

BASICS II



Program Review of Essential Nutrition Actions

Checklist for District Health Services

BASICS OF
CHILD SURVIVAL

Tina Sanghvi
Serigne Diene
John Murray
Rae Galloway
Ciro Franco



Program Review of Essential Nutrition Actions

Checklist for District Health Services

*Tina Sanghvi
Serigne Diene
John Murray
Rae Galloway
Ciro Franco*



 **BASICS II**

BASICS II

BASICS II is a global child survival support project funded by the Office of Health, Infectious Diseases, and Nutrition of the Bureau for Global Programs, Field Support, and Research of the U.S. Agency for International Development (USAID). The agency's Child Survival Division provides technical guidance and assists in strategy development and program implementation in child survival, including interventions aimed at child morbidity and infant and child nutrition.

BASICS is conducted by the Partnership for Child Health Care, Inc. (contract no. HRN-C-00-93-00031-00, formerly HRN 00). Partners are the Academy for Educational Development, John Snow, Inc., and Management Sciences for Health. Subcontractors are the Office of International Programs of Clark Atlanta University, Emory University, the Johns Hopkins University's School of Hygiene and Public Health, Porter/Novelli, and Program for Appropriate Technology in Health.

This document does not necessarily represent the views or opinions of USAID. It may be reproduced if credit is given to BASICS II.

Recommended Citation

Sanghvi, Tina, Serigne Diene, John Murray, and Rae Galloway, and Ciro Franco. Revised 2003. Program Review of Essential Nutrition Actions in District Health Services: A Checklist. Published for the U.S. Agency for International Development (USAID) by the Basic Support for Institutionalizing Child Survival (BASICS II) Project, Arlington, Va.

BASICS II

Basic Support for Institutionalizing Child Survival

1600 Wilson Blvd., Suite 300

Arlington, VA 22209 USA

Phone: 703-312-6800

Fax: 703-312-6900

E-mail: infoctr@basics.org

Internet: www.basics.org

Contents

Acknowledgments	v
Acronyms	vii
Introduction	1
How to Use This Checklist	3
Analysis: Unmet Need for Nutrition	5
Summary of Key Questions	5
Prevalence and Severity of Malnutrition	5
High Risk Groups, Areas, and Seasons	6
Problem Feeding Behaviors	6
Essential Nutrition Actions in Health Facilities	9
Summary of Key Questions	9
Services Provided by Health Facilities in the District	9
Nutrition Content in Maternal/Reproductive Health	9
Nutrition Content in Child Health Services	12
Essential Nutrition Actions in Communities	15
Summary of Key Questions	15
Sources of Health Care, Commodities, and Diet/Health Counseling in the Community	15
Nutrition Content in Prenatal Care	16
Nutrition Content at Delivery and in Postpartum Care	16
Nutrition Content in Sick Child Care	16
Nutrition Content in Community Group Activities	17
Nutrition Supports at the Community Level	18
Community Leaders' Awareness of and Commitment to Nutrition	18
Essential Nutrition Actions in District Health Services	21
Summary of Key Questions	21
Scale and Coverage of District Health Services	21
Coverage of Maternal and Child Health Services	21
Nutrition-Related Maternal/Reproductive and Child Health Policies and Guidelines	22
Staff Responsible for Essential Nutrition Actions in the District Health Services	23
Training and Allocation of Health Staff	23
How Nutrition Activities Are Integrated in Health Systems at the District Level	24
Nutrition Targets, Resources, and Plans	24
Action Plan	27
Summary of Key Questions	27
Actions for District Planning	27

Actions to Support Nutrition Interventions at Health Facilities	27
Actions to Support Nutrition Interventions at the Community Level	28
Actions to Support Nutrition at the National Level	29
References	31
Annexes	33
A. Essential Nutrition Actions in Health Services	35
B. Recommended Practices for Maternities: Ten Steps for BFHI	36
C. Nutrition Job Aids for Health Contacts	
C-1: Nutrition Job Aid for Prenatal Care Contacts	37
C-2: Nutrition Job Aid for Delivery and Postpartum Contacts	38
C-3: Nutrition Job Aid for Postnatal Contacts	39
C-4: Job Aid for Giving Vitamin A with Routine Immunizations	40
C-5: Job Aid for Nutrition Services for Sick Children	41
C-6: Nutrition Job Aid for Well-Baby Contacts	43
D. Counseling Guide	45
E. Guide for Assessing the Quality of Implementation of a Growth Monitoring and Promotion Program	46
F. Implementing Positive Deviance–Informed Hearth Programs	49
G. Implementing Child Health Weeks	53
H. Guide for Iron Deficiency Anemia	56

Acknowledgments

The authors would like to thank Adwoa Steel, BASICS Consultant from The Manoff Group, and Jean Baker, Director of the Academy for Educational Development (AED) Linkages Project for using the checklist for the USAID-funded child survival assessment in Ghana and for making useful early comments on how to revise the checklist. The authors also appreciate the substantive technical comments and formatting suggestions on the checklist provided by Phil Harvey, Nutritional Sciences Advisor for the International Science and Technology Institute (ISTI) MOST Project; Ellen Piwoz, Nutrition Specialist for the AED Support for Analysis and Research in Africa (SARA) Project; Vicky Quinn, of the AED Linkages Project; and Luann Martin, Program Resource Specialist for AED. Thanks also go to Pat Shawkey for expert editorial assistance and to Pat Bandy, Director of the BASICS Information Center, for her help in making this document a reality. Alix Harou, Program Assistant for the Nutrition Team at BASICS II, coordinated the updating of the checklist.

Acronyms

ARI	acute respiratory infection
BASICS	Basic Support for Institutionalizing Child Survival
BCG	Bacillus of Calmette and Guerin (tuberculosis vaccine)
BF	breastfeeding
BFHI	Baby Friendly Hospitals Initiative
EBF	exclusive breastfeeding
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IU	international unit
IEC	Information, Education, and Communication
IMCI	Integrated Management of Childhood Illness
IVACG	International Vitamin A Consultative Group
mg.	milligram
MinPak	Nutrition Minimum Package
NID	National Immunization Day
OPV	oral polio vaccine
TBA	traditional birth attendant
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAD	vitamin A deficiency
WHO	World Health Organization

Introduction

Malnutrition accounts for over half of all childhood deaths. The most critical period of intervention is from pregnancy through two years of age. Building the capacity of communities to improve the feeding, care and health of all women and young children should be a high priority of all district health programs. The interventions are simple and affordable, and the tools are available. This checklist is a good first step.

By making periodic reviews of district health programs, managers can find critical gaps and subsequently focus their resources on priority needs. This checklist for collecting information about priority nutrition activities is designed for district health teams that want to strengthen the nutrition components of their primary health care programs. It can be used by government and nongovernmental organizations, donors, and others who are interested in integrating nutrition interventions into maternal and child health. To understand or interpret the information collected, see the references that are provided at the end of the checklist.

Health workers have many opportunities to provide critical nutrition services to women and children through routine health activities and to support communities to take action. Priority should be given to proven, cost-effective nutrition interventions, called the Essential Nutrition Actions, (ENA) or Nutrition Minimum Package (BASICS 1997).

The six proven interventions include the promotion, protection, and support of:

- Exclusive breastfeeding for six months
- Adequate complementary feeding from approximately 6 to 24 months, with continued breastfeeding
- Adequate nutritional care of sick and malnourished children
- Adequate vitamin A status
- Adequate iron status
- Adequate iodine status

Lessons learned from past efforts show that to improve nutritional status and reduce childhood illness and deaths, these six priority interventions should be included in an integrated package with other health services. This integrated package should be provided at all health contacts. Frequent contacts should be made during pregnancy and until the child is two years of age.

Six categories of health contacts commonly occur in communities and clinics:

- Prenatal contacts
- Delivery and immediate postpartum contacts
- Postnatal contacts
- Immunization contacts
- Sick child visits
- Well-child visits

These contacts have been identified as the initial targets for building improved nutrition content in district health programs. Based on national household surveys in developing countries in Africa, Asia, and Latin America, WHO estimates that each year 75 million pregnant women receive at least one prenatal visit (WHO, 1997). Forty-five million births are attended by trained health providers at health facilities; another 25 million are attended by trained health workers at home. About 70 million infants or their caretakers come in contact with health workers within the first two months after birth (WHO, 1997). Building in proven nutrition interventions in each of these existing contacts can provide important benefits. In the annexes are summaries of the nutrition actions for these contacts. The checklist helps health managers to identify whether or not these actions are being taken and what needs to be done to improve the actions.

The information needed for this rapid program review can be obtained by using existing data, observing and interviewing health staff, and visiting a limited number of health facilities and communities. This checklist is not designed to replace quantitative surveys or studies required to collect high precise quantitative data on information on health worker knowledge and practices or in-depth qualitative research necessary to develop feeding recommendations. This checklist should be used as a starting point to determine the need for more information.

How to Use This Checklist

- Make a list of hospitals, health centers and clinics, health posts, health huts, and rural maternities. Include government and private facilities.
- Select a small number of health facilities and communities in the catchment areas around the facilities on the list that will provide a comprehensive picture of the current situation. Include nearby and distant communities that are typical of the district.
- Form two or more teams, including health staff from the selected facilities, and explain the objectives and methods of the program review.
- Invite key partners who will be supporting or implementing the follow-up actions, in addition to field teams, to plan the review (for example, donors, NGOs, private providers, and community committee members).
- Review and adapt the checklist. Agree on key questions, definitions, and descriptions of terms, protocols, and procedures for collecting data.
- Have a nutrition specialist provide an orientation for the health teams on technical questions and, if possible, an information, education, and communication (IEC) specialist on how to review IEC materials.
- Use locally adapted feeding guidelines based on the Integrated Management of Childhood Illness (IMCI, UNICEF/WHO) Counsel the Mother section of the chart book to assess the content of counseling. Use national or international (WHO/UNICEF) protocols to review the adequacy of micronutrient supplementation services. These guidelines and protocols are also summarized in the job aids in Annex C. If applicable, use key concepts in Annex E to assess the quality of CBGP activities. Use PD Hearth program model in Annex F to assess Nutrition rehabilitation activities at the community level. If applicable, use questions in Annex G to assess the functioning of Child Health Weeks or similar periodic social mobilization and 'catch-up' activities.
- Collect information from health facilities and communities.
- Invite key partners, who will be supporting or implementing the follow-up actions, to participate in synthesizing and interpreting the information collected. Identify program actions to fill in the gaps found during the program review. Prioritize next steps and agree on responsibilities.

Analysis: Unmet Need for Nutrition

Summary of Key Questions

1. What is the level and pattern of stunting, wasting, or underweight in children; or underweight in women, in this district?
2. Are micronutrient deficiencies a problem in this district?
3. What are the maternal, infant, and child feeding problems in this district?
4. Are there gaps in the available information?

Note: See the references at the end of this document for criteria and for definitions of classification of malnutrition and adequate feeding practices.

Prevalence and Severity of Malnutrition

- Use existing surveys or other quantitative studies.
 - What percentage of young children are stunted (low height-for-age)?
 - What percentage of young children are underweight (low weight-for-age)?
 - What percentage of young children are wasted (low weight-for-height)?
 - What percentage of women are too thin for their height (low Body Mass Index)?
 - What percentage of children have clinical or sub-clinical vitamin A deficiency (VAD)?
 - What percentage of women or pregnant women have anemia?
 - What percentage of infants and young children are anemic?
 - What percentage of adults and children show signs of iodine deficiency (goiter), or are classified as iodine deficient using other criteria, such as urinary content of iodine?
 - Are these nutrition problems improving or becoming worse? What is the evidence? What are the reasons for these trends?

- Interview health workers and other key informants.
 - Do health staff see a large number of very thin, emaciated, or severely malnourished children?
 - Do health staff see a large number of very thin women?
 - Is VAD a problem; for example, is there a local term for night blindness, and is night blindness reported among pregnant women or school children?
 - Are there cases of visible goiter in the area?
 - Are these nutrition problems improving or becoming worse?
 - Is the problem seasonal, recent, or chronic? Why? What is the evidence?
 - According to health workers or key informants, what are the main causes of the observed nutrition problems? Are the causes primarily food, health/illnesses, or care/feeding practices, or all of these?

High Risk Groups, Areas, and Seasons

- Use existing surveys or quantitative studies and interview health workers and other key informants.
 - What geographic locations, communities or ethnic groups, seasons, age groups, and males/females are most likely to have nutrition problems?
 - Where, when, and in what group are underweight/stunting/wasting and underweight women most common?
 - Where, when, and in what group is VAD most common?
 - Where, when, and in what group is anemia most common?
 - Where, when, and in what group is iodine deficiency most common?

Problem Feeding Behaviors

- Use existing surveys or quantitative studies. Seek out qualitative studies; interview health workers, social workers; and conduct group discussions with mothers.
 - What percentage of infants under 6 months are exclusively breastfed?

- What percentage of infants 24 months of age are fed adequate complementary foods?
 - What percentage of children who were sick in the previous 2 weeks were given extra breastfeeding and food during recovery?
 - What percentage of pregnant and lactating women increase the number of meals and snacks and choose more diverse ingredients to meet their increased nutritional needs?
 - What are the reasons for feeding problems, and what are possible barriers to improving feeding practices?
- Interview health workers and other key informants.
- Are young children fed adequate diets (for example, do types and amounts of food given, preparation and feeding methods, and frequency of feeding provide minimum requirements for energy, protein, vitamins, and minerals)? Use recommendations in the WHO/PAHO Guidelines on Complementary Feeding.
 - If not, why? What can be done to improve infant feeding practices?
 - Do women consume adequate diets (for example, to meet their requirements for energy, protein, vitamins, and minerals) during pregnancy and lactation and when they are not pregnant or lactating?
 - If not, why? What can be done to improve infant feeding practices?

Essential Nutrition Actions in Health Facilities

Summary of Key Questions

1. What services are offered by health facilities (including government, nongovernment, and private)?
2. Do health staff include key nutrition tasks in their routine practices?
3. What is the quality and coverage of nutrition services provided by health workers?

Note: Use the *Recommended Practices for Maternities* in Annex B, *Nutrition Job Aids* in Annex C, and *Counseling Guide* in Annex D to guide data gathering at facilities.

Services Provided by Health Facilities in the District

- Make a list of hospitals, health centers and clinics, health posts, health huts, and rural maternities; include government and private facilities.
 - Which of the following services are provided by each facility on the list?
 - Maternal/reproductive health services:
 - Testing and counseling on HIV/AIDS and PMTCT
 - Prenatal care
 - Assisted deliveries and postpartum care
 - Postnatal care
 - Family Planning
 - Child health services:
 - Immunizations
 - Sick-child care
 - Well-child care
 - Nutrition rehabilitation

Nutrition Content in Maternal/Reproductive Health

Note: For each category of facilities that provides HIV/AIDS prevention, prenatal care, delivery/postpartum care, postnatal care or Family Planning Services, review the content of nutrition in these services, as described in the following text.

- Visit health facilities and directly observe the health worker (observe the management of at least one or two women). Use the job aid checklists in Annex C-1, C-2, and C-3 to determine the key elements to observe. Record the following:
 - Do pregnant women receive the equipped amount of prophylactic iron/folic acid, and do they receive counseling with side effects of iron/folic acid?

- Are pregnant women given the correct antenatal counseling regarding the following:
 - diet during pregnancy
 - compliance with iron/folic acid tablets
 - preparation for breastfeeding
- Do postpartum women receive support to initiate breastfeeding?
- Do postpartum women receive a dose of vitamin A?
- Do women seen during the first 2 weeks after delivery receive counseling on breastfeeding and their diet?

■ Visit health facilities, interview health workers, and directly inspect supplies and equipment.

- Are all essential drugs/micronutrients available on the day of the visit?

For example—

- Are vitamin A capsules, iron/folate, mebendazole, and first-line anti-malarial drug available on the day of the visit?
- Are counseling/IEC materials available for prenatal visits, delivery/postpartum, and postnatal counseling?
- What is the number of stock-outs (days when no stocks are available) of vitamin A capsules, iron/folate, mebendazole, or first-line anti-malarial drug in the 30 days before the visit?
- What percentage of health workers providing services have received primary health care training that includes key nutrition elements?

For example—

- In how many facilities have more than half the health workers in this service category been trained, in the previous three years, on preventive iron/folate supplementation, anemia assessment and treatment, postpartum vitamin A supplementation, breastfeeding counseling, and dietary adequacy in women?
- Are supervisory visits being made to the facility?

For example—

- In how many facilities has there been at least one supervisory visit during the previous 4 months that included observation of nutrition counseling of prenatal, postpartum/delivery, and/or postnatal cases, and immediate feedback given to the health provider?

- Does the supervisor have a checklist that is used during this visit and does it include key nutrition actions?
- Do monthly reporting forms for each clinical service include information on the number of prenatal women given iron/folate, number of iron/folate tablets distributed, cases of anemia detected, postpartum vitamin A supplements given, counseling given on diet, and preparation for breastfeeding?
- In how many facilities are all essential monthly reporting forms available and up to date, and do they include items on key nutrition interventions?
- Is there a card with the critical nutrition interventions and do health workers know the correct way to record on the mother's health card the iron/folate tablets given, counseling on her diet, breastfeeding support provided, and postpartum vitamin A supplements given?
- Do health workers demonstrate adequate counseling skills?

For example—

- In how many facilities did more than half the workers need no improvement in the steps listed in the counseling checklist (Annex D)?
- Do the health facilities follow the national micronutrient protocols and, where births occur in the facility, the “Ten Steps” of a Baby Friendly maternity?

For example—

- How many facilities have national vitamin A and iron supplementation guidelines available? In how many do at least half of the health providers know correct dosages?
 - How many maternities follow the ten steps of Baby Friendly guidelines (see Annex B)?
 - What is the health worker's relationship with the community?
- For example—
- Do health workers provide training; supplies; and supervise or meet with TBAs, private providers, and health workers in the community at least once every two to three months in each community?
 - Do health workers monitor nutrition problems in the community (for example, women with anemia signs such as palmar pallor, vitamin A deficiency such as night blindness, “insufficient milk,” bottlefeeding, iodized salt supplies not available, or others)?

- Do health workers inform community leaders or representatives about nutrition problems and actions they should take?
- Do health workers keep lists of communities with special problems (for example, communities with no trained TBA or other person trained in breastfeeding counseling, no local supplier of iron/folate tablets, no local supply of iodized salt)?

Nutrition Content in Child Health Services

- Review the content of nutrition for each category of facilities that provides immunizations, treatment for sick children, nutrition rehabilitation, or well-baby services, as shown below.
- Visit health facilities and directly observe the health worker (observe the consultation with one or two children). Use the job aid checklists in Annex C-4, C-5, and C-6 as guides to the key elements that need to be observed.
- Record the following:
 - Are caretakers of children under 2 years of age asked about breastfeeding and complementary feeding practices? Is breastfeeding position and attachment checked for infants below 6 months?
 - Are children receiving immunization services checked for their vitamin A supplementation protocol and given vitamin A correctly?
 - Are caretakers asked about iron supplements, mebendazole, and anti-malarials, and, if required, given correct doses?
 - Do sick children have their nutrition status assessed (plot on a growth chart, look for pallor, look for visible wasting, look for edema)?
 - Is there specific counseling linked with results of growth monitoring?
 - Are caretakers of sick children advised to give extra fluids and to continue feeding?
 - Are sick children given adequate vitamin A?
- Visit health facilities, interview health workers, and directly inspect supplies and equipment. Record the following:
 - Are all essential drugs/micronutrients and equipment available on the day of the visit?

For example—

 - Do facilities have vitamin A capsules, iron, anti-malarials, mebendazole, and first-line anti-malarial drug available on the day of the visit?

- Do facilities have counseling/IEC materials for assessment and counseling on child feeding?
- Do facilities have weighing scales and weight-for-age charts?
- What is the number of stock-outs (days when no stocks are available) of vitamin A capsules, iron/folate, mebendazole, or first-line anti-malarial drug in the 30 days before the visit?
- What is the percentage of health workers providing services on the day of the visit who have received training on key nutrition interventions?

For example—

How many facilities have more than half the health workers in this service category trained in the past three years in topics that include nutritional status assessment, assessment and counseling on feeding problems, anemia and iron supplementation, and vitamin A supplementation.

- Are supervisory visits being made to the facility?

For example—

- Have facilities received at least one supervisory visit during the previous four months that involved observation of assessment and counseling on feeding, vitamin A and iron supplementation, nutritional status assessment (wasting or edema, weight-for-age, and palmar pallor); and was immediate feedback given to health providers?
- Do monthly reporting forms for each clinical service include information on the number of cases of malnourished children, anemia pallor, feeding problems, iron supplementation, and vitamin A supplements given?
- Do monthly reports include information on key nutrition interventions?
- Do facilities have all essential monthly reporting forms with nutrition indicators up-to-date and available?
- Do health workers know the correct way to record on the child's health card the child's weight for age, feeding problems and counseling given, and both iron and vitamin A supplements given?

- Do health workers demonstrate adequate counseling skills?

For example—

- How many facilities have more than half of the workers needing little or no improvement in the steps listed in the counseling checklist (Annex D)?
 - In how many facilities do more than half the workers use locally adapted feeding recommendations for all children under 2 years?
- Do the health facilities follow the national micronutrient protocols and locally adapted feeding guidelines?

For example—

 - Do facilities have national vitamin A and iron supplementation guidelines available?
 - Do facilities use locally adapted feeding guidelines?
- What is the health worker's relationship with the community?

For example—

- Do health workers provide training; supplies; and supervise or meet with private providers and health workers in the community at least once every two to three months in each community?
 - Do health workers monitor nutrition problems in the community (for example, children with signs of malnutrition, palmar pallor, night blindness, "insufficient milk," bottlefeeding, lack of weight gain, "poor appetite," or lack of iodized salt, and others)?
 - Do health workers regularly communicate nutrition problems to community leaders and health volunteers and discuss actions they should take?
 - Do health workers know which communities have more nutrition problems or low access to services and supplies? Do they have charts or lists with nutrition statistics by community (for example, the number of underweight children, reported night blindness, lack of iodized salt)?

Essential Nutrition Actions in Communities

Summary of Key Questions

1. What health and nutrition services are offered in communities?
2. Do community workers include key nutrition tasks in their routine activities?
3. What is the quality of nutrition services provided by community workers?
4. Are essential commodities locally available?

Sources of Health Care, Commodities, and Diet/Health Counseling in the Community

- Make a list of the types of resources in the community selected for the visit.

Note: Interview key informants who are knowledgeable about the community. In the list, include women's groups, health huts, health volunteers/community workers, TBAs, private practitioners, traditional healers, dispensaries, pharmacies, drug vendors, and others, in each community. Include government and private sources, and health/non-health workers who provide nutrition-related services.

- Which of these services is provided by each?
 - Prenatal health/dietary care, counseling, tonics, and drugs; other activities with pregnant women.
 - Support, care, drugs, and tonics for deliveries and after; other activities with mothers who have recently delivered.
 - Counseling, care, and drugs when infants and children are sick.
 - Counseling, care, and preventive medicine or tonics for maintaining good health in infants and children (for example, guidance on feeding, immunizations, and others).
- Describe the nutrition care, counseling, and commodities in the community.
 - Visit the community health/nutrition site or make home visits and directly observe community health worker practice. Observe the interactions with at least one or two women and one or two children. Use the job aids in Annex C as a guide. Record which of the actions in the job aids are implemented by care providers and which ones are not. Ask why some actions are not taken and what needs to be done. If Growth Promotion sessions are organized, observe one session; use Annex E as a guide. If PD/Hearth is implemented, observe feeding and health talks. If Child Health Weeks are implemented, observe one day of activity and/or talk to community members about services given.

Note: If direct observation is not possible, discuss nutrition activities provided during each contact with community providers and caretakers.

Nutrition Content in Prenatal Care

- Is there community-based distribution of iron/folate tablets? Is there a convenient location where pregnant women can get iron/folate tablets?
- Do pregnant women receive counseling about their diet?
- Do pregnant women and their families receive counseling to prepare for exclusive breastfeeding?
- Do pregnant women receive appropriate counseling on compliance with taking iron/folate pills, how to manage side effects, and how many tablets to take?

Nutrition Content at Delivery and in Postpartum Care

- Is breastfeeding initiated immediately (within about one hour) after delivery?
- Do mothers receive support to initiate breastfeeding?
- Do mothers receive counseling about their diet?
- Do mothers receive postpartum vitamin A?

Nutrition Content in Sick Child Care

- Are breastfeeding and complementary feeding practices assessed and appropriate counseling given according to age, sick or not, mother's HIV/AIDS status, families' economic status, etc.?
- Are vitamin and iron supplementation protocols and the content of counseling or feeding consistent with district guidelines?
- Are sick children weighed and their weights plotted on growth charts accurately? How is this information used? Are caretakers shown the child's weight gain and feeding discussed accordingly?
- Are sick children routinely screened for visible wasting/edema, very low weight, acute respiratory infection (ARI), diarrhea, malaria, measles; are the children referred appropriately, and given follow-up care according to district guidelines?

- For malnourished children, are there daily nutrition rehabilitation sessions in a village volunteer's house? (see Annex F on PD Hearth).

Nutrition Content in Community Group Activities

- Do women's groups, volunteers, change agents, health workers adequately assess breastfeeding and complementary feeding practices of children?
- Is appropriate counseling and motivation given based on the child's age, if sick or not, mother's HIV/AIDS status, family's economic means, etc.?
- Is there community-based distribution of vitamin A at least twice a year?
- Do volunteers and workers know what families are having difficulties in feeding practices of pregnant women or infants? Do they know if the children are gaining adequate weight and if not, why? Are they taking appropriate steps to support families?
- Is the status of vitamin A and iron supplementation checked?
- Are children regularly weighed in the community? Is feeding assessment and counseling linked to weighing sessions?
- Are results of weighing sessions reported to caretakers and community leaders regularly?
- Is appropriate counseling given for children who have not gained adequate weight for 1–2 months (see Annex on Community Based Growth Promotion).
- Are children who are not growing well followed up and counseled or referred for medical care frequently? Are other actions taken to reduce the number of children who are not growing well (for example, food supplies, day care, other social support)?
- Are child Health Weeks/Nutrition Health Days adequately supported by community workers and volunteers (see Annex G on Implementing Child Health Weeks)?

Nutrition Supports at the Community Level

- Visit communities, interview community health workers, and directly inspect supplies and equipment.
 - Is there a trained child feeding counselor (trained in breastfeeding, complementary feeding, and feeding during and after illness) in or near the community?
 - Is there a source for iron/folate tablets for children and pregnant women, and iodized salt in or near the community that can be purchased by families?
 - Are the protocols/content of counseling routinely given to pregnant women and caretakers of children 0–24 months of age consistent with district guidelines?
 - Have any community workers received nutrition-related training or supplies from health facilities' staff in the past two to three months?
 - Have community workers received at least one supervisory visit in the past two to three months that included a discussion of nutrition assessment, micronutrient supplementation, testing iodized salt samples, growth monitoring, assessment and/or counseling on feeding?
 - Is there any recording of nutrition services given in the community on the child's or mother's cards, or registers, or on records for immunizations and/or deliveries?
 - Are IEC materials used appropriately; are they adequate for effective counseling on priority nutrition messages?
 - Are there many different activities regularly undertaken for raising awareness about the dangers of malnutrition and what actions to take? For example, theater, puppet shows, school activities, festivals, radio programs, village council meetings to review indicators and discuss problems, home visits by volunteers?
 - Are other sectors involved in supporting priority nutrition behaviors? For example, do school-children test salt samples or help in child weighing, do agricultural extension workers assess and counsel on feeding practices, are religious/social/political leaders involved in monitoring and promoting priority behaviors and assuring pro-nutrition resources, e.g. food for needy families or child care for working mothers, to support good nutrition in the community?

Community Leaders' Awareness of and Commitment to Nutrition

- Do social/political leaders, teachers, priests, health workers, and others know that:
 - Nutrition problems may be widespread in their area even if severe malnutrition or extreme food shortages do not exist.

- Approximately half of all child deaths are associated with malnutrition.
 - The foundation for nutrition is laid down before birth.
 - Malnutrition is caused by a combination of inadequate diet, frequent illnesses, and insufficient care given to mothers and children.
 - Malnutrition increases the severity of common illnesses, increases the chances of becoming disabled or blind, lowers intelligence, and reduces the ability to work.
- In the community, are the following present:
- A committee or group of community members that is responsible for health and nutrition issues; do they take action when a problem is detected?
 - At least one person in each community selected by the community and trained in priority nutrition actions for maternal/reproductive health and child health; is this person(s) widely known by families and adequately supported by community leaders and resources?
 - Community ownership of the nutrition and primary health care activities. For example, is there substantial, broad-based involvement by the community in decision making; and are resources provided by the community to support health and nutrition activities?

Essential Nutrition Actions in District Health Services

Summary of Key Questions

1. What is the scale and coverage of district health services?
2. Are district resources adequate to manage nutrition activities?
3. Are district nutrition activities and guidelines consistent with national policies?
4. Are key nutrition activities integrated into all health services; are health activities for nutrition coordinated with agriculture and education activities?

Note: District staff play a key role in planning for priority nutrition actions. Setting reasonable targets for nutritional improvement and allocating enough resources in district health plans to reach these targets are important. In this section, the need for better plans, adequate resources, and coordination are identified.

Scale and Coverage of District Health Services

- Identify facilities that have integrated nutrition activities into routine services.
- Interview district health staff and review district records. Make a table showing facilities by category and indicate the types of services they provide (maternal/reproductive health services, child health services, or both).
 - What percentage of governmental, nongovernmental, or private facilities provide the six main categories of maternal and child health services (prenatal/ANC, deliveries, postnatal checks, immunization, well-baby clinic/growth monitoring, sick childcare)? What percentage of these facilities have incorporated key nutrition activities? Are priority nutrition activities included in both facilities-based and community-based or outreach services?
 - How can these six services be introduced, improved, or expanded to incorporate key nutrition activities?

Coverage of Maternal and Child Health Services

- Review district records.
 - What percentage of all deliveries are assisted by trained birth attendants, including clinics/posts and in the community?
 - What percentage of pregnant women have at least three antenatal visits?

- What is the immunization coverage for BCG, DPT 3, and measles compared with targets? What are the trends over time?
- What proportion of the population lives within one hour of a health facility?
- What proportion of the population lives in communities visited by health center staff at least four times a year?
- What proportion of communities have at least 2–3 trained volunteers who can assess and counsel on feeding practices and motivate families to practice healthy behaviors?
- How does coverage vary by geographic area, ethnic groups, and seasons?
- How can coverage be improved?

Nutrition-Related Maternal/Reproductive and Child Health Policies and Guidelines

- Interview district health staff and review their guidelines. Determine if they are consistent with national and international standards.
 - What are the policies for the use of vitamin A and iron supplements for infants and children?
 - What is the policy for iron/folate supplementation of pregnant women?
 - What is the policy for postpartum vitamin A supplementation of women?
 - What is the policy on the duration of exclusive breastfeeding?
 - Are women counseled in the first few months postpartum that exclusive breastfeeding is a family planning option until about 6 months postpartum?
 - Is there a policy on breastfeeding and HIV/AIDS?
 - Is there a policy to train staff and revise maternity procedures according to the Baby Friendly Hospital Initiative (BFHI) “Ten Steps” (see Annex B)?
 - What are the policies and guidelines for complementary feeding and nutritional counseling guidelines during illness and good health?
 - What is the policy on the promotion of iodized salt by health workers?

- Are there regularly scheduled periodic social mobilization/outreach weeks or days to catch up with low coverage in vitamin A, immunization, de-worming and/or other services?

Staff Responsible for Essential Nutrition Actions in the District Health Services

- Interview district health staff.
 - At what level and by whom are decisions made about policies and technical content of protocols?
 - Who is responsible for managing and coordinating primary health care and nutrition activities within MCH services and with other programs such as agriculture and education?
 - Is there adequate leadership and coordination?

Training and Allocation of Health Staff

- Interview district health staff and review records and materials.
 - Do staff have the knowledge, awareness, skills, tools, job aids, and motivation to carry out critical nutrition interventions with high quality?
 - What is the ratio between staff and target population seen at facilities to provide essential nutrition services as part of primary health care?
 - What percentage of staff have received integrated primary health care training that includes the identified key nutrition activities?
 - Is there a system for providing supervision, support and follow-up including in-service training to health workers?
 - Are training materials and methods consistent with national and international standards on nutrition, e.g., training in how to assess and counsel for infant feeding practices, growth monitoring, anemia assessment?
 - Has there been an evaluation or review of the quality of health worker nutrition and health practice within the past 2 years?
 - How can training materials and methods related to nutrition actions be improved?
 - How can support to health workers be improved to sustain practice of the selected priority nutrition activities with high quality?

- How can the needs of unpaid or volunteer workers involved in providing nutrition services be met? How can good work be rewarded and recognized?

How Nutrition Activities Are Integrated in Health Systems at the District Level

- Interview district health staff and review records.
 - Are supplies of iron/folate supplements, mebendazole, vitamin A supplements, and iodized salt testing kits routinely procured with other essential drugs? Are supplies and records adequately maintained?
 - Does routine supervision in maternal/reproductive health and child health services include supervision of the priority nutrition actions? If yes, how does it take place?
 - Do health education messages, IEC materials, and activities include priority nutrition themes?
 - Do all facilities have functional adult, child, and baby weighing scales, and are stocks of growth charts, IEC materials, job aids, and other essential recording cards available?
 - Are data routinely collected on nutrition services provided and on micronutrients distributed by facilities?
 - Are data collected on the number of cases of malnutrition, low birthweight, and micronutrient deficiencies? Do frontline workers and managers know the nature and magnitude of infant feeding problems and how to address them?
 - How are routine data on nutrition from tally sheets, coverage graphs, monthly reports, and registers used for program planning?
 - What is the intensity and quality of linkages between peripheral health facilities and communities, and peripheral health facilities and referral sites?

Nutrition Targets, Resources, and Plans

- Interview district health staff and review records.
 - What is the current prevalence and the expected reduction of the following:
 - low birth weight
 - underweight/stunting/wasting in children under 3 years old
 - vitamin A deficiency in children
 - anemia in women and children
 - iodine deficiency in women and children

- women with low Body Mass Index (too thin for their height)
- What are the targets for the following:
 - improving women's diets
 - breastfeeding practices
 - complementary feeding practices
 - improving quality of nutritional care for sick and malnourished children
 - vitamin A supplementation for children and post-partum women
 - iron/folate supplementation for women and children
 - proportion of households using iodized salt
- Are targets well disseminated and known to staff?
 - Are targets understood and attainable?
 - How is the progress toward targets being measured?
 - Are the staff and budgetary resources that are allocated for essential nutrition actions adequate for achieving the desired targets and operational needs and plans?
 - Are steps being taken to implement the plans; is progress against plans reviewed and problem-solving carried out by managers?
 - How were program priorities set? Were the views of community representatives considered when the priorities were set?
 - Are data on priority problems, high risk areas and groups, causes of nutritional problems, and operational difficulties used to allocate resources?
 - Do donors or other organizations involved in financing or otherwise supporting nutrition activities participate in reviews/assessments or do they contribute to budgets or plans?
 - Are donor contributions from different sources coordinated to meet district needs and avoid gaps and duplication?

Action Plan

Summary of Key Questions

1. What activities are needed to improve nutrition programming?
2. Who will be responsible for implementing activities?
3. What is the timetable for implementing activities?
4. What resources are required for implementing activities, and are the resources available?

Actions for District Planning

- What actions are needed to ensure effective coordination, planning, and budgeting of nutrition activities at the district level?
- Has a coordinator been identified? What is the coordination mechanism with non-health and nongovernmental sectors?
- Is better/more information needed on nutrition problem, behaviors of households, and community needs?

Actions to Support Nutrition Interventions at Health Facilities

- What changes are needed in maternal/reproductive health and child health policies and technical protocols or procedures for the following:
 - breastfeeding
 - micronutrients (vitamin A, iron, and iodized salt)
 - management of sick and malnourished children
 - nutrition and diet of women
- Does new information need to be collected or analyzed before the necessary revisions can be made?
- What actions need to be taken to improve supplies of the following:
 - iron/folate
 - vitamin A
 - mebendazole

- salt testing kits
 - counseling cards
 - other IEC materials
 - equipment (for example, weighing scales)
- What are staff training needs? Do materials need to be updated? Does a training plan need to be developed?
 - How can existing services be expanded to incorporate key nutrition activities?
 - What actions are needed to improve the quality of supervision provided to health workers? Are revisions in supervisory tools required?
 - What actions are needed to strengthen the routine monitoring of nutrition activities? What tools and methods are required to conduct routine monitoring?

Actions to Support Nutrition Interventions at the Community Level

- Do district staff and health workers know how important it is to sensitize/mobilize community leaders and women's groups to give priority to maternal and child nutrition? Do they need training in how to do this?
- Are district staff and health workers aware that other sectors (for example, education and agriculture) are also important in solving the nutrition problem; are they working with other sectors to solve the problem?
- How can the nutrition skills of existing community-based workers be improved? Is better training required? What other kinds of support are necessary?
- Are there local groups or organizations working in communities that can promote key nutrition activities in collaboration with district and health facilities' staff? What can health staff do to support these groups and organizations?
- Have market channels for improving access to iodized salt, iron/folate, and other commodities been explored? Have private practitioners planned ways to improve practices? What support can the district health team provide to private retailers and service providers?

- How can community links to health posts/clinics be improved? Can additional/different training, supplies, monitoring, and supervision be provided?
- How can various channels of communication (radio, print, traditional media, festivals, competitions, and others) be used to reach communities and motivate families and communities?

Actions to Support Nutrition at the National Level

- Is better coordination needed between health and non-health sectors?
- What are the national protocols, policies, and standards, and do they need to be changed to support work at the district level?
- What is the national training strategy in nutrition (pre-service and in-service) and how could that be strengthened to support work at the district level?
- How does the national supply system for commodities (for example, micronutrients) affect work at the district level, and how could that be improved?
- Do national policies on nutrition use information collected at the district level? Are national figures on nutrition shared with the districts?

References

General Nutrition

Sanghvi, T., et al. 1999. *Nutrition Essentials: A Guide for Health Managers*. A joint USAID/UNICEF/WHO publication. (250 pages).

Sanghvi, T., and J. Murray. 1997. *Improving child health through nutrition: The nutrition minimum package*. Technical report. Arlington, VA: BASICS, for USAID.

Yip, R., and K. Scanlon. 1994. The burden of malnutrition: a population perspective. In: *The Relationship Between Child Anthropometry and Mortality in Developing Countries*. J.Nutrition 124:2043S–2046S.

MACRO International. (1990–1998.) *Demographic and Health Surveys (DHS)*. Series of country reports. Macro International. Calverton, MD.

UNICEF. (1995–1998.) *Multiple Indicator Cluster Surveys (MICS)*. Series of country surveys. New York: UNICEF.

Iron

Stoltzfus R. J., And M. Dreyfuss. 1998. *Guidelines for the use of iron supplements to prevent and treat iron deficiency anemia*. INACG/WHO/UNICEF.

Iodine

WHO/UNICEF/ICCIDD. 1994. *Indicators for assessing iodine deficiency disorders and their control through salt iodization*. WHO/NUT/94.6.

Vitamin A

WHO/UNICEF/IVACG. 1997. *Vitamin A supplements: A guide to their use in the treatment and prevention of vitamin A deficiency and xerophthalmia*. Second edition. Geneva: WHO.

WHO. 1997. *Safe vitamin A dosage during pregnancy and lactation. Recommendations and report of a consultation*. Preliminary version. WHO/NUT/96.14.

WHO/UNICEF. 1998. *Vitamin A and EPI*. Statement from a consultation held at UNICEF, New York. 19B20 January 1998.

WHO. 1996. *Indicators for assessing vitamin A deficiency and their application in monitoring and evaluating intervention programmes*. WHO/NUT/96.10.

Infant and Child Feeding

WHO/PAHO. 2002. Guidelines on Complementary Feeding. Geneva: WHO.

WHO/UNICEF. 1989. Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services. Statement. Geneva: WHO.

Institute for Reproductive Health at Georgetown University. 1996. *Lactational amenorrhea method (LAM)*. Monograph. Washington, DC: USAID/Linkages.

UNICEF, UNAIDS, and WHO. 1998. HIV and Infant Feeding. A guide for health care managers and supervisors. Geneva: UNAIDS.

WHO/UNICEF. 1995. Integrated Management of childhood illnesses (IMCI). Chart book. Sections on assessing breastfeeding, feeding recommendations, and counsel the mother. Child Health and Development Division. Geneva: WHO.

Griffiths, Marcia, Kate Dickin & Michael Favin. 1996. *Promoting the Growth of Children: What Works, Rationale and Guidance for Programs*. The World Bank.

Management of Sick Children

WHO/UNICEF. 1995. Management of childhood illness (IMCI) chart booklets. Child Health and Development Division. Geneva: WHO.

WHO/UNICEF. Integrated management of childhood illness: A WHO/UNICEF initiative. *WHO Bulletin*. Vol 75, Suppl.1, 1997.

WHO, 1997. Management of Severe Malnutrition: A manual for physicians and other senior health workers. Final draft. February, 1997. Geneva: WHO.

Ashworth A., A. Jackson, S. Khanum, and C. Schofield. “*Malnourished Children: Ten Steps to Recovery*” in Child Health Dialogue, 1996. London: AHRTAG.

Annexes

- A. Essential Nutrition Actions in Health Services
- B. Recommended Practices for Maternities: Ten Steps for BFHI
- C. Nutrition Job Aids for Health Contacts
- D. Counseling Guide
- E. Guide for Assessing the Quality of Implementation of a Growth Monitoring and Promotion Program
- F. Implementing Positive Deviance–Informed Health Programs
- G. Implementing Child Health Weeks
- H. Guide for Iron Deficiency Anemia

Annex A

Essential Nutrition Actions in Health Services

When you see clients for	You should provide	The content should be
Prenatal Care	Breastfeeding counseling.	Breastfeeding immediately after delivery, the importance of colostrum and exclusive breastfeeding (EBF), solving problems that prevent establishing breastfeeding, mother's diet.
	Iron/folate supplements and counseling.	One daily tablet (60 mg. iron) throughout pregnancy for 6 months (180 tablets), counsel on side effects and compliance, and when and how to get more tablets.
Delivery and Postpartum Care	Breastfeeding assistance and counseling (all maternities should follow the "10 Steps for Baby Hospitals," see Annex B).	Immediate initiation of breastfeeding, check for position and attachment, management of common problems, duration of EBF up to about 6 months, dangers of giving water or liquids, and how to express breastmilk.
	Vitamin A supplement for mothers.	One dose of 200,000 IU administered to the mother after delivery (within the first 8 weeks).
Postnatal Checks	Exclusive breastfeeding check; reinforce good diet and rest for mothers.	Assess and counsel on problems, teach prevention of "insufficient milk," how to increase milk supply, manage problems, and mother's diet.
Immunizations	With tuberculosis vaccine (BCG) contact, check mother's vitamin A supplement.	Complete one dose of 200,000 IU for women within 8 weeks after delivery (within 6 weeks if not breastfeeding).
	During National Immunization Days (NIDs) and community outreach for immunizations, check and complete children's vitamin A.	One dose of 100,000 IU for infants from 6–11 months; and one dose of 200,000 IU for children 12–59 months every 4–6 months.
	With OPV-3 and measles immunization, check infant's vitamin A.	One dose of 100,000 IU for infants 6-11 months; and one dose of 200,000 IU for children 12-59 months should be given every 4-6 months (for infants under 6 months, use 50,000 IU per dose).
Well-Baby Visits	Assess and counsel on breast-feeding; assess and counsel on adequate complementary feeding (use locally adapted recommendations).	Counseling and support for EBF in the first 6 months, counseling and support for adequate complementary feeding from 6–24 months, continuation of breastfeeding to 24 months. Use iodized salt for all family meals.
	Check and complete vitamin A, iron and anti-malaria protocol.	See protocols above under immunizations, and INACG (1998).
Sick Child Visits	Screen, treat, and refer severe malnutrition, vitamin A deficiency, and anemia.	IMCI and WHO (1997) protocols for severe malnutrition, vitamin A deficiency, and anemia.
	Check and complete vitamin A protocol.	See protocols above under immunizations. Also, provide vitamin A supplements for measles, diarrhea, and malnutrition according to WHO/UNICEF/IVACG.
	Assess and counsel on breast-feeding; assess and counsel on adequate complementary feeding (use locally adapted recommendations).	Increase breastfeeding while child is sick. Counsel and support EBF in the first 6 months; counsel and support for adequate complementary feeding from 6–24 months, continuation of breastfeeding to 24 months. Continued and recuperative feeding for sick children.

Annex B

Recommended Practices for Maternities

Ten Steps for BFHI (based on UNICEF/WHO, Baby Friendly Hospital Initiative 1992)

1. *Breastfeeding policy* routinely communicated to all health staff:
 - (a) explicit written 10-step policy;
 - (b) prohibit all promotion and group instruction on substitutes, bottles, teats, or others;
 - (c) give policy to all maternal and child health staff;
 - (d) post and display policy in all areas; and
 - (e) put a mechanism in place for evaluating program effectiveness.
2. *Train all health staff* in necessary skills:
 - (a) all staff must be aware of benefits and policy;
 - (b) train all new staff within 6 months of joining staff;
 - (c) cover at least 8/10 steps in training;
 - (d) provide at least 18 hours of training, with 3 hours of supervised clinical experience, and
 - (e) provide some staff with 40 hours of more specialized training.
3. *Inform all pregnant women*, pregnant women attending antenatal clinic, outreach or in-patient, about the benefits and management of breastfeeding.
4. *Help mothers breastfeed immediately after birth*: (a) for normal deliveries and cesarean sections, mothers should have physical contact with infants within 30 minutes after birth.
5. *Show mothers how to breastfeed and maintain breastfeeding even if they are separated from their infants*:
 - (a) mothers in postpartum wards should be given help within 6 hours after delivery and shown how to express milk,
 - (b) mothers with babies in special care should be given help to initiate and express breastmilk, and
 - (c) staff should be able to demonstrate manual expression.
6. *Newborns should receive no water, food, or fluids unless medically indicated*:
 - (a) mothers are not permitted to give food or fluids,
 - (b) infant foods, drinks, and related apparatus may not be displayed or promoted, and
 - (c) staff should know acceptable medical reasons for giving other fluids, milk, or foods.
7. *Mothers and infants should practice rooming-in* for 24 hours a day: (a) mothers and newborns should remain together after leaving the delivery room, day and night, except for up to 1 hour for special procedures.
8. *Encourage breastfeeding on demand*:
 - (a) mothers should know that there are no restrictions on frequency or duration of each breastfeed, and
 - (b) health staff should place no restrictions.
9. *No artificial teats or pacifiers* (dummies or soothers): staff and mothers should know not to give these objects to infants.
10. *Encourage the establishment of support groups* and refer mothers on discharge:
 - (a) staff should discuss mothers' plans after discharge,
 - (b) tell mothers about support groups in the local area, and
 - (c) encourage mothers to return for checkups.

Annex C-1

Nutrition Job Aid for Prenatal Care Contacts

- Why is nutrition important? Poor nutrition in pregnant women endangers the lives of mothers and newborns.
- What can you do to help? At each prenatal contact with mothers, check and complete the following activities.

Who?	How Much/Content?	Duration?
All pregnant women	<ul style="list-style-type: none"> ■ One iron/folate tablet daily (60 mg. iron + 400 mg. folic acid) ■ Counsel on compliance, safety, side-effects. 	180 days, starting at first prenatal visit and continuing until all 180 tablets are taken.
Pregnant women with pallor (pale eyelids and palms)	<ul style="list-style-type: none"> ■ Two iron/folate tablets daily (120 mg. iron + 800 mg. folic acid) until pallor disappears, followed by 1 tablet daily (60 mg. iron + 400 mg. folic acid). ■ Counsel on side effects, compliance, safety. 	Two tablets daily until pallor disappears or a minimum of 90 days. Continue taking one tablet daily until all 180 days of iron supplementation are complete; continue taking tablets postpartum.
All pregnant women	Assess and counsel to prepare for exclusive breastfeeding; counsel for breastfeeding immediately after baby is delivered.	Counsel at every prenatal contact.
All pregnant women	Counsel on adding one meal per day, more vitamin A- and C-rich foods, and getting extra rest.	Start as soon as pregnancy is detected and continue during lactation.

How can the recommendations be accomplished?

1. Screen each mother for pallor (check eyes and palms).
2. Ask each mother when she can return for the next prenatal visit. Count how many tablets she needs until the next visit—use the protocol above. Give her or suggest that she use old film containers or plastic/poly bags to store iron tablets to prevent their decay from moisture and air.
3. Give each mother enough iron/folate tablets until the next visit. Give her 60 or 90 (or more) tablets if she can only return after 2 months or 3 months (or later). She can continue to take tablets after delivery until she has taken 180 tablets.
4. Counsel mothers on side effects, compliance, and safety (keep tablets away from young children).
5. On the mother's card, record the date and number of tablets given.
6. On the tally sheet/register, make one mark for each mother as she is given tablets, and record the number of tablets given.
7. Screen each mother for flat and inverted nipples, and counsel.
8. Counsel each mother and her accompanying family members on exclusive breastfeeding (EBF) for about 6 months and on breastfeeding immediately after delivery.
9. Counsel each mother and her accompanying family members on eating extra food and resting more, particularly in the last three months of pregnancy. Use a list of local, affordable foods, and show the mother how much extra (volume) food she needs to eat.
10. On the mother's card, record breastfeeding counseling when it is given.
11. Remind each mother to return for her next prenatal visit.

Note: Many women in your catchment area probably do not come for prenatal visits or they come very late. To reach them, work with community midwives (matrons) or trained birth attendants (TBAs); train, supply, and supervise matrons and TBAs.

Annex C-2

Nutrition Job Aid for Delivery and Postpartum Contacts

Why? Building a strong foundation for successful breastfeeding and giving vitamin A to mothers and infants increases their ability to fight infections and prevents infant disease and deaths.

What? At delivery and during the first few hours and days postpartum, check and complete the following activities.

Who? All women.

How Much/Content?	Duration?
Put the baby to the breast immediately after delivery.	Continue to keep the baby with the mother in the same bed or adjacent cot for unlimited breastfeeding.
Give no water, glucose water, teas, or any fluids to the baby.	Birth until about 6 months.
Teach mothers correct attachment. Baby should be turned completely toward mother. Chin should touch mother's breast, mouth wide open, lower lip turned outward. More areola visible above than below the mouth. Infant should take slow, deep sucks (these should be audible), sometimes pausing. Show mothers different breastfeeding positions.	One time or more until mother is confident.
Counsel mothers about eating an extra meal and ingredients/snacks rich in energy, protein, and vitamins.	For the first 4 to 6 months after delivery.
Give one 200,000 IU dose of vitamin A as soon as possible after delivery but no later than 8 weeks (or 6 weeks if she is not lactating).	Once only.

Note: Women should continue taking iron/folate tablets after delivery, for a total of 180 days.

How?

1. Place the newborn on the mother's breast/abdomen immediately after delivery. Do not separate the baby and mother.
2. Place the baby in the mother's bed or an adjacent cot for easy access to breastfeeding throughout the day and night. Do not give the baby additional fluids. Only give medications prescribed by the doctor.
3. Observe position and attachment; show mother the correct ways.
4. Give every mother one vitamin A capsule of 200,000 IU (or two 100,000 IU capsules). Open the capsule and squeeze the contents into the mother's mouth or ask her to swallow it with water, in your presence. Do not give her the capsule to take away. Do not give this dose if 8 weeks have passed since delivery; for non-lactating mothers do not give this dose if 6 weeks have passed.
5. Record the date vitamin A was given on the mother's card. Also, record any breastfeeding and diet counseling.
6. On the tally sheet/register place a mark for each woman given vitamin A. Also, place a mark for each mother given counseling on diet and breastfeeding.
7. Counsel each mother and her accompanying family members on EBF for about 6 months, taking extra food and rest, particularly in the first 4 to 6 months after delivery.

Note: For women in your catchment area who do not come for deliveries, adapt this protocol for use by midwives (matrons) or TBAs, then train, supply, and supervise matrons and TBAs.

Annex C-3

Nutrition Job Aid for Postnatal Contacts

Why? Lack of follow up to support women in exclusive *breastfeeding during the first week or two* often leads to infants receiving other fluids/foods too early. This, in turn, causes diarrhea, reduction in milk supply, and the danger of another pregnancy in the first few months.

What? In the first week or two after delivery, contact each mother to review the information on the following chart.

Who? All women.

Assess?	Diagnose Problems?	Counsel?
Ask if there is any difficulty with breastfeeding. How many times in the past 24 hours was infant breastfed? Did the infant receive any other fluids or foods from birth to now?	Less than 10 breastfeeds in the past 24 hours or receives other fluids or foods.	Increase frequency of feeds. Reduce and gradually stop all other fluids and foods; at the same time increase frequency and duration of each breastfeed. Remind mothers of the importance of no other fluids/foods for about 6 months.
Observe a breastfeed; listen to and look at the infant.	Infant should take slow, deep sucks (these should be audible), sometimes pausing.	Check position and attachment. Clear blocked nose if it interferes with breastfeeding.
Check position and attachment; observe the infant.	Baby should be turned completely toward mother; chin should touch mother's breast, mouth wide open, lower lip turned outward. More areola visible above than below the mouth.	Teach mother correct position and attachment.
Counsel about preventing "insufficient milk," sore or cracked nipples, engorgement, manual expression, and storage.	Confirm need to increase milk production, increase frequency and duration of each feed, correct attachment and position.	Teach mother correct position and attachment.
Counsel mothers on eating an extra meal, and eating ingredients/snacks rich in energy, protein, vitamins.	Ask about affordable foods, timing of preparing, storing, and consuming the foods.	Use a list of local, affordable foods and show mother how much extra (volume) she needs to eat.

How?

1. Ask each mother about breastfeeding; observe a breastfeed; listen to and look at the infant; observe position and attachment; show mothers the correct methods.
2. Counsel each mother on the importance of continuing breastfeeding without fluids or foods for about 6 months and how to solve common difficulties (insufficient milk, separations, and others, according to the information in the table above).
3. Counsel mother about diet and work.
4. Counsel mother and accompanying family members on exclusive breastfeeding (EBF) for about 6 months.
5. Record the date of counseling on the mother's card and any problems and solutions advised.
6. Record the number of women given postnatal counseling on the daily tally sheet/register.

Note: Most women do not have postnatal visits at clinics or they come only for problems. Determine who can follow each postpartum mother to provide counseling. Work with community agents, such as women's groups, social workers, midwives (matrons), or trained birth attendants (TBAs). Train, supply, and supervise agents.

Annex C-4

Job Aid for Giving Vitamin A with Routine Immunizations

Why? Lack of vitamin A damages the body's ability to fight infections and causes blindness.

What? At each immunization contact with mothers and children, check and complete the following.

Note: Give children who are not sick or malnourished preventive doses of vitamin A, including 2 doses between 6–12 months of age, spaced about 4 to 6 months apart. Continue the doses, spaced about 4 to 6 months apart, until the child is 5 years old (60 months). Use the chart below to determine how much vitamin A to give.

Possible Immunization Contact	Age Group/Timing	Amount of Vitamin A	
		If using 100,000 IU capsules	If using 200,000 IU capsules
Tuberculosis vaccine (BCG) contact up to 8 weeks.	Mothers up to 8 weeks postpartum	Two capsules	One capsule
DPT-3, OPV-3 contact from about 6 months.	Infants 6-11 months	Drops in one capsule	Half the drops in a capsule
	Children 12 months or older	Drops in two capsules	Drops in one capsule
Measles vaccination contact.	Infants 6-11 months	Drops in one capsule	Half the drops in a capsule
	Children 12 months or older	Drops in two capsules	Drops in one capsule
Booster doses, special campaigns, delayed primary immunization doses, immunization strategies for high-risk areas or groups.	Infants 6-11 months	Drops in one capsule (every 4 to 6 months until 59 months of age)	Half the drops in a capsule (every 4 to 6 months until 59 months of age)
	Children 12 months or older	Drops in two capsules (every 4 to 6 months until 59 months of age)	Drops in one capsule (every 4 to 6 months until 59 months of age)

How?

1. Check the dose in the capsules, the child's age (for mothers, the date of delivery), and when the last dose of vitamin A was received.
2. Cut the narrow end of each capsule with scissors or a nailcutter, and squeeze out the drops into the child's mouth. Ask mothers to swallow the capsule in your presence. Do **not** ask a child to swallow the capsule. Do **not** give the capsule to the mother to take away.
3. To give less than one capsule to a child, count the number of drops in a sample capsule when a new batch of capsules is first opened. Give one-half or one-quarter the number of drops from the capsule.
4. Record the date of the dose on the child's card, and the mother's dose on the mother's card.
5. On the tally sheet/register, place a mark for each mother dosed, and another mark for each child dosed. Make a monthly/quarterly/annual chart of VA-0, VA-1, VA-2 the same way immunization coverage is charted. Report coverage of mother's dose (VA-0), first dose for infants (VA-1), and second dose for infants (VA-2) routinely with immunization coverage.
6. Advise the mother when to return for the next doses of vitamin A, and encourage completion of immunization protocols.

Annex C-5

Job Aid for Nutrition Services for Sick Children

Why? Illnesses drain a child's nutrition reserves, interfere with feeding, and makes children more susceptible to getting sick in the future. It can increase the duration and severity of diseases, and increase the risk of death and disability.

What? At each contact with a sick child, health workers should assess, classify, and treat the child using IMCI guidelines, as shown below (also see complete IMCI protocols, WHO/UNICEF). For treating severely malnourished children, use WHO's *Management of Severe Malnutrition*, 1997.

Classification	Age in Months	Management	Follow Up
Any sick child without a severe classification.	≤24	<ul style="list-style-type: none"> Assess the child's feeding and counsel the caretaker according to the IMCI food box from the Counsel the Mother chart. Check and complete the preventive vitamin A dose; one age-appropriate dose every 4-6 months. 	<ul style="list-style-type: none"> If there is a feeding problem, follow up in 5 days. Advise the caretaker about danger signs that would require her to return immediately.
Measles (severe complicated measles, measles with eye and mouth complications, or uncomplicated measles).	Age-Appropriate Dosage		<ul style="list-style-type: none"> Give single dose and refer immediately if severe, complicated measles. For other classifications: treat conjunctivitis with tetracycline eye ointment and mouth ulcers with gentian violet. Follow up in 2 days if there are complications.
	0–5	Vitamin A 50,000 IU per dose	
	6–11	Vitamin A 100,000 IU per dose	
	12+	Vitamin A 200,000 IU per dose	
Severe malnutrition or severe anemia.	0–59	<ul style="list-style-type: none"> Give single dose of vitamin A according to dosage schedule shown above. 	<ul style="list-style-type: none"> Refer urgently to hospital.***
Anemia or very low weight.	0–59	<ul style="list-style-type: none"> Assess the child's feeding and counsel the caretaker according to the attached IMCI food box on the Counsel the Mother chart. If pallor: give iron (give half a tablet of iron (30 mg. iron)* daily to children >12 months for 2 months or until pallor disappears. For younger infants give 20 mg. elemental iron.** Give antimalarials if high malaria risk. Give mebendazole if child is 2 years or older and has not had a dose in the previous 6 months. 	<ul style="list-style-type: none"> Advise mother about danger signs that require her to return immediately. If pallor, follow up in 14 days. If very low weight for age, follow up in 30 days

* Ferrous sulfate 200 mg.=60 mg. elemental iron.

** Give drops, if possible, or powder ferrous sulfate tablets (two tablets contain 10 mg. iron each) and give by spoon, mixed with a liquid (WHO, IMCI guidelines).

*** Referral hospitals or clinics treating severe malnutrition should follow WHO guidelines in *Management of Severe Malnutrition*, 1997.

How?

1. Give each sick child the recommended vitamin A doses as indicated on the previous page. For children who do not have the conditions listed above, check and complete their preventive dose (see job aids for well-baby contacts and immunization contacts).
2. Vitamin A dosing. Cut open the narrow end of each capsule with scissors or a nailcutter and squeeze the drops into the child's mouth. Do **not** ask a child to swallow the capsule. To give less than 1 capsule, count the number of drops in a capsule from each new batch of capsules when they first arrive. Give one-half or one-quarter of the total number of drops counted.
3. Assess, classify, and treat all sick children according to IMCI guidelines (obtain IMCI checklist from WHO or UNICEF). Assess child's feeding and give nutritional counseling according to attached IMCI guidelines.
4. Record the classification and treatment given on the child's card. Place a mark on the tally sheet for each child assessed, dosed, counseled, and referred.

Annex C-6

Nutrition Job Aid for Well-Baby Contacts

Why? Preventing nutrition and feeding problems costs less than treating severe malnutrition. Every contact with a well child is an opportunity to prevent severe problems before they occur.

What? Follow this protocol at each contact with a well child.

Check and Complete Vitamin A Protocols	Age in Months	Amount of Vitamin A		Number of Doses
		If 100,000 IU capsules are used	If 200,000 IU capsules are used	
	6–11	Drops in one capsule	One-half drops in a capsule	One dose every 4-6 months from about 6 months of age to 59 months.
	12 or more	Drops in two capsules	Drops in one capsule	
Assess and Counsel for Feeding Difficulties	Age in Months	Assess and Classify		Counsel/Treat
	0–5	Assess breastfeeding.	Identify difficulties.	Exclusive breastfeeding until about six months. Correct attachment, position, other difficulties; encourage longer duration and more frequent feeds.
	6 or more	Assess complementary feeding.	Identify difficulties: poor appetite, frequency, amount per feed, density, hygiene, feeding style.	Strategies to correct problems in food content and feeding style. Increase amount and enrichment after illness. Continue breastfeeding for at least 24 months.
Screen for Severe Anemia	Screen for pallor.			Give 1/2 tablet of iron (30 mg. iron)* daily to children >12 months for 2 months or until pallor disappears. For younger infants give 20 mg. elemental iron.**
Screen for Severe Malnutrition	Screen for severe wasting, edema of both feet; if possible, weigh children.			Give vitamin A and refer to hospital immediately.
<p>* Ferrous sulfate 200 mg. (60 mg. elemental iron).</p> <p>** Give in the form of drops, if possible, or powder ferrous sulfate tablets (two tablets containing 10 mg. iron each) and give by spoon, mixed with a liquid. Ref. IMCI (WHO/UNICEF).</p>				

How?

1. Check and complete the recommended vitamin A dose.
2. Cut open the narrow end of each capsule with scissors or a nailcutter and squeeze the drops into the child's mouth. Do **not** ask a child to swallow the capsule. Do **not** give the capsule to the mother to be given later. To give less than 1 capsule, count the number of drops in a capsule from each new batch when it first arrives. Give half the number of drops counted.
3. Assess, classify, and counsel on feeding.
4. Assess, refer, or treat/counsel for severe malnutrition (visible severe wasting and edema); anemia (pallor).
5. Record the date of the vitamin A dose on the child's vaccination card; record feeding assessment and counseling on the child's card.
6. Record treatment for severe malnutrition and anemia on the child's card.
7. Mark the daily tally sheet for vitamin A, feeding assessment/counseling, and treatment.

Annex D

Counseling Guide

Stages	Good	Needs to Improve	Stages	Good	Needs to Improve
1. Entry/climate setting:			4. Explains connection between desired outcome and behavior:		
Kind and reassuring.			Uses simple language.		
Makes client feel comfortable.			Makes suggestions, not commands.		
Uses gestures and responses that show interest in the client.			Gives only that amount of information or advice that can be remembered and followed.		
2. Agenda setting:			5. Ask the client how she can achieve this behavior:		
Announces the subject.			Recognizes and praises what the client is doing correctly before suggesting changes.		
Asks consent of client.			Checks what is practical and possible for the client to do.		
Assures it is a subject of interest.					
3. Find out what client knows and believes:			6. Verify clients comprehension and intention to try it.		
Asks open-ended questions.			7. Plan for next appointment.		
Repeats/reflects back what the client says.			Overall Listening Skills:		
Accepts or validates feelings of the client. Doesn't challenge what the client feels.			Uses encouraging non-verbal communication (facial expression, body language).		
Avoids words that sound as if the client is being judged.			Empathizes—shows that he/she understands how the client feels.		

Annex E

Guide for Assessing the Quality of Implementation of a Growth Monitoring and Promotion Program

Part A: Response to Growth Failure

Issue	Response to Growth Failure				
	1. Negligible	2. Minimal	3. Fair	4. Good	5. Excellent
Participation of mothers & families	Mothers attend only if receive some incentive; attend sporadically; not asked to be involved; chart not made for or kept by family	Most mothers attend 3 times per year and are passive participants; keep child's chart but have little understanding of it.	Mothers attend 6 times per year; participate in weighing and want to know weight; express motivation to change practices so child will gain weight; ask questions; keep chart	80% of mothers attend regularly; interpret growth pattern; plan to try specific behaviors; use weight gain to indicate success; growth chart tailored for family	Mothers help weigh child, interpret growth pattern; with worker, choose actions to improve growth; offer experiences to other mothers all materials; developed for mothers
Guidelines for decision making based on child's progress	No guidelines for decisions.	Guidelines use nutrition status only; status used for supplementary feeding decisions at service delivery point.	Guidelines combine nutritional status with health or weight gain criteria; interpretation not clear; action plan suggestive, not specific.	Guidelines for decisions by gaining, not gaining, or losing weight but are only developed for program, e.g. food or for one aspect of level, e.g. community.	Criteria for adequate and inadequate growth combined with health status; used at all program levels, with clear guidelines for decisions and action
Targeting & integration of program components	Children weighed but weights not used for targeting or integration	Weighing linked only to decisions such as feeding; or frequency of weighing based on nutritional status	Targeted referral within health system, based on nutritional status and/or growth	Use growth for referral to other services in community & some targeting of program actions such as health care, but no follow-up	Close coordination with program and community services; good targeting & follow-up
Community awareness and decision making	No community-level use of data (health system only).	Health system provides some feedback to part of community	Community worker compiles nutrition status data periodically and shares results with community, but information does not trigger actions.	Community organization receives and discusses aggregate growth and status information regularly; analyses causes of problems.	Community compiles, discusses & frequently bases decisions/action on data; takes pride in having few under-nourished children & in children who grow adequately.

Part A: Response to Growth Failure (Continued)

Issue	Response to Growth Failure				
	1. Negligible	2. Minimal	3. Fair	4. Good	5. Excellent
Individual nutrition counseling	Either no counseling or messages concern only attendance at weighing	Group nutrition education talks for mothers; topics are generic	Individual nutrition education for those targeted, but messages are general, not tailored	Counseling tailored to individual child who is not growing; counseling more intensive, as needed.	Adequacy of growth determines content and intensity of counseling nutritional negotiation used; targeted materials used.

Ref: Griffiths, Marcia, Kate Dickin, & Michael Favin. 1996. *Promoting the Growth of Children: What Works Rationale and Guidance for Programs*. The World Bank.

Part B: Level of Operational Management

Issue	Level of Operational Management				
	1. Negligible	2. Minimal	3. Fair	4. Good	5. Excellent
Worker and workload	In a fixed facility; growth promotion is one of many responsibilities; no incentive to give attention to growth promotion tasks.	In fixed facility with occasional outreach; auxiliary assigned resp. no incentive to give attention to growth promotion except to food distribution.	In community, extension of health center, multi-purpose; overworked; few incentives.	Community worker with responsibility for nutrition, may work with multi-purpose worker; not overworked; some performance-based incentives.	Community worker has help and will make home visits; percent of children gaining weight is part of job performance.
Training of workers	Emphasis on weighing and charting; one time occurrence; didactic theoretical	Emphasis on weighing and charting, plus nutrition education and rehabilitation are discussed, but low priority and are non-specific; still theoretical but divided into shorter sessions.	Emphasis on weighing and charting, plus analysis of causes and how to target feeding, general nutrition advice, recipes, etc.; task oriented; cases presented, short sessions.	Emphasis on weighing & charting plus analysis of causes & how to target and give general nutrition advice & recipes, plus community dynamics counseling, using materials & giving targeted advice; task-oriented cases and practices; short sessions with follow-up of training in community.	Previous accomplishments plus teach to negotiate with mother, emphasis on community motivation and counseling; previous characteristics plus methods devoted to practice, self-assessment and community follow-up.

Part B: Level of Operational Management (Continued)

Issue	Level of Operational Management				
	1. Negligible	2. Minimal	3. Fair	4. Good	5. Excellent
Supervision of nutrition worker and activities	Check only monthly reporting forms, at best growth charts; visits are at best sporadic.	Check records and frequency of education or receipt of food; visits infrequent; if a problem, blame placed on worker.	Previous accomplishments plus observes growth monitoring session and asks about child nutrition; visits are at least twice a year and attention given to improved performance.	Observe sessions, assess targeting & decisions based on growth data; visit worker quarterly, work with community, emphasis on improved performance.	Previous accomplishments plus visits mothers to help solve problems with worker; initial visits monthly continued, training.
Detailed operational planning	Only a few general norms available.	Norms developed with general guidance but not for all aspects of program.	Guidelines developed for implementation of all aspects of program; some response to local needs in purchase of scales, etc.	Full set of operational guidelines and tools available to respond to local needs.	Full set of operational guidelines with options and examples of local initiatives; materials respond to local needs; budget for local innovations.
Program-level monitoring	Data not compiled, although can be sent through system.	Data compiled, but not used to affect program.	Compiled only for nutritional status; decisions taken on supplies of commodities only.	Data on growth and nutrition status compiled, presented, and discussed, but not at all levels.	Data on growth used for pro-gram decisions (design, expansion) & advocacy at all levels.
Commitment to sustain program	Undernutrition part of dialogue only at national level among program personnel.	Commitment to reducing undernutrition seen only in general terms, not in local action.	Commitment at all levels to reducing under-nutrition.	Adequate growth is used at household and community levels but does not have commitment outside of program personnel at other levels to sustain resource allocation.	Adequate growth is a national development objective; commitment to achieving this is seen at all levels; local resource allocation.

Ref: Griffiths, Marcia, Kate Dickin, & Michael Favin. 1996. *Promoting the Growth of Children: What Works Rationale and Guidance for Programs*. The World Bank.

Annex F

Implementing Positive Deviance–Informed Hearth Programs

Goal of Hearth programs

Positive Deviance allows vulnerable populations to overcome the problems of malnutrition TODAY in a sustainable way, using their own resources.

In what context is this approach used?

The causes of malnutrition among young children are complex and interconnected and the problems resulting from malnutrition are difficult to overcome. Direct causes include insufficient nourishment and disease. Principle causes (at the societal level) result from an unequal distribution of resources and poor economic development. Secondary causes are attributed to a lack of maternal and child care, lack of food security and of health services as well as an unhealthy environment.

The challenge

How can we solve childhood malnutrition problems quickly, economically and sustainably in a culturally appropriate way while considering:

- Poverty
- Complexity of causes
- Urgent needs

Objectives of Hearth

- Rehabilitate all malnourished children in the community within a designated amount of time
- Equip families to keep children in good health at home
- Prevent malnutrition of future generations

In which communities should this approach be used?

- Vulnerable communities
- >30% malnutrition among children 0–3 years
- Presence of inexpensive local foods (not in famine situations)
- Possibility of finding women to work as volunteers
- Committed leaders, village chiefs

Positive Deviance Approach

Positive Deviance-based nutrition programs ask the question: Why are some children in the community from poor families growing well while others, some of which who come from relatively wealthier families, are malnourished? These families of well nourished children are called “Positive Deviant or positive model families.” (Note: for use in the field, these families are usually called

positive model families because of the confusion when using *deviant* to describe something positive.) These families are then studied to determine the positive behaviors and practices they demonstrate which are replicable by the majority but are **unique** when compared to community norms.

Steps in Positive Deviance Inquiry (PDI)

1. Community forms village health committees
2. Community chooses and elects women volunteers
3. Identify community norms which have an impact on children's health status using participatory methods (PAR)
4. Take an inventory of locally available foods
5. Identify well nourished children from poor families
6. Conduct house visits to identify behaviors and practices of positive deviant families which are different from other community members
7. Analyze the results and design a nutrition intervention specific to that community

Identifying community norms

Define community customs and practices, which relate to feeding, care, and health of children

Target groups: mothers and other guardians, grandparents, fathers, and community decision makers.

Identification of Positive Deviant children

1. Weigh all children in the target group
2. Make a list of well-nourished children
3. Determine indicators of wealth/poverty
4. Identify and select those children who are well nourished and who come from relatively poor families

Behaviors and practices to look for during home visits

- Good feeding practices
 - Supplementary foods given at ~ 6 months
 - Variety of child's diet
 - Good quality, frequency and consistency of child's diet
 - Active feeding of child (interaction during feeding)
- Good affection and supervising behaviors
 - Constant supervision of child
 - Positive interaction between child and mother, father, and other family members for the harmonious development of the child
 - Division of labor (i.e. mother is not solely responsible for all child and family care)

- Good hygiene and health seeking practices
 - Good personal hygiene
 - Good food preparation hygiene
 - Good environmental hygiene
 - Completely vaccinated
 - Knowledge of danger of signs of childhood illnesses

Analysis of findings

After identifying those practices, which are unique to the positive deviant families, community members, including health committee members, help determine those practices and behaviors, which are replicable by other community members. These results are used to design community-specific nutrition rehabilitation and education sessions (Hearth sessions).

Nutritional rehabilitation and Education Hearths

Those children identified as malnourished and one family member participate in a daily nutritional rehabilitation session for 15 days held at a village volunteer's house. Elements of a hearth session include:

- Preparation of a collective group meal
- Meal rich in calories
- Daily contribution of foods by families
- Interaction among participants (peer support)
- Discussion of a health topic

Hearth calendar

As a general rule, hearths should be 12-15 days long. This allows mothers and community members to witness a change in the child's health and to relate it to the new behaviors and practices. Ideally, a hearth is six days a week, 2 weeks per month, but variations are sometimes necessary due to women's work. Those children who are not rehabilitated in the designated time period come back the next month to repeat the hearth.

Daily contribution of foods

Each participant brings positive deviant foods to hearth sessions daily so that they can practice acquiring and using new positive deviant foods. This is also used to introduce and reinforce the idea of 'food as medicine' used in the rehabilitation of their children.

Key elements of program

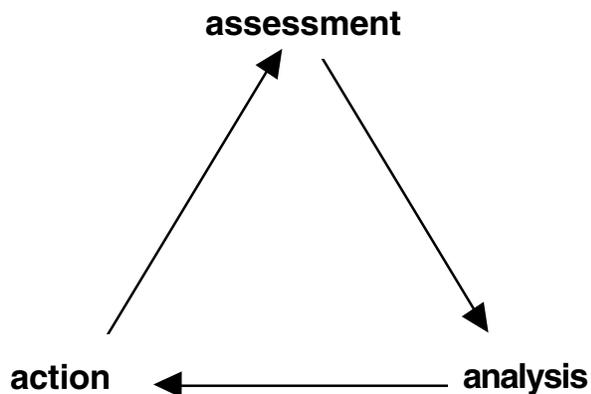
Behavior change

- Learning new behaviors through repetition in a secure, nurturing environment
- Peer support to obtain a new behavior
- Daily contribution of food
- Witnessing the physical and psychological changes in the children during the course of the rehabilitation session

Managing the community project—Follow-up and evaluation

Growth monitoring—regular weighing of all children in target group

- Allows each family to follow their child's growth
- Permits the identification of malnourished children for rehabilitation and inclusion in future hearth sessions
- Allows community to follow-up with targeted children for at least 2 years
- Facilitates inclusion of other preventive and curative interventions



Behavior change at the village level —the project's impact on the entire community

Positive Deviance/Hearth projects have a lasting effect on the entire community because community members are involved in identifying problems and determining solutions.

Sharing experience and teaching others—Living University

Positive Deviance project sites become centers for active learning where other communities, NGOs and public health practitioners come to study the approach in order to replicate it elsewhere.

Difficulties

- Time and effort required of supervisors
- Repetition of PDI in each village
- Inconsistent participation at session (12 days)
- Need to identify underlying illness (TB, malaria, parasitic infections)
- Utilization of supplementary meals as principal meal
- Role of older siblings as guardians

Advantages

- Rapid progress
- Inexpensive
- Respectful of culture and local practices
- Based on local resources
- Planned, managed, and evaluated by the community
- Better use of health services, improved vaccination coverage, facilitation of vitamin A distribution, easier mobilization of community in case of epidemic or for IEC

Annex G

Implementing Child Health Weeks

Goal of Child Health Week

Child Health Week (CHW) is an intervention whose primary goal is to achieve high coverage with Vitamin A supplementation through intensive outreach efforts that are concentrated in a one-week period. Other distribution modes (i.e. coupled with routine immunization) have not shown their ability to achieve the desired coverage levels. The CHW is a demand creation mechanism and is also accompanied by communication strategies to promote the activities. Generally, other preventive services are delivered along side Vitamin A during the CHW, maximizing results during this intense period of supplementation. Examples of other preventive services that have been added during the CHW include EPI, growth monitoring, deworming, bed net redipping or sale, IFA tablets for pregnant women, and health education.

Key components of a CHW strategy

The CHW strategy can be adapted to a country's situation and needs. It will be necessary to define the following aspects:

- Which interventions are going to be offered during the CHW, in addition to Vitamin A
- Which groups are targeted with these interventions (e.g., IFA for pregnant women, children under 5 years of age, etc.)

Successful implementation of the Child Health Week strategy depends on good planning and support activities: training, social mobilization/demand creation, logistic, supervision and monitoring, and financial planning for sustainability.

Training

Initially it is important to provide training prior to the CHW for those involved in provided services during the CHW. This training should cover the benefits of vitamin A, the means of its distribution, and technical issues related to administration of Vitamin A capsules and recording of data. It should also highlight the other preventive services that are part of the CHW. As the CHW becomes part of the normal activities of the Ministry, the need for the training will decrease.

If the country policy allows lay people to administer Vitamin A, training programs will need to be strengthened to be able to accommodate these lay workers with fewer health knowledge and skills, and supervision will need to be more intense to ensure quality.

In addition, training plans will need to be developed for the other interventions included in the CHW. Supervisors will also need training in supervisory skills and how to observe distribution and conduct exit interviews.

Social mobilization and Demand-creation activities

Promotion of the CHW should start approximately a month before the beginning of the CHW and will need to focus on the need to bring both young and older children to this intervention.

Mass media and community and religious leaders, local networks and village-based systems, such as town criers, and schools have been successful in informing the population. The “calls to action” (telling when, where, and who) in the days before and during the distribution can rely heavily on local networks. Success depends upon reaching as many people during distribution as possible. The involvement of grass root organizations, such as women’s group, churches, mosques, or any other community-based groups is crucial in the success of the CHW.

Logistics of the CHW

Good, accurate supply of CHW drugs and supplies to distribution sites is critical and is the ultimate measure of a successful logistics supply system. It is of utmost importance to estimate the adequate number of capsules, vaccines and/or deworming tablets that are needed in each catchment area of the district. The calculation of the number of children can be based on population projections.

Supplies needed for the CHW need to be pre-determined. The district should involve each health post in calculating the number of Vitamin A capsules and other drugs and supplies (for other CHW interventions), based on the number of children in the health post’s catchment area.¹

Vitamin A capsules have an opaque outer covering made of a gelatinous substance and require special handling when storing and transporting. The capsules do not need refrigeration, but in hot climates they may stick together, so it is best to store them in a cool, dry place. If they are left in the refrigerator, they may need to sit out at room temperature in order to soften the outer coating. The capsules should never be frozen. Drugs and supplies for other interventions may have special requirements as well.

Supervision and monitoring

Supervision must ensure that health workers (or other providers) carry out their tasks correctly and that they have the supplies they need, as well as helping to handle any problems that arise. Monitoring of CHW could be done through the supervision, for example as part of observation of encounters between provider and clients, and through exit interviews with clients. Coverage should also be tracked, either through tally sheets and population estimates. Another way to measure coverage of the various CHW interventions and/or knowledge of caretakers (mothers and fathers) is to undertake small household survey.

Two tools for CHW supervisors: (1) observation checklist. An observation checklist for proper delivery of CHW interventions should be designed and administered by supervisors to ensure monitoring. (2) exit interview. An exit interview that provides information on how well the health education messages and the initial communication strategy have worked in improving demand and knowledge. It can be done at the same time as the observation checklist.

Recorded distribution/tally sheets. Coverage can be estimated by recording the number of doses given on a tally sheet and dividing by the estimate of the number of children who should have received a supplement. Estimating coverage from recorded distribution of capsules can be very accurate if the number of capsules distributed is accurate and there is adequate census or other data accurately determining the target population to use as the denominator.

Calculation of the adequacy of supplies should be done for each catchment area, used locally to identify problems, and then sent up to the next level. If it is found some distribution sites did not have adequate numbers of capsules, etc., this information should trigger identification of those areas, and generate plans for alternative strategies for the next round of supplementation.

Program costs and funding

The sustainability of the CHW is dependent on adequate funding. Accurate cost information is key to ensuring this funding. Below is a list of items to be taken into consideration for costing and funding a CHW:

- *Cost of capsules, cost of the vaccines, cost of deworming tablets;*
- *Cost of training personnel, which includes per diem expenses and fuel;*
- *Cost of other supplies, such as scissors or nail cutters, needles, syringes tally sheets, training materials, job aids;*
- *Cost of promotional messages in the media and community; and*
- *Other delivery costs, including transport costs and per diem for travel for community outreach activities and supervision costs.*

Annex H

Guide for Iron Deficiency Anemia

Table 1: Guidelines for Iron supplementation to children 6-24 months of age

Prevalence of anemia in children 6-24 months	Dosage	Birth-weight category	Duration
< 40%	12.5 mg iron + 50mg folic acid daily	Normal	6–12 months of age
		Low Birth weight (< 2500 g)	2–24 months of age
> 40%	12.5 mg iron + 50mg folic acid daily	Normal	6-12 months of age
		Low Birth weight (< 2500 g)	2-24 months of age

Note:

- If the prevalence of anemia in children 6-24 months is not known, assume it is similar to the prevalence of anemia in pregnant women in the same population.
- Iron dosage is based on 2mg iron/kg body weight/day.

Ref: Stoltz, Rebecca J. and Michele Dreyfuss. INACG/WHO/UNICEF

Table 2: Complementary parasite control measures for Children under 5 years

- Where hookworms are endemic (prevalence 20-30% or greater) it will be most effective to combine iron supplementation with anthelmintic treatment for children under 5 years. Children should be treated at least twice a year. The following single-dose treatments are recommended:
 Albendazole 400 mg single dose
 Mebendazole 500 mg single dose

Ref: Revised Stoltz, Rebecca J. and Michele Dreyfuss. INACG/WHO/UNICEF
 Dreyfuss. INACG/WHO/UNICEF