

DEVELOPING A COMMUNITY INFORMATION TOOLBOX



CARE's 2nd Annual Child Survival Workshop Report

May 3-8, 1997

Atlanta, Georgia, USA

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ACKNOWLEDGMENTS

CARE (Cooperative Agency for Relief and Development Everywhere) staff from Headquarters and from ten Child Survival implementing Country Offices express their gratitude to the United States Agency for International Development (USAID) for the opportunity to conduct an annual Child Survival workshop, this year on Health Information Systems. The wealth of experience gathered in one room provided a rich exchange as the group worked on the issues of effectively monitoring Child Survival projects.

We would also like to thank Rollins School of Public Health for opening their doors, providing a first class venue. Not only was the facility well-outfitted and comfortable, the professionals and students working there were a tremendous benefit. Notably, two outstanding professors of public health provided important input. James Setzer provided the initial invitation to hold the workshop at the school. His significant experience working with HIS around the world was insightful. Dr. Stanley Foster was an invaluable resource person whose words of wisdom lent tremendous guidance to the event. When Stan talks, participants listen!

The school's base of international students was the resource for translators. The translators themselves were students of public health so that they were able to understand the specific type of English we spoke, namely "Public Health-ish". They were called upon at times to participate since their knowledge and experience was a bonus not to be missed.

Being next door to Centers for Disease Control and Prevention (CDC) was a well-planned strategic decision. Not only did we have the opportunity to visit the premises so conveniently, we were able to tap CDC's tremendous human resources.

David Newberry and Michelle Kouletio were the main forces behind the organization of the workshop and assured that it flowed logistically and technically. They both displayed undying commitment to the workshop both in terms of form and content.

There are many to thank. Most of all, the workshop could not have occurred without the participants who traveled far and wide from around the world to attend the workshop. Upon arrival they began to actively contribute and share. It was an exceptional group of people whose creativity, commitment, hard work and talent brought about an amazing synergy. It is clear that their inputs and processing of information during the week will lead to improved information systems in local communities. This in turn, will help focus projects towards reaching the goal of improving the lives of children and women throughout the world, and simultaneously empower communities to "own" projects by being in charge of their own information.

ACRONYMS

API	Annual Project Information
ARI	Acute Respiratory Infection
ALRI	Acute Lower Respiratory Infection
CDC	Centers for Disease Control and Prevention
CDD	Control of Diarrheal Disease
CHW	Community Health Worker
CO	Country Office
DIP	Detailed Implementation Plan
EOC	Emergency Obstetric Care
HF	Health Facility
HH	Household
HER	Health Evaluative Reporting
HIS	Health Information System
HHLS	Household Livelihood Security
IMN	Impregnated Mosquito Net
IMR	Infant Mortality Rate
INFO	Information
KPC	Knowledge, Practice and Coverage Survey
LQAS	Lot Quality Assurance Survey
MER	Monitoring, Evaluation, Reporting System
MIS	Management Information System
MM	Maternal Mortality
MOH	Ministry of Health
NNT	Neonatal Tetanus
ORT	Oral Rehydration Therapy
PNC	Prenatal Care
PVO	Private Voluntary Organization
RSPH	Rollins School of Public Health
Rx	Antibiotics drugs
SD	Standard Deviation
TT	Tetanus Toxoid
TOT	Training of Trainers
QOC	Quality of Care
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
U5MR	Under-Five Mortality Rate
USAID	United States Agency for International Development
VAC	Vitamin A Capsule
WHO	World Health Organization
WRA	Women of Reproductive Age

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I. Executive Summary

CARE held a Child Survival workshop entitled, "Developing a Community Information Toolbox" at Rollins School of Public Health in Atlanta, Georgia May 3-7, 1997. The workshop was supported with Child Survival funds. Participants included 19 national staff from ten of CARE's Country Offices implementing Child Survival X, XI, XII and USAID mission-funded projects.

The workshop goals to achieve higher quality standards within CARE Child Survival programs, to create a community monitoring system and to improve program accountability were furthered by reaching the workshop objectives successfully. Objectives included defining the information requirements for carefully selected indicators, streamlining the quantity of HIS measurements, selecting monitoring tools and methods for field-level workers. The products of the workshop are a complete list of key health indicators and information requirements, a toolbox of community-based monitoring instruments and a plan for implementing a community HIS per participating country.

To achieve these goals and products the facilitator used a participative approach, emphasizing adult learning principles.

Highlights of the workshop included:

- the development of "stronger" indicators with a means of measuring them
- an increased understanding of community level tools of measurement
- inter-country sharing amongst Child Survival program staff
- country-specific toolbox outlines for information tools needed
- a field visit to CDC

II. Planning and Preparation

A workshop pre-planning meeting was held in Atlanta on March 10-11, 1997 to develop objectives and clarify logistical details. Maurice Middleberg, Health and Population Unit Director; Carlos Cardenas, Senior Advisor for Reproductive Health; David Newberry, Senior Advisor for Children's Health; Michelle Kouletio, Program Officer for Children's Health; and, Jim Rugh, Design, Monitoring and Evaluation Coordinator at CARE headquarters met with Donna Sillan, an external consultant hired as facilitator.

It is clear that CARE has a sophisticated information system at the international level. Given CARE's wealth of experience with successful Child Survival programming, much work has gone towards the development of monitoring and evaluation systems. Recently, headquarters is developing a set of standardized indicators through a system called API (Annual Project Information) and a computerized information system called MER (Monitoring, Evaluating and Reporting).

The intent of the workshop was to focus on the **grass roots level** information system which will assure that the aforementioned systems rests upon a foundation of valid and reliable data which is feasible to collect. More importantly, the intent was to provide information systems at the community level which are relevant and practical for the community themselves. CARE seeks to empower communities, and if communities are able to effectively collect and analyze their own information, then certainly they will be better empowered to effect change. Information is power. Valid decisions based on good information is even more powerful.

The process begins with a careful selection of indicators which are effective indicators of progress and which are practical to collect. To avoid the natural tendency of information overload in this age of information, one of the workshop goals was to streamline data collection.

Prior to the pre-planning meeting, a needs assessment survey was conducted among the 10 participating Country Offices. Results of the survey were used to develop the content of the workshop. The Needs Assessment survey results are in *Appendix 1*.

The facilitator prepared a Facilitator's Guide which was reviewed by CARE's headquarters workshop team prior to the workshop. Feedback was provided. A copy of the guide is available. Workshop designs were slightly adapted to follow the flow and needs of the group.

III. The Workshop

A. People and Place

The workshop was held at the Rollins School of Public Health of Emory University (RSPH) in Atlanta, Georgia. Nineteen representatives from ten of CARE's Child Survival projects participated in the workshop along with representatives from CARE headquarters, RSPH, CDC, and a workshop facilitator.

Participants included:

- Sani Aliou, *Project Manager*, CARE Niger
- Paula Brunache, *Project Manager*, CARE Haiti
- Anne Devine, *Project Manager*, CARE Mozambique
- Micheline Dieudonne, *Training Officer*, CARE Haiti
- Luis Espejo, *Project Manager*, CARE Peru
- Alfredo Fort, *Health Sector Coordinator*, CARE Peru
- David Hintch, *Project Manager*, CARE Tanzania
- Wahidul Islam, *Project Manager*, CARE Bangladesh
- Sani Mamen Laminou, *Health Information System Coordinator*, CARE Niger
- Alicia Leiva, *Project Manager*, HOPE Honduras
- Elsa Victoria Lopez, *Project Manager*, CARE Honduras
- Gloria Manzares, *Title II Food Security Program Manager*, CARE Honduras

- Elena McEwan, *Project Manager*, CARE Nicaragua
- Carmen Monasterios, *Project Manager*, CIES Bolivia
- Kamrun Nahar Sultana, *Assistant Project Coordinator*, CARE Bangladesh
- Victoria Ndalawa, *Assistant Project Manager*, CARE Tanzania
- Georgina O'Connor, *Title II Program Monitoring and Evaluation Sub-Mgr*, CARE Honduras
- James Okoth, *Project Manager*, CARE Kenya
- Dan Wendo, *Project Manager*, CARE Kenya



Photo 1: Project participants pose in front of the Rollins School of Public Health

Facilitator included:

- Donna Sillan, *Public Health Consultant and Trainer*. She has extensive experience in Child Survival as a program implementor and manager. She specializes in community-based health information system development.

Resource persons included:

CARE-USA:

- David Newberry, *Senior Advisor for Children's Health*, Health & Population Unit

- Maurice Middleberg,
- Judiann McNulty, *Deputy Director of Children's Health*, Health & Population Unit
- Jim Rugh, *Coordinator of Design, Monitoring and Evaluation*, Partnership and Household Livelihood Security Unit
- Michelle Kouletio, *Program Officer for Children's Health*, Health & Population Unit

Rollins School of Public Health of Emory University

- Dr. Stan Foster, *Visiting Professor*, Department of International Health
- James C. Setzer, *Senior Associate/Program Coordinator*, Department of International Health

Presenters included:

CARE-USA:

- Maurice Middleberg, *Unit Director*, Health & Population Unit
- Carlos Cardenas, *Senior Advisor for Reproductive Health*, Health & Population Unit
- Peter Buijs, *Unit Director*, Grants and Contracts Unit
- Ruby Judit, *Grants Officer*, Grants and Contracts Unit

Centers for Disease Control and Prevention

- Robert J. Baldwin, *Director*, Global Health Bureau
- Ben Schwartz, *Branch Chief*, Respiratory Disease and Children's Health Branch
- John Nkuchia, *Program Coordinator*, CARE/CDC Health Initiative

Rollins School of Public Health of Emory University

- Dr. Glen Maberly, *Chair*, Department of International Health
- Dr. Robin Houston, *Adjunct Associate Professor*, Department of International Health.

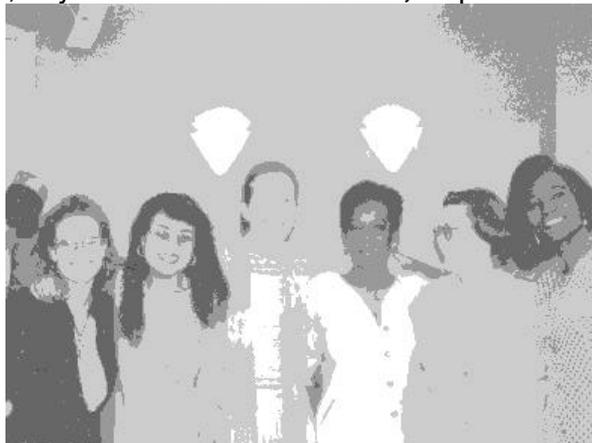


Photo 2: Participants learning from each other's experience

B. DAILY OBJECTIVES

DAY 1: PUTTING HIS IN CONTEXT

- To share experiences to date in HIS
- Determine rationale for information system: WHY and WHO
- To place HIS in the CARE context: the Big Picture
- To review API and MER
- To review selected indicators

DAY 2: INDICATOR'S & INFORMATION REQUIREMENTS

- To sift the indicator lists
- To list the information requirements for each indicators
- To practice calculation of public health rates

DAY 3: BUILDING THE TOOLBOX

- To select monitoring methods
- Determine HOW to obtain information and by WHOM
- To build on a set of tools that works
- To design specific tools per country

DAY 4: USING THE SYSTEM

- To share case studies of problem-solving using health data
- To practice analyzing data
- To list quality assurance checks per intervention
- To conduct internal and external cross-checks on data

DAY 5: M&E PLAN, DIPS for HIS

- To determine means for community feedback
- To plan Monitoring and Evaluation System
- Determine support needs of HIS
- To draw implementation plans
- To return to the Big Picture

PRODUCTS per COUNTRY: An individualized HIS Tool Box see Appendix 12

I.

IV. THE SESSIONS

A. DAY 1: PUTTING HIS IN CONTEXT

1. Daily Objectives

1. To share experiences to date in HIS
2. Determine rationale for information system: WHY and WHO
3. To place HIS in the CARE context: the Big Picture
4. To review Annual Performance Indicators (API) and Monitoring, Evaluation, Reporting (MER) systems
5. To review selected indicators

2. Welcome

The workshop began by discussing the meaning of its title 'Developing a Community Information Toolbox.' The purpose of the workshop was to analyze the tools used by front-line workers, developing the 'hand' tools which are needed to report on selected indicators of progress.

3. Warm-up

Participants were handed an index card on which they wrote down two quantitative indicators and two qualitative indicators about themselves. Each participant introduced themselves by reading out the four indicators they chose. This clarified the difference between quantity and quality, as well as serving as an introduction to each other.

4. Participant Expectations (from needs assessment questionnaires):

- tools & indicators at project level
- develop a training module for project staff
- share lessons with others
- learn how MER can meet the needs of the ideal system
- understanding of why this is the best HIS
- a User's Manual for a manual system
- a set of indicators
- a feasible plan for collecting data
- a monitoring and evaluation plan

5. Review of Workshop Goals and Objectives and Agenda

The workshop strategy was reviewed and validated by the participants.

6. Norms

Participants were free to choose and decide on the group norms to be followed.

7.

Sayings of the Day

Each day sayings were introduced as daily mottoes.

Less is More

Garbage In, Garbage Out

If you Use it, Keep it If you Keep it, Use it

80/20 Collecting/Analyzing usually, better if 20/80 Analyzing/Collecting

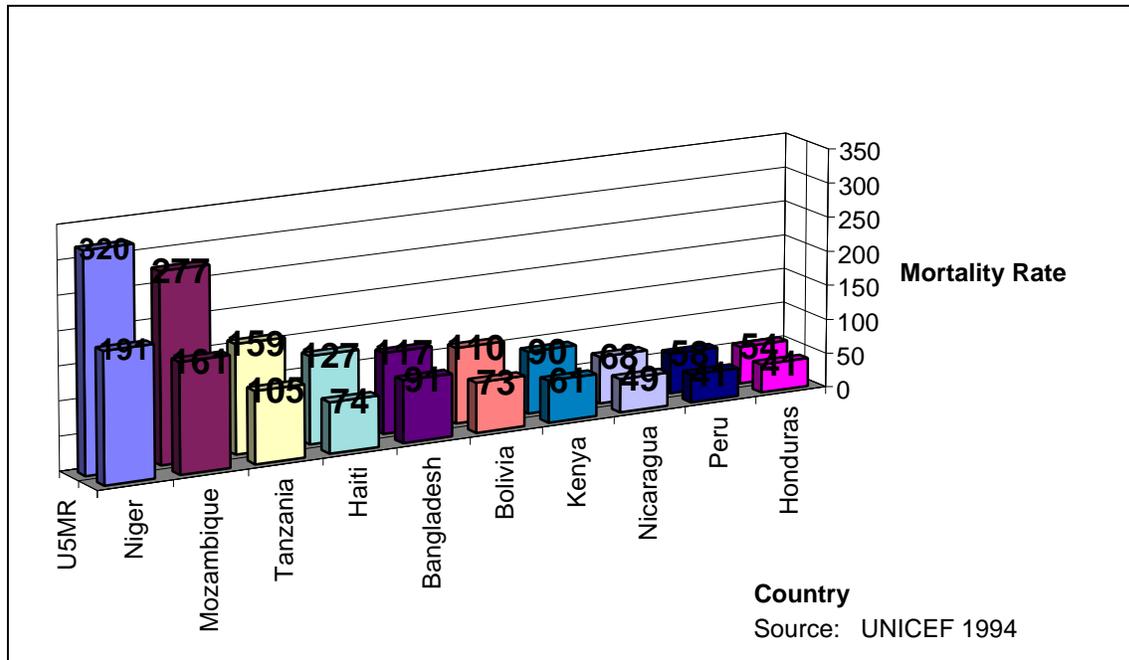
An Information System can change a program (focuses it). The it is up to the Program to change the information (increase coverage rates, lower mortality rates).

When a famous bank robber was asked "Why'd you rob the bank?" he responded "Because that's where the money was".

8. WORLD CONTEXT: IMR and U5MR

What is the goal of child survival? It is to lower infant and under-five mortality rates and maternal mortality. The group looked at national statistics by participating country from UNICEF's State of the World's Children data to see where each country fit in.

Figure 1: CARE's Child Survival Countries Infant and Child Mortality Rates, 1994



9. CARE'S CONTEXT: CARE'S WAY

The facilitator, being an outsider to CARE, asked the full group to Answer a few philosophical questions to set the PVO context and have the group reaffirm general development principles. Below are the questions asked and the group responses:

1. Would the measured change take place whether CARE was there or not?

This is difficult to measure since there are many contributing and confounding factors which lead to outcomes and impacts. We hope that we can be credited with responsibility for change.

2. Do you seek replicability?

Yes, we hope that our projects will serve as models to be replicated.

3. Do you seek sustainability?

Yes, not of programs but rather of benefits. Keep modeling the programs to meet new emerging needs.

4. Process or results oriented?

Both. USAID tends to be more results oriented whereas the implementors are more process oriented.

5. Percentage change or absolute numbers?

Both. Absolute numbers are needed to calculate the percentages, but numbers alone will not be meaningful. We need to know the scale also.

6. Do you work in geographically defined populations?

Yes, clearly defined.

7. Do you target the poorest of the poor?

High-risk target groups.

8. Are you interested in equity of services?

Yes, we target whole populations for education.

9. Are you interested in who is getting reached or who isn't?

Who isn't.

10. Are you tracking curative or preventive health?

Both, but mostly preventive.

11. Are your programs child and women centered?

Both.

12. Do you measure impact in terms of births and deaths?

Ultimately, but not yet.

13. Are you concerned with gender issues?

Yes.

14. If you could choose one indicator to measure the child survival program which would it be?

Mortality: the Bottom Line: maternal and infant/child mortality.

10. WHY HIS? Brainstorm

- Empowering communities with the information they need for action.
- Provide a community with feedback. A project TAKES information, must GIVE it back in a format that is easily understood.
- Increase confidence and understanding among community members.
- Self-diagnosis of community (census data, population-based registers, vital events reports)

11. CARE CONTEXT

a) Health and Population Presentation:

Maurice Middleberg provided an overview of the Health and Population framework which is based on the concept of Household Livelihood Security (HHLS). HHLS is comprised of five components: income security, food security, health security, education and participation. The hexagon illustrates the framework of the Health Security component. It embraces a risk-management approach, whereby preventive and supportive actions are undertaken to manage risks to health.

Figure 2: Health Security Programming Framework



CARE - Health & Population April 1997

The Implications of Health Security are:

- now have a common terminology
- health issues CARES addresses change as epidemiology changes

- best practices need to be defined (Day 6 following workshop)
- assessing health security (indicators need to be defined)
- links between health security and CARE's advocacy and partnership strategies.

Maurice Middleberg stressed the need to address the emerging health needs in this day and age and presented the 10 leading causes of disability among women in the developing world are now: 1) Unipolar major depression, 2) TB, 3) anemia, 4) self-inflicted injuries, 5) obstructed labor, 6) chlamydia, 7) bipolar disorder, 8) maternal sepsis, 9) abortion, and 10) war.

Global health is in transition and the leading causes of disease burden will continue to change from 1990 to 2020. In 1990 the first three causes of disease were ALRI, diarrheal disease and perinatal conditions. In 2020, it will be ischemic heart disease, unipolar major depression and traffic accidents. This behooves health professionals to adapt to the ever changing health needs. Maurice Middleberg used the report The Global Burden of Disease as a resource for his presentation.

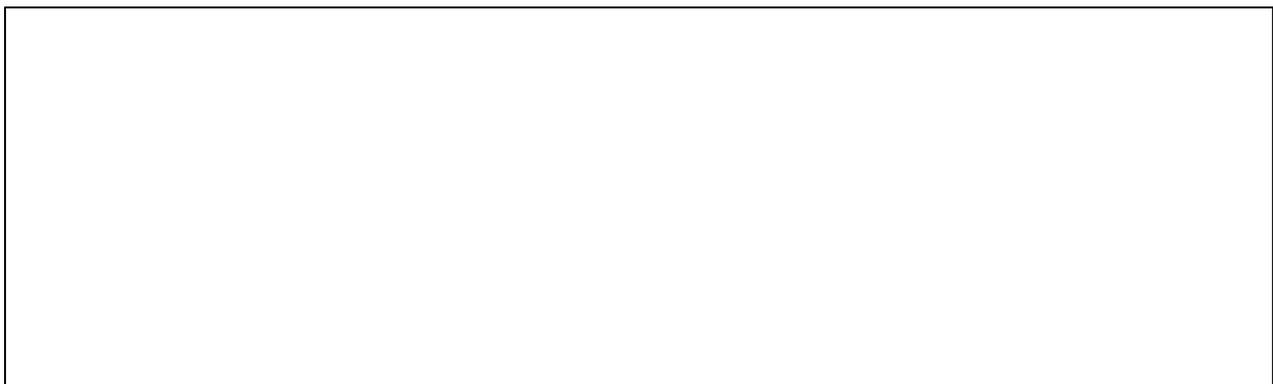
b) Monitoring and Evaluation Department Presentation:

Jim Rugh discussed the general program measurement framework. The basic steps in the implementation of HHLS are:

1. Selection of geographic area in county
2. HHLS Assessment
3. Selection of Interventions
4. Program Designs
5. Baseline studies (HHLS indicators)
6. Implementation of Projects
7. Evaluation

An API working group was formed during the workshop which met after-hours in order for Jim Rugh to elicit input from the Country Offices. The important opportunity for field staff to provide their input into this headquarters initiative was captured.

The following illustration shows the different levels of indicators:



Jim introduced the MER system which is currently in progress of development. See *Appendix 3* for a handout which explains what MER is and isn't. The API system which is the Annual Project Information is an attempt to provide a standardized set of indicators which will serve as guideposts to Country Offices implementing a particular intervention. This system will allow CARE to aggregate data on a worldwide basis. The initial set of indicators include:

Children's Health

1. Annual births
2. # of infants 0-11 months
3. # 1-2 years
4. # 2-5 years
5. # measles immunization in last 12 months
6. # <1's received ORT past 12 months
7. # <5's received malaria treatment last 12 months
8. # <5's received treatment for ALRI last 12 months
9. # of mothers trained in Breastfeeding
10. # health workers trained in immunization, CDD, malaria, ALRI, nutrition
11. # of children participating in growth monitoring
12. # children weighed who gained

Reproductive Health

1. Couple Years of Protection (CYP)
2. # users
3. # facilities with EOC
4. # women 15-44 years old
5. # births attended by trained TBA
6. # of women received ANC in last trimester
7. # condoms
8. # people referred or provided STD treatment
9. # providers and managers trained by project
10. # partner institutions score over 80% on MCAT (management test)
11. # families which score over 80% quality of care (QOC)
12. # persons reached by project-sponsored IEC

- 13. # active CHW promoting Reproductive Health
- 14. # communities with funds for obstetric emergencies
- 15. \$ volume of community-managed emergency health funds

12. Afternoon Warm-up: Zen Koan Role Play

Stan Foster, a university professor came to meet with Master David Newberry, a Japanese Master to inquire about Zen. The Master served tea. He kept pouring into the cup which flowed over the edge. Stan exclaimed that it was i>overfullî. The Zen Master replied, i>Like this cup, you are full of your own judgments, opinions, and speculations. How can I show you Zen until you empty your first cup?î This is relevant to the task set forth at the workshop for each participant, since every program has an existing HIS at varying stages of development.

13. WHERE ARE WE AT?

a) SUMMARY of NEEDS ASSESSMENTS

Most Helpful: (existing HIS)

- data collection tools at village level
- decentralized
- community level
- lists of women & children
- identifies high-risk
- feedback to community

Most Hindering (existing HIS):

- number of indicators is unwieldy
- limited CHW literacy, reliability & quality

Recommendations:

- village level system for low literacy
- reduce quantity of information
- orient staff on data analysis and use
- high-risk identification
- involve beneficiaries
- develop population-based system

Vision of Ideal System:

- measures progress reliably
- timely and a basis for decisions
- responding 1st to needs of grass roots
- identifies problems
- is computerized
- is organized before computerization
- know WHY information is being collected

- includes routine feedback component

14. WHO NEEDS TO KNOW WHAT & WHY? INFO USERS

a) Exercise: STAKEHOLDERS ROLE PLAY

Eight participants sat in a line-up of chairs in front of the room representing various stakeholders, starting with a Mother, next the Community, then Project, then CO, then CARE/Atlanta, then USAID, then Congress, and finally WHO. The large group asked each representative what they needed to know.

This exercise illustrated the amount of detail required at each level and the degrees of aggregation necessary to flow from the individual child up to the world body of data. The fact that a mother's daughter had DPT 3 on April 23, 1997, which a mother needs to know, is fed up all the way to the world-wide body of data at the international level, UNICEF. This data point is taken up through the entire information flow and thus requires accuracy. The actual antigen and date it was given is not relevant at the next level, as the community is only interested in who is "completely immunized" and by what age. "Where you sit, depends on where you stand."

b) INFORMATION AS IT FLOWS THROUGH THE STAKEHOLDERS

Mothers/families need to know the impact on their child's health and education

Survival, immunization status of her children, growth trends, breastfeeding, where to go for referral, trends in her child's health, who to trust, support of her family members:
Individual data

Communities need to know community diagnosis and coverage

Common causes of death (major killers), preventive measures, existing resources, existing practices, wider network, who is NOT immunized, who is making decisions:
Family level data

Projects need to know the at-risks and who isn't getting reached

Cost effectiveness, realizing targets, quality of services, practices in the community, impact in community, why not accessing services. Community level data

Country offices need to know which projects need more support

Cost effective funding allocation, coverage, cost/beneficiary, Project-level aggregates

Headquarters needs to know which Offices need more support

Models that are working, Country level aggregates

USAID needs to know the impact of their contribution

Health priorities in MOH, track record of PVO, strategy, overall coverage, urban/rural split, numbers, PVO level aggregates

Congress needs to know where to allocate federal funds

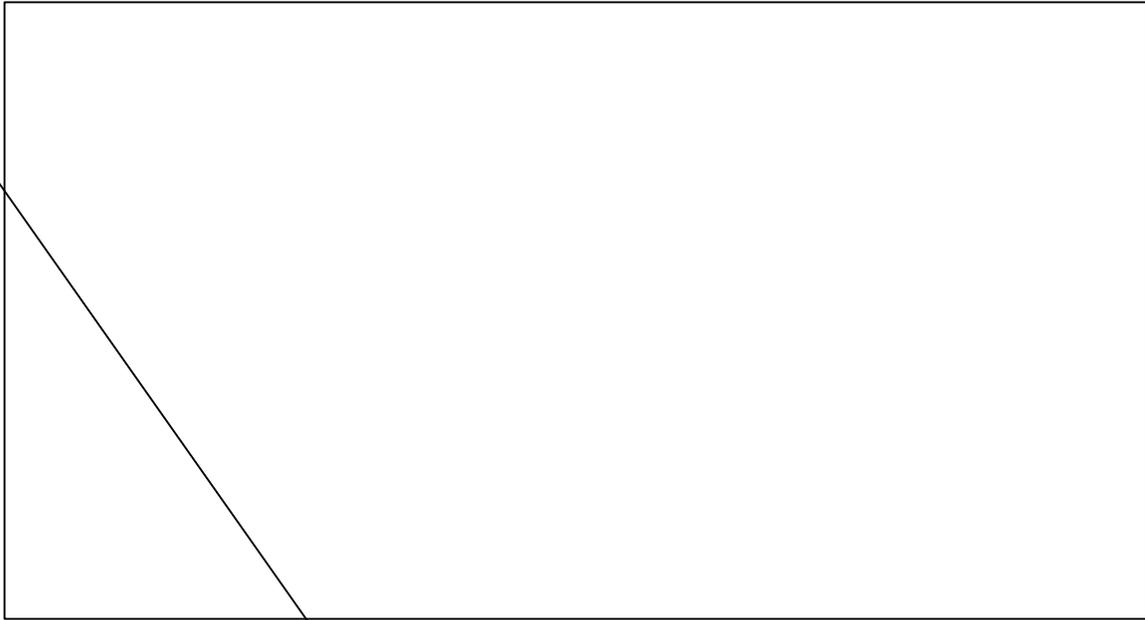
USAID budget, impact of their allocation, figures to justify spending

UNICEF/WHO needs to know the state of the world's children

Pool together for State of the World's Children, funds effectiveness, a tool to pull together data, apply tools and standards, let investors know their donation had impact.

c) HOMEWORK: The Seven Sieves

Each country put each of their indicators from their list of program objectives through the following 7 sieves:



d) Review of the Homework (See Appendix 4)

A few CO's were able to modify and sift out some of their indicators. Some will return to share the process with counterparts. The rationale for such changes can be given in the next annual report and midterm evaluation reports to USAID. It is worth it to start with good indicators, otherwise projects will be chasing data that isn't worth collecting, displacing important program time.

B.

DAY 2: INDICATOR & INFO REQUIREMENTS

1. DAILY OBJECTIVES

1. To review indicator lists after sifting.
2. To list the information requirements for each indicator
3. To review Rates.

2. PRODUCT

A list of key indicators and their information requirements.

3. Warm-up: Telephone Game

In passing a message down a line-up of people does the original message come close to the message at the end? Each time information is passed, it is subject to human error or misunderstanding. What lesson is learned in terms of HIS? *KISS: Keep it Short and Simple *The more information changes hands, the more it becomes distorted.

4. Sayings of the Day

If I wanted information, I had to prove I needed it.

If you don't use it, DON'T collect it.
If you measure it you have to do something about it.

5. COUNTRY OFFICE PRESENTATIONS

Five Project Managers voluntarily gave brief overviews of their HIS to date.

Niger: Maintains complete lists of target groups. The community registers, CARE records and government records are brought together at a monthly reporting meeting. On a trimester basis 14 indicators are reported.

Haiti: An initial health census leads to target lists of 0-3 years old, pregnant and nursing women, 15-9 year old and under 15's. Registers of families are kept centered around a post, (within a 1 hour radius). Each family card has a post number and identification number. There is a specified day for each target group. Quarterly reports are prepared and fed back to the community.

Kenya: Census data is kept in a register which is continually updated with clinical data and vital events. The health workers post data on a monthly chalkboard at the central pharmacy so the community is able to access the data.

Honduras: Health Monitoring Information System has three components: Supervision, Field Monitoring and Evaluation through a partnership with Project Hope, sharing one HIS.

Bangladesh: Utilizing the government reporting system, the project seeks to improve the quality of the data. Surveys are conducted to cross-check data. Quality checklists for service delivery and performance are used by CARE staff as the HIS is in actuality a Management Information System.

6. INFORMATION REQUIREMENTS

In small groups, participants went through the indicators of their project which fell under the interventions assigned to the group. Each indicator was broken apart in terms of information required. The information bits were placed within one of three categories on a worksheet:

Demographics, Vital Events, Service Statistics

GROUP	TOPIC
1	Maternal Health , Family Planning, STD/HIV
2	Breastfeeding, Nutrition, Vit A
3	DD, ARI, Immunization, Malaria

- **Denominators** are the total number of a population or subset of a population.
- **Numerators** are a subset of the denominators that received a service, etc. (intervention effect)

Information requirements are: (examples)

DEMOGRAPHICS (denominators)

1. Total population
2. Total number of families
3. Total number of under-five's
4. Total number of 12-23 month olds (up until 24 months)
5. Total number of over-fifteen's
6. Total number of couples

VITAL EVENTS (changes to denominators)

1. Total number of live births
2. Total number of deaths by age and cause
3. Total number of pregnancies and outcomes (births)
4. Total number of migrations (in or out)

SERVICE STATISTICS (numerators)

1. Total number of complete immunizations for 12-23 mos. olds
2. Total number of children born in the last year who were TT protected
3. Total number of under-five children who are severely or moderately malnourished.

This tedious task is necessary in order to see what actual pieces of data are required in order to report on a particular indicator. It also reveals areas of overlap. Each country which presented their HIS maintained a denominator. Who needs to know the denominator? The community health worker. S/he needs to know not just who

received services, but more importantly those who have not. A denominator will point a CHW not only to those who are motivated towards seeking healthy behaviors, but also more importantly to those who are not, and therefore at higher risk. See *Appendix 5* for example of the format used and an example from Honduras' program.



Photo 3: Participants sitting in horseshoe style

7. RATE EXERCISE

Three groups were formed by language (Francophones, Anglophones, and Spanish-speakers) and competed in scoring highest on the following exercise.

DEMOGRAPHICS: sample population

• Population:	330	
• # Families:	990	
• Total females:	4,000	over 15: 2339
• Females between 15 and 49 years:	2100	
• Females between 15-45:	2000	
• Mothers with under-5's:	1250	
• Total males:	4,330	over 15: 2404
• Males between 15 and 49:	2000	
• # live births last year:	375 live births	
• Under-five's:	1660	
• 12-23 months:	323	
• Under-1's:	300	
• pregnant women:	134	

These figures are counts on a specific day at the end of the year.

QUESTIONS:

1. Last year there were 60 deaths of under-five children. What is the Under-5 Mortality Rate?

Answer: $60/375 = 160$

2. Out of the 60 deaths, 47 of the deaths were to children under one year of age. What is the Infant Mortality Rate (IMR)?

Answer: $47/375= 125$

3. There are 1323 child-bearing aged women using contraceptives (modern and traditional). What is the Contraceptive Prevalence Rate?

Answer assumes modern only: $1323/2100=63$

4. Of 375 women who delivered last year, 267 had received TT2. What is the TT coverage rate? (only 200 had a card to prove it). Card verification necessary.

Answer: $200/375= 53$

5. Of 12-23 month olds, 255 were immunized. There were 200 three year old children who were completely immunized. What is the under-one year coverage rate?

Answer: $255/323= 78$

6. Of the 255 children completely immunized above, 45 were missing their card. What is the immunization coverage rate?

Answer: $210/323=65$

7. Of 12-23 months olds, 150 received DPT3. What is the completely immunized coverage?

Answer: Unknown cannot assume if received DPT 3 that a child is completely immunized.

8. Of children 12-23 months, 140 received DPT 1 and 130 received DPT2. What is the drop-out rate?

Answer: $140-130/140= 7.1\%$

9. Of children under-5, 1000 received a Vit A capsule within the last 6 months. What is the rate of VAC distribution (Only 400 had a card to prove it)?

Answer: $400/1660= 24$ although the denominator is really only those children 6 months to 5 years, excluding the 0-6 month olds.

10. During the end of the year house to house visits, 698 families had at least one member who could properly explain how to manage cases of diarrhea, and could mix ORS. What is the percentage of ORT knowledge?

Answer: $698/990= 70.5$

11. Of 600 mothers of under-2's, 400 could name at least 2 actions to prevent diarrhea dehydration and 200 could name none. What is the ORT knowledge rate?

Answer: Unknown

12. Of the 550 families with under-2's, at least one family member knew 3 actions to prevent diarrhea dehydration. What is the ORT knowledge rate?

Answer: Unknown. Don't know the number of families with under-2's, only the families with under-5's.

13. Of 300 Mothers of under 2's who have had diarrhea in the last 2 weeks 200 have EVER used ORT and 100 have used it in the last 2 weeks. What is the usage rate?

Answer: $100/300= 33\%$

14. Of the 289 <2's weighed, 120 were less than -1SD from the norm and 35 were < -2SD's from the norm. What is the percentage malnourished?

Answer: $35/289=12\%$

15. During the same family visit, 550 could explain the proper way to handle a case of ARI. What is the percentage of families with ARI knowledge?

Answer: $550/990=55\%$

16. Of mothers of under-fives, 300 recognized rapid breathing as a sign of pneumonia in a child with cough or difficult breathing. What percentage of mothers ARI knowledge?

Answer: $300/1250=24\%$

17. Of caretakers of under-5's 200 reported that they would seek care upon early recognition of pneumonia. What is the rate?

Answer: $200/1250=16\%$

18. Of caretakers of under-5's, 150 sought treatment for ARI in the past 2 weeks. What is the rate?

Answer: Unknown, don't have a denominator: # of children with ARI in same time period.

19. Thirty-four presumed cases of malaria among 12-23 month olds 34 were treated with chloroquine first what is the percentage that were treated correctly?

Answer: Unknown, don't have a denominator of total number of children with malaria

20. Of women of reproductive age 560 have knowledge of at least 3 modern methods of family planning, of these same women, 234 know of 2 methods and 121 know of one. What is the % who know of at least 3 methods?

Answer: $560/2100=26\%$

21. There are 450 women using a contraceptive method who do not want another child in the next two years. What is the percentage?

Answer: Unknown do not know the denominator

22. There are 200 men using condoms or who have had a vasectomy who do not want another child in the next year. What is the contraceptive prevalence rate?

Answer: $200/2404=8\%$

23. Last year 340 condoms were distributed. What is the ratio of condoms per reproductive man?

Answer: $340/2404=.14$ condom 1 condom/7 men/year

24. There are 560 families with impregnated mosquito nets. The survey showed that 1300 mothers slept under the net. Some households only the under-2s slept under the net. What is the IMN coverage?

Answer: $560/990=56\%$ If for women $1300/5600$ (must specify)

25. Only 250 under-2's are exclusively breastfed, 100 are supplemented with minute quantities of food. What is the exclusive breastfeeding rate for under-2's?

Answer: $250/623=40\%$

26. What is breastfeeding rate if 200 mothers reported that they exclusively breastfed for the first 6 months?

Answer: bogus, no denominator

27. What is the percentage of population appropriately breastfed if during the survey 100 6 month old children exclusively breastfed in the past 24 hours?

Answer: $100/150=66\%$

28. Of children 12-23 months olds, 58 were immunized for measles in the past 12 months. What is the coverage rate?

Answer: $58/323= 17.9\%$ What is the complete coverage rate? Unknown, can't assume

29. What is the drop-out rate if 100 12-23 month olds received BCG and 50 received measles?

Answer: $50/100=50\%$

30. Of mothers 780 were trained in exclusive breastfeeding. What is the percentage?

Answer: $780/1250=62\%$

31. Of under-5 children 650 received appropriate treatment for ALRI or referred during the last 12 months out of 750 cases. What is the percentage?

*Answer: $650/750= 86\%$ (Of the 650 children 50 were recurrent cases).
Count episodes, Answer remains the same.*

32. Of the 450 CHW's, 354 were trained in immunization, 25 were trained in nutrition, 50 were trained in ALRI and 40 were trained in all three. What is the percentage trained in one or more interventions?

Answer: $354/450= 78\%$

33. Of people, 4000 were reached with health education messages. What is the %?

Answer: $4000/8330=48\%$. Rather useless since the denominator contains all children and elders who may not necessarily register the message and adapt behavior.

34. Of the 250 children weighed in the last 3 months, 200 gained weight. What is the %?

Answer: $200/250=80\%$

35. Of people, 500 were referred for STD treatment. What is the percentage?

Answer: Unknown , no denominator, need the number of people suffering with a STD.

36. Of 560 of <5 years old children with diarrhea only 345 caregivers increased fluids to during the diarrheal episodes. What is the ORT Usage rate? Note: the fluid of choice was unboiled water.

Answer: 0, unboiled water is not a proper for ORT.

37. Of 250 <5 mothers with children suffering from diarrhea, 200 increased fluids during diarrhea using boiled water. What is the ORT Usage Rate?

Answer: $200/250=80\%$

38. Of 500 couples, 300 said they used condoms as contraceptives. What is the STD prevention rate?

Answer: Unknown, don't know if the couples knew about STD prevention.

39. Of 350 women with TT2, 300 got boosters for subsequent pregnancies and 50 did not. What is the TT coverage rate?

Answer: $300/2000=15$. In some countries, two TT injections are the norm, so it could also be $350/2000$ or 17.5%.

8. Lesson Learned

This exercise highlights the actual information data points required to report on certain indicators. As one goes through the calculation of rates using the fictitious population figures it becomes clear that all the information requirements are not always available through a monitoring system. Often we are faced without a proper denominator in order to report on an indicator and therefore can not answer to coverage. The reason each indicator needs to be broken down into the pieces of information required is to design a system which will be able to document the indicators.

9. Homework: Each country team completed the information lists required for each of their country-specific interventions using the worksheet. See Appendix 5 for form.

C.

DAY 3: MONITORING METHODS & INSTRUMENT DESIGN

1. DAILY OBJECTIVES:

1. To select monitoring methods
2. To build a set of tools
3. To begin designing specific tools

2. PRODUCT:

A complete INFORMATION PLANNING MATRIX

3. Warm-up: *Exchange of Bodily Fluids*

Stan Foster provided an excellent warm-up illustrating the spread of HIV/AIDS by passing around 20 cups of water (two of which had a clear substance, which was not water). Each participant mixed their water with 3 others. He then placed a chemical which reacted with the clear substance into each person's cup. Those that turned pink were representative of HIV positive. Out of 20 participants, suddenly 12 were bright pink (60%).

4. Sayings of the Day:

Let's Keep it Simple, Let's Do the Obvious thing, the common thing, but let's do it uncommonly well.

Are we doing the right things? Are we doing them right?

5. Stan Foster Presents: Lessons Learned: Monitoring at Community, Health Facility and District Levels

Dr. Foster gave a vivid example of the importance of indicators during the smallpox eradication program in the 1970's. Cases were mapped out showing where the disease was contained. Rewards were provided to the first person to report a case. Defining visitors proved to be an important component since relatives were not considered as visitors and thus the disease continued to spread. He also drew lessons from Child Survival projects, such as TBA training in Bangladesh which provided confidence to the participants so that they were no longer afraid to conduct deliveries; the Village Vaccination Register in Cambodia whereby CHWs are able to track coverage and add newborns to their lists; and the positive deviant study for nutrition monitoring from Vietnam in which families with children who are not malnourished within the same socio-economic group provide the Answers for those with malnourished children.

He urged the group to take on the challenge of delineating four to six key indicators which would be useful at all levels for Child Survival. He stated that the bottom line is coverage data and more specifically measles coverage data by village and health facility rather than by survey. Instead of seeing indicators for problem identification, they are also tools for affirming a job well done. The presentation was ended with a question: how should we measure HIV interventions? He ran into a CDC epidemiologist on the

way to the workshop who recommended inumber of males with ulcers or discharge within the last six monthsî. This appeared to be a long recall period, however, because of the differences in incubation periods and some STDs are painful and not easily forgotten. Women are often asymptotic so it would be useless to collect meaningful data on STD prevalence amongst women. For outline of Dr. Foster's presentation see *Appendix 6*.

6. Data Collection & Monitoring Methods

The group discussed the various methods used to date by the projects as written up in the DIPs submitted to USAID and the interventions chosen by each CO (See *Appendix 7*). Many of the projects were using surveys and clinical records as the main method of data collection. A discussion followed which outlined other types of monitoring methods as well:

Quantitative Monitoring Methods:

- Population-based Data Collection: registration
- Periodic sampling: Lot Quality, 30 Cluster

Qualitative:

- Focus groups
- Quality circles
- Participative rural assessments
- Key informant interviews
- Quality assurance checklists

Studies:

- Disease surveillance
- Case-control
- Comparison Group
- Mortality
- Epidemiological
- Positive Deviants

7. PANEL DISCUSSION: CLARIFYING ISSUES BEFORE PROCEEDING

Panelists: Judiann McNulty, Stan Foster, Jim Rugh, David Newberry

A list of questions raised from the group were asked to a panel for discussion.

1. Methods to get a denominators: a census or registration. Can make it a living denominator by capturing vital events to update it.
2. Puzzle Mix: Any system requires a mixture of methods, some indicators to be tracked monthly through a population-based approach and others periodically through surveys.

3. Process Indicators: CARE's Way: community participation, sustainability, etc. How will we measure the way we work? What kinds of process indicators are we looking at? What about management indicators? The focus of this workshop is on health indicators for child survival projects, however process indicators are important as well and should be monitored. Rather than using a Machiavellian approach, there are certain 'best practices' that characterize CARE's work.
4. Fit within CARE's API & MER: Both API and MER are in process of development so it is important to provide input during this workshop. If a project is not implementing a particular intervention, then they obviously would not need to report on that indicator.
5. Monitoring and Evaluation: Monitoring is basically an on-going daily evaluation which tell you where you are. If on-going monitoring is performed, then a midterm or a final evaluation would not require a whirlwind of activity to capture data. The updated data would be available and the evaluation team could spend their time analyzing the data and reviewing data historically to look for trends.
6. Progression of Health Impact: In order to reach Impact there is a normal progression that is needed to reach impact in progressive order.
 - Availability
 - Accessibility
 - Knowledge/Attitude
 - Utilization
 - Coverage
 - Quality
 - Effectiveness
 - Impact
 - Efficiency

8. DESIGN OF INSTRUMENT/TOOLS: SHARING THROUGH SISTERS

A 'Big Sister Program' was initiated which paired project managers to facilitate direct sharing. Participants from projects with more HIS experience acted as mentors for project participants with less to assist them in developing their systems using their system as an example.

PROJECT SISTERS:

- Nicaragua & Peru
- Niger & Haiti
- Honduras & Bolivia
- Bangladesh & Mozambique
- Kenya & Tanzania

Each set of sisters worked on filling out the Information Planning Matrix in *Appendix 8*. The first two columns of the matrix were already filled out during previous sessions. Next the **METHOD, WHO (to collect), FREQUENCY.** and the **TOOL (used to collect)**

was determined. Building on the tools that are currently working well, participants determined:

- instruments still needed in the field
 - which tools can be combined (dovetailed) or are no longer necessary
 - which information collection tasks can be combined
 - which information exists elsewhere and can be accessed and trusted
- (Sample rosters and registers were handed-outs to serve as boiler-plates: *Appendix 9*)



Photo 4: Participants Reviewing Individual Strategy Papers On Community Bulletin Board

D.

DAY 4: USING THE SYSTEM

1. DAILY OBJECTIVES:

1. To share case studies of problem-solving using health data
2. To practice analyzing data
3. To list quality assurance checks per indicator
4. To conduct internal and external cross-checks on data
5. To visit and understand CDC

2. Warm-up: WHO AM I?

Three participants stood in front of the room with a new name taped on their back. Each volunteer could ask the group yes/no questions as to determine who they are after they have shown their back to the group. Hillary Clinton, Mohammed Ali, Peter Bell (Executive Director CARE)

Lesson: We need to ask appropriate questions in order to acquire needed information to know something. Closed, leading questions take a lot longer to get an Answer rather than open-ended questioning.

3. Sayings of the Day:

Expect the Unexpected

It's not what you Expect, it's what you Inspect and Inspire

4. PRESENTATIONS of Case Studies: How Information Helped Change a Program

1. **Peru:** KPC results varied distinctly from government data (*Appendix 10*)
2. **Kenya:** The EPI approach changed since the pockets of low coverage were revealed through HIS
3. **Bangladesh:** The program is focused on a MIS since they are creating linkages and upgrading the government HIS through better management systems.
4. **Nicaragua:** An excellent example was given of how unrealistic targets set by the government can force a program to proceed without a concern for quality.

5. DATA ANALYSIS CASES

The sister groups got together and picked out a slip with a data analysis problem case from a hat. They analyzed the situation and reported to the large group.

Data Analysis Cases:

1. It is true, the immunization coverage rate is below average in your area. Upon further investigation it is found that children are missing measles vaccine, being complete up till then.
 - *focus groups to determine why mothers aren't coming for measles vaccine.*
1. There is a measles outbreak even though the complete immunization rate is high.
 - *check quality of immunization sessions: cold chain maintenance, age of measles vaccine, etc.*
 - *check reported cases to confirm if measles*
 - *intensify measles prevention messages and motivation*
1. The major cause of deaths to Under-five's is accident. What to do?
 - *accident prevention program. This may be a good sign of how the program is effectively controlling early childhood diseases through immunization and nutrition.*
1. The percentage of children who are malnourished (either 1st, 2nd or 3rd degree) is 65% of the under-five population, more than half.
 - *check quality of weighing and plotting*
 - *investigate, nutritional habits*
 - *conduct positive deviant study to compare habits of children who are well-nourished from similar situations*
 - *establish rates for each degree of malnutrition (e.g. at 65% overall, there is something seriously wrong)*
1. ORT knowledge remains at 35% over two years.
 - *is a message that is inappropriately worded so that families don't understand?*
 - *review educational messages. Try another educational media. Can packets be attained?*
1. The number of births has dropped considerably since last year.
 - *check if under-reporting of birth reporting system or major migration*
 - *check the pregnancy reporting system*
 - *check stillborn rate*
 - *does it correlate to effectiveness of family planning intervention? cross-check*
1. The number of deaths has increased since last year.
 - *expect deaths to increase first due to more accurate death repressing*
 - *check the accuracy of death reporting*
 - *check change in reporting death requirements*
 - *check the causes of death*
1. The family planning acceptance has risen, so has the birth rate.

- *check the family planning practices. Are the methods used properly?*
 - *check family planning clinic reporting system*
1. Condom distribution has increased yet the incidence of STDs has increased.
 - *may be used for family planning purposes rather than for safe sex*
 - *check condom user rates*
 1. Referral systems for pregnant woman have been established, but the percentage of pregnant women receiving ANC has decreased.
 - *check for bottlenecks in system. Are people being charged? Are women motivated to attend?*
 - *check for constraints (e.g. transportation, motivation, and/or cost)*
 1. Impregnated mosquito nets has reached 90% of households yet malaria continues to be a major cause of maternal and infant morbidity.
 - *check to see who sleeps under the nets within the household. Actual practices.*
 1. Breastfeeding knowledge among mothers has increased to 75% due to training. The rate of under-six month old malnutrition rate has gone from 3% to 5%.
 - *check to see the attitudes and practices of mothers with knowledge. There is often a lag.*
 - *re-assess in six months for any significant change in practice and attitudes*
 1. Reported cases of ALRI has gone from 12 to 19 in spite of the ALRI training among 86% of households.
 - *check to see if the referral system is working, and attitudes and practices*
 - *an increase in reported cases is among the desired outcomes - may want to check the internal problems for treatment (within 24 hours)*

6. QUALITY ASSURANCE CHECKS BY INTERVENTION

For each of the interventions there are a series of quality assurance checks which will need to be monitored to guarantee that the right things are being done right. These may be instituted through the supervisory system. Below are a series of questions or issues to keep in mind while supervising the system. When a supervisor visits the field, these are points for discussion to be raised during a supervisory dialogue. Checklists may be developed to bring on visits which will aid a supervisor in remembering important quality points.

The lists were reviewed as a large group. The last four lists were developed by the participants who divided into 4 small groups which worked on one topic.

Quality Assurance Checks by Intervention: (examples)

1. Under-five and Infant Mortality

- a) Are deaths under-reported or are they being captured?

- b) Are live births being captured?
- c) How are the causes being determined?
- d) Are all the families with child deaths being visited?
- e) Is there a gender bias?

2. Severe and Moderate Malnutrition

- a) Are weighing sessions conducted properly? scale calibration, Rd. to Health card distribution
- b) Are the weights being plotted correctly?
- c) Is the status determination correct? Is there a rehabilitation mechanism in place?
- d) Adequate counseling: breastfeeding, weaning, micro-nutrient supplementation (iodine, VAC, Fe)?
- e) Investigate major causes of malnutrition: income, worms, food availability, education, etc.
- f) Is there a gender bias?

3. Severely Malnourished Children

- a) Are all 3rd degrees receiving follow-up?
- b) Effectiveness of follow-up services for at-risk children
- c) Investigate family situation as severe malnourishment is a symptom of a dysfunctional family
- d) Assure proper food distribution within the household (gender bias)
- e) Are the at-risk children improving?
- f) Is there a gender bias?

4. Immunization: (childhood and TT for women)

- a) Support the national or regional EPI program
- b) Tracking of defaulters
- c) Maintenance of the cold chain
- d) Assuring proper sterilization techniques
- e) Periodic disease surveillance to check for immunizable diseases and vaccine failures
- f) Condition of vaccine in stock

5. Diarrhea Management

- a) Proper proportions of water, salt and sugar if home-mix is used
- b) Alternatives to packet ORS within household (local home fluids)
- c) Messages are well-understood and practiced
- d) Improved preventive health education activities
- e) Reduction of bottle-feeding/increase of breastfeeding
- f) Clean weaning foods introduced: weaning habits
- g) Adequate training and supervision of health workers
- h) Increase feeding through cup and spoon

6. ALRI

- a) Improvement in early recognition and diagnosis of pneumonia

- b) Improvement of access to appropriate care early in illness
- c) Improvement of community referral systems
- d) Promotion of local pharmacies with anti-biotic availability
- e) Improvement of environmental factors (smokeless stoves, ventilation, etc.)
- f) Ensure adequate support/training is available for primary care providers
- g) Initial antibiotic therapy within 24 hours

7. Malaria

- a) Is it a control program ?
- b) Drug availability at the local level (right drug at the right time)
- c) Strong referral center which can treat severe malaria + lab support
- d) Availability of bed-nets and insecticides and repellents
- e) Malaria treatment during pregnancy (especially important)
- f) Training and education for health workers
- g) IEC (information, education, communication)
- h) Response to outbreak and surveillance
- i) Environment control: vector control, [political response], fumigation ???
- j) Logistics (manpower, drugs, money) available in time
- k) Reporting (women more vulnerable, gender issues)
- l) Adherence to drug regimen

8. Reproductive Health

- a) Increased access to ANC centers
- b) Improved community network for referrals for EOC
- c) Increased number of personnel centers handling of EOC
- d) Ensured adequate counseling to clients
- e) Effective referral system for high obstetric risk patient women
- f) Reliable system/registration for maternal mortality and other reproductive health indicators
- g) Adequate and regular supplies
- h) Adolescent health services
- i) Involvement of males

9. Breastfeeding

- a) Define exclusive breastfeeding, (no other foods or liquids)
- b) Quality of both the training and IEC
- c) The training should be addressed to the mothers
- d) Barriers to breastfeeding (policy in workplace, cultural, societal (upper class), physical problems)
- e) Late initiation, initiation with other liquids
- f) Duration of breastfeeding practices during child's illness

10. Maternal health (ANC)

* See groups following handout which was a resource already available and appropriate. This is not cheating, it's resourcefulness

1. Promotion and protection of health: People need to know about pregnancy and childbirth and to understand the danger sign.
2. Accessibility and availability of services: Women should be able to benefit from quality of care, understand the full range of services available to them and receive care at the lowest appropriate level of the system close to where they live.
3. Acceptability of services: Women need privacy, they many prefer to consult a female health worker, and tehy should be assured of confidentiality.
4. Technical competence of health care providers: Technical competence depends on regular training and retraining and on clear guidelines for clinical treatment.
5. Essential supplies and equipment: Norms and standards should be established for the necessary supplies and equipment at each level of care and their availability should be ensured.
6. Quality of client-provider interaction: Providers must treat clients with respect, be responsive to their needs and avoid judgemental attitudes.
7. Information and counseling for the client: Cleints should have the opportunity to talk to health care providers and should be offered guidance on any health problems identified.
8. Involvement of clients in decision-making: Providers should see clients as partners in health care and should involve them in decision-making as active participants in their own health care.
9. Comprehensiveness of care and linkagaes to other reporductive health services: Maternal health care is a unique opportunity to proveid women with comprehensive r4eprodu tive health care and to address other issues, such as nutrition and sexually transmitted diseases.
10. Continuity of care and follow-up: Maternal health care should be paret of a continuum of care comprising antenatal, delivery and postpartum care. Clients must, however, be seen as people with health needs that continue throughout their lives.
11. Support to health care providers: Health care providers at all levels need the backup and economic and social support of the State and the communities in which they work.

7. CROSS CHECKS

Quality assurance of the monitoring system itself should be built-in so that the data is reliable and valid. If incoming data isn't of good quality, then the decisions based on it will not be good decisions either. The adage *Garbage In - Garbage Out* clearly denotes the importance of collecting accurate data.

There are some simple methods for cross-checking data. The *systems* that feed the indicators need to be checked from time to time so valid and reliable data will emerge. Taking the data at face value is not wise. It is a good idea to check the data and check the system so that the information is reflective of reality.

a) Demographics Baseline Info (denominators for rate determination)

These are general rules of thumbs in public health regarding estimated percentages of the population to be expected in a developing country in certain age groups. It is a good idea to cross-check the results using the above ballpark figures to see if the system is missing some of the population. For example:

TOTALS	EXPECTED PERCENTAGES	ACTUALS
<i>Total population</i>	100%	8000
<i>Total number families</i>	compare to average family size (nat'l)	1333
<i>Total number of under-five's</i>	16-20% of total population	1280-1600
<i>Total number of under-one's</i>	3-5% of total population	240-400
<i>Total number of child-bearing age</i>	15-49 year old women 20%	1600
<i>Total number of live births</i>	according to birth rate (nat'l) i.e. 32	256
<i>Total number of pregnancies</i>	4-5% of total population	320

b) **Expected Figures:** In order to estimate the figures to expect, each project can create an expectation sheet using rates from the closest source to the actual area.

Figure 3: Expectation Sheet

PUBLISHED DATA	EXPECTED DATA*	ACTUAL**
Population		
U5MR		
IMR		
Birth rate (expected # births)		
Death rate (expected # deaths)		
Literacy rate		
Complete immunization rate		
TT coverage		
ORT Usage		
Family Planning Usage		

NOTE: *First do project level and aggregate projects for CO figures.

**Can be compared to baseline data collected in previous years if available.

c. **Finance:** How are expenditures related to the indicators ? Cost per beneficiary, cost efficiency and cost effectiveness checks to see if the program is getting the most iBang for Buckî.

d. **Trends over Time:** How is the information changing? Compare year to year. Has the program made a measurable difference in the community? Is the quality of life improving? What are the differences?

e. **Compare UNICEF** figures or government statistics with those at the CO level. What is the national IMR and U5MR compared to your data? Where does your project area stand? Below are 4 categories of IMR and U5MR used by UNICEF:

	Under-five Mortality Rate	Infant Mortality Rate
Very High	>170	>120
High	95-170	85-120
Middle	31-94	45-85
Low	<30	10-45

What is the U5MR for your country? _____
your project area*? _____

What is the IMR for your country? _____
your project area*? _____

Which category does your CS project fall into? _____

* If project area reports death

8. CROSS CHECKING EXERCISE

As a large group, participants performed some cross checks on the following data:

What's Wrong with this Picture?

1. Of your total population of 2,300, there are 145 under-five's.
P Only 6% of population, can expect three times that, around 435.
2. The immunization coverage rate for <1 children is 45% compared to the national rate of 75%.
P Reporting system of government may not be accurate, also it hides pockets of low coverage since it's an average.
⇒ Coverage may be low.
⇒ There may be a national shortage of antigens for EPI.
3. The severe malnutrition rate is 27%.
P Extreme amount, probably famine conditions. Can expect 3% in developing world.
4. You come to visit a project and ask to see the documentation. There are piles and piles of manuals, reports and lists of children. There are books kept by particular people who are not available so the information is inaccessible till next week. There are separate lists of children for each activity.
P Information overload. Must find methods to streamline data collection and to make it accessible.
5. A project has 90% immunization coverage. Impressive. You check and see that there were 100 children receiving immunizations. What does this say to you?
P The scale of the project is important and although the coverage rate seems high, the actual numbers are fairly unimpressive and low.
P Percent rates are important when population-based but numerators and denominators are most important for quality of program assessment.
6. There are 300 1-2 year olds out of a population of 1000 under-five children.
P Can expect about 1/5 of the under-five children to be in each year. This is 33%. Would expect about 200.

7. There are 10 members on the community committee of which 1 is female. There are 20 people on the project staff and 3 are women, there are 30 staff members at the country office and 5 are women.
- P Gender bias is everywhere, and practicing what we preach to serve as a model is a good start.*
- P The Health & Population Unit has 4 men and 13 women- there is gender bias on both sides of the coin.*
8. Seventy-five percent of project budget is spent on immunization while the national coverage stands at 85%. Malnutrition and female illiteracy is extremely high.
- P Although this budget may have been responsible for the high rates, allocating budget to areas of weakness where the rates are low and the government input is low may be a better use of resources.*
- P Resource allocation based on the current situation would fall short of the problem for natural increase and resource allocation would be at least partially wasted if the problem were naturally decreasing.*
9. A severely malnourished girl's father is given a imodalî to start his own income-generating project. He starting making a profit and took another wife.
- P Income-generating projects targeting women have been more successful in effecting children's health because women tend to make better choices for their children.*

10. The project requested a computer to analyze their health data. The surveyors did not know how to use the computer. A software expert was hired to write a program to tabulate data. The computer broke down and the numbers were not ready for presentation until the computer was repaired six months later.

P Avoid creating dependence on computers, calculators yes!

11. The Couple Years of Protection (CYP) is 47 whereas the Contraception Prevalence Rate (CPR) is 35.

P Distributed contraceptives doesn't always lead to use.

9. Centers for Disease Control and Prevention (CDC)

a) PRESENTER: ROBERT BALDWIN, OFFICE OF GLOBAL HEALTH AT CDC

The Centers for Disease Control has added îPREVENTIONî to its name, which is a welcome sign for public health professionals. CDC falls under the Executive branch of the United States government, under the Department of Health and Human Services, under the Public Health Service. The CDC Mission is to promote health and quality of life by preventing and controlling disease, injury and disability. The agency has just celebrated it's 50th anniversary.

As the nation's prevention agency, they accomplish their mission by working with partners throughout the nation and the world to: monitor health, detect and investigate health problems, conduct research to enhance prevention, develop and advocate sound

public health policies, implement preventive strategies, promote healthy behaviors, foster safe and healthful environments and provide leadership and training. Child Survival goals and objectives are very much aligned with CDC's mission.

b) CDC FIELD VISIT

The logistical headache of any field visit was non-existent for this workshop's field trip due to the convenient location. Participants simply walked one block out of the workshop venue. Participants had to undergo strict "airport style" screening in order to enter the building considering all the virus' stored in their laboratories. The visit to the exhibition museum was very informative and interesting. The group held a question and Answer period with a CDC personnel. Maurice Middleberg gave an overview of CARE's recent collaborative efforts with CDC in capacity-building in four East African countries, Ethiopia, Tanzania, Uganda and Kenya) and pilot programs in refugee nutritional assessment, malaria control in refugee populations, and emerging and re-emerging multi-drug resistant tuberculosis.

CDC has a website that serves as an excellent public health resource. The internet address is <http://www.cdc.gov>.

E.

DAY 5: M & E PLAN, DIPs for HIS

1. DAILY OBJECTIVES:

1. To discuss critical indicators and components of a HIS
2. To learn about CARE Finance
3. To draw an implementation plan

2. Warm-Up: HIS ROLE PLAYS:

a) Three Women at a Clinic: (Pregnant woman, a nurse and a family planning client)

A pregnant women is waiting in line at a maternal health clinic for TT2. The nurse is giving a Depovera injection to a women seeking contraceptives in front of her. She hears the nurse talking about family planning so she steps out of line, scared of what she heard, afraid that the TT injection may be Depo! The nurse yells at her to stay in line and get her TT. The nurse doesn't explain the difference.

b) Weighing Session: (Mother with baby, CHW with Growth Chart)

A mother brings her severely malnourished child to the weighing post. The CHW weighs the child and is so proud of the fact that she correctly plotted the weight. The CHW totally concentrated on the plotting the she handed back the Growth Chart to the mother and let her go, no counseling or advice whatsoever. The CHW didn't use the information. She did not analyze the weight, nor counsel the mother.

c) Home Visiting: (Home Visitor with register and a mother at home)

A CHW makes a home visit. She walks into the house and rudely sits down and starts asking for data, keeping her head in the books. When the mother shows the CHW her immunization card, the CHW yells at her for not completely immunizing the child and start talking about sanitation and hygiene in the home. The CHW only criticizes and takes information, not giving any moral support or encouragement or Information! The home visitor takes her book and leaves abruptly.

3. Sayings of the Day:

Make the data talk to you, better yet, make it sing

Change now rather than later. If it works better, change it.

HIS Health Information System or HERS Health Evaluative Reporting Systems

Indicators: Do we want strong singing types or the weak silent types that don't say much?

4. CARE FINANCE: Presenters- Peter Buijs and Ruby Judit

CARE headquarters finance department presented an overview of the Child Survival budgets and reviewed how finance works from Atlanta. This shed light on the budgeting process bringing about a greater understanding between the field and headquarters perspectives.

5. REVIEW CRITICAL HIS COMPONENTS

Given the four days of input from participants, and reviewing ten country office's objectives, indicators and HIS, the facilitator consolidated some of the ideas and presented the following:

a) CANDIDATES FOR CRITICAL INDICATORS:

NUTRITION

1. growth normal of under-3's	% weighed normal in last 6 months
2. growth faltering of under-3's	% faltering who are rehabilitated last 6 months
3. critical age weights (wt/age)	6 mos., 12, 24 and 36 months
4. micronutrients for under-5's	% of under-5's with VAC, iodine, Fe
5. breastfeeding	% of under-6 months exclusively BF
6. weaning	% of children properly weighed (foods & age)

IMMUNIZATION

1. measles immunization before 1 year	% covered by 12 months
2. neonatal deaths decreased	# of neonatal tetanus deaths
3. TT protection of newborn:	% newborns TT-protected

CHILD SPACING

1. birth intervals	% of pregnancies spaced ≥ 24 months apart
2. age of first pregnancy	% of first pregnancies of women above 18 years

ARI

1. recognition and action	% of cases sought treatment
2. pneumonia deaths	# of Under-5 deaths due to pneumonia

ORT

1. recognition and action	% of cases properly managed
2. diarrheal dehydration deaths	# of under-5 deaths due to diarrheal disease

HIV/STD

1. male ulcers or discharge last 6 months	# of males with signs of STD/HIV
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b) SIX INTERVENTIONS RATIONALE:

1. Nutrition: Malnutrition holds back the mental and physical development of 1 in 3 children in the developing world.

Look at:

1. growth faltering, not nutritional status OR
2. critical ages to check nutritional status as a predictor of child health and survival
3. micronutrient deficiencies
4. exclusive breastfeeding practice
5. weaning practices
6. rehabilitation

2. Immunization: Avert 1.2 million measles deaths per year and 50,000 maternal deaths and 600,000 neonatal deaths each year. World Summit of Children set goal of eliminating NNT by 1995.

Focus on:

- measles as major childhood killer
- look at TT protected newborns and deaths due to NNT as indicator of TT effectiveness

3. Child Spacing: Multiple, unwanted pregnancies impact a women's life, depleting her physically and costing her educational opportunities and opportunities for providing well for a few children rather than spreading her resources amongst too many.

- Look at outcomes within family as indicator of family planning effectiveness rather than trying to determine desire for children, which may change within 2 years due to replacement of a child who died, and naturally desires change as a human. Assure greater health and survival of children under-two.

A True Scene Never to be Forgotten: A mother of 40 with 9 children. She was breastfeeding her 9th next to her first born daughter who was breastfeeding her baby. Grandmother and mother both breastfeeding newborn children.

- Interesting to due a truncated pregnancy history for the last 5 years of every Woman of reproductive age. You will be surprised how many women are pregnant every year, although they do not have the children to prove it. How many more risks a women is subject to with each pregnancy!

- Also looking at delaying pregnancy will have an impact on the health of a child, since she will in the end have less children, possibly become more educated during that time and become more fit physically and emotionally to become a mother. Prevent children having children.

4. ARI: Look at averting up to 4 million deaths per year due to pneumonia which are treatable in the community and the biggest single killer of the world's children.

- See if recognition of warning signs leads to action to TAKE antibiotics or seek care promptly within 24 hours.

5. ORT: Act to avert 1.5 million child deaths per year due to dehydration.

- Look at: how many cases were managed effectively and decrease in deaths. Knowledge alone of first of all need for ORT, what to give, how to mix, amounts to give, times to give (starting points, frequency) is very complicated. On top of this is the fight against giving useless anti-diarrheals! End result: did less children die of preventable dehydration deaths from a not-so-simple therapy?
- See if recognition of warning signs leads to action to administer ORT.
- See if more children are surviving dehydration.

6. HIV/STDs: Twentieth century plague, killing women, men and children

Look at:

- effectiveness of reducing STD prevalence
- effectiveness of messages to change behavior, not just recite knowledge.

c) BASIC HIS RECOMMENDATIONS:

1. Living Census

Give the Census Life!!!! Turn the baseline population-based survey into a multi-year /multi-purpose tool. A census need not be a one time shot. It can be updated periodically through a roll call. Provide space to mark dates of changing behaviors (household level changes and individual changes). i.e. water access, sanitation, date use ORT, female primary education Behavior changes over time, so record dates of change to see which intervention caused change. Give yourselves credit! A denominator gives you either the glass as half full or as half empty, it is two aspects in one.

2. Use the KPC for Evaluation, not Monitoring

Use the KPC for the purpose it was intended. Johns Hopkins University has developed a standardized Knowledge, Practice and Coverage survey which is used by all Child Survival grantees. It is good for measuring hard to measure and long to change indicators. It happens only at beginning, middle and end of

project. This is not a Monitoring tool. It is an Evaluation tool. Ask smart questions: 'what did you feed your baby yesterday?' then perhaps followed by prompted responses. Remember the 'Yes-No' Role Plays. Open-ended questions lead to better information rather than a closed, leading question.

It is better for knowledge and practice questions rather than keeping track of knowledge in rosters but these may be measured through the KPC survey. Actual practices and adopted behaviors are more tangible and better if recorded in rosters.

3. Continue to Track Deaths

If Child Survival projects were allowed to collect but one indicator, 99% of the projects would count deaths. This is the bottom line of any child survival program. What are the major killers in the community? Do the interventions reduce the number of deaths? This is easily understood by members in a community. A Honduran farmer once exclaimed that the Child Survival project was very good and when asked how he knew, he pointed to the village graveyard and said, 'before there were many small gravestones (the ones used for children) but now there are hardly any.' This was the main indicator of success of the project. Rather than accept death as 'fate,' communities can be empowered to prevent deaths.

It is not necessary to institute an elaborate death reporting system for the entire population, which perhaps is already done through the administrative government. Rather a simple cross off a target list with a 'reason' will capture this most grave event. It will show you pregnant women who died (if you track pregnancies), it will show you children under-five who die of ARI, dehydration from diarrhea, and tetanus.

4. Track Pregnancy and Pregnancy Outcomes

Most programs are implementing maternal health components. Look directly at the pregnancies occurring at the moment, not the last pregnancies within the last 2 years. That is already too late. It's a 'done deal.' Try to effect current pregnancies. It's not too late. This is a sure-fire way of subsequently tracking Births. From this list you will be able to see how many women are diverting pregnancy till a later age, how many women are receiving adequate prenatal care and how that affects outcome, how many women are not becoming pregnant (family planning success), how many women are spacing their births for the health of herself and her children already in family.

5. Keep the system person-specific

At the community level direct beneficiaries need to be identifiable by location. CHWs know who and the people are. Divide complete target group among individual CHW responsibility. CHWs can perform OUTREACH activities rather than wait for the already well-motivated to come for services. It is the segment of the population not attending services that are most at-risk.

6. Keep List of Complete Target Groups

A CHW needs a complete list of target group, not the risk groups. Risk categories change over time: children falter, children get diarrhea, children get pneumonia, etc. These are variable. So keep complete lists of targets and focus on at-risks on that list as they change over time.

7. Translate the 'knowledge' indicators into an indicator of 'practice' indicators

There is very little or no correlation between knowledge and practice. As we look to develop a HIS which the 'Information leads us to Act' so too we should expect that of the 'raison d'être' of a HIS. The client using the information to ACT. This is what we should expect of the beneficiaries, if we are to call them as such.

8. Progressive rather than retrospective

Look forward, can not change the past. Want to effect the changes as soon as possible because 'Her Name is Today'. Don't look at last pregnancies but rather current pregnancy.

9. Pro-active rather than passive

Community outreach entails going out to the community to reach the unreached. Not waiting for the unmotivated to arrive, it's the people not coming which are at-risk. It also involves community organization, partnership and ownership.

10. CHW Notebook/Roster/Register/Target List

This most important tool serves as a working map for the CHW to locate and list who s/he is responsible for. It guides the home visitor on her rounds and provides the clues as to who needs what and when. It is filled with names not numbers. The numbers are derived from names.

11. Schedule of Rate Calculations

There is not need to calculate a coverage rate every month. It will not change that often so it will not be interesting to calculate it often. Death rates are over the course a HIS/year. Rates should be calculated at intervals that one can expect change.

12. Monitoring and Evaluation

Monitoring is a daily evaluation, a formative, on-going evaluation. Evaluation has a 'bad reputation' but if there is on-going monitoring then an evaluation should not be a last minute attempt to capture data. And monitoring also entails continual use of HIS data through analysis and action. Therefore, evaluation results should not surprise you.

13. Time is a Finite Commodity

Analyzing data takes a lot of time and thought. Data collection tends to be more time-consuming leaving little time for analysis. Be sure to keep the collection minimal so that more time is spent analyzing what comes in rather than collecting

so much data that it becomes paralyzing since there is little time left for thinking about what the data means. The more time spent collecting data, the less time left for analysis. Remember: timely decisions are made from understanding and interpretation of findings.

14. Data Overlap

If there are parallel lists, look for ways to combine them into one list. Look for areas where data overlaps and dovetail them into one. It is burdensome not only to the data collector but to the person providing the data to constantly be giving data.

15. Spot Checking

A good supervisory tool for checking registers is to randomly visit the homes of families listed every now and again to validate the information.

16. Quantity vs. Quality HIS

A good indicator of an improved HIS is if there are a decreased number of indicators (light weight quantity) and increased power of each indicator (heavy weight quality).

6. *USAID CHILD SURVIVAL DIP for HIS*

The group reviewed the USAID DIP Guidelines (*see Appendix 11*) and feel better able to address the questions. Any revisions will be reported to USAID in the next annual report and in the Midterm Evaluations.

7. *DIP for HIS*

The group developed a generic implementation plan for returning to their projects and introducing their revised HIS in their projects.

- a) Present workshop process to CO staff and project staff
- b) Critique current indicators with health teams (act as facilitator)
- c) Revise indicators as necessary using the Workshop Process as described below
- d) Invite data users to be participants
- e) Field test all new forms and methods
- f) Implement new improved HIS
- g) Supervise the monitoring system (audit, M&E)

8. *PROCESS of WORKSHOP*

As a full group, the overall process of the workshop was reviewed to clarify it's logical framework. This serves as a guide for returning participants as they undergo a similar process in their projects.

- a) Place system in larger context (own country, district, etc.)
- b) Break apart each indicator as to what information is required, look at existing indicators
- c) Use the Information Planning Matrix to determine WHO, HOW OFTEN, and TOOLS.
- d) Provide exercise in using data for decision-making
- e) Create a plan

9. DATA ANALYSIS

A discussion on how data will be analyzed and used ensued which emphasized community involvement in data analysis. Monthly meetings are forums for discussing data and tracking trends and costs. It is also a time to discuss what steps will be taken to respond to the data so that the analysis directly translates into action. If certain indicators continue to report poor performance values, then new approaches and alternatives need to be tried.

Information dissemination to the community includes meetings, bulletins, graphics and flyers. Meetings with MOH are important to share CARE's findings although it is often a sensitive issue if there are discrepancies between data sets. Information is also disseminated to PVO/Headquarters in aggregated form.

10. LEVELS OF INFORMATION: Pop Quiz

How does the newly developed community toolbox:

1. Serve the child? _____
2. Serve the mother? _____
3. Serve the community? _____
4. Serve the District Health Office? _____
5. Serve the Country Office? _____
6. Serve the MOH? _____
7. Serve CARE/Atlanta? _____
8. Serve USAID? _____
9. Serve Congress? _____
10. Serve the planet? (world body of literature) _____

The full group came up with the following after taking the quiz individually:

CHILD: person-specific for preventive and curative care, identifies at-risk, for healthy, happier better citizens, immediate effect, provides more chance of survival

MOTHER/FATHER/CAREGIVER: increase communication and feedback system, empowering, able to make more informed decisions, careseeking, able to demand more services, case management at home

COMMUNITY: improves child survival in community, strengthens organization, empowers, decision-making, prevention efforts, increases confidence, provides

ownership of project, increases independence, cause-specific killers, capacity-building, measure own progress, increase participation and management of health risks

DISTRICT HEALTH OFFICE: track and monitor health status, high-risk identification, allocate resources better, decision-making tool, key to informed decisions

COUNTRY OFFICE: know if we reach beneficiary, able to measure outputs, effects and outcomes, fund-raising , more pro-active, cost effective, more accountability, planning tool

MOH: affect allocation of resources, provides them with community level reality check, client-oriented, policy effects, gives them rationale for policies

CARE HEADQUARTERS: API data, effectiveness, TA needs, lessons learned, donors, strategic planning, decision-making, comparing interventions cross-COs

USAID: is the funding making a difference? lessons learned, makes them more flexible, reality checks

CONGRESS: policy-making, equitable, allocate their resources

PLANET: solidarity, peace, saves forests (less paper work), healthier, happier families, more informed choices among inhabitants, sustainable development.

11. REVIEW OF WORKSHOP GOALS

Participants reviewed workshop goals and objectives, the product list and their expectations.

ïRather than doing tasks- doing a cross check of counting children, the key to value-creating work is mastering Process, how bits of work that form a service come together. This is the work of Angels. In a world where so many people are so deprived, it's a sin to be inefficientî.

12. COUNTRY CONSULTATIONS

Each Country Office was provided with an individual consultation by the facilitator the following day. Synthesizing the individual country-specific work done during the week, the facilitator reviewed each country's HIS with the participating staff member and made recommendations.

See *Appendix 12* for facilitator reviews and recommendations and information planning matrices per country.

13. CLOSURE

A closing ritual was performed around an information box. On an upside-down box, photographs of children, from participant's wallets were taped. Participants joined hands and a message was sent around the room, a silent squeeze. This was a

language understood by all in spite of some difficult language barriers experienced during the workshop.

The box in the center brought focus as to why the group gathered and worked for the past five days on information systems. Our children, all children of the world, are children of today who we are, as a whole, responsible for. We are working towards a better future for them, one with Well-Being and hope.

A community-based HIS which is Child-Centered and Child-Specific is a powerful tool if used wisely to help ensure a better world for every child.



Photo 5: Closure Information Box with Dear One's Photos

V.

WORKSHOP EVALUATION

A. Daily Evaluations

Evaluation forms were filled out at the end of each day. The responses were discussed among the facilitation team (Donna Sillan, David Newberry, Michelle Kouletio, Judiann McNulty and Jim Rugh) in the evening and the following day's design was adapted accordingly. The evaluation results were feedback each morning to the full group.

Participants expressed what was the most important, and the least important regarding content, and the most helpful and the most hindering regarding process. Lastly, recommendations were elicited. Participants provided valuable feedback to the facilitator which was integrated into the workshop design.

B. Final Evaluation

The final evaluation forms were filled out at the end of the sixth day, combining the evaluation of both the HIS Workshop (Day 1-5) and Children's Health Strategy Session (Day 6). The tabulated results follow.

1. Logistics

Participants were pleased with the logistics of the workshop. The workshop site was desirable and the facilities excellent. Participants sat in chairs arranged in a horseshoe without desks. This removed a barrier to communication. Special gratitude was expressed to Michelle Kouletio for doing an excellent job at responding to even petty needs.

In terms of suggestions, a participant who expressed a need for desktops (can never please all of the people all of the time) and a banner. One participant expected more professionalism from the organizers and improved translation.

Overall, the workshop organization was highly satisfying.

2. Facilitation Methodology:

The methodology which was most effective was the direct presentation, small group work, tools and matrices and Project HIS development. The homework was generally rated as beneficial and the group dynamics were excellent.

3. Expectations:

Most expectations were met during the course of the workshop. Developing tools and indicators at the project level was met, however developing a training module for the project level was not applicable. The process did not lead to the ability to design project level modules, as the tools still needed to be introduced and approved by all parties in the country offices and projects. Therefore, it was an unrealistic expectation. Two participants expected to create a HIS User's Manual. The foundation for this has been developed during the workshop, but the details will be country-specific. It would be a good workshop follow-up task. Expectations that were met were: sharing lessons,

developing a set of indicators, designing a plan for collecting data, designing a monitoring and evaluation plan.

4. Overall:

The overall workshop was rated 'Excellent' by 63% of participants. The effectiveness of the interpreters was rated 'Excellent' by 67%. 100% of participants feel they are able to share what they've learned with their project staff. An increased knowledge of CARE headquarters operations occurred among 84% of participants.

In terms of implementing a more aggressive health information system in current projects, 63% are certain that they will and 26% are very certain. In terms of future projects, 31% are very certain and 56% are certain that they will implement a more aggressive HIS.

The aspects most liked about the workshop were (*numbers reported*):

- methodology
- participatory nature (4)
- facilitation (3)
- very focused
- understandable
- group dynamics (3)
- much learning
- using examples from our projects to develop tools: relevant
- excellent understanding by facilitator of project content and variation
- HERS
- guidance in the development of the project's indicators
- the idea for a great register tool for monitoring and evaluation
- the sister program
- product-oriented
- great technical direction
- lessons learned from other participants (4)
- field visit to CDC (3)
- some of guest speakers (2)
- exercises of analysis, criteria matrix (3)
- simple and best way of collecting and using data
- know it's not too late to re-focus
- enthusiasm
- learned a lot about HIS at community level (2)

The aspects least liked were

- panel discussions didn't provide the information they could have
- long hours with little free time (4)
- some of the logistics
- finance lecture was too directive and inappropriate
- presentation of case studies (2)

- good review of my HIS Plan before we start it from TA (7)
- visits from CARE Atlanta staff (3)
- share other country's HIS with each other (2)
- follow-up questionnaire from Atlanta/feedback (2)
- standardization (2)
- other registration formats that could help project develop
- inter-country visits/share experience with others

Unanswered questions:

- MER
- API
- How do we collaborate with other CARE program sectors: MO for multi-sectoral approach?
- At what stage we monitor the functioning of our HIS?
- Inform us about other countries
- Need for a training manual/user's manual

Suggestions from participants for future workshop topics:

- | | |
|---------------------------|---|
| • Partnering (11) | • Standardization of Indicators |
| • Supervision (11) | • Preview toolbox of each country |
| • Sustainability (10) | • Baseline survey |
| • Gender Issues (5) | • Operations Research |
| • Education Methodologies | • Lessons Learned |
| • Project Evaluation | • Project financing |
| • Project Construction | • Case studies of the operationalization of the HHLS approach including health security |
| • Project Management | |
| • Program Planning | |



Photo 7: Workshop Resource Persons Working Behind the Scenes

C. SYNTHESIS of FINAL EVALUATION FORMS:

Children's Health Strategy:

1. Facilitator synthesize and then guide us through to more detailed 'Best Practices' by writing examples from synthesis of previous presentations.
2. Expectation from the guest speakers was not met. Too general
3. Provide more Handouts
4. More time needed for further discussion and synthesis
5. Still unclear about concept of best practices
6. Little discussion of strategies and my expectations weren't fully met



Photo 8: Part of the French Speaking Delegation

Appendix 1
Needs Assessment Results

**CHILD SURVIVAL 1997 WORKSHOP: INFORMATION SYSTEMS
NEEDS ASSESSMENT QUESTIONNAIRE**

	Most Helpful	Most Hindering	Recommendations	Vision of Ideal	Expectation of WS
NIGER	Data collection tools at village level: immunization register field agents quarterly reporting form	* Quality & reliability of data collected by VHW & TBA's *Indicators measuring how well village mgt. committees function	*Village-level system adapted for low literate communities * To have indicators to monitor management committees	*an information system which measures progress reliably * identifies problems * is simple * is computerized	Tools & indicators adapted to project thru the exchange of experience with others
HONDURAS	*System designed using participatory approach with the involvement of all system users. * Results-oriented * Linked to M&E plans * Decentralized *Used for managerial decisions	* Number of indicators is unwieldy * Complex * Needs to respond to donors, MOH and CARE.	Learning from other systems	A system which functions as a tool providing info on a timely basis to mgt. levels to make decisions & consistent with the projects M&E needs.	Recommendations & practical ideas to improve the system based on others' experiences.
KENYA	*Data generation on clinical mgt. is done by CHW's *A community-based health system is based on chalk & board in community	*Amount of CHW data is excessive & not fully utilized *Limited CHW literacy	*Reduce quantity of information collected * Project staff be oriented on critical data analysis & use	A system responding 1st to needs of grass roots and 2nd to project implementors.	*To develop a training module for project staff, CHW's and village health committees * A strategy for M&E of our HIS system * Identify realistic system
BOLIVIA	*It is compatible with CIES (local NGO) *Identifies problems *Based on spread	*Changes in info needs from CARE Atlanta *Failure of Atl. to recognize association	Take into consideration work with partners when designing system.	An ideal system should: *provide info that is useful for planning *evaluate impact	*Learn how MER can meet the needs of the "ideal" system. *Share experiences

**CHILD SURVIVAL 1997 WORKSHOP: INFORMATION SYSTEMS
NEEDS ASSESSMENT QUESTIONNAIRE**

	Most Helpful	Most Hindering	Recommendations	Vision of Ideal	Expectation of WS
	<p>sheets & not a complex computer program *Developed through CIES & CARE *Compatible with Bolivia's nat'l info sys *Was useful during MTE</p>	<p>info tied to other NGO *Lack of community feedback loop, info is not returning to communities.</p>		<p>*monitor activities *write reports to donors Characteristics: *easy to use *requires minimal time * used by decision-maker *concise & clearly defined *donor requirements met *measures objectives *used by project staff *project staff participate in design *system is organized BEFORE computer sys.</p>	<p>with other CS projects</p>
NICARAGUA	<p>*It obtains info on socio-econ, health & agric. *Produces census *Lists women & children *Community diagnosis *Identifies high-risk *Classifies communities by agroecological zone *Brings community closer to MOH</p>	<p>*Lacks vital information to identify high-risk, now only socio-econ. survey is used. *CHWs experience delays in recording data of ORT & ARI *Computer system is too extensive, needs a permanent person * doesn't generate all required reports.</p>	<p>*Undertake diagnosis of information needs *Design a system that will identify high-risk groups in community *Include specific info in epidemiological maps *Involve participation of different members in its design. * Train CHWs to use info in planning & targeting vulnerable groups.</p>	<p>A system that helps to monitor indicators, is able to produce timely info for decisions</p>	<p>Share lessons of others Learn new concepts Share results with project staff upon return</p>
TANZANIA	<p>Not applicable: just starting</p>	<p>Not applicable: just starting</p>	<p>Not applicable: just starting</p>	<p>A simplistic, easy, collection of data that empowers us to make good mgt. decisions &</p>	<p>*A solid outline for HIS which can discussed with partners, adjusted to the project</p>

**CHILD SURVIVAL 1997 WORKSHOP: INFORMATION SYSTEMS
NEEDS ASSESSMENT QUESTIONNAIRE**

	Most Helpful	Most Hindering	Recommendations	Vision of Ideal	Expectation of WS
		NOTE: *our partners don't have computer access *Low literacy levels		provides proper project guidance.	*The understanding & info we will need to convince our staff & partners that this is the best HIS and teach them how to run the system & make it theirs.
BANGLA-DESH	Flow of info within project is rapid. Interaction is frequent among project staff so internal decisions are quick Access to MIS of MOH (process indicators) Regular reporting	Lack of community involvement in the monitoring system Lack of strategies to monitor institutional strengthening (phase 1) Too dependent on MOH MIS Less data analysis & its use by MOH	Develop strategies to involve beneficiaries in monitoring process Strengthen qualitative monitoring process Develop strategy to monitor institutional strengthening indicators	Less hierarchy within organization for info flow Beneficiaries involved in the process Info collectors at all level should know WHY Standardized indicators	*Develop a standardized information system for CS projects within the CARE family *Share experiences *Review strategies, methods of collecting, assessing and using different types of indicators *Develop methods to assess sustainability, institutional strengthen including conceptual issues * A User's Manual for a manual system to serve as a foundation
HAITI	Data collection is based on MOH service data & thus is not a burden for partners Data is entered into a	Time lag from the field (Partners) Multitude of problems with census-based system	Develop a system which is population-based & not dependent on computer-literate people	Easy-to-use, responsive, and flexible	Possible prototypes of HIS adapted to CARE More HIS in general & feedback loops for

**CHILD SURVIVAL 1997 WORKSHOP: INFORMATION SYSTEMS
NEEDS ASSESSMENT QUESTIONNAIRE**

	Most Helpful	Most Hindering	Recommendations	Vision of Ideal	Expectation of WS
	spreadsheet & feedback to community every 4 mos.& discussed	Need more time (5-10 years) to invest in a functioning census system			different levels of the system.
MOZAMBIQUE	Have no system yet. Common indicators & definitions with MOH & all NGO's in past project All partners involved in analysis would be ideal.	In other projects: * huge number of indicators for the MOH *very poor numeracy even where literacy is good.	Measure process too. System should be population-based, HIS of MOH should be studied & used to report to the pop. and compared to the population-based data.	A few, focused and useful indicators Operated entirely by our partners with CARE helping to validate & analyze	A set of indicators A feasible plan for collecting data Training tools A M& E Plan
PERU	Hope for at-risk referrals Simple, comprehensive forms	HIS is not popular & a new system less so Info overload!! No more admin. work	*Cut the # of indicators *Strike a balance between process & results * Teach people how to use data as information to be analyzed and acted upon in decisions.	Everyone needs to know the consequences of their actions. Arrive at appropriate process & results indicators according to the needs of the project only.	Get to know all elements needed to approach the ideal system. Share trials & tribulations of others.

Appendix 2 Participant List



From back left to front right: *David Newberry, Jim Rugh, Sani Mamen Laminou, Sani Aliou, Alfredo Fort, Wahidul Islam, David Hintch, Dan Wendo, Jason Dang, James Okoth, Mary Wieczynski, Linda Yaneth Bustamante (vistor), Luis Espejo, Gabriel Ponce de Leon, Michelle Kouletio, Carmen Monasterios, Georgina O'Connor, Virginia Swezy, Alicia Leiva, Elena McEwan, Victoria Ndalawa Olivier, Anne Devine, Marisabel Governer, Karmun Nahar Sulta, Nazerah Subedar, Elsa Victoria Lopez, Gloria Manzares, Paula Brunache, Marie Micheline Dieudonne, Judiann McNulty, Donna Sillan.*

Second Annual Child Survival Workshop Participant List

CS XII Programs

- Paula Brunache, Project Manager, CARE Haiti
- Micheline Dieudonne, Training Officer, CARE Haiti
- Anne Devine, Project Manager, CARE Mozambique
- Alfredo Fort, Health Sector Coordinator, CARE Peru
- Luis Espejo, Project Manager, CARE Peru
- David Hintch, Project Manager, CARE Tanzania
- Victoria Ndalawa, Assistant Project Manager, CARE Tanzania

CS XI Programs

- Wahidul Islam, Project Manager, CARE Bangladesh
- Kamrun Nahar Sulta, Assistant Project Coordinator, CARE Bangladesh
- Alicia Leiva, Co-Project Manager, Project HOPE Honduras
- Elsa Victoria Lopez, Co-Project Manager, CARE Honduras
- Dan Wendo, Project Manager, CARE Kenya
- James Okoth, Health Information Officer, CARE Kenya
- Elena McEwan, Project Manager, CARE Nicaragua
- Sani Aliou, Project Manager, CARE Niger
- Sani Mamen Laminou, Health Information Officer, CARE Niger

CS X/XIII

- Carmen Monasterios, Project Manger, CIES Bolivia

Title II Food Security

- Gloria Mazanares, Title II Program Manager, CARE Honduras
- Georgina O'Connor, Title II Program M&E Sub-Manager, CARE Honduras

Interpreters

- Becky Araiza, Spanish
- Isabelle Cousineau, French
- Jason Dang, French
- Marisabel Gouverneur, Spanish
- Misrak Makonnen, French
- Elizabeth Miller, French
- Gabriel Ponce de Leon, Spanish
- Blanca Reiggs, Spanish
- Virginia Swezy, French
- Mary Wiczynski, Spanish

Training Team

- Donna Sillan, Facilitator
- Jim Setzer, Stan Foster and Nazerah Subedar, Rollins School of Public Health
- Maurice Middleberg, David Newberry, Judiann McNulty, Carlos Cardenas, Michelle Kouletio, Health & Population, CARE USA

Appendix 3
MER MYTH HANDOUT

THE MER MYTH: MAGIC BULLET OR UNNECESSARY DEPENDENCE ON A SOPHISTICATED COMPUTER PROGRAM?

Jim Rugh 4-24-97

There are many questions being asked about the MER, indicating the need for there to be some clarity on what it is, what can be expected of it, and what should not be expected of it. Let me try to respond to some of those questions.¹

1. *What is MER?*

There are at least three answers to that question: a) The **MER** (Monitoring, Evaluation and Reporting) **System** is a comprehensive set of manuals and training materials which promote systematic project design, log frames, M&E plans, data handling and analysis, and reporting systems. b) The **MER Management Software program** is an integrated database, analysis and reporting tool to help project managers automate the collection, analysis and reporting of data from routine project monitoring and periodic surveys for baseline and evaluations. And c) the **MER Initiative** is a project to test and further develop the MER package for wider distribution and use.

Version 1.0 of the MER program was developed during the past two years by Gerard Van der Burg for projects in Honduras. Based on that experience four things are currently happening simultaneously: much more comprehensive manuals and training materials are being developed; a new version of the software is being developed (ver. 2.0 using Visual Foxpro); the program-under-development has been introduced to and is beginning to be used by more projects in Honduras, as well as projects in Nicaragua and El Salvador; and plans are underway to involve 10 pilot COs in the testing and further development of the whole MER system in a greater variety of conditions.

2. *What is going on with the iMER Global Initiative?*

During the DME Strategic Planning Conference in Atlanta last November the need was expressed for there to be better project Management Information Systems (MIS). A list of criteria was drawn up which project MIS should meet. It appeared that the MER showed the most promise of all known systems in use by CARE projects. Participants asked for that system to be made available to other COs and projects.

In December a survey was sent to all DME Cadre asking if there were other existing systems which meet project management needs, and asking for volunteers to be part of a team to test and further develop the MER package. This included the CO's willingness to invest time and finances into the initiative. After a process of discernment and considering a number of criteria the following COs were invited to participate in the MER Phase I testing process: Cambodia, Nepal, Sri Lanka, Kenya/Somalia/South Sudan, Egypt, Mali, Haiti, Honduras, Nicaragua and Guatemala.

¹ Most of these questions were posed by Geoffrey Chege, ACD CARE-Uganda.

The opening event of the CARE-International-supported global initiative will be the MER Project Start-Up workshop in Copenhagen (at the invitation of CARE-Danmark) May 20-29. With a theme of *isystematize before you automate*, participants will go through the essential steps of project design and developing integrated M&E systems before learning how to use the MER software. This will include theory (including reviewing and further developing the MER manuals), demo-tutorial and software program (including the initial setting up on the MER software of one of the projects in each CO where this system will be tested), paper & computer-based training materials (use by participants and further development for use in training project staff), and the development of the MER Initiative Detailed Implementation Plan (DIP).

The long-range plan is to have a satisfactory set of materials and software program ready for wider testing in an additional 10 COs during Phase II (FY99), with a goal of having a ready-to-market package ready by July 1, 1999, for use by any other interested CARE COs and any other development agencies.

3. What is to be achieved through MER? What needs will it meet within Country Offices?

As mentioned above, MER includes guidelines and training materials to promote more systematic project design, M&E plans, etc. Of course we've been trying to promote better project D+M&E in other ways as well. We have then left it up to the responsible staff in each project to use whatever paper-based system or computer-based program they are familiar with (database, spreadsheet, word processor) to design a monitoring and reporting system to meet their needs. But the MER also has the potential of offering a software tool which enables project staff to effectively put those theories into practice.

While the MER software program has built into it the ability to incorporate many aspects of project monitoring, evaluation and reporting, it has an open architecture and can be used simply to collect data which can be exported to other programs (e.g. SPSS, EPI-INFO) for statistical analysis, and others (Excel, Word) for reporting. Templates will be developed for projects of a variety of sectoral interventions, which will make it easier for project staff to get started in using this program. But there is still the flexibility for those who want to be innovative to develop their own indicators, data analysis and reporting systems.

The MER system will provide an integrated package of tools for the management of information related to project and organizational management processes. This includes user friendly tools for standardizing and automating integrated information management, analysis and reporting to all stakeholders.

4. For whom is it meant?

First of all, it needs to be made clear that this is not a HQ-initiated system that will be imposed on all COs. It is a system for project MIS developed in one CO which shows

promise, and which we want to make available to other COs who feel the need for better project MIS.

Where Project Managers and CO SMTs are satisfied with current systems for data management, analysis and reporting, there may be no need to switch to the MER system.

On the other hand, where the need is felt for something better than what is currently being used, the MER shows great potential.

But it will not be ready for general dissemination until July, 1999. Based on the experience of those who have developed other software programs, it is wise to fully develop and test a program before sending it out, rather than to respond to requests from those who are anxious to start using it. Thus patience is required on the part of those who feel the need for a better project MIS. We're taking a conservative approach, wanting to be as certain as possible that the system works well before disseminating it. (Those COs who have volunteered to be a part of the testing process realize that it is not a ready-to-plug-in system; it still is in the testing and further development stage.)

5. How does MER relate to the API, PIR and other reporting formats?

In order to fill out any report a project needs to have a good data collection and information management system. Where does a PM look for the information he/she needs to prepare the PIR or API? With a good MIS it should be possible to mostly automate report preparation. Thus for a project with a functional MER, which includes among the indicators it monitors those called for in the API, it should be possible literally at the touch of button to prepare and electronically transmit the API report. Likewise, once properly set up, numerical data can be exported to spreadsheets within the PIR, and even qualitative information transferred to a template in MS Word.

6. Would the MER address the need for a standardized, user-friendly program that could be used for baseline, midterm and final evaluations?

Certainly. MER will offer an integrated platform for keeping track of data collected throughout all phases of a project, including surveys conducted for baseline and evaluations, as well as on-going monitoring. Its best use is based on a database which includes a registry of all project participants, so it can track trends over time by individual or by various sub-strata of beneficiaries. But it can also be used for anonymous sources, such as rapid assessments or other surveys.

7. Is MER going to address the issue of impact evaluation?

Again the answer is *certainly*. If you think about it, one of the most important tools needed for impact evaluation is the ability to correlate baseline data with that obtained from an end-of-project evaluation survey. That is difficult to do if the methodology and database used for the baseline is different and separate from that used for later surveys. With a life-of-project, integrated system like MER it will be much more feasible

to show not only *before* and *after* measurements of impact, but to correlate them with indicators of project processes, outputs and effects.

In addition, the guidelines with MER will help design evaluation systems which take into account the need for control groups, sample size and selection, appropriate statistical analysis, graphical and other forms of presentations and reporting, and more.

8. *What is the leadership and governance of the MER Initiative?*

The MER Initiative (the widespread testing and global spreading of the MER system) is supported by CARE International. Those national offices which have been most involved to date include CARE-USA, CARE-Canada, CARE-Danmark. Others who have already expressed different degrees of interest and support include CARE-Australia, CARE-Deutschland, CARE-Oesterreich and CARE-UK. The over-all MER Advisory Committee is made up of representatives of these CI members plus representatives of the pilot COs participating in the MER Initiative.

On behalf of the CI Advisory Committee, more direct oversight is provided by Jim Rugh, DME Coordinator, on behalf of the CARE-USA Program Measurement Task Force (PMTF), and Yvette Evers on behalf of the CARE-Canada PMTF.

The MER Team is lead by Gerard Van der Burg, who will be moving from Honduras to Canada, where he will be based at the CARE-Canada HQ in Ottawa. Other members of the MER Team in Honduras include Darcie Diana Lara, Technical Coordinator (developing manuals and training materials, assisted by several consultants), and a team of three computer programmers, also in Honduras. Rich Caldwell is helping develop the project design aspects of the manual-based and computer-based training materials. Helen Mousseau of CARE-Canada Information Systems (IS) and Marie-Ange Binagwaho and Greg Sjogren of CARE-USA IS will be available to help provide TA related to the setting up and testing of the software in pilot COs.

In summary it should be noted that there are those who are very anxious to have what they perceive as a *magic bullet*, which will, they hope, by itself solve all their project MIS needs. And there are others who don't see why computers should be relied upon to collect and analyze project monitoring information.

To those on the first end of the expectation spectrum, we issue a warning: no software program, by itself, can do all that needs to be done to provide reliable, timely and effective project information management. Remember, *systematize before you automate*. In other words, before an effective project MIS can be set up the project's design and M&E plans need to be well thought-out and systematized. There's much more to a computer program than just collecting data on random indicators. It needs to fit into an integrated process if the system is to be useful in providing managers with the kind of information they need for decision making.

To those on the *why should a sophisticated computer program be necessary?* side of the spectrum, we can say *if what you've got satisfies your needs, fine*. But if and when

the MER system is tried and ready, we'll also challenge your system to provide you with an equivalent level of information management.

The bottom line: MER shows great promise, but give it time to be thoroughly tested under many conditions before expecting it to help CARE do much more effective D+M&E.

Appendix 4
Seven Sieves

SEVEN SIEVES

	1	2	3	4	5	6	7
INDICATOR	Address a problem?	Relevant? Proven association?	Nice to know or need to know?	Is it useful in planning and management?	Possible to measure technically, financially, and managerial?	Worth the time and effort?	Measures process or impact?

Appendix 5
Information Requirement Form

HOMEWORK: INFO REQUIREMENTS

Put # of indicator next to each piece of information

Demographics		(# indicator)
DENOM- INATORS	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	

Vital Events (Births, deaths, migrations, pregnancies)		
DENOM- INATORS	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	

Service Statistics		
NUMER- ATORS	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	

HOMEWORK: INFO REQUIREMENTS

ex. Honduras

Objective:

% of new borns with adequate birth weights

1.1e

% of under-2's with adequate growth trends

1.1h

		Demographics	# indicator
Denom- inators	1	# of children under two years of age	1.1h
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		

		Vital Events (Births, deaths, migrations, pregnancies)	
Denom- inators	1	# of newborns	1.1e
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		

		Service Statistics	
Numer- ators	1	# of under-two who are weighed	1.1g
	2	# of under-twos that gained weight adequately	1.1g
	3	# of newborns with weights over 2500 grams	1.1e
	4		
	5		
	6		
	7		
	8		
	9		
	10		

Appendix 6
Stan Foster's Presentation Outline

***Monitoring at Community, Health Facility, and District Levels
Key to Implementation Affirmation, Problem Identification, and Program
Strengthening Lesson Learned***

***Stanley O. Foster, MPH
Visiting Professor
Rollins School of Public Health, Emory University***

Lessons from Smallpox Eradication

- Need for technology (freeze dried vaccine, jet injector, bifurcated needle)
- Flexibility in strategy
Mass Vaccination
Mass Vaccination and Coverage Assessment
Surveillance and Containment
- Indicator upgrading
1955 - Number of Vaccinations
1966 - Vaccination Coverage - 30 cluster survey adapted to developing world
1968 - Cases
1970 - Infected villages
1972 - Surveillance Interval - Interval in days between first case and detection
1973 - Containment Interval - Interval in days between detections and last case (14 days if perfect)
1974 - Rash cases detected
- Actors
Motorcycle surveillance teams
Identification of one person as responsible in each district - 420
Reward - to first person to report
Reward to first public to report and first health worker to report
House to house survey for detection of rash cases
- Rangaraj - Optimism
- Sabour - Use of indicators at delivery level to identify and solve problems
- Kamrul Huda - Leadership - Commitment, responsibility and action

Lessons Learned from Child Survival

TBA in Bangladesh
Village vaccination register in Cambodia
Nutrition monitoring in Vietnam

Challenge for this Workshop

- Basic indicators useful at all levels - community, health area, district, project, USAID indicators need to be related to those factors with greatest relevance to the goal - more than survival - **Well Being and Hope**
- Indicators answer programmatically important question at each level, e.g. EPI
- **Community** - progress toward objective, identification of left outs for follow-up
- Health Area - identification of good coverage areas for affirmation, low coverage for strengthening
- **District** - identification of high performers for commendation, identification of health centers needing strengthening
- **Project** - baseline for setting targets, indicator for measuring progress toward objectives, identification for problem areas for investigation strengthening, documenting program progress
- **USAID** - individual program and global assessment, accountability to congress

Bottom line - coverage data - more specifically measles coverage data by village and health facility are of greater use than survey

Principles of data collection

- Monitoring is as important for affirmation as problem identification
- Data collection needs to be limited to that needed, used, and answering a programmatic important question
- Data needs to be used, at least in part, at level of collection
- Each level (community, health area, district, project, USAID has its own unique need for data
- Data transmission should be limited to that needed, used, and feedback
- Work involved in data collection, analysis, and use should justify the work involved in its collection

HIV exercise

HIV indicators - What should we measure?

- Key questions

Appendix 7
Matrices of Methods and
Interventions per Country Office

MEASUREMENT METHODS:

As reported in 1996 DIPS

	KPC	Baseline	MTE Survey	Final Survey	Additional Survey	MOH records	Clinic
Honduras	x	x	x	x			
Bolivia	x		x	x			
Niger	x	x		x	x		
Bangladesh	x	x	x	x		x	
Tanzania	x		x	x		x	
Haiti	x		x	x			x
Mozambique	x	x		x	x	x	x
Haiti	x					x	x
Peru	x					x	x
Kenya	x		x	x	x	x	x

Appendix 8
Information Planning Matrix

Appendix 9
Sample Community Tools: Rosters and Registers

Vital Events Registers

Pregnancies

Births

Date	Name of Woman	House #	DOB	Expected Del. Date	TT1	TT2	Name of Child	DOB	Sex	Comments

Deaths

House #	Name Died	Date of Death	Date of Birth	Age	Sex	Cause

Migrations in and Out

House #	Name of Household Head	# in HH	In or Out	Date Moved	Moved From or To	Reason

Appendix 10
Case Study: Peru

Appendix 11
PVO Child Survival DIP Guidelines

PVO Child Survival Program Detailed Implementation Guideline - October 1996

Section F. PROGRAM MONITORING HEALTH INFORMATION SYSTEM

F.1 HIS Plan

Discuss how program progress will be monitored. Will you track individual beneficiaries and the services provided by them over time (census-based tracking of individuals), and/or will you monitor program activities and services provided to beneficiaries (service, activity, or contract-based reporting)?

F.2 Data Variables

Specify which data variables you will collect to monitor the program, how this data will be collected, from whom it will be collected, how often it will be collected, and by whom. Describe any qualitative (ethnographic or non-quantitative) data collection which you plan to do on a regular basis.

F.3 Data Analysis and Use

Describe plans for data analysis, use, and dissemination to program staff, the community, MOH authorities, and the PVO home office. How will the program use data collected on specific variables to improve the coverage or quality of intervention activities?

F.4 Other HIS Issues

How will you protect the confidentiality of personal health data? Identify the materials and equipment that are needed for the HIS. Describe the program's needs for technical assistance, if any, in developing the HIS. State when the program HIS will be fully operating.

Appendix 12
Recommendations & Information Planning Matrices per
Country Office

BANGLADESH

Indicators:	Activity	Info	Info Tool
Immunization	QOC center 12-23 coverage	supervisory checklist % 12-23 completed	CHILD monthly KPC survey
CDD	ORT use	# cases managed <2 reports	MOH forms & KPC monthly performance
FP	CPR improve QOC	# of eligible couples qualitative	KPC survey CHILD monthly CHILD monthly
Vit A	coverage participation	#6-6yrs VAC planning meeting	KPC survey CHILD monthly meeting minutes

TOOLBOX:

1. CHILD monthly report
2. KPC survey
3. MIS format of MOHFW
4. CHILD HIS

Recommendations:

This is a special case in that CARE Bangladesh is implementing a MIS not a HIS. They are cross-checking government data and upgrading supervision of the government system. For example, cross-checking ORT use in diarrhea prone, high-risk areas.

INFORMATION PLANNING MATRIX FOR BANGLADESH

INDICATOR	INFO Required	METHOD of Collection	Who to Collect?	Frequency	Tool Used to collect
EPI					
immunization coverage among 12-23 mo children	# of children below 2 years of age,	1. baseline KPC survey, 2. mid-term KPC survey, 3. Final KPC survey	CARE staff, MOHFW	annually	USAID KPC formats
increase quality of care at the outreach center	1. availability of EPI advance schedule at the thana level, 2. MOHFW routine reporting (MIS), 3. qualitative checklist of C.H.I.L.D. HIS, 4. monthly report of CHILD project, 5. supervision plan of MOHFW managers/supervisors	meetings/field visits	CARE staff, MOHFW	1. quarterly 2. monthly 3. semesterly	1. checklist (CHILD HIS), 2. CHILD monthly reporting format, 3. MOHFW MIS format
CDD					
increase ORT use among mothers of children <2 years	# of mothers managing diarrhea cases per standard protocol, # of children <2 years, supply of ORS packet at outreach sites, training needs of MOHFW workers	1. qualitative assessment, 2. KPC survey, 3. daily monitorings, 4. outreach site visits, 5. community visits	CARE staff, MOHFW	semesterly	KPC survey formats, checklists (CHILD HIS), MOHFW MIS format, CHILD monthly performance report
FP					
increase the proportion of mothers using contraceptives who do not want another child in the next 2 years;	# of eligible couples, availability of advance schedule of satellite clinic, FWC monthly reports	1. baseline KPC, 2. monthly reporting, 3. qualitative assessment using CHILD checklist (HIS)	CARE staff, MOHFW	1. annually 2. monthly	KPC format, CHILD HIS checklist, CHILDS monthly performance report
Improve quality of services at satellite centers	satellite clinic plan, MOHFW staff position	qualitative assessment, monthly reporting (CHILD reports), compilation of checklists	CARE staff, MOHFW	1. annually 2. monthly	KPC format, CHILD monthly reports
VITAMIN A					
increase coverage of Vit A capsules among children aged 6 months to 6 years	# of children 6 months to 6 years	1. baseline survey, 2. post VAC round assessment report, 3. NID report, 4. MTE and Final KPC survey	CARE staff, MOHFW	1. annually 2. semesterly	KPC formats, CHILD monthly reports
participation of NGOs in VAC distribution program	VAC distribution plan	planning meeting	CARE staff, MOHFW, NGO	semesterly	records and minutes

BOLIVIA

Indicators: Activity		Info	Info Tool
Family Planning	knowledge of 2 methods	# of WRA	List of eligible couples
	use of modern method	# users	List of eligible couples
	birth spacing >2 years	# spacing children	KPC survey
STD	knowledge of 2 preventive methods	# who know	List of eligible couples
	condom use >15's	# use condom	KPC survey
ORT	decrease # of diar	# with diarr.	List of Under-2s
	ORT usage	# use ORT	List of Under-2s
	Seek help	# seek help	List of Under-2s

TOOLBOX:

1. List of Eligible Couples (STDs & FP)
2. List of Under-2s (ORT)
3. KPC survey

Recommendations:

- Family planning and STD: targeting of couples (women and man included)
- May want to have a special Diarrhea Notebook per CHW
- ORT objective to decrease # of diarrhea means preventing diarrhea. Do you want to prevent dehydration?
- Initiate death reporting.

INFORMATION PLANNING MATRIX

BOLIVIA

WRA=Women Reproductive Age

INDICATOR	INFO Required	Method of Collection	Who to Collect?	Frequency	Tool Used to collect
1. % of WRA who know at least 2 contraceptive methods	# of WRA # of WRA who know 2 methods	Questionnaire	Project staff	1st & 3rd year	KAP
2. % of WRA who use modern FP method	# of WRA # of WRA who use modern method	Questionnaire Registers	Project staff Volunteer promoters	1st & 3rd year annual	KAP forms
3. % of WRA who space their pregnancy at least 2 years	# of WRA # of WRA spacing births	Questionnaire Questionnaire	Project staff	1st & 3rd year	KAP
4. % of WRA who know 2 ways of preventing STDs	# of WRA # of WRA who know 2 ways of preventing STDs	Questionnaire Questionnaire	Project staff	1st & 3rd year	KAP
5. No. of WRA who older than 15 years who use condom	# of WRA # of WRA who older than 15 years who use condom	Questionnaire Questionnaire	Project staff	1st & 3rd year	KAP
6. Decrease the # of diarrhea cases among under-twos	# of under-twos # of cases of diarrhea among under-2s	Questionnaire Register	Project staff Volunteer promoter	1st & 3rd year annual	KAP
7. # of under-twos with diarrhea who used ORT	# of under-twos # of cases of diarrhea among under-2s who used ORT	Register	Volunteer promoter	annual	KAP
8. # of mothers <2s who sought help if child had diarrhea	# of mothers under-2s # of mothers under-2 sought help	Questionnaire Register	Project staff Project personnel	annual	form

HAITI

Indicators:	Activity	Info	Info Tool
Maternal:	PNC check-ups	dates of PNC	Pregnancy Register
	TT	dates of TT	Pregnancy Register/ confirmed by Birth Report
	At-risk knowledge	question	KPC survey
	Weight-gain	weight	Pregnancy Register/ confirmed by Birth Report
	Attended births	who delivered	Pregnancy Outcome report
(Birth report)	Knowledge Safe Delivery	how delivered	Pregnancy Outcome report
(Birth report)	Post-Partum	checks	dates of PPC Birth Reports
Family Planning	CPR of 15-49 yrs	methods/dates	List of WRA
	Knowledge of 2 methods	question	KPC survey (or drop)
	Knowledge of 2 sources	question	KPC survey (or drop)
	Knowledge of 2 benefits	question	KPC survey (or drop)
AIDS	access to STD service	# cases referred	MOH records
	knows 2 modes trans.	question	KPC survey (or drop)
	knows 2 STDs		ì
	knows STD are sexual		ì
	knows 2 preventive methods		ì
	# women using condoms		ì
# women talk partner AIDS		ì	
INSTITUT. DEV.	score increase of 50%	score	survey

COMMUNITY TOOLS:

1. Pregnancy Registration
2. Birth Reporting
3. List of WRA
4. MOH records
5. KPC survey

OVERALL:

- a. MATERNAL: Start tracking pregnancies now and following behavior closer, not waiting for surveys and asking about past pregnancies. His name is Today!

b. FAMILY PLANNING: For this intervention use the birth reports to see if the birth intervals are increasing (results: greater intervals). Look at the age of first pregnancy (see if gets older).

c. STD/HIV: For this intervention, Stan Foster's recommendation: # men with ulcers or discharge last 6 months. This would be a survey question. Or use the eligible couples list to teach COUPLES about HIV/STDs.

Conclusion:

- Institute intensive Pregnancy Registration and Pregnancy Outcomes: BIRTH Reporting
- Include MALES in STD training and Family Planning training.

HONDURAS (Title II)

Indicators:	Activity	Info	Info Tool
Nutrition	food intake	increase of <2's	food intake 24 hr. recall survey (KPC) List of under-2's
	mother's knowledge	question	KPC survey
	reduced % malnourished	# of <2 less-2SD	List of under-2's
	birthweights adequate mother's knowledge	birthweights question	List of under-2's KPC survey
Growth Monitoring	% participate	# attend	List of under-2's
	% with adequate trends	# gaining	List of under-2's
Breastfeeding	<6 months exclusive <2 years still BF	# <6 mos children # <2's children	List of under-2's KPC survey
Feeding	Mothers practice child feeding pregnancy feeding feeding during BF	# of mother's	KPC survey

TOOLBOX:

1. List of under-2's
2. KPC survey

Recommendations:

- Breastfeeding: may want a special highlighting for newborns to assure exclusive breastfeeding.
- Good job at developing 'practice' indicators rather than knowledge.
- For the Under-2 registers: add birthweight as a separate column, then column for exclusive BF until some date, then arrows for weighing results.
- Birthweight knowledge in itself isn't important to a mother, as much as what that means. Is her newborn low birthweight or not? The number isn't meaningful on it's own.

HONDURAS

TITLE II

INDICATOR	INFO Required	METHOD of Collection	Who to Collect?	Frequency	Tool Used to collect
1. Increase % caloric intake in under-twos	consumption of food volume of food under-twos	Survey	suveyors	1st & 3rd year	24 hour recall baseline
2. Increase % caloric adequacy of mothers with children under-2	consumption of food volume of food moms of under-2s	Survey	suveyors	1st & 3rd year	24 hour recall baseline
3. Reduced % of under-one malnutrition	# of under-ones # of under-1's less than 2 SDs	Survey	suveyors	Initial, midterm final evaluation	anthropometric baseline measures
4. Increase % of newborns with adequate birthweights	# of newborns # newborns with weights over 2500 gms	Survey	suveyors	Initial, midterm final evaluation	anthropometric measures
5. Increase % of mothers know the wt. of their newborn	# of mothers with newborns # of mother know the birthweight	Interview	interviewer	Initial, midterm final evaluation	form
6. Increase % of children regularly growth monitored	# of under-twos # under-2 regularly weighed	registers	project staff growth monitors	monthly	registers growth charts
7. % of under-6 mos. children exclusively breastfed	# of newborns # being BF exclusive	surveys formats	team project MOH BF counselors	baseline trimester MT & final	KPC list of infants
8. % children 6-9 mos given solid or semi-solid foods from three different groups	# of 6-9 mos olds # of 6-9 given solids	surveys formats	team project MOH CHCV	baseline trimester MT & final	KPC list of infants
9. % of children 20-23 mos with breastfeeding	# of 20-23 mos. olds # rec'ing breastmilk	surveys formats	team project	baseline trimester MT & final	KPC list of infants
10. % of mother who know proper age to introduce weaning food	# of mothers with under-2s # of mothers who know when to wean	surveys formats	team project	baseline trimester MT & final	KPC list of infants
11. % of children weighed 4 past mos.	# of children under-2 # under-2s weighed	surveys formats	team project MOH & CHCV	baseline MT & final	KPC

HONDURAS Child Survival

Indicators: Activity		Info	Info Tool
Maternal	TT coverage	# pregnant TT2	KPC & List of Pregnant Women
Family Plan	methods distributed community centers WRA knowledge	# methods distributed # centers distributing # women trained	activity reports center records training records List of Fertile Women
Nutrition	Exclusive BF<6 Weaning Proper Continued BF mother knowledge of proper wean age growth monitoring	# newborns EBF # 6-9 month olds # 20-23 month olds # moms of <2 # <2's weighed	List of Women with <2's List of <2s
Maternal	prenatal cards	# women with card	# of PNC's received
ARI	mothers knowledge mothers seek help	% mothers know signs # sought care	KPC KPC

TOOLBOX:

- List of Mothers with Under-2's
- List of Fertile Women
- KPC survey
- Training records

Recommendations:

- Family planning: indicator of supply and distribution. Look at contraceptive usage, mini survey
- knowledge not as important as practice
- ARI: not just referred, but actually received care. First they are referred, then they seek, then they receive care or not. (will check the clinic records)
- Mothers weaning knowledge already tested in looking at practice indicator.
- Weighing children is only a process. What is the purpose of weighing? # faltering?
- Results of PNC care? Have card and received # of PN check-ups? More activity not just form.

HONDURAS

Infant Survival

INDICATOR	INFO Required	METHOD of Collection	Who to Collect?	Frequency	Tool Used to collect
1. % women 15-49 yrs receiving TT2	# of women 15-49 yrs # of above with TT2	Survey format	team project MOH	baseline trimester	KPC list of fertile women
2. Increased % of mothers who use modern contraceptives	# of contraceptives distributed	Survey format report	team personnel community health care volunteers MOH	baseline midterm final monthly	KPC activity reports registry
3. % of women 15-49 with knowledge of modern methods	# of pregnant women statistics of women	Survey interviews report of training focus group docs	community health care volunteers	baseline midterm final monthly	KPC activity reports report of community health care
4. % of women with prenatal control card	# of women # of prenatal cards	quantitative research	Project staff MOH	trimester	KPC
5. % of mothers who know the danger signs of ARI	# of mothers # of mothers who know danger of ARI	baseline	Project staff MOH	Initial midterm final	KPC
6. % of mothers who seek help during delivery	# of mothers # of mothers seeking aid of midwife	qualitative research MOH stats VHC referrals	Project staff MOH	initial, midterm final continuous monitoring	KPC

KENYA

Indicators:	Activity	Info	Info Tool
Pneumonia	recognition sign train mothers Seen by CHW CHW trained	rapid breathing know-how mothers trained % seen by CHW within 24 hrs. % of CHWs know-how	KPC survey Training records CHW Clinical Record Training records
Malaria	IMN's <2's use seek care	% households with nets # under-2's use net # children seen by CHW	Household Registers Household Registers CHW Clinical Record
Diarrhea	exclusive BF ORT case mgt.	# of newborns % children<2's ORT use	Mini-survey Clinical Register
Immunization	Measles by 1 yr.	# of measles immun. rcd.	Household Register
Maternal	Preg TT Malaria	# preg with TT # preg. with mal. proph.	Pregnancy Register Pregnancy Register
Family Planning	Usage rate	# of women 15-49 use	Register of WRA
VAC	Coverage	# children rec'd	CHW clinical records/registers

TOOLBOX:

1. Pregnancy Register and Pregnancy Outcomes
2. Household Register
3. CHW/Clinical Records of ARI and ORT
4. Register of WRA

Recommendations:

- The CHW has clinical records?
- For malaria care seeking children, what age group child? 0-5 year olds
- Does the HH register have a place for pregnancy info?
- Excellent register which captures not only vital events but services in one place.

MOZAMBIQUE

Indicators:	Activity	Info	Info Tool
Maternal	prenatal check-ups attended births	# of PNC # assisted	Pregnancy Register Pregnancy Outcome Register
	post-partum visit	# of PPV	Pregnancy Outcome Register
ORT	train mothers cases referred	# families know # diarrhea referred	List of Families <5s List of Case for ORT clinic records
ARI	diagnosed and treated	# cases, treated	List of Cases ARI
	death rate % population covered by trained providers	# died pneumonia # people?	Death record List of Families <5
MALARIA	pregnant women propha. providers correctly diagnose	# pregnant women # providers correctly diagnose	Pregnancy Register Clinic records

TOOLBOX:

- Pregnancy Register and Outcome (Birth Register)
- List of Families with Under-5
- List of Cases ARI
- List of Cases ORT
- Death Reports

Recommendations:

- Shadow boxes are a great idea, except that it is clinic based and therefore not good for outreach and can't carry it around to serve as a guide for the CHW.
- For ARI may want to look at health facilities with trained personnel or # of families with under-5's covered rather than population.
- For ORT, 'mothers' may include elders with no children in house, etc.. May want to Too late to wait until the end of the project to measure training of moms.

MOZAMBIQUE INDICATORS

Maternal Health

Indicator	Use	Information	Method	Who	Freq.	Tool(s)	Analysis
No. of births assisted by trained attendant	to measure access	births, attendants	community bio-events recording	the council	quarterly	counting bowls, registers	Baseline is 47% Expect 60%
No. women who receive standard care day 1&2 post partum	to measure process and quality	TBA & HW performance, no. postnatal visits day 1&2	1. monitoring of trainees 2. survey of mothers at home	project assistant, manager, MOH supervisors	3 times post training, annual	checklist questionnaire	No baseline yet.
No. women who receive presumptive Rx for anemia @ start of 2nd & 3rd trimester of pregnancy	to measure effect and management	Rx received and recorded by trimester of pregnancy, no. of pregnancies	survey of mothers at home	as above	annual	mothers health card	No baseline for specific drugs. Do have a imodernĩ drug use.
Proportion of survivors among referrals for EOC	to measure impact	birth outcomes, no. of births referred	community records	monitors	quarterly	birth register	No baseline yet.
No. of targeted men who know the danger signs of child bearing	to measure access	no. of men w/ transport or communication resource, no. of men expecting a child, no. of target men who can list danger signs of infection & hemorrhage	post training tests	trainers	ongoing	training evaluation form	No baseline yet.
No. of active TBAs w/ basic kit	to measure management & potential for sustainability	contents of kits, no. of trained TBAs	support visit	MOH nurse	quarterly	checklist	Collecting baseline now

Diarrhea

Indicator Proportion of caretakers who correctly manage ² childhood diarrhea at home.	Use to measure effect.	Information practices, point prevalence	Method KPC survey	Who outsiders	Freq. at end of project	Tool(s) questionnaire	Analysis Baseline is 38% Expect 50%
Proportion of serious cases referred to a trained provider.	to measure process	all cases referred, all deaths from diarrhea not referred.	monitoring	council, monitors	collected daily, collated quarterly	shadow boxes, community bulletin, verbal autopsy guide	No baseline.

Pneumonia

Indicator Proportion of children with danger sign of respiratory infection who are diagnosed and treated within 24 hours	Use to measure access and utilization	Information all serious cases - those referred and those who die without referral	Method monitoring	Who council and monitors	Freq. collected daily, compiled quarterly	Tool(s) shadow boxes, referral vouchers, verbal autopsy guide	Analysis no baseline
Proportion of population covered by trained health care providers who correctly diagnose and treat ALRI	to measure quality	performance statistics for all trainees, catchment population for each trainee	mini-survey	MOH partners, trainers	annual	checklists from ARI Toolbox	baseline being collected now

Malaria

Indicator	Use	Information	Method	Who	Freq.	Tool(s)	Analysis
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² that is give more or the same breastfeeding, food, fluids, including ORT the same day diarrhea starts and until the illness has passed.

Proportion of pregnant women who receive at least one course of malaria treatment during last pregnancy.	to measure access and management and effect	treatment given, no. of all pregnant women	KPC survey Many need to change to mini-survey, see analysis	outsiders	start and finish	questionnaire, months health care	Baseline of 57% drug taken is not specific for chloroquine. Expect?
Proportion of population covered by providers who correctly diagnose and treat childhood fevers.	to measure quality	signs used to diagnose, treatment prescribed for all cases seen	spot checks	monitors	quarterly	clinic service register	No baseline planned at preset. Expect what %?

NICARAGUA

Indicators:	Activity	Info	Info Tool
Immunization	complete 12-23 mos. # complete	total # target Immunization	census: Family Register CHW Notebook
CDD	<2's with diarrhea mothers knowledge question Mom gives more liquid Mom gives more food Mom gives more breast CHW knowledge	total # diarr. KPC survey dates pre-post test	Diarrhea CHW Notebook Register Diarrhea CHW Notebook ì ì
ARI	knows 2 signs CHW 2 signs Moms bring for Rx.	# moms # CHWs	ARI CHW Notebook Register pre-post test
BREAST FEED	<4 mos. practice gives food 6-8 mos . 20-24 mos breastfeed moms & girls prepare nut. foods HH intro. new foods HH increase quantity foods	# infants	Under-2 Year Register ì ì KPC survey KPC survey KPC survey
VIT A	1-5 year olds VAC moms know 3 foods Vit A CHWs know 3 foods Vit A HH producing Vit A food	# children Notebook	Immunization CHW KPC Survey Pre-post training test KPC Survey
MATERNAL	women 15-45 with TT Pregnant women PNC women using contracep.	dates TT dates PNC dates/methods	Maternal CHW Notebook Pregnancy Register Maternal CHW Notebook

	Delivery by trained TBA	who delivered	
Pregnancy Outcome: Birth Reporting	moms know 3 sign HR TBAs know 3 signs HR	# of moms # TBAs	KPC survey pre-post training test

TOOL BOX:

1. Family Register: living census
2. Immunization Notebook
3. ORT Notebook
4. ARI Notebook
5. Maternal Notebook
6. KPC survey
7. Vital Events form (monthly)

Recommendation:

- Use a Under-Five Register to track all interventions: breastfeeding, immunization, VAC, diarrhea and ARI to avoid separate lists per intervention. A more holistic approach.
- Use a Pregnancy Register and Pregnancy Outcome: Birth Reporting

NICARAGUA					
INDICATOR	INFO Required	METHOD of Collection	Who to Collect?	Frequency	Tool Used to collect
1. % under-ones fully immunized	# of under-1's # of under-1's completely immunized	census	CHW	annually bimonthly	Family register Immun. notebook
2. % of under-twos with proper case management of CDD	# of under-2s	census	CHW	baseline	family register EDA notebook questionnaire
	# of under-2 with diar.	survey		midterm	
	# of mothers of above who know CDD case management	survey	supervisor	final	
3. % of under-twos with proper case management of ARI	# of under-2s	census	CHW	baseline	family register ARI notebook
	# of under-2 with ARI	survey		midterm	
	# of mothers of above who know ARI case management	survey		final	
4. % of under-twos properly breastfed	# of under-twos # <4 mos. exclusive	survey CHW visiting	CHWs	Baseline midterm	Under-2 registry KPC survey
	# weaned at 6-8 mos			final	
5. % of 1-5 yr olds with Vit A	# of 1-5 yrs old	survey	CHW		Immunization register KPC Survey
	# with VAC				
	# mother knows 3 Vit A rich foods				
	# CHW knows above				Pre-post test KPC Survey
	# HH producing VitA				
6. % of women 15-49 yrs with Prenatal care	# of women 15-49	survey monitoring	CHWs	Baseline midterm	Maternal CHW notes Pregnancy register
	# of above with TT2			final	
	# pregnant women who get PN check-up	survey	CHW		KPC survey Pre-post test
	# moms know HR				
	# TBAs know 3 HRs				

NIGER

Indicators:	Activity	Info	Info Tool
Immunization	12-23 coverage TT coverage	% 12-23 completed % of pregnant women	List of <2's List of pregnant women
CDD	ORT use	# cases managed <2	CHW Notebooks (List of <2's)
Malaria	<2's malaria cases properly treated Mothers prophalaxis	# of malarial cases properly treated # of mothers rc'd Rx	CHW Notebooks (List of <2's)
Breastfeeding	<2's BF 1st 8 hrs <2's BF until 4 mos.	# <2's # <2's	List of <2's or Birth Register with follow-up till 4 months
Nutrition	% 6-24 mos.rec'd food 5 times a day	# <2's	List of <2's

TOOLBOX:

1. List of <2's
2. List of Pregnant Women and Pregnancy Outcome (Birth Registers)
3. CHW Case Notebooks (optional)

Recommendations:

1. Rather than retrospectively look at TT immunization, track pregnant women and encourage TT protection of all new newborns. (List of pregnant women)

2. CHW Notebook may be the actual **List of <2's** for:

- Immunization
- ORT usage *
- Malaria case management *
- Mothers of under-2's with prophlaxis

* May want to keep the cases in a separate CHW Notebook for CDD and Malaria treatment

3. Breastfeeding: May want to institute follow-up to the birth reporting (which is a natural outcome of pregnancy monitoring). Follow each birth up to monitor breastfeeding practice at 8 hrs, and the 4 months mark to determine how many are breastfed at those critical times and how many women received malaria prophylactics. (Birth Register) or simply use the List of <2's to monitor BF activities tracking the child rather than the mother.

4. Nutrition Intervention

Rather than measure fortified food distribution which does not guarantee growth (due to intra-family food distribution or selling of food), start monitoring growth instead (% of children who gained weight within last 3 months). This is closer to your goal of improving nutrition. May want to conduct a mini-surveys to track dietary recall.

NIGER

Indicator	Info Required	Method of Collection	Who to collect?	Frequency?	Tool Used to Collect
% of children 12-23 months completely vaccinated	# of children 12-23 months # of DTC3/P3	census of births < 24 months recording (MOH)	field workers health workers	quarterly	vaccination records
% of children's (<24 months) mothers that received at least 2 TT shots before the birth of last child	# of measles # of mothers of children < 2 yrs	census of pregnancy and mothers	field workers	quarterly	vaccination records
% of diarrhea case in children <24 months treated with ORT	# of diarrhea cases in children < 24 months # of cases treated with ORT	ORS recording for mothers of children < 24 months sick persons recording	community health workers (MOH)	quarterly	CHWs notebooks
% of possible malaria cases in children < 24 mo. treated correctly with chloroquine	# of malaria cases in children < 24 mo # cases treated correctly with chloroquine	malaria recording for mothers of children < 24 months sick persons recording	community health workers (MOH)	quarterly	CHWs notebooks
% of children's (6 weeks to 24 months) mothers who received chemoprophylaxis	# of mothers of children btwn 6 weeks and 24 months # of new births	census of pregnancies and births recordings of chloroquine distribution	field workers	quarterly annually	CHWs notebooks
% of children's (0-24 months) mothers who began breastfeeding their child within first 8 hours after birth	# of mothers who received chemoprophylaxis # of mothers with children <24 months # of new births # of immediate breastfeeding (within first 8 hours)	recordings of births and breastfeeding	CARE field workers CHWs	quarterly	CARE field workers notebooks CHWs notebooks
% of children's (0-24 months) who exclusively breastfeed child during first 4 months	# of mothers with children <24 months # of exclusive breastfeeding until at least 4 months	recordings of breastfeeding	CARE field workers CARE CHWs	quarterly	CARE field workers notebooks CHWs notebooks
% of children 6 to 24 months who received fortified foods (peanut oil) at least 5 times a day	# of children 6 to 24 months # of children who received fortified foods	recordings of children 6-24 months who received fortified foods	CHWs	quarterly	CHWs notebooks

PERU

Indicators:	Activity	Info	Info Tool
Diarrhea	CHW trained Mom<2 trained <2 w/diar. treated Rx <2 w/diar. referred <2 w/diar. died	# trained # trained # cases w/Rx # referred cause-specific	training records Logbook of Under-2s ì ì Death reporting
ARI	CHW trained Mom<2 know 2 signs Sought care/referred Treated Died	# trained # trained # referred # treated cause-specific	training records Logbook of Under-2's ì ì Death reporting
Maternal	CHW trained WRA trained Preg. with ANC Preg. with complication Moms <2 know referral sys. Preg. Women died	#, names, dates #, names, dates dates Maternal deaths	Project records Project records Pregnancy Register Pregnancy Register List of WRA Death Reporting
Family Plan	Acceptance/practice	methods/dates	List of WRA
Synergy	Coor. meetings	#'s, names, dates	Project Records
CBO Strengthen	Train Leaders	#'s, names, dates	Project Records
MOH Strengthen	MOH trained	#'s, names, dates	Project Records

TOOLS:

1. List of Under-2's
2. List of Women in Reproductive Age
3. Pregnancy Register with Birth Reporting
4. Death Reporting
5. Project Records
6. KPC survey

Recommendations:

- Rather than knowledge indicators look at tracking practice. (Look at Indicators in DIP).
- Instead of mothers with under-two children knowledge of high-risk factors to actual pregnant women with risks who seek care.
- Instead of looking at the referral system knowledge, but see if the referral system is exercised. (# sought care and received it) over time.
- Track Pregnant Women and Pregnancy Outcomes.
- Can you combine those under-2's with ARI who sought care with those treated. Can't you assume if referred will be treated?

PERU

INDICATOR	INFO Required	METHOD of Collection	Who to Collect?	Frequency	Tool Used to collect
1. Diarrheal Disease management	# CHWs trained # WRA <2s rec mess # <2s with diarrhea ---referred, treated, die	Events attendance Women attending Home visits	PM/CV CHW CHW	quarterly monthly	Project records log books
2. ARI	# CHWs trained # WRA <2s rec mess # <2s with ARI ---referred, treated, die	Events attendance Women attending Home visits	PM/CV CHW CHW	quarterly monthly	Project records log books
3. Maternal Health	# CHWs trained # WRA rec mess # pregnant women # above with ANC # above with complic. # above referred, die	Events attendance Women attending Home visits	PM/CV CHW CHW	quarterly monthly	Project records log books
4. Synergy	# coordinating mtgs with W S, MSPP, P2000	Acts.	PM/CV	quarterly	Project records
5. CBP Strengthening	# of leaders trained # of meeting with MOH, municipals,	Events attendance	PM/CV	quarterly	Project records
6. MOH Strengthening	# of MOH trained # IEC materials distributed/ understood HIS: developed, used	Events attendance Dispatches mini-survey observation	PM/JM CS XII team PM & team	quarterly annual	Project records Questionnaire

TANZANIA

Indicators:	Activity	Info	Info Tool
Maternal	TT	# pregnant women TT	Pregnancy Register
	Malaria Rx Preg.	# preg. with prophal.	Pregnancy Register
	PNC	# preg. with 2 PNC	Pregnancy Register
	Birth attended by Village with EOC	# of births attended	Pregnancy Outcome Register
	HC with staff trained	# of villages with EOC	survey
	High-risk rec. care	# HC with trained EOC staff	survey
	Maternal death	# high-risk preg. rd.care	Pregnancy Register
		# maternal deaths	Pregnancy Register
STD/HIV	Recognize signs	# WRA id 2 signs	survey (or partner)
	HF provision	# HF treating STD	survey
PNC	Post-natal check	# post deliverers PNC	Pregnancy Register
Family	CPR	# users	survey: cross check for below
Planning	CPR	# users	List of eligible couples

TOOLBOX:

1. Pregnancy Register
2. Eligible Couple Register
3. Survey

Recommendations:

- Make a checklist of standards for trained EOC handlers.
- Good to track those referred who received services. Quality of service checked?
- Women are often asymptomatic with STD. Ask if she recognize in partner?
- Be careful to count check-ups. (post-natal). What are you looking for? Any effect to change by those check-ups?
- Family planning: birth intervals in your pregnancy outcome register rather than CYP? CYP is looking as supply not use. It's a low quality proxy for practice.
- Sure it is new acceptors or prevalence?
- Consider developing or borrowing a multiple pregnancy card for pregnant women