point during the reporting period, using the above criteria.	
Explanation of Denominator: The denominator is the number of active beneficiaries aged 6-59 months surveyed. Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.	
Interpretation: MUAC indicates moderate and/or severe malnourishment and can serve as a recommended threshold of admission to therapeutic feeding programs. MUAC can be used to identify moderate malnutrition, although there is no international agreement on such use and standardized cut-offs.	
Additional References: MEASURE Evaluation OVC Survey Tools Comprehensive guides, training aids and online calculation tools are available to facilitate accurate MUAC measurement and calculations, including: http://www.who.int/childgrowth/training/module_b_measuring_growth.pdf http://www.who.int/nutrition/publications/severemalnutrition/9789241598163_eng.pdf	

CW.4	Percent of children too sick to participate in daily activities
<p>Purpose:</p> <p>This is a direct outcome indicator of a child’s well-being. It is a measure of the impact of sickness, impairment, and mental health issues on daily life. It is especially important for PEPFAR OVC programs and partners to monitor this indicator because children who are unable to participate in daily activities may be in need of immediate medical care and could be in an especially vulnerable state. Disaggregation enables programs to define interventions to reach specific subpopulations based on need.</p>	
Numerator:	Number of active beneficiaries who are too sick to participate in daily activities
Denominator:	Number of active beneficiaries surveyed
Disaggregation(s):	Required: <ul style="list-style-type: none"> • Sex: male, female • Age group: 0-4 years, 5-9 years, 10-14, 15-17 years
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver or self-report. The suggested survey question for caregivers / children aged 10-17 years is:</p> <ul style="list-style-type: none"> • At any time in the last 2 weeks, has [NAME]/have you been too sick to participate in daily activities? 	
<p>Explanation of Numerator:</p> <p>The numerator is the number of active beneficiaries surveyed who are too sick to participate in daily at any time during the two weeks preceding the survey, as reported by primary caregiver, another household member, or the child.</p> <p>A condition is defined as one that is either or both physical mental health condition. As stated, the emphasis is on the impairment and the fact that an illness or condition prevented the child from participating in daily activities. Daily activities should be defined and interpreted by the caregiver/child according to the respondent’s specific situation.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiaries aged 0-17 years surveyed. Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
<p>Interpretation:</p> <p>This is an indicator of child physical and mental health.</p>	
<p>Additional References:</p> <p>MEASURE Evaluation OVC Survey Tools</p>	

CW.9	Percent of children who have a birth certificate
<p>Purpose:</p> <p>This is a direct outcome indicator of the child’s access to legal protection. A birth certificate is often the starting point for protecting a child’s right to state or community level support, and, in many places, a child must have a birth certificate in order attain any government social and/or protection services. This indicator will allow PEPFAR OVC programs to determine the specific sub-groups where birth documentation may be lacking, thus, allowing for targeted interventions in the future.</p>	
Numerator:	Number of active beneficiaries who have a birth certificate
Denominator:	Number of active beneficiaries surveyed
Disaggregation(s):	<p>Required:</p> <ul style="list-style-type: none"> • Sex: male, female • Age group: 0-4, 5-9, 10-14, 15-18 years <p>Optional: Age group: 0-11 months, 1-4 years</p>
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver or self-report and verification.</p> <p>The suggested questions for caregivers and children aged 10-17 years are:</p> <ul style="list-style-type: none"> • Does [NAME] / do you have a birth certificate? • Could you please show me [NAME’s] / your birth certificate? 	
<p>Explanation of Numerator:</p> <p>The numerator is the number of active beneficiaries aged 0-17 years surveyed who have a birth certificate issued by appropriate Government authorities, as reported by primary caregiver <i>and</i> verified by observation. A birth certificate is defined as the official in-country identification document, which often facilitate access to services.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiaries aged 0-17 years surveyed. Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
<p>Interpretation:</p> <p>This indicator has child protection implications. Results may indicate the existence of challenges in applying for and/ or receiving birth certificates. Analysts should consider national processes of birth registration when interpreting the results of this indicator.</p>	
<p>Additional References:</p> <p>MEASURE Evaluation OVC Survey Tools</p>	

CW.11	Percent of children regularly attending school
<p>Purpose:</p> <p>This is a direct outcome measure of school attendance. School attendance is an important correlate of educational progress and protection as schools can serve to protect children who are at risk of being left unattended inside and outside of their places of residence. Research on children has demonstrated that education can contribute to significant improvements in the lives of children and their families. In addition to fostering basic educational competencies, such as reading, writing, and mathematics, learning opportunities can provide students with chances to develop age-appropriate, gender-sensitive life skills and also offer sex education interventions. School attendance indicates that children and youth have the opportunity to engage in formal learning, and are not required to join the workforce or quit school in order to care for younger siblings or family members. Disaggregation is necessary to identify sub-populations that are at high-risk for dropping out of school, (for instance, the age when youth transition from primary to secondary school is believed to be an area in need of specific targeting to encourage continued school attendance).</p>	
Numerator:	Number of active beneficiaries aged 5-17 years of age regularly attending school
Denominator:	Number of active beneficiaries aged 5-17 years surveyed
Disaggregation(s):	<p>Required:</p> <ul style="list-style-type: none"> • Sex: male, female • Age group: 5-9 years, 10-14 years, 15-17 years <p>Optional: Further disaggregation by age, particularly within the 5-9 age group, may be useful as often children do not begin school until the age of 6 or 7.</p>
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver or self-report. The suggested survey questions for caregivers and children aged 10-17 years are:</p> <ul style="list-style-type: none"> • Is [NAME] / Are you currently enrolled in school? • During the last school week, did [NAME] / you miss any school days for any reason? 	
<p>Explanation of Numerator:</p> <p>The numerator is the number of children aged 5-17 years who did not miss any school days in the week preceding the survey (or last week school was in session), as reported by the primary caregiver, another household member, or the child.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiaries aged 5-17 years surveyed. Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
<p>Interpretation:</p> <p>This is an indicator of school attendance. There are many reasons why a child may have missed school during the previous school week; a follow-up question asking why the child missed school is highly recommended to ascertain whether results are concerning.</p> <p>If the survey was conducted during a school holiday or when teachers are on strike, and respondents are asked to recall the last time school was in session, data may be subject to recall bias.</p>	
<p>Additional References:</p> <p>MEASURE Evaluation OVC Survey Tools and UNESCO</p>	

CW.12	Percent of children who progressed in school during the last year
<p>Purpose:</p> <p>This is a direct outcome measure of educational progress. Progression in school is generally highly correlated with school attendance, except where social promotion is common, and dependent on current school enrollment. The educational progress of children can be jeopardized by household's financial vulnerability, which could render families unable to pay school fees or other school-related expenses. Additionally, many children's educational progress may be slowed by a need to work to support their household financially or excessive household responsibilities.</p>	
Numerator:	Number of active beneficiaries aged 5-17 years who progressed in school during the last year
Denominator:	Number of active beneficiaries surveyed who were enrolled in school during the previous year
Disaggregation(s):	<p>Required:</p> <ul style="list-style-type: none"> • Sex: male, female • Age group: 5-9 years, 10-14 years, 15-17 years <p>Optional: Further disaggregation by age, particularly within the 5-9 age group may be useful at the national level as often children do not begin school until the age of 6 or 7. It may also be useful to disaggregate by primary and secondary school.</p>
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver or self-report.</p> <p>The suggested survey questions for caregivers and children aged 10-17 years are:</p> <ul style="list-style-type: none"> • Is [NAME] / Are you currently enrolled in school? • What grade/form/year is [NAME] / are you in <u>now</u>? • Was [NAME] / Were you enrolled in school during the previous school year? • What grade/form/year was [NAME] / were you in during the <u>previous school year</u>? 	
<p>Explanation of Numerator:</p> <p>Number of active beneficiaries aged 5-17 years who report being in a more advanced grade level at the time of survey compared to the previous school year.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiaries aged 5-17 years of age surveyed who report being enrolled in school during the academic year previous to the current/most recent academic year.</p> <p>Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
<p>Interpretation:</p> <p>This is an indicator of educational progression over time, which is necessarily different than completion of age-appropriate education (a single point-in-time measure). Recommended age disaggregation should be interpreted as percent of children progressing through primary school and percent of children progressing through secondary school. This measure assumes that children received passing marks / grades / scores to progress to the next level, which is an indicator of performance, but only of 'pass-fail'.</p>	
<p>Additional References:</p> <p>MEASURE Evaluation OVC Survey Tools</p>	

CW.13	Percent of children < 5 years of age who recently engage in stimulating activities with any household member over 15 years of age
<p>Purpose:</p> <p>This direct outcome indicator of whether caregivers and other adults are engaging children at a young age. Stimulation through individual attention from caregivers is among the most vital needs of children under 5. Stimulation during early childhood is essential for promotion of long-term learning, growth, and health. The neural connections which create the capacity for these advances, develop most rapidly during early childhood. Even in the absence of other interventions, stimulation has been shown to have a significant effect on the development of undernourished children. Thus, it is critical to assess and promote stimulation during early childhood because the damage done to children who do not receive consistent care and regular stimulation has long-term repercussions.</p>	
Numerator:	Number of active beneficiaries < 5 years of age who have engaged in stimulating activities with any household member over 15 years of age during the last 3 days, as reported by an adult
Denominator:	Number of active beneficiaries <5 years of age surveyed
Disaggregation(s):	Required: Sex: male, female Optional: Age group: 0-11 months, 12-23 months, 2-4 years
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver report. The suggested survey question for caregivers is:</p> <ul style="list-style-type: none"> • In the past 3 days, did you or any other household member over 15 years of age engage in any of the following activities with (NAME)? <ul style="list-style-type: none"> a) Read books or looked at picture books with (NAME)? b) Told stories to (NAME)? c) Sang songs to (NAME) or with (NAME) including lullabies? d) Played with (NAME)? e) Named, counted, or drew things to or with (NAME)? 	
<p>Explanation of Numerator:</p> <p>The numerator is number of active beneficiaries < 5 years of age who have engaged in stimulating activities with any household member over 15 years of age during the last 3 days, as reported by an adult.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiaries < 5 years of age, surveyed. Active beneficiary is defined as an individual who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
<p>Interpretation:</p> <p>This is an indicator of child stimulation. The age of individuals assessed is limited to those < 5 years of age as evidence suggests that that early childhood development is dependent on stimulation. Results must be interpreted cautiously because answers may be influenced by social desirability, as caregivers may desire to give interviewers a good impression. Moreover, because this indicator has only a binary (yes/no) result, it is limited in its ability to capture the duration and frequency of stimulation.</p>	
<p>Additional References: MICS EC7</p>	

HW.2	Percent of households able to access money to pay for unexpected household expenses
<p>Purpose:</p> <p>The HIV pandemic affects the economic stability of families and the children in their care by interrupting the income streams, depleting assets, introducing labor constraints, and increasing dependency ratios. PEPFAR OVC programs must take into account the financial stability and food security of HIV-affected households. Ability to access money for unexpected household expenses is a direct (outcome) measure of a household's financial stability and resilience in the face of economic shocks. This factor is associated with the stability of children, caregivers, and other household members. Specifically, financial stability reduces the risk of a child having to work outside the home. Vulnerability in this area may be the source of (or part of a web of factors influencing) many other child or household well-being issues measured in these indicators, particularly nutrition and education.</p>	
Numerator:	Number of active beneficiary households able to access money to pay for unexpected household expenses
Denominator:	Number of households surveyed that contain at least one active beneficiary
Disaggregation(s):	Optional: Location: urban, rural
Data Source:	Special Study
Data Collection Frequency:	Biennially
<p>Method of Measurement:</p> <p>Caregiver self-report. The suggested survey questions are:</p> <ul style="list-style-type: none"> • Did your household incur any unexpected household expenses, such as a house repair or urgent medical treatment, in the last 12 months? • If yes: Was your household able to pay for these expenses? 	
<p>Explanation of Numerator:</p> <p>The numerator is the number of households surveyed that report the ability to pay for an unexpected household expense, as reported by the caregiver or head-of-household.</p>	
<p>Explanation of Denominator:</p> <p>The denominator is the number of active beneficiary households surveyed who report incurring an unexpected household expense in the last 12 months. An active beneficiary household is defined as a household where at least one household member has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
<p>Interpretation:</p> <p>This is an indicator of household stability or vulnerability, with regard to a household ability access to resources to withstand shocks/unexpected costs. Promotion of household economic strengthening is a key aim of PEPFAR OVC programs because of the widespread impacts of household vulnerability on children's well-being. The effect of unexpected costs has been magnified in households affected by HIV, which have often been handicapped by death and/or incapacitation of adult household members and cope with the added responsibility of orphaned children. Research has indicated that impoverished families frequently sell any assets to withstand difficult financial situations, e.g. funerals, and pay for regular expenses for food, housing, and education, which limits their long-term resilience. This has direct implications for households serviced by PEPFAR OVC programs, which seek to enable children to participate in formal education, encourage healthy families, and prevent malnourishment.</p>	
<p>Additional References: MEASURE Evaluation OVC Survey Tools</p>	

CW.14	Percent of caregivers of active beneficiaries who agree that harsh physical punishment is an appropriate means of discipline or control in the home or school
Purpose:	
<p>This indicator is related to child protection. The relationship between violence against children, gender-based violence and HIV/AIDS is multi-faceted. Violence increases the risk of exposure to HIV and other sexually transmitted diseases. Conversely, HIV status can increase the likelihood that a child will experience violence, both in school and at home. For this reason, reducing violence against children is a PEPFAR priority. Research indicates that most perpetrators of violence against children are family members or others close to a family. Children frequently experience violence in the form of harsh discipline by caregivers. Perceptions of physical discipline have been linked to actual use of physical discipline against children and changing perceptions of discipline can reduce violence against children.</p>	
Numerator:	Number of caregivers of active beneficiaries who agree that harsh punishment is an appropriate means of discipline or control in the home or school
Denominator:	Number of caregivers of active beneficiaries surveyed
Disaggregation(s):	Required: Sex: Male, Female; Required: Age: Age group: <18, 18-30, 31-50, 50+
Data Source:	Special Study
Data Collection Frequency:	Biennially (Every two years)
Definitions: Harsh punishment is in this case defined as hitting or beating a child as a means of discipline. The distinction between home and school is important as caregivers might think teachers and caregivers have different boundaries on what constitutes harsh punishment.	
Method of Measurement:	
<p>Caregiver report. The suggested survey question for caregivers is:</p> <ul style="list-style-type: none"> • Do you think that hitting or beating a child is an appropriate means of discipline or control in the home? <ul style="list-style-type: none"> a) Yes b) No • Do you think that hitting or beating a child is an appropriate means of discipline or control at school? <ul style="list-style-type: none"> a) Yes b) No 	
Explanation of Numerator:	
<p>The numerator is the number of caregivers who agree that harsh punishment is an appropriate means of discipline or control in the home or school.</p>	
Explanation of Denominator:	
<p>The denominator is the number of caregivers of active beneficiaries surveyed. Caregiver in this indicator is defined as an individual who is currently caring for an active beneficiary who has received program services in the last three months and who is scheduled to receive program services at least once every three months, as outlined in program guidelines or standards of practice.</p>	
Interpretation:	
<p>This is a reflection of whether a caregiver perceives harsh punishment (defined as hitting or beating) as an appropriate means of discipline or control in the home or school.</p>	
Additional References: MEASURE Evaluation OVC Survey Tools	

APPENDIX 3: OUTCOMES MONITORING PROTOCOL CHECKLIST

PROTOCOL CHECKLIST

<input checked="" type="checkbox"/>	Protocol includes:
<input type="checkbox"/>	Description of the beneficiary population that will be surveyed.
<input type="checkbox"/>	Description of the study design, sampling method and sample size. This should describe how surveyors will obtain information needed for sampling from the OVC program.
<input type="checkbox"/>	Ethically sound and culturally appropriate procedures for recruitment that allow informed consent and do not perversely incentivize participation. This should describe how the OVC program will collaborate with the survey team to locate respondent households.
<input type="checkbox"/>	Informed consent forms and a well described consenting process.
<input type="checkbox"/>	Description of data collection procedures including procedures for call back if the caregiver (or child aged 0-4 years) is not available for interview.
<input type="checkbox"/>	The data collection tools and a description of how tools have been or will be translated and/or adapted to the local context, if necessary.
<input type="checkbox"/>	Description of the data collectors, their qualifications, and the training that they will undergo prior to data collection.
<input type="checkbox"/>	Data management plan, including data flow and procedures for quality control.
<input type="checkbox"/>	Description of procedures for data entry.
<input type="checkbox"/>	Data analysis plan.
<input type="checkbox"/>	Description of the ethical and child protection risks and safeguards in place.
<input type="checkbox"/>	The name of the research ethics committee in the country of study from which non-research determination will be sought / has been obtained.

APPENDIX 4A: DATA COLLECTION CONSENT FORM FOR CAREGIVERS

MER Indicator Questionnaire: Consent Form for Caregivers

Hello. My name is _____ and I am working with [*insert name of organization/program and donor, if applicable*]. We are conducting a survey about child and caregiver well-being so that we can improve the impact of our services and programs. To gather this information we are interviewing caregivers in some households. We have randomly chosen to visit your household.

We would very much appreciate your participation in this survey. Participation involves answering approximately 10 easy questions about up to five children under your care. If you care for a child between the ages of 0 and 5 years, I will also measure that child's mid-upper arm circumference.

The interview with you will take less than 30 minutes to complete. If you agree to participate, we will ask you questions from a printed questionnaire and we will note your answers on the questionnaire. The risks to you as a participant in this survey are minimal. Some of the questions are personal and some people may find them difficult to answer. You do not need to answer any questions that you do not want to.

Your participation in this survey is voluntary. If you don't want to answer my questions, it is OK. If you agree to participate, you can decide not to answer certain questions and can stop the interview at any time. Your decision about whether to participate in this survey or to answer any specific questions will in no way affect any services that you receive.

Other people will not know if you participated in this survey. We will put things we learn about you together with things we learn about other people from your community, so no one can tell what answers came from you. We will never use your name, so no one will ever know what answers you gave me. Only a few data collectors will have access to this information, and all information will be stored in a locked cabinet under the care of the [*insert program name*] until it is destroyed in [*insert time*].

Your participation in this survey will not benefit you directly, but it may benefit others in the future, as your responses will improve our understanding of ways to provide better services to people in communities like yours.

Before you say **yes or no** to participating, we will answer any questions you have. You can also ask me questions later. Do you have any questions now? [*Pause & answer all questions*]

If you have any questions later, you may contact the survey coordinator at _____.

CONSENT STATEMENT FOR SIGNATURE

I have read this entire consent form, or had it read to me, and any questions have been answered to my satisfaction. I agree to participate in this survey. [Data collector confirms with signature.]

Signature of Data Collector: _____ Date: _____

For Interviewer:

RESPONDENT AGREES TO BE INTERVIEWED . . . 1

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 END

APPENDIX 4B: DATA COLLECTION FORMS (ALL GROUPS)

MER Indicator Questionnaire: Cover Sheet

IDENTIFICATION DATA

001	QUESTIONNAIRE IDENTIFICATION NUMBER	
002	TYPE OF LOCATION	Urban 1
	<i>Circle</i>	Rural 2
003	PROVINCE OR STATE	
004	DISTRICT OR LOCAL GOVERNMENT AREA	
005	CONSTITUENCY (if applicable)	
006	WARD (if applicable)	
007	SUPERVISION AREA (if applicable)	
008	TOWN/VILLAGE (if applicable)	
009	NEIGHBOURHOOD (if applicable)	
010	HOUSEHOLD NUMBER (from sampling list)	[_ _]

INTERVIEW LOG

	VISIT 1	VISIT 2	VISIT 3
DATE (day/month/year)			
INTERVIEWER COMMENTS			

Interview comment codes: Interview completed 1; Appointment made for later today 2; Appointment made for another day 3; Refused to continue and no appointment made 4; Other (Specify) 5

011	INTERVIEWER	A) CODE	B) NAME
012	DATE INTERVIEW COMPLETED (day/month/year)		

COMMENTS

1. MER Indicator Questionnaire: Caregivers

First, I have a few questions about you and the children under your care.

No.	Question	Coding Category	Skip
1	Record caregiver sex.	Female 1 Male 2	
2	How old were you at your last birthday? Do not leave blank. If unknown, ask respondent to estimate.	[___] years	
3	Have you personally <u>ever</u> received services or participated in activities from [insert name of program]? By this I mean, have you ever been visited by a community worker, or have you ever participated in any activities organized by the program such as a savings group or parenting program?	Yes 1 No 2	If No: 5
4	Have you personally received services or participated in activities from [insert name of program] in the <u>last six months</u> ?	Yes 1 No 2	
5	Did your household incur any <u>unexpected</u> household expenses, such a as a house repair or urgent medical treatment, in the last 12 months?	Yes 1 No 2	If No: 7
6	Was your household able to pay for these expenses?	Yes 1 No 2	
7	Do you think that hitting or beating a child is an appropriate means of discipline or control <u>in the home</u> ?	Yes 1 No 2	
8	Do you think that hitting or beating a child is an appropriate means of discipline or control <u>at school</u> ?	Yes 1 No 2	
9	How many children aged 0-17 years are you responsible for?	[___] children	

Starting with the oldest, please tell me the first names and ages of the children that you care for or are responsible for. **Make sure the total number of children is the same as the response given to question 5.**

No.	First name	Age (years)	Age group 0-4 years, 5-9 years, 10-14 years, 15-17 years
1	<i>Example. Samuel</i>	6	5-9 years

Information is required for only one child in each age group. If there is only one child in a given age group, ask the caregiver to reference that child in his/her responses. If there is more than one child in any age group, randomly select one child from each age group. You may use the Kish Grid (next page) or another method for this. One you have selected the reference child in each age group remind the caregiver that his/her responses pertain to that child only. If there is no child of a given age group in the household, skip the module for that age group.

Kish Grid

In each age-group specific table below, list the names of all eligible children from oldest to youngest. Using the last digit of the serial number of the questionnaire, find that number along the top row of the table. Follow that number down to the last line where a child is listed. The number that you come to is the number of the child that should be surveyed.

#	Name of eligible individuals 0-4 years listed from <u>oldest to youngest</u>	Age (0-4)	Last digit of questionnaire serial number											
				1	2	3	4	5	6	7	8	9	0	
1.			1	1	1	1	1	1	1	1	1	1	1	1
2.			2	1	1	2	2	1	1	2	2	1	1	
3.			3	3	2	1	3	2	1	3	2	1	3	
4.			4	2	3	4	1	2	3	4	1	2	3	
5.			5	5	4	3	2	1	5	4	3	2	1	
#	Name of eligible individuals 5-9 years listed from <u>oldest to youngest</u>	Age (5-9)	Last digit of questionnaire serial number											
				1	2	3	4	5	6	7	8	9	0	
1.			1	1	1	1	1	1	1	1	1	1	1	
2.			2	1	1	2	2	1	1	2	2	1	1	
3.			3	3	2	1	3	2	1	3	2	1	3	
4.			4	2	3	4	1	2	3	4	1	2	3	
5.			5	5	4	3	2	1	5	4	3	2	1	
#	Name of eligible individuals 10-14 years listed from <u>oldest to youngest</u>	Age (10-14)	Last digit of questionnaire serial number											
				1	2	3	4	5	6	7	8	9	0	
1.			1	1	1	1	1	1	1	1	1	1	1	
2.			2	1	1	2	2	1	1	2	2	1	1	
3.			3	3	2	1	3	2	1	3	2	1	3	
4.			4	2	3	4	1	2	3	4	1	2	3	
5.			5	5	4	3	2	1	5	4	3	2	1	
#	Name of eligible individuals 15-17 years listed from <u>oldest to youngest</u>	Age (15-17)	Last digit of questionnaire serial number											
				1	2	3	4	5	6	7	8	9	0	
1.			1	1	1	1	1	1	1	1	1	1	1	
2.			2	1	1	2	2	1	1	2	2	1	1	
3.			3	3	2	1	3	2	1	3	2	1	3	
4.			4	2	3	4	1	2	3	4	1	2	3	
5.			5	5	4	3	2	1	5	4	3	2	1	

2. MER Indicator Questionnaire: Child Aged 0-4 years

I have a few questions about [insert child's name]. **Check to make sure the sampled child is present.**
You will need to take this child's mid-upper arm circumference.

No.	Question	Coding Category	Skip																		
1	Is [NAME] female or male?	Female 1 Male 2																			
2	How old was [NAME] at their last birthday? Do not leave blank. If unknown, ask caregiver to estimate. If the child is not less than 5 years, stop interview and proceed to next household/child on list.	[_ _] years																			
3	Does [NAME] have a birth certificate?	Yes 1 No 2																			
4	In the past 3 days, did you or any household member over 15 years of age engage in any of the following activities with [NAME]: Read out a through e one at a time.	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>a) Read books to or looked a picture books with [NAME]?</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) Told stories to [NAME]?</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) Sang songs to [NAME] or with [NAME] including lullabies?</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) Played with [NAME]?</td> <td>1</td> <td>2</td> </tr> <tr> <td>e) Named, counted, or drew things with [NAME]?</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		Yes	No	a) Read books to or looked a picture books with [NAME]?	1	2	b) Told stories to [NAME]?	1	2	c) Sang songs to [NAME] or with [NAME] including lullabies?	1	2	d) Played with [NAME]?	1	2	e) Named, counted, or drew things with [NAME]?	1	2	
	Yes	No																			
a) Read books to or looked a picture books with [NAME]?	1	2																			
b) Told stories to [NAME]?	1	2																			
c) Sang songs to [NAME] or with [NAME] including lullabies?	1	2																			
d) Played with [NAME]?	1	2																			
e) Named, counted, or drew things with [NAME]?	1	2																			
5	In the last 2 weeks, has [NAME] been too sick to participate in daily activities?	Yes 1 No 2																			
6	I don't want to know the results, but has [NAME] ever been tested to see if he/she has the AIDS virus?	Yes 1 No 2	If No: 8																		
7	I don't want to know the results but do you know the results of [NAME's] test?	Yes 1 No 2																			
8	May I measure your child's mid-upper arm circumference? Measure the child's mid-upper arm circumference using the MUAC tape and document measurements.	[_ _]. [_ _] Cm																			
9	Has [NAME] ever received services or participated in activities from [insert name of program]?	Yes 1 No 2	If No: end																		
10	Has [NAME] received services or participated in activities from [insert name of program] in the last six months?	Yes 1 No 2																			

3. MER Indicator Questionnaire: Child Aged 5-17 years

Age group	<input type="checkbox"/> 5-9 years	<input type="checkbox"/> 10-14 years	<input type="checkbox"/> 15-17 years
------------------	------------------------------------	--------------------------------------	--------------------------------------

I have a few questions about [insert child's name].

No.	Question	Coding Category	SKIP
1	Is [NAME] female or male?	Female 1 Male 2	
2	How old was [NAME] at their last birthday? Do not leave blank. If unknown, ask caregiver to estimate. If the child is not between the ages of 5-17, stop interview and proceed to next household/child on list.	[][] years	
3	Does [NAME] have a birth certificate?	Yes 1 No 2	
4	Is [NAME] currently enrolled in school?	Yes 1 No 2	If No: 7
5	During the last school week, did [NAME] miss any school days for any reason?	Yes 1 No 2	
6	What grade/form/year is [NAME] in now?	[][]	
7	Was [NAME] enrolled in school during the previous school year?	Yes 1 No 2	If No: 9
8	What grade/form/year was [NAME] during the previous school year?	[][]	
9	At any point in the last 2 weeks, has [NAME] been too sick to participate in daily activities?	Yes 1 No 2	
10	I don't want to know the results, but has [NAME] ever been tested to see if he/she has the AIDS virus?	Yes 1 No 2	If No: 12
11	I don't want to know the results but do you know the results of [NAME's] test?	Yes 1 No 2	
12	Has [NAME] ever received services or participated in activities from [insert name of program]?	Yes 1 No 2	If No: end
13	Has [NAME] received services or participated in activities from [insert name of program] in the last six months?	Yes 1 No 2	

APPENDIX 5: ESSENTIAL SURVEY INDICATORS DATA ANALYSIS GUIDANCE AND DUMMY TABLES

Guidance is presented by indicator.

Percent of children whose primary caregiver knows the child's HIV status

For this indicator, the numerator is the number of “yes” responses to the question: I don't want to know the results but do you know the results of [NAME's] test? The denominator is the number of responses (total, either “yes” or “no”) to the question: I don't want to know the results, but has [NAME] ever been tested to see if he/she has the AIDS virus? The table below shows data for children aged 0-17 years:

	Yes	No	Total
I don't want to know the results, but has [NAME] ever been tested to see if he/she has the AIDS virus?	60	40	100
I don't want to know the results but do you know the results of [NAME's] test?	50	10	60

The proportion for the final calculation is: 50/100 or 50%. That is, 50% of the caregivers surveyed know their child's HIV status. The other 50% do not know their child's status either because the child has not yet been tested, or the child has been tested, but the caregiver does not know the results. Data should be calculated and presented by age group and by sex. Your final data table may look like this:

<i>Percent of children whose primary caregiver knows the child's HIV status, by age and sex</i>	Sex						All		
	Male			Female					
	n	N	%	n	N	%	n	N	%
0-4 years									
5-9 years									
10-14 years									
15-17 years									
All ages							50	100	50%

Percent of children <5 years of age who are undernourished

The numerator for this indicator is the number of children aged 6-59 months with mid-upper arm circumference (MUAC) measurement of less than 115 mm (WHO, UNICEF, 2009)¹². In analysis you will want to create a new binary variable for undernourishment: yes/no. The denominator is the total number of children aged 6-59 months from whom measurements were taken. Your final data table may look like this:

<i>Percent of children who are undernourished</i>	n	%	Total
Female			
Male			
All			

¹² A MUAC of less than 115 mm in children 6-60 months indicates severe acute malnutrition.

Percent of children too sick to participate in daily activities

For this indicator, the numerator is the number of “yes” responses to the question: At any time in the last 2 weeks, has [NAME] been too sick to participate in daily activities? The denominator is the number of responses to that question in total. The table below shows data for children aged 0-17 years:

	Yes	No	Total
At any time in the last 2 weeks, has [NAME] been too sick to participate in daily activities?	60	40	100

The proportion for the final calculation is: 60/100 or 60%. That is, 60% of children surveyed were too sick at some point in the two weeks prior to survey to participate in daily activities. Data should be calculated and presented by age group and by sex. Your final data table may look like this:

<i>Percent of children too sick to participate in daily activities</i>	Sex						All		
	Male			Female					
	n	N	%	n	N	%	n	N	%
0-4 years									
5-9 years									
10-14 years									
15-17 years									
All ages							60	100	60%

Percent of children who have a birth certificate

This indicator may be calculated in exactly the same way as the previous indicator, except the numerator is the number of “yes” responses to the question Does [NAME] have a birth certificate?, and the denominator is the total number of responses to that question.

Percent of children (aged 5-17 years) regularly attending school

The numerator for this indicator is the number of “no” responses to the question: During the last school week, did [NAME] miss any school days for any reason? The denominator is the number of responses total to the question: Is [NAME] currently enrolled in school? In the table below we have data for children aged 5-17 years:

	Yes	No	Total
Is [NAME] currently enrolled in school?	80	20	100
During the last school week, did [NAME] miss any school days for any reason?	20	60	80

The proportion for the final calculation is: 60/100 or 60%. That is, 60% of the children surveyed (ages 5-17 years) are regularly attending school. Among those not regularly attending school, some are not enrolled and others are enrolled but missed school days recently for some reason. Data should be calculated and presented by age group and by sex. Your final data table may look like this:

Percent of children regularly attending school	Sex						All		
	Male			Female					
	n	N	%	n	N	%	n	N	%
5-9 years ¹³									
10-14 years									
15-17 years									
All ages							60	100	60%

Percent of children (aged 5-17 years) who progressed in school during the last year

This indicator aims to capture the proportion of students who progressed from one grade to the next grade over the last two school years. Four survey questions relate to this indicator:

- Is [NAME] currently enrolled in school?
- What grade/form/year is [NAME] currently in?
- Was [NAME] enrolled in school during the year previous to this one?
- What grade/form/year was [NAME] in last year?

We suggest you develop a Table, similar to the one below, to organize your data to calculate progression in school. The number of “Yes” responses in Column E will indicate the number of children who moved up one grade from last year. The total N to calculate the percentage is the total number of school-aged children who attended school in the previous year.

A	B	C	D	E
Individual ID	Current Year Grade	Previous Year Grade	Current Year Grade MINUS Previous Year Grade	Progression, Yes/No (Record as “Yes” if Column D = 1 or Column D>1. Record as “No” otherwise)

Importantly, in calculating grade progression, exclude current first grade students who were not enrolled in school last year because they cannot show grade progression yet. First grade students who are in first grade during both this and last year should be included in the calculation of grade progression. Your final data table may look like this:

Percent of children who progressed in school during the last year (among those who were in school the previous year)	Sex						All		
	Male			Female					
	n	N	%	n	N	%	n	N	%
5-9 years ¹³									
10-14 years									
15-17 years									
All ages									

¹³ Consider presenting these data by exact age (5 years, 6 years, 7 years, 8 years, and 9 years) as children in the lower end of this age-group are far less likely to not be attending school (yet) than children at the higher end of this age group. We also recommend including a data table on basic enrolment.

We also recommend that you calculate grade repetition and drop-out rates.

Percent of children <5 years of age who recently engaged in stimulating activities with any household member over 15 years of age

The numerator for this indicator is the number of children who had one or more “yes” responses to the following question:

In the past 3 days, did you or any household member over 15 years of age engage in any of the following activities with [NAME]:

- a) Read books to or looked a picture books with [NAME]?
- b) Told stories to [NAME]?
- c) Sang songs to or with [NAME] including lullabies?
- d) Played with [NAME]?
- e) Named, counted, or drew things to or with [NAME]?

For analysis purposes, treat records in the same way if there is one response to any of items A-F or multiple “yes” responses. So the numerator is: “yes” to (a) and/or (b) and/or (c) and/or (d) and/or € and/or (f). The denominator is the number of respondents to this question. Data should be calculated and presented by sex. Your final data table may look like this:

<i>Percent of children aged 0-5 years who recently engaged in stimulating activities with any household member over 15 years of age</i>	n	%	Total
Female			
Male			
All			

Percent of households able to access money to pay for unexpected household expenses

The numerator for this indicator is the number of caregivers responding “yes” to the question: Was your household able to pay for these expenses? The denominator is the number of caregivers responding to the question.

Percent of caregivers who agree that harsh physical punishment is an appropriate means of discipline or control in the home or school

The numerator for this indicator is the number of caregivers reporting that harsh physical punishment is an appropriate means of discipline or control at home *and/or* school. In analysis you will want to create a new binary variable for “accepting of harsh physical punishment in either setting”: yes/no. The denominator is the total number of caregivers surveyed. Data should be analyzed by caregiver sex, if sample size permits. Your final data table may look like this:

Percent of caregivers who agree that harsh physical punishment is appropriate as a means of discipline or control in the home or at school	n	%	Total
Female			
Male			
All			

APPENDIX 6: USING DATA FROM AN LQAS SURVEY FOR PROGRAM MANAGEMENT

Using LQAS is advantageous as it allows us to determine which supervisions areas within the program are performing to standard, and which are not performing to standard, in addition to allowing us to calculate a proportion for the program as a whole. As explained earlier, in order to use this data for program management, before we conduct the survey, we may have set a threshold for performance on this indicator. Let's say that our program has defined the threshold at 60%, that is, 11 out of the 19 randomly sampled children (in each age group or for all age groups combined) need to report having a birth certificate in the SA for the SA to "pass". In the table below, we present dummy data. We have tallied up the number of "yes" responses to "child has a birth certificate" in each SA.

Child has a birth certificate	Yes		Performing to standard?	Total
	n	%		
SA 1	13	n/a	Pass	19
SA 2	8	n/a	Fail	19
SA 3	6	n/a	Fail	19
SA 4	14	n/a	Pass	19
SA 5	11	n/a	Pass	19
Total for all SAs	52	54.7%	n/a	95

As you can see, three out of five SAs "passed" (11 or more children of the 19 surveyed had a birth certificate) and two "failed". Based on this information, program managers may want to direct resources for birth certification to SA2 and SA3, and discuss and action plan on performance issues with the supervisors for these areas.

MEASURE Evaluation

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