

WHAT GEOGRAPHIC AREAS SHOULD BE COVERED BY DOCUMENTATION?

The areas to be covered in documentation depend on the design of the evaluation in a particular country or setting. IIP investigators have suggested elsewhere⁹ that the plethora of MNCH partners and activities in most countries with high MNC mortality precludes the use of traditional evaluation designs comparing “intervention” and “comparison” areas. An alternative model may be to construct an evaluation platform that includes all districts (or other health administration units) within a country, and to develop district data bases that include relevant demographic, epidemiological, socioeconomic and health infrastructure variables. The evaluation platform would allow multiple analyses based on ecological designs, comparing levels of health impact across districts (or even smaller geographic areas) implementing various combinations of interventions at different levels of intensity.

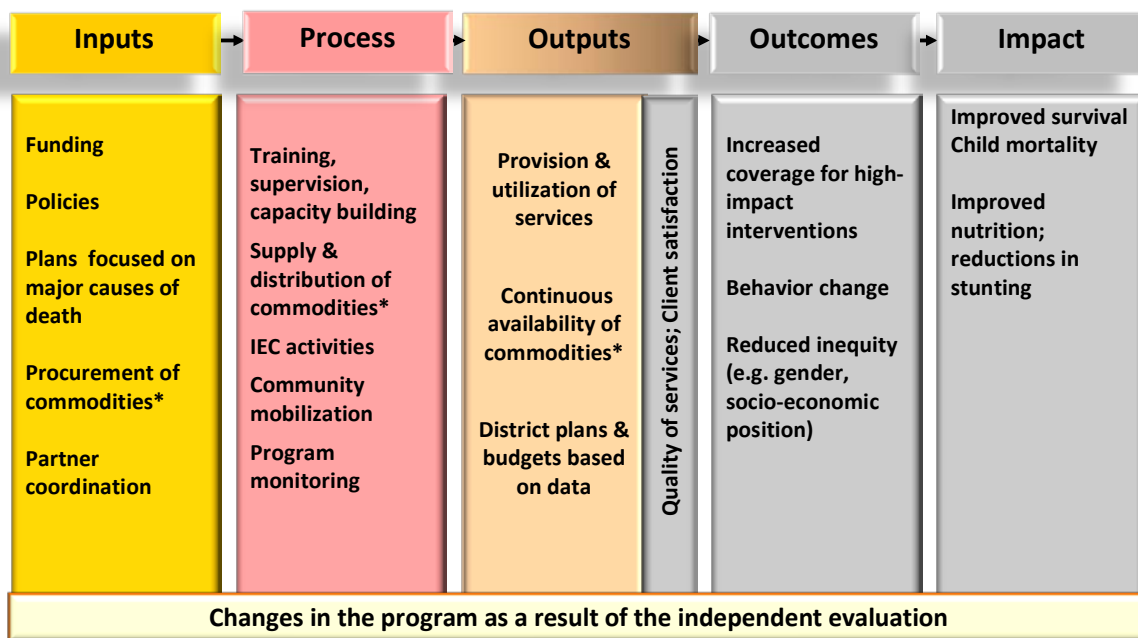
These guidelines are equally applicable to evaluation designs based on intervention and comparison groups and the broader platform approach. Documentation of both program implementation and contextual factors is needed for comparable geographic areas that **are** and **are not** implementing accelerated program approaches.

⁹ Victora CG , Black RE, Bryce J. Large-scale programmes in child survival: Why we need evaluation platforms. *Bulletin of the World Health Organization* 2009; 87(2):83.

WHAT TO DOCUMENT FOR PROGRAM IMPLEMENTATION

All documentation should begin with the program-specific plans, budgets and conceptual models. Figure 1 shows a generic conceptual framework for child survival and nutrition programs. Documentation addresses elements of the first three components of the framework: inputs, processes and outputs. Other evaluation activities are needed to address quality, outcomes and impact (shown in grey). In addition, investigators must document carefully any changes in the program that occur as a result of the independent evaluation.

Figure 1: Simplified conceptual framework showing focus of documentation of program implementation for Catalytic Initiative child survival programs



*Antibiotics effective against childhood pneumonia, ACT, ORS, zinc, ITNs, weighing scales, clock or timer, vaccines & cold chain.

Many CI programs are planning to accelerate coverage for the same set of high-impact interventions, and many will use similar delivery strategies supported by standard training packages and with needs for the identical commodities. We have tried to use these common implementation areas in this document. There will also be important differences across countries, however, and these may be more difficult to document in a standardized way. In-country investigators should begin with these guidelines and then work to adapt them using the principles presented in these guidelines to reflect the specific activities and contextual factors in each country.

1. Inputs

Description: Broadly, inputs are *the resources invested in a program*,¹⁰ this encompasses funding, procurement of commodities, partner coordination, harmonization, and the planning and policies for the program.

Measures: Table 1 presents examples of the minimum documentation required to describe the strategies and intensity of program inputs within CI countries. These are broken down into quantitative measures and qualitative descriptions. All measures, both quantitative and qualitative, should be disaggregated to the lowest geographic level possible given available data and feasibility of collection.

Data sources: The documentation of inputs relies heavily on the compilation of routine program reporting and meeting notes. Additional brief interviews and discussions with program planners and implementers, as well as other development partners, will likely be required to document descriptive aspects of program planning and partner coordination at the national level.

Periodicity: Inputs should be documented at least every six months.

¹⁰ Frankel, N. & Gage, A. Monitoring and Evaluation Fundamentals: A mini-course. Chapel Hill, NC, MEASURE Evaluation, 2007.

Table 1. Documentation of inputs				
Type of input	Quantitative measure	Data sources/ notes	Descriptive/ narrative	Data sources/ notes
Policies and planning (design)	Number of meetings with national, regions & district MOH	Meeting notes; interviews	The majority of initial planning and policies are described and assessed during pre-evaluation assessment. These should be updated at 6-month intervals	
	Number of district-level planning meetings annually	Meeting notes; interviews	Who was involved in program planning & priority setting? ; What is covered at a planning meeting?; What data does the DHMT use in planning?	Interviews; meeting notes
	District-level plans submitted annually	Program reports and plans	Do district-level plans and budgets use data to prioritize activities? ; Do plans follow pre-determined guidelines? ; Do planned activities focus on major causes of death?	Program reports and plans
Funding	Amount of total program funding annually*	Program budget	Were there delays or complications in distribution of funding? Does allocation of funds focus on addressing major causes of death? **	Interviews
	Amount of funding disbursed for each activity/ intervention annually*	Program budget/ accounts		
	Amount of funding disbursed for each district annually*	Program budget/ accounts		
Procurement commodities	Number of LLITNs, vaccines, vitamin A supplements, essential drugs (etc) procured	Program accounts; invoices	Were there delays or complications in procurement of commodities?	Interviews
	Number of vehicles, ambulances, medical kits, refrigerators, (etc) procured			
Partner coordination & harmonization	Number of planning meetings with partners per quarter Number of planning meetings with MOH per quarter	Meeting notes; interviews	What was the content of planning/partners meetings? ; Was data used? Who was represented at planning meetings (MOH, donors, etc)? ;Do program plans follow the national child survival strategy? National monitoring strategies?	Meeting notes; interviews/ discussions Program plans & national CS plans

Notes: *If possible, disaggregated by external donor and compared to funding planned for disbursement
**Possibly using TEHIP templates and/or methodologies

2. Processes

Description: Processes are *the activities carried out to achieve the programs objectives*,¹¹ within the CI, many of the processes pertain to building district-level management capacity, training and supervision of facility and community workers, supply and distribution of commodities and essential drugs, as well as information, education and communication activities, community mobilization and enhanced program monitoring.

Measures: Table 2 presents examples of the minimum documentation required to describe the strategies and intensity of program processes within CI countries. These are broken down into quantitative measures and qualitative descriptions. All measures, both quantitative and qualitative, should be disaggregated to the lowest geographic level possible given available data and feasibility of collection.

Data sources: The documentation of processes relies heavily on routine program reporting. Information from health facility and community surveys may provide additional information if these. Additional brief interviews and discussions with program planners and implementers, as well as other development partners will likely be required to document descriptive aspects of processes at the national and district levels.

Periodicity: Processes should be documented at least every six months.

¹¹ Frankel, N. & Gage, A. Monitoring and Evaluation Fundamentals: A mini-course. Chapel Hill, NC, MEASURE Evaluation, 2007.

Table 2. Documentation of processes				
Type of process	Quantitative measures	Data sources/ notes	Descriptive/ narrative	Data sources/ notes
Capacity building	Number and type of training sessions/capacity building workshops with DHMTs	Training report; program reports	What was the content and duration of training or feedback sessions? Who attended the training or feedback sessions?	Training reports; interviews
	% of DHMT members trained in improved planning			
	Number of feedback sessions with DHMTs	Program reports		
Training (facility)*	Number of each cadre (Dr, nurse, midwife) of worker trained in IMCI	Training report; health staffing info; health facility survey	What was the adaptation process and was the standard 11 day training course used?	Training modules; interviews
	Number of each cadre (Dr, nurse, midwife) of worker trained in ANC, EMOC, VCT, etc	Training report; health staffing info; health facility survey	What was the content and duration of training?	
Training (CHWs)	Number of CHWs trained per 1000 U5s, initially and annually	Training report	How was CHW training developed/ adapted? How long was training? What was included in training? What were the strengths and weaknesses of training?	Program documents; Training modules; interviews
	Percent of CHWs adequately supplied (essential drugs, job aids, counseling materials)	Program reports; CHW survey	What is the "Typology" of CHWs? ¹²	Program documents; Interviews; CHW survey
Other training	Other types of trainings: number of trained per cadre of worker	Program report; health facility survey	What was the content of training modules? How long was training?	Training modules; interviews
Supervision	Percent of IMCI trained	Program/	Are there supervisory	Program

¹² i.e. where s/he works, types of responsibilities, types of incentives, types of referral system ,etc

Table 2. Documentation of processes				
Type of process	Quantitative measures	Data sources/ notes	Descriptive/ narrative	Data sources/ notes
	workers receiving supervisory visit within 6 weeks of training	supervision reports; health facility survey	checklists? Are they used? What is their content?	reports; supervisory checklists
	Number of IMCI supervisions per trained worker	Program reports		
	% of health facilities that received at least 1 supervisory visit that included observation of case management during the previous 6 months	Program reports; health facility survey		
	Percent of CHWs receiving supervisory visit within 6 weeks of training	Program reports; CHW survey	Are there CHW supervisory checklists? Are they used? What is their content?	Program reports; supervisory checklists
	Percent of CHWs receiving supervisory visit within previous 3 months	Program reports; CHW survey		
Supply & distribution	Number of LLITNs distributed annually per 1000 U5s	Program reports; monitoring data	What is the distribution strategy for LITNs? What is the price of LITNs?	Program reports; interviews
	Number of vitamin A supplements distributed annually per 1000 U5s		What is the primary strategy for vitamin A supplementation?	
	Number of essential drug kits provided initially, annually		How are drug kits distributed? Restocked and maintained?	
IEC activities	Number of BCC radio broadcasts/posters/advertisements/community meetings	Program reports; monitoring data	What behaviors are the targeted as part of IEC activities?	Program reports; communications material; interviews
			How were IEC messages formulated?	
Community mobilization/ outreach	Number of child health days per annum	Program reports	What activities are included in child health days?	Program reports; interviews
	Number of outreach visits per 1000 U5s per annum	Program reports; routine data	What services are provided in outreach visits?	
	Number of mothers' groups formed per 1000 U5s	Program reports; routine data	What are the primary activities of mothers' groups?	
			Are there other community mobilization activities?	
Enhanced	% of DHMT members	Training and/or	What type of training and	Program

Table 2. Documentation of processes				
Type of process	Quantitative measures	Data sources/ notes	Descriptive/ narrative	Data sources/ notes
program monitoring	trained in improved monitoring	program reports	content?	reports; interviews
	Number of supervision reports available quarter	Program reports; routine data	What is the content of supervision reports? Who completes them?	
	% of district (quarterly/annual) reports completed within x weeks	Program reports; routine data	Are monitoring data used during supervision? Does the DHMT use data for planning?	
<p>Notes:</p> <p>* The WHO IMCI planning guide 1999 provides a full documentation framework for IMCI implementation and is available at http://whqlibdoc.who.int/hq/1999/WHO_CHS_CAH_99.1_eng.pdf</p>				

3. Outputs

Description: Broadly, outputs are *immediate results achieved at the program level through the execution of activities*.¹³ Within the CI, this corresponds to provision and utilization of health services. Quality of services should be documented as a program output where data are available through program reports or complementary studies. In most cases, quality of services and client satisfaction are outside the scope of documentation, and will be addressed through other sub-studies conducted as part of the independent evaluation.

Measures: Table 3 presents examples of the minimum documentation required to describe the program outputs within CI countries. If any of the quantitative indicators presented below highlights a problem, this will require further investigation using more qualitative methods. All measures should be disaggregated to the lowest geographic level possible given available data and feasibility of collection.

Data sources: The documentation of outputs relies heavily on the compilation of routine program reporting and meeting notes. Description and explanations of the level of outputs will rely on routine program narratives and interviews with program implementers.

Periodicity: Outputs should be monitored at least every six months.

¹³ Frankel, N. & Gage, A. Monitoring and Evaluation Fundamentals: A mini-course. Chapel Hill, NC, MEASURE Evaluation, 2007.

Table 3. Documentation of outputs		
Type of output	Quantitative measures	Data sources/ notes
Provision and utilization of interventions	Percent of each cadre of worker (nurses, midwives, etc) trained in IMCI	Training report & health staffing info
	Percent of health facilities with at least 1 health worker (or 60% of workers) who manage children	Training report & health staffing info; health facility survey
	Annual retention rates of IMCI trained staff in program area	
	Annual retention rates of trained CHWs	Program reports; CHW survey
	Percent of health facilities that meet basic service standards in IMCI, immunization, malaria control, safe motherhood, baby friendly hospital, PMTCT, etc according to WHO definitions	Program reports, health facility survey
	Number of vaccines (by antigen) given annually per est. 1000 population /U5s	Program reports; routine data Most current demographic data at the lowest level of disaggregation possible
	Number of vitamin A supplements provided per est. 1000 population/U5s	
	Number of ORS sachets, zinc, ACT & Antibiotic blister packs provided in facility / community per est. 1000 population/U5s	
	Number of ANC 1,2,3, & 4 visits per est. 1000 pregnant women	
	Number of pregnant women receiving HIV test per est. 1000 pregnant women	
	Number of pregnant women receiving TT2 per est. 1000 pregnant women	
	Number of pregnant women receiving IPT (2 doses SP) per est. 1000 pregnant women	
	Number of births attended at facility per est. 1000 pregnant women	
Number of postnatal visits per est. 1000 pregnant women		
Continuous availability of commodities	Number of stock-outs of vaccines (by antigen) in previous X months	
	Number of stock-outs of LLITNs in previous X months	
	Number of ORS sachets, zinc, ACT & Antibiotic blister packs stock outs in previous X months, in facility / in community	
District plans & resource-allocation	% of districts with plans and budgets that focus on major causes of death*	Program reports; Health facility survey

*Notes: *possibly based on TEHIP templates*

4. Changes in the program as a result of the independent evaluation.

Description: An additional part of program documentation involves careful recording of any monitoring results or other information provided to program managers by the independent evaluation team and changes in programming that result from this feedback. The feedback provided by independent evaluators may prompt changes in program planning or implementation, and must be carefully documented. For example, assessment of the potential impact of different intervention packages using the Lives Saved Tool (LiST) may stimulate changes in the program focus on certain interventions.

Measures: Table 4 presents examples of the types of evaluation activities that may prompt changes and minimum documentation required to describe the program changes as a result of the independent evaluation. Documentation in this area will be primarily qualitative in nature, although quantitative measures should be recorded, if available. All descriptions and measures should consider changes at the lowest geographical level possible.

Data sources: The documentation of changes as a result of the independent evaluation relies on reports generated by the independent evaluation and narrative accounts of program managers and implementers. We recommend interviews with program managers and implementers at the national level annually, using the questions presented in table 4 as a guide.

Periodicity: Any changes in the program as a result of the independent evaluation should be documented for every “evaluation event” (for example, design workshops, results presentations, etc) and assessed regularly every twelve months.

Table 4. Documentation of changes in the program as a result of the independent evaluation	
Examples of evaluation activities / “events”	<ul style="list-style-type: none"> • Early assessment of program inputs and processes (e.g. LiST projections of potential impact of different intervention packages, program assessment templates); • Coordination with other development partners around evaluation activities; • Reporting of documentation and quality of services results; • Reporting of contextual factors and program mapping results; and/or • Reporting of outcomes and/or impact results.
Description of potential changes	<p>Did any of the following change as a result of an evaluation activity or event? How did they change?</p> <ul style="list-style-type: none"> • Partner coordination? • Interventions, or a focus on certain interventions? • Target populations or targeted geographic areas? • Delivery strategies? • Funding allocation for certain interventions, geographic areas, delivery strategies? • Processes, such as types of training, IEC activities, community mobilization, supervision, etc? • Program monitoring? • District or national planning processes? • Consideration of contextual factors and/or other partner activities in program planning and processes
Additional checks that the evaluation activity resulted in the changes	<ul style="list-style-type: none"> • Is the evaluation activity consistently mentioned as the primary reason for the change in the program? • Did the changes occur after the evaluation activity? • Is it plausible that the change occurred because of the evaluation activity?
Data sources/ notes	<p>Notes for the record, workshop reports, reports on evaluation results, and follow-up interviews</p>

DOCUMENTATION METHODS

Documentation consists primarily of extraction of data from routine and other sources, and involves limited collection of primary data. Some descriptive information will require supplementary interviews with key informants.

At the ***national level***, information will be extracted from routine plans, budgets and reports. Interviews with program managers and implementers are likely to be required every six months to supplement written information and to assess any changes that may have occurred due to independent evaluation activities.

At the ***district level***, documentation should be conducted by a team that is consistent over time. The team should visit the district level regularly, at least every six months, to collect all available information. Information extracted at the district level should include district-specific plans and budgets; district-level partner coordination; training, supervision, IEC, and community mobilization activities; district-level monitoring; service provision and utilization; and the availability of commodities in facilities and community. All information should be sourced, and the documentation team should look for primary data sources and evidence to support the collected information. Additionally, during the district level visits, brief interviews with program managers and implementers will be necessary to provide supplemental information.

Model templates for data extraction and compilation at the national and district level are under development. Specific methods and tools for documentation will need to be adapted in collaboration with the in-country and IIP/JHU teams in each country taking into consideration the local data collection platforms.

Periodic interactions with program managers and implementers will be necessary to feed-back documented information and to ensure that the collected and summarized information is correct and consistent.

DATA BASE CONSTRUCTION AND MAINTENANCE

Preliminary guidance is provided here; further direction will be provided as the first countries move forward in their plans. Please contact the IIP/JHU research team before beginning work on the construction of the data base for documentation.

Data bases will be constructed as Excel workbooks. Each sheet within a workbook will address one aspect of documentation. Within each sheet, rows will represent the geographic subunits and columns will be the variables in the documentation plan.

Pre-coded (numeric) variables should be used whenever possible. Where text is needed, narrative statements will be used initially, and then transformed into categorical variables after sufficient data are available to support an analysis of the range of responses. Work is on-going on developing a standard structure for the data base.

ASSESSING LEVELS OF PROGRAM INTENSITY

Information collected through prospective documentation activities will be utilized to estimate the level of program intensity across districts. Further technical work is planned to develop methods for estimating levels of program intensity.

DOCUMENTING CONTEXTUAL FACTORS

The CI program is adapted to each country's health system; and documentation efforts must therefore also be adapted to collect information on contextual factors affecting maternal and child health in the areas included in the evaluation design. There are two main objectives for documenting contextual factors within the scope of the evaluation:

- As a basis for selecting comparison areas and/or conducting dose-response analysis; and
- To identify possible confounding factors and effect modifiers.

In order to capture the most detailed, accurate information, it is useful to collect contextual factors at the district or sub-district level and continuously monitor changes as they occur in real time.

Selection of comparison areas and/or dose-response designs

To estimate the differential impact of the CI program over routine services, one evaluation design option is to assess coverage and impact in a CI area compared to a non-CI area. To maximize internal and external validity of the evaluation, non-CI comparison areas should have similar baseline characteristics to the CI implementation areas, especially baseline mortality, poverty and access to health care. Additionally, the comparison area should have similar demographic patterns and cause-of-death profiles since these factors may affect the impact of CI interventions.

Governments and partners are committed to reducing child mortality, creating a dynamic environment where various development organizations are implementing similar strategies within one country. In some situations, an ecological design will be required if an adequate "untouched" comparison area is not available. A newly proposed paradigm for large-scale effectiveness evaluations does not rely on the assumption of "untouched" comparison areas, and instead is based on an "evaluation platform" that can support ecological designs across an entire country.¹⁴ As more large-scale evaluations move towards ecological designs, tracking contextual factors across all evaluated areas is vital.

Identify possible confounding factors and effect modifiers

Confounding factors are associated with both the program and the outcome without being an intermediate factor. For instance, the presence of other, external child health programs in the intervention or comparison area is a possible confounding contextual factor. As part of the CI evaluation, we can ask for each country:

1. *What factors would independently affect child health and mortality outside of the CI program?*
2. *Are these factors different in the CI districts versus the non-CI districts?*

In addition to confounding, we would also need to document factors that could modify the effect of the CI program on child health and survival such as access to health care, drug availability and governmental health policies.

¹⁴ Victora CG, Black RE, Bryce J. Large-scale programmes in child survival: Why we need evaluation platforms. *Bulletin of the World Health Organization* 2009; 87(2):83.

1. What intermediate factors would modify the effect of the CI program on child mortality, but are not a component of the CI program?

The minimum set of contextual factors that should be documented in each participating country is listed in Annex 1, along with the recommended indicators and source of data. Indicators should be updated at least annually throughout the evaluation period.

ANNEX 1 : Contextual factors to be collected for each district in the evaluation areas.

Contextual Factors	Indicators	Timing	Source
Rainfall patterns	Average annual rainfall Seasonal rain patterns	Baseline	
Altitude	Height above sea level	Baseline	
Epidemics	Qualitative	Annually	Key informant interviews
Humanitarian crises	Qualitative	Annually	Key informant interviews
Socio-economic factors	Main language spoken in HH Women's education & literacy Wealth quintiles Ethnicity of head of HH Occupation of head of HH Poverty maps	Baseline; Endline	Survey
Other Child Health Programs	<i>See document on program mapping</i>	Baseline; Every 12 months	Program mapping exercise
Mortality	Under-five, infant and neonatal mortality Maternal mortality were applicable	Baseline; Endline	Survey
Cause of death profile	Cause of death for under-five children	Baseline	Countdown report; only available at national
Malnutrition	Stunting	Baseline; Endline	Survey
Demographic	Population Population density Urbanization Total fertility rate Family size	Baseline; Endline	Survey & census data
Access to health facility	Average travel time to nearest health facility per HH % of population within xx km of a health facility	Baseline; Endline	Survey & GIS mapping
Health facility quality	Health facility assessment	Baseline; Endline	Health facility assessment tool

Contextual Factors	Indicators	Timing	Source
Health worker/population ratio	Doctor/pop ratio Nurse/pop ratio Trained midwife/pop ratio	Baseline; Endline	Health facility assessment tool
Drug availability	ACT stocks Cotrimoxazole stocks Other drugs	Baseline; Every xx months	Health facility assessment & key informant interviews
User fees	What services require a fee? How much is the fee?	Baseline; Every xx month	Health facility assessment & key informant interviews
Health Policies	Health insurance scheme Change in national drug policy	Baseline; Every xx months	Key informant interviews