



MINISTRY OF HEALTH

# Training of Community Health Promoters Positive Deviance Hearth Manual



# Positive Deviance Hearth Promoters

MANUAL

# Terms of Use

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Adapted from World Vision International Positive Deviance Hearth (PD Hearth) Manual, 3rd Edition, 2021 developed by Diane Baik and Naomi Klaas and World Vision International.

Globally, one in 10 people is hungry or undernourished, and one in three people is overweight or obese (Global Nutrition Report, 2022). Governments have a fundamental responsibility and authority to safeguard their populations' nutrition, resilience, and well-being through wide ranging enabling, policy, and impact actions.

The government of Kenya is committed to the achievement of Global, Regional, and National targets for nutrition including the World Health Assembly (WHA) targets and Sustainable Development Goals 2 (By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons) and SDG 3 (ensure good health and well-being for all at all ages).

The Kenyan Constitution in Article 43(a, c) also provides for citizens' rights to good health and nutrition which has a vital role in economic growth, poverty reduction and the realization of Kenya's Vision 2030. The achievement of a long-term development agenda for Kenya, anchored in Vision 2030, calls for a healthy and productive labour force. The Ministry of Health recognizes the immediate and long-term social and economic repercussions of malnutrition amongst infants and young children

According to Kenya Demographic Health Survey (KDHS), 2022, Kenya has made significant progress in reducing malnutrition. The prevalence of stunting among children under 5 years reduced from 26% to 18% between 2014 and 2022 while underweight reduced from 11% to 10%. The prevalence of wasting minimally increased from 4% to 5% while overweight reduced from 4.1% to 3%.

The Positive Deviance Hearth (PD Hearth) is an internationally proven community-based model for rehabilitating malnourished children in their own homes using locally available food commodities. The approach is in tandem with the Kenya Nutrition Action Plan (KNAP 2018-2022) Key Result Area Six which elaborates on the strategies for strengthening the prevention and Integration of Management of Acute Malnutrition (IMAM) and Key Result Area One on the promotion of optimal nutrition care practices and support for children 6 – 59 months.

Adapting the model to rehabilitate underweight children will actualize the Integrated Management of Acute Malnutrition (IMAM) Guideline, Second Edition, 2021. In addition, the PD hearth approach actualizes the Kenya Agri-nutrition Implementation Strategy (2020-2025) that promotes the consumption of affordable, safe, diverse, and nutritious foods.

The Ministry of Health will provide the necessary leadership and coordination in liaison with County governments in providing effective coordination to protect, facilitate and encourage optimal infant and young child nutrition at the community level. I urge all stakeholders to play their role in actualizing the implementation of this manual.



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**Dr. Patrick Amoth, EBS**  
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## Preface

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Kenya has introduced several high impact health and nutrition interventions in an effort to extend and improve the health and nutrition status children below five years. However, child morbidity and mortality linked to inadequate dietary intake and/or disease remains high. Thus, the Ministry of Health has embraced decentralized community approaches to treat acute malnutrition. Positive Deviance Hearth (PD Hearth) is one of the innovative approaches to improve coverage of rehabilitating children with malnutrition in line with the Kenya Nutrition Action Plan key result area six. Prevention and integrated management of acute malnutrition.

Community Health Promoter (CHPs) play a key role in supporting health and nutrition interventions in the communities. It is therefore essential to train and empower them with additional skills and knowledge for improved community service delivery. This training manual has been developed for use in training CHPs on Positive Deviance/Hearth (PD Hearth) program implemented in Kenya. We trust this manual will enable CHPs to increase the understanding, skills, and competencies in order to rehabilitate malnourished children and prevent future malnutrition through the PD Hearth program.



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## Acknowledgements

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# List of Acronyms

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ANC	Ante-Natal Care
CHA	Community Health Assistant
CHC	Community Health Committee
CHMT	County Health Management Team
CHP	Community Health Promoters
CHU	Community Health Unit
DHS	Demographic & Health Survey
M&E	Monitoring & Evaluation
ECCD	Early Childhood Care & Development
ED	Edible Portion
FGD	Focus Group Discussion
GMP	Growth Monitoring Promotion
HIV	Human Immunodeficiency Virus
IDP	Internally Displaced Person
IMAM	Integrated Management of Acute Malnutrition
IU	International Units
IYCF	Infant & Young Child Feeding
KNAP	Kenya Nutrition Action Plan
KAP	Knowledge, Attitude & Practice
MOH	Ministry of Health
MUAC	Mid-Upper Arm Circumference
ND	Negative Deviant
NGO	Non-Governmental Organization
NPD	Non-Positive Deviant

## List of Acronyms

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ORS.....	Oral Rehydration Solution
PD.....	Positive Deviance/Positive Deviant
PD Hearth .....	Positive Deviance Hearth
PD Hearth+.....	Positive Deviance Hearth Plus
PDI .....	Positive Deviance Inquiry
PLA.....	Participatory Learning for Action
SCHMT.....	Sub County Health Management Team
TOF.....	Trainer of Facilitators
TOT.....	Trainer of Trainers
UNICEF.....	United Nations Children's Fund
VHSC.....	Village Health & Sanitation Committee
WASH.....	Water and sanitation and Hygiene
WHO.....	World Health Organization

# Operational Definitions

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A **Community Health Promoter** is a member of the community selected to serve in a community health unit.

**Community Health Committee (CHC)** refers to a committee that is charged with the coordination and management of a community health unit.

**GLOW:** Body protective foods.

**GO:** Energy- giving foods.

**GROW:** Body- building foods.

**Graduation:** children who have improved nutrition status to normal or at mild after 3 months in PDH

**Grandmother** refers to a senior woman (related or unrelated to the child) who lives in close proximity to the child and who has influence on child care.

**Hearth:** A place within a house where food is cooked and served.

**Hearth menu:** This is a meal composed of locally available, accessible, and affordable foods that are nutrient-dense.

**Hearth sessions:** These refer to sessions where mothers with malnourished children meet with the guidance of Community Health Promoters to share knowledge, learn positive practices, cook hearth meal and give the food to their children.

**Negative Deviants (ND):** These are malnourished children from rich households

**Non-Positive Deviants (NPD or non-PD):** These are malnourished children from poor households and healthy children from rich households

**PD practices:** These are practices, actions, and behaviors that minimize disease, promote health and wellbeing of individuals.

**Positive Deviance:** Mean 's different in a positive way from the usual practice.

**Positive Deviants (PD):** These are Healthy children from poor households.

**Stunting:** Is Height/length-for-age less than- 2 SD from reference.

**Underweight:** Weight-for-age less than - 2 SD from reference

**Wasting:** Weight-for-height/length less than - 2 SD from reference or 'yellow or red' MUAC).

This training manual contains the information needed to conduct a five-day face-to-face training program to prepare Community Health Promoters prior to starting the program, with a sixth day training scheduled after the 1st week of Hearth implementation. The goal is to train CHPs who will be competent and confident to guide and support caregivers to rehabilitate their malnourished children and prevent future malnutrition. Most sessions involve hands-on practice of the skills and knowledge promoters will need to help caregivers learn.

The curriculum and exercises have been developed based on field experience from many countries in all regions of the world. Adult learning methodologies with practical examples, exercises, role plays and field visits reinforce the principles of strong PD Hearth programs. Facilitators should have experience applying adult learning methodologies as well as a thorough understanding of PD Hearth principles, and preferably, implementation experience.

The maximum number of participants recommended per trainer is 15 to allow for interaction to allow for interaction and hands-on learning. Thus, if there are 2 trainers, a maximum of 30 participants is recommended.

Arrangements need to be made for Day 2, during the practice sessions for weighing and taking children's MUAC measurements. For each group of 15 participants, 3 children between the ages of 6-35 months will be required for the practical session on weighing and taking MUAC measurements.

**By the end of the course participants will be able to:**

- Assist in measuring growth of children using weight and MUAC
- Actively participate in a Positive Deviant Inquiry (PDI)
- Teach caregivers how to prepare Hearth menus
- Conduct Hearth sessions (share the Hearth messages)
- Conduct household visits to support caregivers in application of new behaviors
- Communicate progress and results of Hearth sessions to community leaders
- Follow-up on the growth of the PD Hearth participant children and monitor the Hearth program.

# PD Hearth Promoters Training Agenda

Day and Date	Session	Topics	Time
		DAY 1	
	1	Welcome and Introduction	15 min
	2	What is PD Hearth?	25 min
	3	What is good nutrition?	30 min
	4	What is malnutrition?	95 min+
		DAY 2	
	5	Weighing and measuring children	5.5 hours
		DAY 3	
	6	Positive Deviant Inquiry	115 min
	7	Conduct PDI and share results with community	3.5-4 hours
		DAY 4	
	8	Using the information gathered	210 min
		DAY 5	
	9	Prepare for the Hearth sessions	4 hours
		DAY 6 – After 1st week of Hearth	
	10	Reflection and follow up	150 min
	11	Keeping the community informed	90 min

**Purpose**

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- To begin to learn about one another

**Materials**

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- Manilla paper (Cut small pieces of manila paper equivalent to half of participants' number, write different name of foods one on each paper and cut the small piece of papers into two)
- A bag/box to put the small pieces cut

**STEPS****5 Min**

---

1. Welcome each person to the group.  
Introduce yourself and tell something about your interest in helping families with young children.

Explain that this training involves a lot of participation to aid learning. Encourage promoters to come on time each day.

**10 Min**

---

2. Explain practical details such as where the toilets are and where to get water to drink.

Each CHP picks one piece of a paper from the bag/box then move around and look for the other half and pair to make complete name of the food. Explain this is half of the food name. They are to find the person with the other half of their picture and ask their name, number of children and favorite food.

At the end of five minutes the partners introduce one another to the whole group.

# What is PD Hearth?

25 MIN

DAY 1

## Purpose

- To learn what is PD Hearth
- To learn the three goals of PD Hearth
- To understand the role and involvement of promoters in the programme

## STEPS

### 5 Min

#### 1. Ask the Community Health Promoters:

##### **Are there children in your community who are not growing well? (yes)**

How can you tell? (Small, sickly, too thin, do not walk, do not play, cry a lot)

Why do you think these children are not growing well? (Not enough food, father not present, unsafe water, mother works, too many children in the family)

##### **Are there children who are growing well? (yes)**

How can you tell? (Happy, active, play, growing taller, not thin)

Why do you think these children are growing well? (Eat well, mother cares, grandmother helps, not too many children, family has more land to grow things)

Are all the children from poorer families ill and not growing well? (no) Are all the children from non-poor families healthy? (no)

### 10 Min

#### 2. Explain

“In our village it is possible to be poor and still have children who are healthy and grow well. We want to discover what those families do to make sure their children are healthy so that families with malnourished children can learn the same things and make their children healthier. For 12 days we will meet with the malnourished children and their caregivers. A child’s caregivers could include their mother, father, grandmother, grandfather and/or older sibling – anyone who does a lot of the work of taking care of the child. Grandmothers often give advice on child care and feeding even if someone else is directly taking care of the child. The advisor role is very important too so we will involve grandmothers as much as possible.

Each day the caregivers will bring a small amount of food to cook. These foods will make their children grow better. We will learn to cook foods that will help malnourished children gain weight. We will also help the caregivers learn good habits in cooking, feeding, hygiene, health and caring for their children. In the end we want the malnourished children to improve quickly. We want to help families know how to keep their children healthy and growing well, and we want to keep other children from becoming malnourished.”

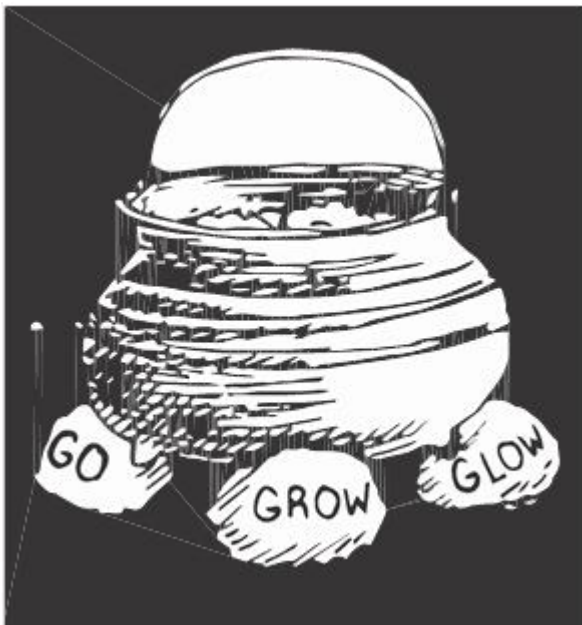
### Introduce the three goals of PD Hearth:

- To rehabilitate malnourished children quickly
- To help families keep their children healthy
- To prevent malnutrition from happening in the future

### 10 Min

### 3. Tell the story 'Stone Soup'

A kind old stranger was walking through the land when he came upon a village. As he entered, the villagers moved towards their homes locking doors and windows. The stranger smiled and asked, "Why are you all so frightened. I am a simple traveler, looking for a soft place to stay for the night and a warm place for a meal."



"There's not a bite to eat in the whole county" he was told. "We are weak and our children are starving. Better keep moving on."

"Oh, I have everything I need," he said. "In fact, I was thinking of making some stone soup to share with all of you." He pulled an iron pot from his bag, filled it with water, and began to build a fire under it.

Then, with great ceremony, he drew an ordinary-looking stone from a silken bag and dropped it into the water.

By now, hearing the rumor of food, most of the villagers had come out of their homes

or watched from their windows. As the stranger sniffed the 'broth' and licked his lips in anticipation, hunger began to overcome their fear.

"Ahh," the stranger said to himself rather loudly, "I do like a tasty stone soup. Of course, stone soup with cabbage -- that's hard to beat." Soon a villager approached hesitantly, holding a small cabbage he'd retrieved from its hiding place, and added it to the pot.

"Wonderful!" cried the stranger. "You know, I once had stone soup with cabbage and a bit of dried fish as well, and it was fit for a king."

Another villager managed to find some dried fish and so it went, through potatoes, onions, carrots, mushrooms, and so on, until there was indeed a delicious meal for everyone in the village to share.



## What is PD Hearth?

The village elder offered the stranger a great deal of money for the 'magic' stone, but he refused to sell it and travelled on the next day. As he left, the stranger came upon a group of village children standing near the road. He gave the silken bag containing the stone to the youngest child, whispering to a group, "It was not the stone, but the villagers that had performed the magic".

Like this story, we will all work together with families contributing what they can, to help improve the growth of our children.

#### **4. Discuss a way to describe the PD Hearth Concepts in the local language.**

#### **5. Explain the role of the CHP in PD Hearth**

As a promoter, you will discover how poorer families feed and care for their children. You will learn how to help caregivers whose children are not growing well. You will guide them and teach them to feed and care for their children. For two weeks, you will spend about two hours with the caregivers and their children cooking together and feeding their children. This session is called "Hearth". Then, for an additional two weeks, you need about half an hour each day to visit the caregivers in their homes to see if they are continuing the practices they learned during Hearth. You would visit each home every two to three days. If caregivers are facing challenges at home that are preventing them from continuing the practices they learned at Hearth, it is part of your responsibility to be together and find solutions with the caregiver and family members, particularly the grandmother.

You will be provided with forms to use to track and monitor the children during the 2 weeks of home visits and then again at 3 months, 6 months, and 1 year after the 1st day of Hearth for the Hearth participant children. We will go through the monitoring forms later on in the training. Hearth will repeat after 3 months (or as frequently as the country office has decided).

You will learn many new things that you will be able to apply with your own families. At the same time, you will help other families in the community.

### Purpose

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- To learn what is good nutrition

### Materials

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A variety of foods available in the community set on a table. Make sure there are eggs, animal and plant protein sources, dairy and dairy products, fruits, vegetables, nuts, grains, grain products and other staple foods. If food is unavailable, use pictures. Use examples of foods that are locally available and affordable in the community.

- Assorted cooking pots
- Cooking oil
- Three large stones, each with a large label: **GO GROW GLOW**
- A variety of healthy and unhealthy snacks
- Hand-washing facilities (basin, water, soap)

### STEPS

#### 5 Min

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1. Explain  
'To grow well children, need to have healthy foods and to be free from illness. Children need adequate, safe, and varieties of foods. We will look at what types of food children need to eat to prevent illnesses.'

#### 10 Min

---

2. Have participants call out what types of food they eat in their community.
  - 1) What is the main food they eat? (Rice, maize, millet)
  - 2) What are other foods they eat? (Any foods they list)
  - 3) Why do we need to eat different types of food? (They taste good, some help us not get sick, some help us not to get hungry, they help children grow)

#### 10 Min

---

3. Set up a cooking pot that rests on three large stones, with the names on the stones turned to the inside. Discuss this cooking method.

Use the cooking pot and stones to explain the three labels: **Go, Grow** and **Glow**: 'Is the pot balanced? (yes)

# What is good nutrition?

What happens if we take away one stone, the pot will fall over. For us to be healthy and not 'fall', we need to embrace food diversity. We are going to call each stone a different name: **GO**, **GROW**, and **GLOW**. Food diversity will lead to achieving the **GO**, **GROW** and **GLOW**.



**What foods give us GO?** That is energy to work, walk and play (Grains, grain products and other starchy foods.)

**Note:** Grains, grain products, and other starchy foods only include grains harvested mature and dried. Therefore, green maize does not fall in this food group

Fats and oils are to make foods more energy dense as well as essential for the absorption of some vitamins such as Vitamin A, D, E,

## Can our pot balance on one stone? (No)

What happens to it? (Falls over, puts out the fire, spills the food) We need all three stones to keep the pot balanced.

Another stone is called GROW. What do you think GROW do? (Help our bodies grow and develop well, build muscles and nerves and perform its functions properly)

These foods often come from animals and also plants.

Which foods on the table are GROW foods? (Eggs, milk, fish, chicken, meat, groundnuts, beans, peas, nuts, seeds)



## Note:

*Legumes nuts and seeds: include legumes harvested mature and dried. Coconut does not fall in the category of nuts: if consumed immature it is categorized in the "other fruits", It can also be used as coconut milk seasoning, or fat if processed Dairy, dairy products, do not include butter and ghee*

**Can our pot stand on two stones? (No)**

We need another stone. This one is called GLOW foods. What do you think GLOW foods do? (Protect our bodies from illness, make our hair, eyes see well, and skin glow).



They are often fruits and vegetables. Which foods on the table are GLOW foods?

(Carrots, pumpkin, tomatoes, dark-green leafy vegetables, pawpaw, mangoes,).

Glow food is made up of;

- Vitamin A rich fruits and vegetables identified by orange, yellow, and green colours
- Other fruits and vegetables rich in Vitamin C.

**Note:** Foods can also be fortified with vitamins and minerals at the factory or at home level. In Kenya, flours, table salt, fats & oils are fortified at the factory level).

Most of the complementary foods provided to children aged 6-23 months do not provide enough micronutrients to meet their nutrient needs, therefore, point-of-use (home level) fortification with Multiple Micronutrient Powders (MNPs) is a strategy to improve the nutrient content of complementary foods by compensating for the lack of nutrient diversity. Multiple Micro nutrient Powders can be added to food prepared at home to improve the nutritional quality of the diet by providing 15 essential micronutrients to food for children 6 -23 months of age.

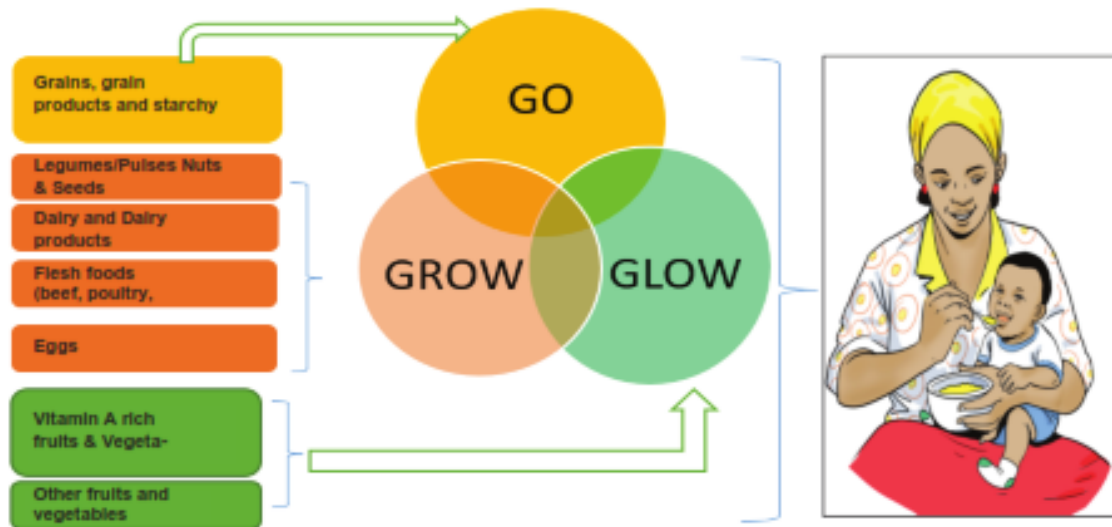
Each child is given one sachet (1g) to be used every third day hence 10 sachets per month. Have each participant pick different types of food from the table. Make sure all the foods are picked. Now have the participants place the foods they picked by the proper stone.

When all the foods are placed, ask if all the foods are in the right places. Gently make any corrections.

*Discuss how most people eat a low-cost staple food that forms the main part of the meal and provides energy. In many homes, not much else is eaten. But to be healthy more than just this main food must be eaten. It is very important to also eat other foods groups so as to achieve food diversity.*

# What is good nutrition?

## Recommended food groups for children



**Discuss one food not included yet it is very important for babies and small children:  
What is it? (Breast milk)**

### Why is breast milk important?

(It contains exactly what a baby needs to be healthy and grow. For six months, a baby does not need any other food or water).

What is the reason for not giving a baby other food or water before six months?

(Baby is more likely to get diarrhoea, will take less breast milk and that will cause the supply of breast milk to decrease).

When do babies need to start to eat other foods?  
(At six months)

How long do babies need breast milk? (Up to 24 months or beyond)

Why do babies need food at six months?

(They are more active, they need more energy and nutrients than they cannot get in breast milk, their gut has developed more and they can digest other food). These foods are called complementary food

What happens if a baby does not get other foods at six months? (Will stop gaining weight and growing well, may not be interested in other foods later)



### Prepare and eat a snack together

**Note:** Have them wash their hands before preparing the snack

Make a display of common snack foods. Include both healthy snacks (banana, papaya, mango, milk, egg, groundnut, orange) and unhealthy snacks (soda, sweets, candy, crisps, junk food). One way to help children grow is to make sure they eat at least three to five times during the day. This includes 3 main meals and 2 snacks. The meals should have foods from at least 4 food groups selected from the 3 types of food (Go, Grow and Glow)

**Lead a discussion using the following questions:**



Why are snacks important for children? (Stomachs are small so they can only eat small amounts at once, it is a chance to give a variety of foods such as fruit)

Which of these snacks (on the table) are healthy and which are unhealthy? Why? Which are affordable? The unhealthy snacks are also readily available in the markets, e.g., sodas, sweets, crisps etc., and limit OR avoid the consumption of these unhealthy snacks as they contain high levels of sugars, salt and fats

Pick one of the healthy snacks, such as pawpaw, for the participants to prepare and eat together.

**Note:** Healthy snack is small portion of nutritious food eaten between meals. They may be simple food item such as raw fruits or vegetables.

# What is malnutrition?

95 MINS

DAY 1

## Purpose

- To learn how malnourished children look like
- To learn causes of malnutrition
- To understand the effects of malnutrition

## Materials

- Two inflatable balls, one perfectly round and the other deflated (or find a healthy branch of leaves and a dying branch of leaves)
- Flip-chart paper and markers
- Clean water and soap to wash hands

## STEPS

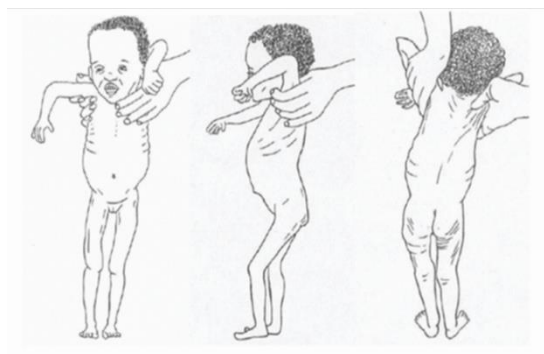
15 Min

### 1. How does a malnourished child look like?

Ask the participants to think of a young child who is not growing well. What shows that the child is not well? Ask several participants to describe the child they are thinking of (Restless, sad, irritable, sickly, no interest in playing, withdrawn, thin arms and legs, may appear normal but be much older than the child looks)



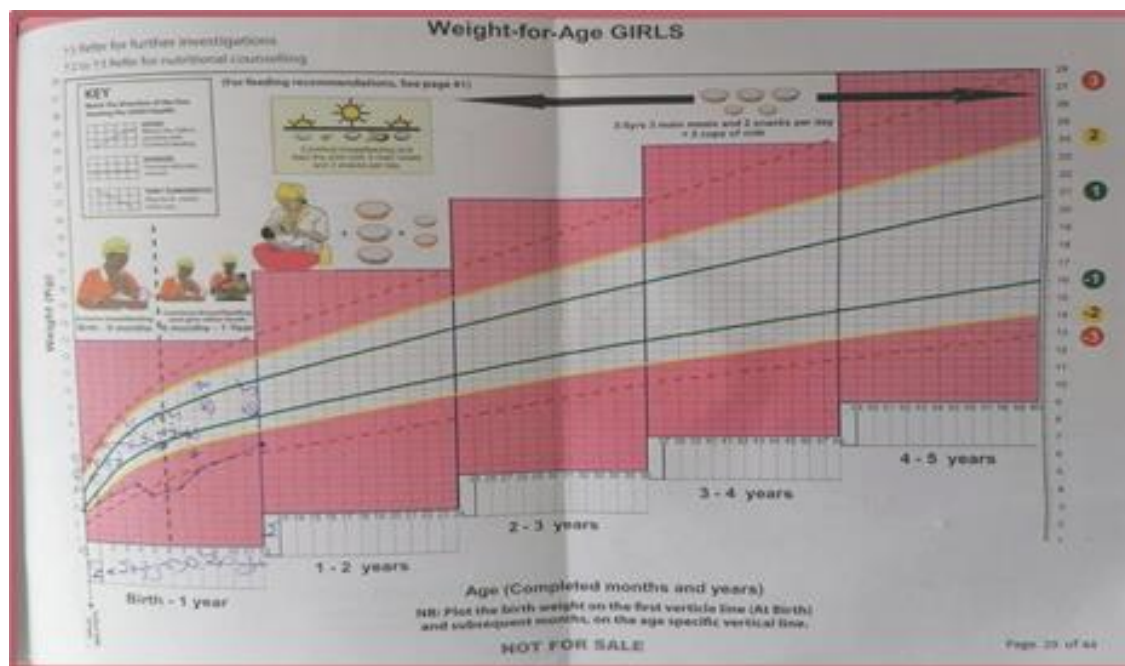
**Fig 3.1**



**Fig 3.2**

*The illustrations show different forms of malnutrition. The two images in figure 3.1 show two children of the same age (2 years and 3 months). The child on the right is stunted. Child stunting is very common but often goes unrecognized. It is more common than other forms of malnutrition, such as being underweight (low weight for age) or wasting (low weight for height).*

*The 3 images in Figure 3.2 shows wasting. A child with wasting has lost fat and muscle, the child weighs less than other children of the same height. A wasted child has a low Mid Upper-Arm Circumference and may have visible signs of wasting on the ribs and wasting on the buttocks.*



**Figure 3.3** is an illustration that shows a growth curve of an under-weight child. Underweight is defined as low weight for age. An underweight child may be stunted, wasted, or both.

**Explain:** 'While these signs help, we can't always tell that a child is not growing well, so we need to measure. Tomorrow, we will learn how to measure weight and mid-upper arm circumference (MUAC) to tell if a child is growing well.'

### 15 MIN

- Why is malnutrition a problem?

**If you have inflatable balls:**

Use the 2 inflatable balls to demonstrate how a well-nourished child has a healthy growing pattern compared to a malnourished child.

Ask 2 participants to take turns bouncing the balls on the floor. Other participants should observe which ball bounces higher.

Ask 2 other participants to draw on a flip chart the height and pattern of the bounce of each inflatable ball. Why does the perfect ball bounce higher?

**Discuss the exercise:**

How does the perfectly inflated ball compare to a healthy child? (The healthy child has more regular and more 'well-rounded' growth and shows more energy. A mal-nourished child is like a deflated ball. This child's growth is not regular and he or she has very little energy.)

Why do we care if a child grows well? (Review consequences of malnutrition)



## What is malnutrition?

### **If you have the 3 leaves:**

Use the healthy and unhealthy branches of leaves to demonstrate how a well-nourished child has a healthy growing pattern compared to a malnourished child. Ask one participant to draw a tree that has access to a lot of rain and sunlight. Ask another participant to draw a tree that does not receive rain and only receives sunlight.

### **Discuss the exercise:**

How does a tree with access to a lot of rain and sunlight compare to a healthy child? The healthy child has more regular growth and is “greener”. A malnourished child is like an unhealthy branch. The leaves have no strength and little energy, like a malnourished child. Why do we care if a child grows well? (Review the consequences of malnutrition)

### **Consequences of malnutrition:**

The consequences of malnutrition are life-threatening. Malnourished children do not have much energy, are not very active, may cry often or seem very sleepy. They are much more likely to be ill with infections such as diarrhoea, pneumonia, tuberculosis and malaria. When a child is malnourished, infection or illness is more likely to become serious or even cause death.

Small and sickly children are more likely to be enrolled in school late – or never – and they tend to stay in school less time. These children struggle to learn and often do not do well at school. This lack of healthy growing, both physically and mentally, will affect them throughout their lives.

As these malnourished children become adolescents, they may not have the knowledge and skill they need to become independent adults. Over their lifetime, they will not be able to do as much work and will earn less than their peers who were well-nourished as children.

They will be less able to support their own children when they become parents. Girls will have difficulty with pregnancy or have small babies.

While all stages of a child’s growth are important, the most critical time is the first 5 years of life, especially the first 1000 days, that is, the period between conception and a child’s second year of life. Thus, children between 6–59 months who are malnourished come to the Hearth for rehabilitation. Babies younger than six months need exclusive breastfeeding for healthy growth so are not included in Hearth.

15 Min

**3. What causes a child not to grow well?**

Tell the following story about Juma. (Adapt the names in the story to the community names) Juma is 15 months old. He is very small and very thin. Juma has an older brother, Fadhili, who is 5 years old, and a sister, Sarah, who is 3. Sarah was born with a low birth weight. Another sister was born very small and died soon after birth. Juma's mother, Eva, is 27 years old. She is pregnant again. She breastfed all her babies, and – as the grandmother told her to - she also gives them tea and thin porridge. Eva works hard on a farm three miles from her home for a small wage. She finds the work very tiring, especially when she is pregnant. On the way back to the house, she stops at the river to get a bucket of water. Once back at her house, she is too tired to do anything but cook the family's meal. Fadhili takes care of all the children while Eva is in the field. He tries hard to keep them clean and happy, but often Juma has diarrhoea and a runny nose. They usually have tea for breakfast. At midday, they eat whatever might be left over from the day before, but often there is nothing. In the evening the family eats maize or cassava and some green vegetables. They cannot afford meat or even beans.

Lead a discussion using the following questions:

- Who were the people in the story? What happened in the story? What was the problem? Why is Juma too thin?
- Some of the reasons will not be clear in the story, but CHPs should think of possible causes for the problem. Have them call out reasons. You might need to ask them
- 'Why?' to help them think more deeply. (Juma doesn't eat enough, not enough food, too many children, mother is gone the whole day, father is not there, not enough money, diarrhoea, sickly, unclean water, worms, no shoes, grandmother tries to help but the tea and thin porridge are not good foods for babies)
- Which is the biggest problem? Why? Does it happen in your community?
- Summarize the discussion by saying there are many reasons children might not grow well.

These can include practices related to:

- 1) Food
- 2) Care
- 3) Hygiene
- 4) Health seeking behaviours

15 Min

**4. Nutritional status is also affected by illness**

Explain that the body needs food to fight infections, but illness makes the child not want to eat. When the child eats less, the illness lasts longer or gets worse and can even lead to death. Children who are sick will also not grow well. It is important to help children not to become sick or to help children get better quickly.

Lead a discussion on childhood illnesses in the local community:

What illnesses do children in our community get? (Diarrhoea, colds, cough, fever, malaria, tuberculosis, pneumonia)

How can we help children not get sick?

## What is malnutrition?

Immunization and Vitamin A supplementation – When do children need to be immunized?  
(Refer to the Ministry of Health Immunization Schedule)



**Deworming**—Why is deworming important?

(a child may not feel like eating, body will not be able to use the food the child eats, more loss of nutrients from the gut)

When do they need to be dewormed? (Refer to the Integrated Vitamin A Supplementation and Deworming Guidelines for children aged 6 -59Months in Kenya).

Vitamin A supplementation – Why is this important? (Helps a child see better, prevents blindness, helps fight infection, disease and prevents death)

How do we treat children who are sick? (Continue to feed breast milk and give food and liquids during illness, go to the health facilities if the child is not getting better)

### **What do we do for a child with diarrhoea?**

(Frequent breast feeding and other foods and liquids; give oral + zinc rehydration solution)  
Review the method for mixing oral rehydration solution.

### **Note to the Facilitator:**

Before children enter the Hearth sessions, they should have completed their immunizations, received Vitamin A supplements and been dewormed. This will give each child the best chance to recuperate from malnutrition. CHPs will need to talk with the caregivers about this and either send them or go with them to the health post to make sure each child has received all these interventions.

**30 Min**

### **5. Handwashing at 5 critical times to prevent illness**

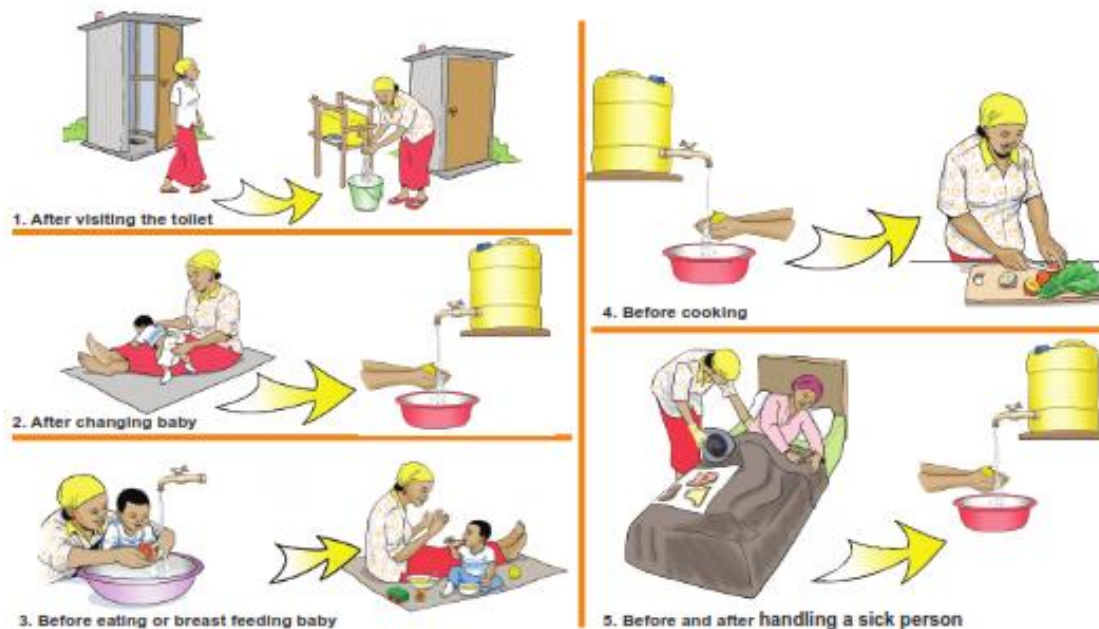
Emphasize the importance of handwashing especially during the critical times illustrated below (after visiting toilet, after changing the baby diapers, before eating or breastfeeding baby, before cooking, before and after handling a sick person)

Why is it important to wash hands? (To keep germs from spreading, getting into our food, mouths, making us sick)

When do we need to wash our hands? (Before preparing food, before eating, after using latrine, after changing a diaper, after helping a child use the toilet, after helping a sick child)

Wash fruit even if you are going to peel it so germs and dirt are not transferred to the flesh of the fruit, and cut with a clean knife

### Critical times of handwashing



### 5 Min

#### 6. Ask participants to think of one new thing they learned today.

Ask them to name the three goals of PD Hearth. (To rehabilitate malnourished children quickly, to help families keep their children healthy and to prevent malnutrition from happening in the future)

Ask them to name the four main reasons why children may not grow well. (Inadequate food, care, hygiene, health-seeking behaviours)

Ask the CHPs to define their responsibility and role in PD Hearth.

- Community Mobilization
- Supervising preparation of menus
- Supervise feeding of children by care givers
- Give timely feedback to community leaders
- Lead Hearth sessions (sharing key messages with caregivers)
- Visit households of PD Hearth participant children for 2 weeks (every 2-3 days) after the last day of Hearth
- Follow-up with the PD Hearth participant caregivers at 3 months, 6 months and 1 Year since 1st day of Hearth

### Purpose

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- To understand how to measure children correctly
- To assess the nutritional status of children
- To consider factors of feeding, care, hygiene, and health seeking practices which are important to child care and development.

### Preparation

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Depending on the number of participants, arrange for at least 3 children between the ages of 6-59 months to be part of the practice sessions for taking weight and MUAC measurements. If there are more than 15 CHPs, additional children will be needed.

- For weighing scales, calibration and zeroing should be done prior to taking weight to ensure accuracy. Zeroing should be done before every child is weighed. Recalibration should be done after every 10 children to make sure the scale is still reading properly.
- Before weighing each child, check to ensure the pointer on the scale points to 'zero', as determined by calibration.
- For the hanging scale, zeroing should be done with the weighing basket or sling or pants.

**NOTE:** To calibrate means to use known weights to see if the scale is reading correctly

- Within a day before the growth monitoring session, weigh at least 1 or 2 known weights to make sure the scale is accurate, e.g., 5 kg and 10 kg known weights. If it is inaccurate, adjust the scale until it yields a correct weight measurement. This is the new 'zero'.

### Materials

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- Hanging scales and weighing pants
- Bathroom/standing scales if used in the community
- MUAC tapes
- Pencils
- Recording charts
- A copy of MCH handbook
- Weight monitoring charts, & attendance charts (these will be used in the Hearth sessions)
- A picture of a healthy child and a picture of a malnourished child
- Sheets of flip-chart paper, cut or torn in half, one for each group of three or four CHPs
- Paper cut into a circle, one for each CHP
- CWC Registers
- Wealth Ranking Forms
- Positive Deviance enquiry checklist
- Hand out 9.1, 9.2, 9.3 For each Participant

### Nutrition Assessment

Children are weighed on day 1 and day 12 of the Hearth sessions; day 30 and thereafter monthly. CHPs will weigh children using the recommended guidelines. The correct techniques are very important and will not be mastered in just one session. For this reason, CHPs with more experience will assist those with less experience in weighing children. The health care worker should attend the Hearth session on the days children are weighed in order to ensure that weighing is done accurately. For more information on how to accurately plot a child's weight on the Growth chart and correctly interpret information from the growth curve, refer to the Community BFCI trainers' manual.

**Note:** If you cannot correct the scale, you may need to subtract or add the difference from the children's weight. This will increase chances for error in the children's weight. It is best to calibrate your scale BEFORE bringing it to the growth monitoring site and finding one that accurately measures a known weight.

Zeroing is the process of adjusting the scale to 'zero'

# Situation analysis

## STEPS

60 Min

### Weighing and measuring children.

#### 1) Procedure to weigh a child using hanging scales

It is easiest to use hanging scales where two people are weighing children: one person to assist the caregiver in placing the child in the scales and read the measurement, and one person to record the weight. Use the Hearth weight monitoring charts to record the weights of children.

#### Prepare the scales

1. Hang scales from a strong support, such as a tree.
2. Scales must be at eye level.
3. With a weighing pant adjust the scales to zero.

#### Prepare the child

The facilitator acts as the health worker or measurer. Ask one participant to be the caregiver and a second participant to be the recorder.



You can use a doll or a sack of grain to take the place of a child for this demonstration.



4. Ask the caregiver to remove the child's outer clothing. Do not remove the child's underpants. If the child is wearing a diaper, ask the caregiver to remove it before weighing.

**Measure the child's weight**

5. Place the child in the basket or sling and ensure that it is secure.
6. Carefully lift the child up by holding the straps of the basket or sling. Hook the straps onto the scales. Gently let go of the child and allow the child to swing freely. Check the position of the child to make sure the child is not touching or holding anything.
7. Hold the scales steady. Stand directly in front of the scales. When the child is still and the needle is steady, read aloud the measurement to 0.1 kg. If the child is moving about, ask the caregiver to talk gently to the child to calm him or her, and wait until the needle is ready before reading the measurement.
8. The measurer repeats the measurement aloud and then records the weight immediately.

**Practice**

- 1) Divide the participants into working groups of 3 people. Tell each group to practice the series of steps you just demonstrated. They should take turns acting the part of the caregiver, the measurer, and the recorder. When you give these instructions, say clearly the list of steps one more time. After they have practiced 1 or 2 times, come back together as a group to discuss any challenges or questions.



## Situation analysis

60 MINS

### Weighing and measuring children.

- 2) Procedure to weigh a child older than 24 months using standing scales.

If a child is not available during the training, ask a participant to volunteer to act as the child to be weighed. The facilitator will take the role of the measurer. Ask another participant to take the role of the recorder/measurer. Use the Hearth weight monitoring charts to record the weights of children.



Then demonstrate in the following order:

- 1) Set scales on smooth, hard surface, in good light. Scales should be out of direct sunlight because heat may affect the readings.
- 2) Measurer zeroes the scales.
- 3) Ask CHP playing role of the child to remove his or her shoes and any heavy clothing/items, with assistance if necessary.
- 4) Child stands with feet at center of scales.
- 5) Measurer moves close to the scales and, when the pointer or digital display is no longer moving, reads aloud the weight of the child to the nearest 0.1 kg.
- 6) Recorder stands behind the measurer and repeats the weight aloud before writing it on the form. Measurer checks the accuracy of the information on the form.



Procedure to weigh a child younger than 24 months using standing scales

Ask a participant to volunteer to act as the caregiver. Use a doll (or sack of grain or a rock) to represent a child. The facilitator will take the role of the measurer

Then demonstrate in the following order:

- 1) Set scales on smooth hard surface in good light. Scales should be out of direct sunlight because the heat may affect the readings.
- 2) Zero the scales.
- 3) Caregiver removes child's outer clothes.
- 4) Caregiver holds child and stands on center of the scales.
- 5) Measurer kneels by scales and, when the reading is steady, reads aloud the weight of caregiver + child, to the nearest 0.1 kg.
- 6) Recorder stands behind measurer and repeats the weight aloud before writing it on the form.



## Situation analysis

## DAY 2



- 7) Caregiver steps off scales, gives the child to another person to hold, and then stands on the scales alone.
- 8) The measurer reads aloud the weight of the caregiver alone.  
For example:  
Weight of caregiver + child = 59.6 kg
- 9) Recorder repeats the weight aloud and records the caregiver's weight on the form. Recorder does the calculation on the sheet.
- 10) Measurer checks the accuracy of the information and calculation.

**Note:** The caregiver's weight is recorded only to be able to calculate the weight of the child by subtracting the caregiver's weight from the weight of the caregiver + child together.

Weight of caregiver only (without the child) = 52.1 kg

Weight of child (59.6 – 52.1) = 7.5 kg

Now ask the participants to calculate the actual weight of the 'child' that was just weighed.

Discuss their answers. Are participants correct in their calculations? If not, why not? Answer any questions.

### Practice

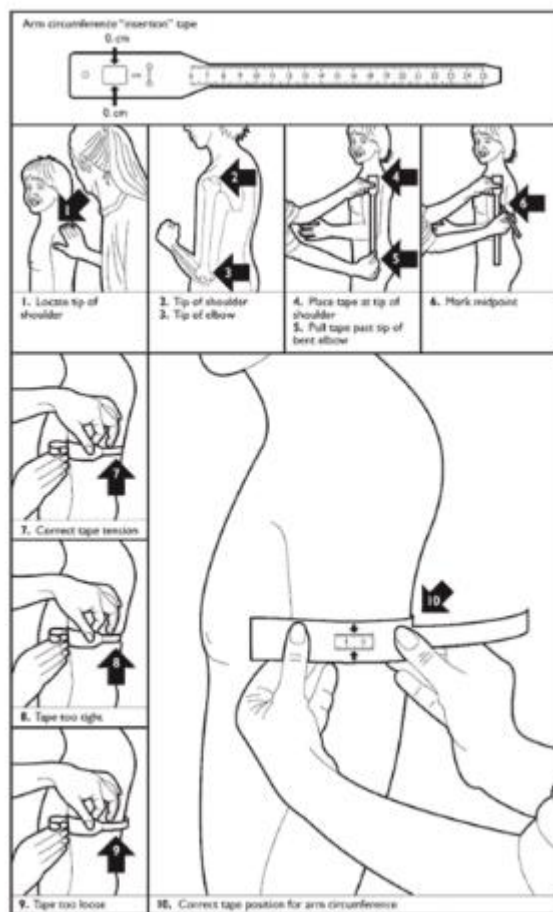
Divide the participants into working groups of 3 people.

Tell each group to practice the series of steps you just demonstrated. They should take turns acting the part of the caregiver, the measurer, and the recorder.

When you give these instructions, say clearly the list of steps 1 more time. After they have practiced 1 or 2 times, come back together as a group to discuss any challenges or questions.

30 Min

- 3) Taking Mid-Upper Arm Circumference (MUAC) measurement Ask a CHP to take the role of the child in your demonstration of how to take the MUAC measurement.



- 1) Work at eye level. Sit down when that is possible.
- 2) Ask the caregiver to remove any clothing that covers the child's arm. Then we find the mid-point of the child's upper arm by doing the following steps.
  - 3) Locate the tip of the child's shoulder with your fingertips.
  - 4) Bend the child's elbow to make the right angle.

## Situation analysis



- 5) Estimate where the middle of the upper arm is between the shoulder tip and the elbow. Mark this as the mid-point.
- 6) Straighten the child's arm.
- 7) Wrap the MUAC band around the child's arm at the mid-point mark you have just made. Insert the end of the band through the thin opening at the other end of the band.
  - a) Keep the colours or numbers on the band right side up so that you can see them, and be sure that the band is flat against the skin.
  - b) Make sure the band is not too tight (if the band is too tight, this bunches up the skin and we do not get an accurate reading)
  - c) Make sure the band is not too loose (the band is too loose if you can fit a pencil under it)

- 8) Read the measurement aloud (either the colour or number which shows most completely in the wide window on the band). Ask the assistant to repeat the measurement and to record it on the form.

Check that the measurement is recorded correctly.

Gently remove the tape from the child's arm. Thank the mother and the child for their cooperation.



30 Min

### Checking for oedema

Children who are severely malnourished can have complications such as oedema, kwashiorkor or others. These children should be referred to the health facility for further management.

- Bilateral pitting oedema is a symptom of acute malnutrition caused by an abnormal and excess accumulation of fluid in the body.
- To determine the presence of oedema, Step 1: Press both feet with thumbs as shown below; Apply normal thumb pressure on both feet for three seconds (count the numbers 101, 102, 103 in order to estimate three seconds without using a watch).

### Checking for oedema

Bilateral pitting oedema is a clinical manifestation of acute malnutrition caused by an abnormal infiltration and excess accumulation of fluid.

To determine the presence of oedema,

**Step 1:** Press both feet with thumbs as shown below; Apply normal thumb pressure on both feet for three seconds (count the numbers 101, 102, 103 in order to estimate three seconds without using a watch).

**Step 2:** Release pressure from feet; If a shallow print persists on both feet, then the child has nutritional oedema (pitting oedema)

**Step 3:** If there is oedema present on the feet, perform the same test described in step 2 but now move up to the lower legs.

**Step 4:** Move up to the upper body and/or face. If there is oedema present on the lower legs, perform the same test described in step 2 but now move up to the upper body and/or the face

**Step 3 and Step 4** are performed to be able to grade or classify the level of nutritional oedema the child is suffering from (if present)

Depending on the presence of oedema on the different levels of the body, it is graded as follows



#### NOTE

Children with oedema (any grade) are at a high risk of dying and should be immediately referred to a health facility. They should not be enrolled in PD Hearth

Figure 10.1 An illustration of a child with oedema

Source: <https://ycf.advancingnutrition.org/>

## Situation analysis

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30 Min

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### **PD Hearth Admission Criteria**

Discuss the target age group (e.g., 6 months to 59 months) and the nutritional status of children that will be included in the PD Hearth program (e.g., mild and/or moderate and severely underweight children). Children who are wasted (MUAC;11.5cm or 115mm red on MUAC) should not be included, but should be referred to the nearest health facility or hospital for further nutritional assessment and management. If there are no IMAM services and the child does not have complications, they should be admitted to PD Hearth.

30 Min

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Review the main reasons a child might not be growing well, as discussed on Day 1. Ask participants to name the ones they can remember. (Not enough food, too many children, caregiver is gone the whole day, father is not there, not enough money, diarrhoea, sickly, unclean water, worm infestation, no shoes, caregiver tries to help but doesn't always give good advice on practices)

**Examples of feeding, caring, hygiene and health practices that contribute to health**

Feeding/Food	Caring	Hygiene	Health
Continued, frequent breastfeeding of infants up to or beyond 24 months	Positive interaction between child and caregivers (play and communication)	Use of latrine and latrine cover	Completed immunization as per schedule.
Introduce other foods at six months	Supervision at all times, responsive feeding, child stimulation	Hand washing with soap after visiting toilet, before eating, before food preparation, handling a sick patient, after changing baby's diapers	LLITN Mosquito nets used in malaria endemic areas Vitamin A supplementation Growth monitoring and promotion
Feed 3–5 times / day (age-appropriate feeding)	Father providing attention/affection Parent or caregiver providing appropriate play and communication to the child	Safe water (boiled, covered)	Sicks medical health when ill
Variety in food; giving snacks between meals selected from the 7 recommended food groups for children	Family members sing and play with children to stimulate learning	Keeping kitchen clean	Mother seeks for family planning services
Caregivers talk to child and make eye contact while feeding (Responsive feeding)	Father provides money to buy good foods for children	Keeping child's play area clean	Use of oral rehydration solution during diarrhoea
Continued breastfeeding along with appropriate liquids and foods during and after diarrhoea	The home is a safe environment for children to play	Kitchen pots are washed and left to dry on a rack.	Children with disability referred for rehabilitative services and feeding support

**120 Min****Wealth Ranking Exercise**

Explain to the CHPs that 'we want to identify positive deviant children in our target age group. Remember, positive deviant children are children from poor families who are healthy. To do this, we must first identify the different socioeconomic classes within our community. This exercise is called, "Wealth ranking". We and the community must believe that the PD families are truly among the poor!'



## Situation analysis

### Why do we need to do wealth ranking?

- 1) To prepare a given community to implement PD Hearth.
- 2) To understand the way the community classifies its economic differences.
- 3) To determine criteria for classifying households as poor or non-poor.

If people share food, resources and income in nuclear units, then wealth ranking is done by household. If the food, resources and other income are shared across multiple, related households, then wealth ranking must consider the extended family instead. Explain that it is important to do wealth ranking with community members because they know how best to define the poor in their community. They must agree with the final assignment of households in order to believe later that there are PD children (from poor families) in their community.

### Identifying characteristics of non-poor households

- Choose two different versions of an object, for example, two stones of different colors.
- Lay the stones out on the ground with some distance between them.
- Explain that one stone represents the non-poor households and the second represents the poor households.
- Have everyone look at the non-poor stone and reflect silently on which families in their community would go with this stone.
- Ask participants how they know these families are not poor. What do these families have that families in the poor category (stone) do not have? List all the characteristics. Prompt them to think about feeding practices, child caring practices, hygiene and sanitation, health seeking behaviors, housing, clothing, occupations, amount of land owned, and so on. Does everyone agree that families in the poor category do not have these characteristics?
- Identifying characteristics of poor households
- Now focus attention on the second stone. Remind participants that this represents the poor people.
- Ask participants how they know these families are poor? What don't they have that the non-poor families have? What do these families have that families in the poor category (stone) do not have? What do they feed children? How do they care for their children? Where do they seek health services? How are their hygiene practices? What income do they have? What about their houses? Jobs? Clothing? Do they own any livestock? What kind and how many?
- It may be necessary to add a third stone if the participants say there is another group which is even poorer. If so, ask for characteristics of those people. To validate the criteria, ask the participants to think silently about the poor household they know. Do these household meet the criteria for poor that were just agreed upon?

Agree with the CHPs on 4-5 main criteria that classify households as poor and non-poor (Refer to the Case Example on page 29 if needed). Let the CHPs know that we will be asking caregivers questions to identify their wealth status as we measure and record the children's weights and MUAC in the field.

**Case Example for Wealth-Ranking Session**

To be classified as poor in 1 sample community, a family must meet at least 3 of the following criteria:

- Lives in 1-room house (Sample Question: How many rooms do you have in your home?)
- House made of mud and sticks (Sample Question: What is your house made of?)
- House has dirt or cracked cemented floor (Sample Question: What is the floor of your house made from?)
- No regular salary (Sample Question: What is the job of the head of the household?)
- No more than one person in the family working (Sample Question: Who works in the family?)

**WEALTH RANKING**

Child's name and family name	Child's age in months	Wealth ranking for family	Wealth ranking (P = poor; non-P = non-poor)
Judy	31	Both parents work as vendors, rent one- room house, house made of mud and sticks, dirt floor	P
Rehema	12	Single mother, works periodically, rents one room, house made of mud and sticks, dirt floor	P
Owami	30	Father works on salary, rent two rooms, two families in house, cement floor	Non-P
Peter (M)	18	Father works part time, mother works part time, rent block house	Non-P
LizAnn Henry (F)	6	Father is temporary taxi driver, owns house made of mud and sticks, dirt floor	P
Juma (M)	31	Mother works as servant on regular salary, rent two-room house, cement floor, father has small shop	Non-P

## Situation analysis

120 Min

### i. Field preparation

#### **Going to the community to conduct the situational analysis: Weigh and collect the MUAC measurements of the children.**

Ask the CHPs to begin mobilizing the community. Once families with children less than 5 years of age have gathered, introduce the team and explain that we are here to address malnutrition together. The CHPs should encourage community members to define the problem of having unhealthy children in the community. Engage the community in a discussion about the issue of childhood malnutrition: discuss its causes, common challenges and constraints and ask for their ideas or suggestions for solutions.

Emphasize that we can overcome malnutrition together because good health is not only available for the rich. Good health is available for all of us, we just need to know the right foods, caring practices, health-seeking practices, and hygiene practices to follow. Introduce the concept of PD Hearth in the local language as practiced in Day 1; e.g. Even within our own community, there are very healthy children and we will be learning from these households what they do to keep their children healthy. We will then practice these lessons during our PD Hearth program. A healthy future for our children is available for all of us! We are going to be weighing children 6 months to 3 years old today, so please begin to line up your children to be weighed.

Have the CHPs organize the children and then assist the health workers to weigh them and take the MUAC measurements. CHPs should assist in the classification of wealth ranking for each household by asking questions determined previously during the wealth ranking session. Wealth ranking should be conducted simultaneously as children's weights and MUAC are being measured. Health workers will provide forms for recording weight and socioeconomic classification of each child.

After the visit, health workers will collect the forms with all the weights, MUAC and wealth ranking recorded. Using the data, health workers will identify the nutritional status of each child using the Weight for Age reference tables. Taking the nutritional status, wealth ranking, and MUAC data, health workers will be able to identify the Positive Deviant families (PDs), that is, poor families that have well-nourished children, for tomorrow's exercise. The purpose is to learn what good practices the families have that enable them to have well-nourished children. Seeing is believing! CHPs have to be convinced of the value of PD practices in order to persuade other families to adopt them.

Organize the CHPs with the appropriate health workers to conduct the PDIs and assign them to households for the visit tomorrow.

- Divide participants into groups that will carry out the market survey, transect walk and FGDs.
- The Market Survey team will visit the market and shops to establish food availability and affordability for families (1 group).
- The Transect walk group will conduct a community mapping exercise to get a glimpse of what the 'norm' is in the community and what might affect the children's health. (1-2 groups).
- Focus-group discussions (FGD) will be held with caregivers and grand caregivers to determine the common feeding and caring practices in the community (1-2 groups).

## WHO Weight-for-Age Reference Table

## DAY 2

Weight-for-age Standard Table – Boys and Girls 0–59 months (WHO) (With 'mild' status) *											
BOYS						GIRLS					
Sex	Age (mon)	Green (Normal)	Yellow (Mild)	Orange (Moderate)	Red (Severe)	Sex	Age (mon)	Green (Normal)	Yellow (Mild)	Orange (Moderate)	Red (Severe)
M	0	3.3	2.9	2.5	2.1	F	0	3.2	2.8	2.4	2.0
M	1	4.5	3.9	3.4	2.9	F	1	4.2	3.6	3.2	2.7
M	2	5.6	4.9	4.3	3.8	F	2	5.1	4.5	3.9	3.4
M	3	6.4	5.7	5.0	4.4	F	3	5.8	5.2	4.5	4.0
M	4	7.0	6.2	5.6	4.9	F	4	6.4	5.7	5.0	4.4
M	5	7.5	6.7	6.0	5.3	F	5	6.9	6.1	5.4	4.8
M	6	7.9	7.1	6.4	5.7	F	6	7.3	6.5	5.7	5.1
M	7	8.3	7.4	6.7	5.9	F	7	7.6	6.8	6.0	5.3
M	8	8.6	7.7	6.9	6.2	F	8	7.9	7.0	6.3	5.6
M	9	8.9	8.0	7.1	6.4	F	9	8.2	7.3	6.5	5.8
M	10	9.2	8.2	7.4	6.6	F	10	8.5	7.5	6.7	5.9
M	11	9.4	8.4	7.6	6.8	F	11	8.7	7.7	6.9	6.1
M	12	9.6	8.6	7.7	6.9	F	12	8.9	7.9	7.0	6.3
M	13	9.9	8.8	7.9	7.1	F	13	9.2	8.1	7.2	6.4
M	14	10.1	9.0	8.1	7.2	F	14	9.4	8.3	7.4	6.6
M	15	10.3	9.2	8.3	7.4	F	15	9.6	8.5	7.6	6.7
M	16	10.5	9.4	8.4	7.5	F	16	9.8	8.7	7.7	6.9
M	17	10.7	9.6	8.6	7.7	F	17	10.0	8.9	7.9	7.0
M	18	10.9	9.8	8.8	7.8	F	18	10.2	9.1	8.1	7.2
M	19	11.1	10.0	8.9	8.0	F	19	10.4	9.2	8.2	7.3
M	20	11.3	10.1	9.1	8.1	F	20	10.6	9.4	8.4	7.5
M	21	11.5	10.3	9.2	8.2	F	21	10.9	9.6	8.6	7.6
M	22	11.8	10.5	9.4	8.4	F	22	11.1	9.8	8.7	7.8
M	23	12.0	10.7	9.5	8.5	F	23	11.3	10.0	8.9	7.9
M	24	12.2	10.8	9.7	8.6	F	24	11.5	10.2	9.0	8.1
M	25	12.4	11.0	9.8	8.8	F	25	11.7	10.3	9.2	8.2
M	26	12.5	11.2	10.0	8.9	F	26	11.9	10.5	9.4	8.4
M	27	12.7	11.3	10.1	9.0	F	27	12.1	10.7	9.5	8.5
M	29	13.1	11.7	10.4	9.2	F	29	12.5	11.1	9.8	8.9
M	30	13.3	11.8	10.5	9.4	F	30	12.7	11.2	10.0	9.0
M	31	13.5	12.0	10.7	9.5	F	31	12.9	11.4	10.1	9.1
M	32	13.7	12.1	10.8	9.6	F	32	13.1	11.6	10.3	9.3

## WHO Weight-for-Age Reference Table

Weight-for-age Standard Table – Boys and Girls 0–59 months (WHO) (With ‘mild’ status) *											
BOYS						GIRLS					
Sex	Age (mon)	Green (Normal)	Yellow (Mild)	Orange (Moderate)	Red (Severe)	Sex	Age (mon)	Green (Normal)	Yellow (Mild)	Orange (Moderate)	Red (Severe)
M	33	13.8	12.3	10.9	9.7	F	33	13.3	11.7	10.4	9.4
M	34	14.0	12.4	11.0	9.8	F	34	13.5	11.9	10.5	9.5
M	35	14.2	12.6	11.2	9.9	F	35	13.7	12.0	10.7	9.6
M	36	14.3	12.7	11.3	10.0	F	36	13.9	12.2	10.8	9.7
M	37	14.5	12.9	11.4	10.1	F	37	14.0	12.4	10.9	9.8
M	38	14.7	13.0	11.5	10.2	F	38	14.2	12.5	11.1	9.9
M	39	14.8	13.1	11.6	10.3	F	39	14.4	12.7	11.2	10.1
M	40	15.0	13.3	11.8	10.4	F	40	14.6	12.8	11.3	10.1
M	41	15.2	13.4	11.9	10.5	F	41	14.8	13.0	11.5	10.2
M	42	15.3	13.6	12.0	10.6	F	42	15.0	13.1	11.6	10.3
M	43	15.5	13.7	12.1	10.7	F	43	15.2	13.3	11.7	10.4
M	44	15.7	13.8	12.2	10.8	F	44	15.3	13.4	11.8	10.5
M	45	15.8	14.0	12.4	10.9	F	45	15.5	13.6	12.0	10.6
M	46	16.0	14.1	12.5	11.0	F	46	15.7	13.7	12.1	10.7
M	47	16.2	14.3	12.6	11.1	F	47	15.9	13.9	12.2	10.8
M	48	16.3	14.4	12.7	11.2	F	48	16.1	14.0	12.3	10.9
M	49	16.5	14.5	12.8	11.3	F	49	16.3	14.2	12.4	11.0
M	50	16.7	14.7	12.9	11.4	F	50	16.4	14.3	12.6	11.1
M	51	16.8	14.8	13.1	11.5	F	51	16.6	14.5	12.7	11.2
M	52	17.0	15.0	13.2	11.6	F	52	16.8	14.6	12.8	11.3
M	53	17.2	15.1	13.3	11.7	F	53	17.0	14.8	12.9	11.4
M	54	17.3	15.2	13.4	11.8	F	54	17.2	14.9	13.0	11.5
M	55	17.5	15.4	13.5	11.9	F	55	17.3	15.1	13.2	11.6
M	56	17.7	15.5	13.6	12.0	F	56	17.5	15.2	13.3	11.7
M	57	17.8	15.6	13.7	12.1	F	57	17.7	15.3	13.4	11.8
M	58	18.0	15.8	13.8	12.2	F	58	17.9	15.5	13.5	11.9
M	59	18.2	15.9	14.0	12.3	F	59	18.0	15.6	13.6	12.0
M	60	18.3	16.0	14.1	12.4	F	60	18.2	15.8	13.7	12.1

**Purpose**

- To share results of the nutrition assessment with the community
- To conduct a Positive Deviant Inquiry in the community
- Mobilize the community again.
- The CHPs will then share the nutrition assessment results and the findings from the group discussions with the community and community leaders.

**STEPS****20 MIN****1. Activity 1 nutrition assessment**

Review with the promoters the initial assessment information (results of weighing and findings from group discussions) and discuss how this could be communicated to the community. Divide the promoters into groups to practice creative ways of sharing the assessment findings with the community. Two examples are provided as a guide.

**Example 1: Use green and yellow leaves to show healthy and unhealthy plants.**

Discuss why the yellow leaves are unhealthy and ways to make the plants healthy. (Use manure, weed them, space them properly, fertilize them). Link the leaves with children. Some children are growing well, and some are not. Why? (Not fed enough, not fed often enough, not well spaced, sickly, not enough variety of food, parents absent)

Use stones to show proportion of children who are like yellow leaves (Malnourished) and those who are like green leaves (well nourished). What makes the difference between these groups of children? How have caregivers in the community tried to help their children grow better? What do some families do to keep their children well nourished?

**Example 2:** Make a very large 'Road to Health' card. Plot every child that was weighed in the community on the chart. Use the colours green, yellow and red to show the difference in levels of malnutrition. Talk to the community about how healthy children's growth follows the curve. Ask how many children there are. How many are not growing well? How can they tell? Why do they think they are not growing well? What have they tried before to help children grow better? Are any children growing well? Why do they think that is? Are there things these families do that we could learn from? What have they tried? What has worked? Introduce PD Hearth – discovering together what these families do so that all can have well-nourished children.

After community feedback, break off into the respective groups. Each PDI team visit will take 45 minutes to 1 hour and should cover a time when the caregiver is making food and feeding the child, if possible (in a group 4 people).

**NOTE:** Use formats provided by Health care workers for each activity

# Positive Deviant Inquiry (PDI)

115 MIN

DAY 3

## Purpose

- To understand Positive Deviant Inquiry (PDI)
- To learn and practice how to observe
- To practice household visits for PDI

## Preparation

- Print and cut apart two sets of 21 behaviour cards
- Adapt and practice the story of Nasiruddin (below)

## Materials

- Behaviour cards

Health care workers, community leaders, health care providers and others will be involved in the PDI. CHPs and Health facility staff do not lead the PDI, but they can be valuable team members as health care workers lead the PDI session.

## STEPS

5 Min

### 1. Tell the following story about Nasiruddin

Nasiruddin lived in a town. Often, he would take a couple of donkeys loaded with grass and cross the border of the town to enter the neighboring territory. The customs officers at the border had a strong suspicion that Nasiruddin was smuggling out some goods, but they could not find any. Nasiruddin only had heaps of grass, which they examined very closely. They thought there might be small rings of gold or tiny diamonds. They even burned the grass, but in vain. Nasiruddin's several crossings of the border did not reveal any smuggled goods, and he entered the neighboring territory several times after giving a big respectful salute to the officers. But there was always a cunning smile on his face. Their police instinct told them he was smuggling something, but they could not figure out what. Many years later, long after Nasiruddin had stopped his movements and lived in another town, one of the customs officers, who had by then retired, suddenly met him.

'Tell me, Nasiruddin the ex-customs officer asked, 'what were you were smuggling in those days?'

Nasiruddin looked up and with the same cunning smile said, 'Donkeys, of course'.

**10 MIN****What is the message behind the story?**

(The solution to something is often right in front of us but sometimes we miss it, look for unexpected things, don't be misled by obvious things (the grass) and miss other things (the donkeys), be open minded)

**Explain the PDI:**

'We want to discover what the poor families who have healthy children do in each of the areas of food/feeding, caring, hygiene and health. To learn about our community, we are going to talk to caregivers and grandmothers in a group about how they feed and care for children, and we will visit some families at home to see what they do. We will also find out what foods are available in the community that poor families can afford. We will visit during the time that caregivers are feeding their children. That way we can observe how they feed them, the care they give them and the relationship between the caregiver and other influential members of the family, such as the grandmother. We want to talk to the caregivers, including grandmothers, and observe what they do but not make any comments. We need to have open minds and look for unexpected practices or ways of doing things.'

**Note:** CHPs will be valuable observers on the team. CHPs will also help caregivers feel comfortable to answer questions honestly during home visits as much as they will not lead the PDI visit.

**15 MIN****2. What information will help us learn about feeding and caring practices?**

Explain the categories of positive deviant practices:

- We will identify the foods which poor families use to feed their children to keep them healthy and strong. These foods are the good foods.
- We will identify the care that poor families give to their children to keep them healthy and strong. This is good care.
- We will identify the hygiene that poor families use to keep their children healthy and strong. This hygiene is good hygiene.
- We will identify the health care that poor families use to keep their children healthy and strong. This health care is good health care.

**NOTE:** Good feeding, good caring, good hygiene and good health care, are important in making a child healthy and strong.

By learning about them from poor families with healthy children, we solve our community's nutrition problems with own solutions. Our solutions will help families in our community learn and understand how to keep their children healthy and strong. Help the CHPs identify the types of information they will need. Samples are included here.



## Positive Deviant Inquiry (PDI)

### Sample Guidelines for Conducting a PDI Good food:

- Is the child breast-feeding? If not, at what age did the mother start giving other foods/drinks to the child?
- What foods is the caregiver giving the child during the inquiry? Identify all the foods and how they prepare them.
- Who decides what the child will eat? What role do other family members play in child feeding decisions?
- How many times did the child eat or drink while you observed?
- Does someone help the child eat?
- Where does the family buy food? Who buys it? How much money is spent on food each day?
- How many 'meals' does the child eat a day? How much does the child eat?
- Are there any foods the caregiver does not give the child?

### Good care: (observe rather than asking the family, if possible):

- Who is the primary caregiver of the child?
- What roles do other family members play in the care of the child?
- Who is in the house with the child during the day?
- Does the caregiver take the child to the vaccination post? How often? Is the child on schedule? (Ask for the mother child booklet)
- Does the caregiver or others play with the child? How? How often?
- How is the child disciplined? By whom?
- How does the caregiver encourage the child to eat when he or she does not want to?

### Good health care: (ask for the health card and/or ask the caregiver these questions):

- How do you know when your child is sick?
- Was the child sick in the past 1 month? If so, how many times?
- What illnesses has the child suffered?
- When the child was sick, what did you do? Did you feed the child anything differently?
- What steps do you take to prevent illnesses?

### Good hygiene:

- Is the house clean? Is the kitchen clean?
- Are the people clean and bathed?
- Is there a latrine? How does it look? Does it have a vent?
- Make observations on the water source.
- Do pigs, mules, dogs or other animals go in and out of the house?

**5 MIN**

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3. **The following exercise helps participants to understand behaviours and skills that are important to the nutritional status of children.**

Divide participants into two teams. Each team gets one set of 21 behaviour cards. Have the team members separate the cards into two piles: those with behaviours that directly affect the nutritional status of children, and those that do not. Tell them to be prepared to justify their choices.

**10 MIN**

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Bring the teams together. Call out each behaviour and have the team members put both hands in the air if the behaviour directly influences the nutritional status of children or put their hands behind their back if it does not. Have team members explain their choices, especially when there is disagreement about the behaviors

**Behaviour cards sample**

Make two sets of cards. Write one behaviour on each card.

## Positive Deviant Inquiry (PDI)

Table 1: Behavior Card

Caregiver smiles and makes eye contact when feeding child	Nails are clipped	Use of home remedies for illness	Child is bathed every day	Boils drinking water for the family	Child eats five times a day including snacks as per age appropriate.
Caregiver sings to child while washing hands	Use of soap to wash hands	Child is given fruit for snack	Child breastfeeds during the day only	Grandmother talks to child with a warm voice and helps the child eat	Adds oil to porridge
Child is dewormed	Seeks medical help when ill	Eggs and groundnuts are included in meal	Parent hits the child for not obeying	Kitchen pots are washed and left to dry on a rack	Child feeds often during illness
Caregiver praises good behaviour	To discipline child, caregiver stays calm and talks to the child in a kind but firm tone	Sleeps with window open	Child eats from own bowl	Washes hands after using latrine	Child wears sandals
Takes child for growth monitoring	Eats food without washing hands	Takes child for supplementation	Not taking children for Immunization	Mother seeks for Family planning services	Caregiver shows love and affection to the child
Availability of hand washing facilities.	Sleeps in the same house with animals	Exclusive Breastfeeding for Children Below 6 Months/ continued breastfeeding for 2 years or beyond.	Caregiver feeds the child Responsively	Child kept neat and clean	Forces the child to feed.
Defecates in the nearby bush	Mother and small children eat from the same plate.	Children eat food once a day.	Grandmother takes care of small child while mother is away.	Children bathes when only going to church.	The father eats first before children

15 MIN

#### 4. How to tell what a child ate?

##### **Explain the 24-hour recall:**

We want to find out what families feed their children. Think about what you ate yesterday. Can you remember everything you ate? Is it easy to remember? (no) We want the caregiver to tell us each food she gave the child yesterday. To help her remember, we will start with breakfast and work through the day. Ask questions to help her remember but be careful not to give her suggestions.

**Role play:** Facilitator with one participant. Ask for a CHP to act the part of the caregiver (e.g., mother or grandmother). The facilitator plays the part of the CHP visitor. Start with breakfast and work through all the foods the 'caregiver' gave her child yesterday till bedtime. Use questions like these: What did you give Mari first?

Anything else? How did you make that? Did you add anything else? Did Mari have anything else with that? What did she eat next? At what time? Thank the CHP 'caregiver'.

##### **Answer any questions from the participants.**

Divide into pairs. Practice this method to find out what each partner ate yesterday. Emphasize that the way questions are asked is important. For example, ask, 'What did Aisha eat when she got up yesterday?' (rice) 'Did she have anything with the rice?' (beans) 'Anything else?' Do not suggest answers by asking, 'Didn't she have beans with her rice?' Caregivers will often answer with what they think the interviewer wants to hear. It is important that caregivers feel free to answer accurately.

#### 5 MIN

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#### 5. Observation exercise

Have participants stand in pairs facing each other and carefully observe each other for 30 seconds. Then ask them to stand back-to-back and change one thing about their appearance (take off an earring, put on glasses, button a cuff, for example). Partners then face each other again and see if they know what changed. Ask how many observed correctly. Emphasize the importance of good observation in order to explore behaviors through the cultural lens of the community and of probing communication to glean information without bias.

## Positive Deviant Inquiry (PDI)

### 15 MIN

#### Role play on observation during household visit

Divide participants into groups of 5. Each group will have an 'interviewer', 'observer', a 'mother' and 2 'children'.

Group members will practice either scenario 1 or scenario 2 for a family visit. The 'interviewer' will talk with the 'mother' about feeding, care, health and hygiene. The 'observer' will listen and look to see what other information he or she can learn that will be valuable.

**Scenario 1:** This role play portrays part of a PDI. During the part shown, the interviewer focuses on feeding practices. The PD child is a well-nourished 30-month-old girl. Her mother says the child eats only during the 2 daily meals. However, a sibling in the room is sharing a snack with the child (who is fed constantly by older siblings, grandmother and neighbors). In this culture 'meals/ feeding' means a meal with rice. The mother talks very little. While she is being interviewed, the sibling washes the child's hands, scolds the child when she drops something and tries to pick it up to eat it, plays with the child, gives the child a drink, and so on. (The interviewer and mother do not interact with the child or sibling during this time.)

**Scenario 2:** This PDI visit is being made to a family with 5 children. The 3-month-old baby is breastfeeding, and there is also a 2-year-old present. The older brother and sisters are in school. The mother is talking about the help she gets from her mother-in-law who instructs her on breastfeeding, preparing meals for the 2-year-old child, and general child care. They have a small garden and use the vegetables in the porridge and sauce she makes. The child is outside putting a dirty stick in her mouth. The mother-in-law stops her, washes the child's hands and then feeds her a banana as a snack. The interviewer then switches the discussion to snacks and foods at different times of the day and does a simple 24-hour recall of food eaten. She also engages the mother-in-law who has just entered the house.

### 15 MIN

#### Discuss the role play

- What did you like?
- What did you learn?
- What surprised you?
- What did you find difficult?
- What would the families do differently?

**Note:** Be sure to emphasize that the PDI team is not to give answers or make comments. The team is there to learn from the caregivers.

## 10 MIN

**6. Scenario 3: Introduce the dos and don'ts of doing interviews**

**Skit** Have 4 people perform the following skit, deliberately exaggerating to draw out bad technique in a funny way:

The PDI team arrives at the house. The members do not introduce the team properly. They say they want to visit the mother because she is poor and they want to find out how she manages to feed so many children. The interviewer's cell phone goes off. As she answers it, the other members of the PDI team start talking, laughing and eating candies, not offering any to the mother. The mother says she has 6 children and the interviewer makes a disapproving face. The interviewer has a long list of questions in a big book and reads 1 after the other, not listening to the answers the mother gives. When the mother says the youngest child has diarrhea, the interviewer starts to lecture her. The team seems bored and disrespectful. The mother says she is busy and would like them to leave. The interviewer keeps insisting on asking 'a few more questions.

## 10 MIN

**Preparation for field visit**

After the role play discuss with the group what was good about the interview team's approach. Discuss what was not done correctly. Talk about the dos and don'ts of conducting interviews. Emphasize important skills to remember:

Dos	Don'ts
<ul style="list-style-type: none"> <li>• Be wise and respect the family.</li> <li>• Be friendly and polite</li> <li>• Introduce yourself</li> <li>• Congratulate the family members on their good work and ask permission to observe and talk to them</li> <li>• Include all influential family members in the discussion</li> <li>• Remember that the team is there to learn</li> </ul>	<ul style="list-style-type: none"> <li>• Don't ask them why they are poor.</li> <li>• Do not criticize or lecture.</li> </ul>

Explain that today the promoters will be visiting families to discover the good feeding, caring, hygiene and health behaviors they practice. Explain where to meet, how the visits will be organized and what they will do with the information they gather.

Organize groups to conduct home visit PDIs (4 groups); Market Survey (1 group), Transect Walk (1-2 groups), and Focus Group Discussions (1-2 groups). Give each PDI team the names of the families it is to visit.

(The CHPs will not lead these activities but will participate in them. Giving feedback to the Community and Visiting Families)

## Using the information gathered

210 MIN

DAY 4

**Purpose**

- To find positive common practices from the information gathered from each PDI group

**Materials**

- Flip charts and markers
- Items to illustrate Hearth activities (e.g., soap and towel; cooking pot and utensils)

## STEPS

30 MIN

**1. Present the PDI Findings**

Health care workers with the help of CHPs, will gather the information from the FGD, PDI, transect walk and market survey. Present a summary of the information in a field-visit summary sheet (see format below). Use an asterisk (\*) to indicate which practices are from the family visit. Points without an asterisk indicate common practices in the community.

PD Food/Feeding	PD Caring	PD Hygiene	PD Health Seeking
Non-PD Food/Feeding	Non-PD Caring	Non-PD Hygiene	Non-PD Health Seeking

## 45 MIN

**2. Identify Key Hearth Messages from the PDI Data**

In the large groups, ask each small group to explain the findings of its PDI data. Show what behaviors were found in the PD families' homes and what behaviours were found in the non-PD homes or learned through FGDs, transect walk, or market survey.

For behaviours considered positive, ask the group whether the behaviour could be practiced by a poor family or only by a non-poor family. In other words, is it feasible, easy to do, and affordable?

Ask each group to identify behaviours that are practiced by more than 1 family. The group should highlight these practices and indicate how many times that behaviour was observed. This serves to illustrate common threads among the PD families.

Work together to develop a summary chart of special foods, behaviours, skills, practices, and messages that should be emphasized in Hearth sessions. Tell CHPs that we will learn how to use this information to help families with malnourished children. Review the 6 key messages to be shared with caregivers during the Hearth sessions, and ensure the CHPs are very familiar with these.

## 10 MIN

**3. Preparing for the Hearth sessions**

CHPs play a key role in the preparations for the Hearth sessions. Introduce the steps involved, explaining that these activities should be done with the help of the supervisor/trainer and the support of the community.

- i. Identify the CHPs that will lead the Hearth Sessions (responsible for sharing key messages)
- ii. Become familiar with at least 2 Hearth menus and how to cook them. Conduct a short home visit to each family who will participate in the Hearth session.
- iii. Meet with the caregiver and grandmother and identify if a child is truly from a poor family and is malnourished. Invite them to an orientation meeting.
- iv. Conduct an orientation meeting for PD Hearth participant caregivers. CHPs need to be sure the following topics are discussed

v.

- **Importance of immunization, Vitamin A supplements and deworming**

Check that each child's immunizations are complete, that the child has had the Vitamin A supplement and that he or she has been dewormed. If not, refer the caregiver to the nearest health facility to have these services given before the hearth sessions begin.

- Explain **where to meet the 1st day**, what the programme will be and what the caregivers need to bring (e.g., ingredients, firewood, plates/bowls/cups and spoons).
- Agree on a **suitable location** for the Hearth sessions.



## Using the information gathered

### The location should have:

- Adequate space for caregivers to cook and children to play in the shade
- A source of water
- A nearby latrine



**Note** that the home visits (step iii) and orientation meeting (step iv) will be carried out on Day 3 of this training. Encourage the CHPs to notify caregivers that they will be visited in their homes the next day by, HCWs and CHPs

#### 4. What happens in a Hearth session?

Introduce the activities included in Hearth sessions:

- arrival of caregivers and children; taking attendance
- weighing children (on the 1st day and 12th day)
- collecting food contribution
- hand washing and preparing/serving a snack
- playing with children
- food preparation
- hand washing and feeding children
- planning for the next day – contributions, tasks
- clean up

Remind the CHPs that each of these activities provides an opportunity to help caregivers learn behaviours and skills that will help their children grow well. Caregivers will learn best through informal conversation and hands-on activities, not lectures.

Set up each of the activities of the Hearth session as a 'station' around the room. Use props (for example, soap and water at the hand-washing area; a pot, a spoon and some food at the cooking area). Go to each station as a group and discuss what caregivers can learn there. Demonstrate the conversation or activity at each station. Ask participants to role play interacting with the caregivers. Emphasize learning while doing and using conversation based on the activities to discuss reasons for each of the practices being promoted. Use the list below as a guide.

## Using the information gathered

### Key roles and messages appropriate to different activities of the Hearth sessions:

#### Arrival of caregivers and children; attendance

- Welcome the caregivers and children with respect.
- Make a positive observation on the appearance of both child and caregiver.
- State the importance of coming every day to see change and learn new practices.
- Ask how things are going at home; troubleshoot and share observations.
- Encourage commitment of both families and community.

#### Weighing children

- Importance of child growing well
- Growing well enables the child to learn better
- Growing well makes the child stronger
- Growing well results in better health.

#### Collect food contribution

- Cost and sources of nutritious food
- Food variety
- Safety of food
- Positive reinforcement of healthy choices
- Nutritious accessible foods
- Proper storage
- Where foods can be found and gathered
- Food production/home gardens

#### Handwashing/ hygiene

- Demonstrate proper hand-washing technique
- Use of soap
- Times when hand washing is important
- Why we wash hands: bacteria and germs contribute to illness/diarrhoea
- Treatment of diarrhoea and illness, and when to seek health care
- Immunization, de-worming
- Nail cutting
- Personal hygiene
- Latrine use
- Use of shoes

**Key roles and messages appropriate to different activities of the Hearth sessions continued:**

### **Snack**

- Frequency of snacks and meals
- Why it is important to feed children 4–5 times a day?
- Healthy snacks that require little or no preparation
- Consistency of food
- Food groups
- Nutritional value of food
- Importance of including a variety of food each day
- Breastfeeding
- Food storage

### **Cooking**

- Nutritional value of food
- Sources of affordable food: food production/home gardens, barter, gathering
- Variety of food
- Good cooking techniques
- Food hygiene and safety
- Food storage
- Palatable food
- Importance of feeding children 4–5 times a day
- Hearth is an extra meal

### **Child stimulation/playing games with children**

- Modelling play and care of children
- Motor skills and cognitive development
- New ways to stimulate children
- Singing, dancing, clapping games, and so forth
- Social skills, sharing and cooperation
- Appropriate touching/affection

## Using the information gathered

**Key roles and messages appropriate to different activities of the Hearth sessions continued:**

### **Feeding children**

- Active, responsive feeding
- Food content (colours, nutrients)
- PD foods
- Importance of meal frequency (4–5) times a day
- Breastfeeding
- Portion sizes
- Troubleshooting feeding problems
- Food taboos
- Active healthy children related to well-fed and well-nourished children

### **Planning for the next day**

- PD foods
- Local and affordable foods
- Quantity of food
- Food combinations – variety, colour
- Ownership/empowerment
- Nutrient value of food – importance of variety
- Where to find foods
- Planning menus and budgets
- Importance of returning the next day

### **Clean up**

- Hygiene – clean surfaces and utensils
- Use of leftovers
- Food safety
- Food storage
- Reuse water, compost
- Latrine use and cleanliness
- Respect for others

## 30 MIN

**5. Monitoring Forms**

Introduce the 2 monitoring forms that CHPs will use (see monitoring forms at the end of the session). Explain each carefully. Practice filling the forms out correctly.

**Note:** it is not mandatory to use these forms, but they are designed as Job Aids to support the work of the CHPs.

**Monitoring Form 1 (Job Aid):** The Checklist of Materials Needed for Hearth Sessions is designed to help in preparing all the items for the Hearth sessions. Discuss who might provide each of these items and how to fill in the form.

**Monitoring Form 2 (Job Aid):** The Menu and Cooking Materials form keeps track of the ingredients and cooking materials for the menu, and the contributions each caregiver brings to the Hearth sessions. Work with the promoters to fill out the form.

## 20 MIN

**6. Song preparation**

Have participants work in small groups to create a song about one of the key behaviours emphasized in the Hearth sessions. (For example, how to prepare and use an oral rehydration solution, feeding children 3–5 times a day, or hand washing after toileting and before eating.) They should use simple language, perhaps rhyming, a well-known tune, repetition and actions. Have each group perform its song. Have the whole group learn one or two of the songs.



## Using the information gathered

15 MIN

### 7. Review the day

Ask participants: What is one new thing that you learned today?

Explain to the CHPs that the next day they will be going through each step of the Hearth session just as they will do in their sessions with caregivers and children. They may all work on one menu or, if there are a large number of CHPs, divide them into two groups with each group cooking a different menu. Explain the menu(s) you will be making. These menus are based on what we learned from the caregivers with well-nourished children whom we visited. Explain that each caregiver will bring a food contribution to the Hearth sessions each day, decide together who will bring each food item needed to prepare the menu the next day.

Thank the CHPs for their great work and remind them of the time and place to meet tomorrow.

**NOTE:** Health care workers should use the data collected from the PDI, FGDs, and Market Survey to develop at least 2 menus suitable for the community's context, using locally accessible, affordable ingredients). Try cooking the menus in preparation for tomorrow's session.

# Monitoring Form 1

## Materials Checklist Needed for PD Hearth Sessions

DAY 4

The HCW and CHP ensure the following items are available for the PD Hearth Sessions

	Provided by:		
	Community	Caregivers	Implementing Agency
Weighing scales			
Register to track attendance and weights			
Daily menu and recipes			
Cooking pots			
Frying pan			
Cooking utensils			
Bowls			
Cups			
Spoons			
Soap or ash			
Basin			
Towels			
Nail cutters			
Water pitchers			
Mats			
Cutting boards			
Mortar and pestle			
Fuel/wood			
PD food			
Staple food (rice, ugali etc.)			
Oil, fat			
Other ingredients			



# Monitoring Form 1

## Materials Checklist Needed for PD Hearth Sessions

1 OF 3

### Hearth Menu and Cooking Materials

### Tracking Sheet

County..... Sub County ..... Ward .....

Community Unit .....Hearth .....

Hearth Session Dates (dd/mm/yyyy): From..... To.....

Community Health Promoter. ....

### PD Hearth Menu & Cooking Material Tracking Sheet of Caregivers for Promoters

No.	Name of Caregiver	No. of Children in PD Hearth Programme
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Total		

## Monitoring Form 1

## Materials Checklist Needed for PD Hearth Sessions

DAY 4

2 OF 3

No.	DAY 1	INGREDIENTS	COOKING MATERIALS	ROLE	DAY 2	INGREDIENTS	COOKING MATERIALS	ROLE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
No.	DAY 3	INGREDIENTS	COOKING MATERIALS	ROLE	DAY 4	INGREDIENTS	COOKING MATERIALS	ROLE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
No.	DAY 5	INGREDIENTS	COOKING MATERIALS	ROLE	DAY 6	INGREDIENTS	COOKING MATERIALS	ROLE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

# Monitoring Form 2 – PD Hearth Menu and Cooking Materials Tracking Sheet Continued

3 OF 3

No.	DAY 7	INGREDIENTS	COOKING MATERIALS	ROLE	DAY 8	INGREDIENTS	COOKING MATERIALS	ROLE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
No.	DAY 9	INGREDIENTS	COOKING MATERIALS	ROLE	DAY 10	INGREDIENTS	COOKING MATERIALS	ROLE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
No.	DAY 11	INGREDIENTS	COOKING MATERIALS	ROLE	DAY 12	INGREDIENTS	COOKING MATERIALS	ROLE
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

### Purpose

By the end of the session, participants should: -

1. Be able to prepare a hearth menu.
2. Understand what happens in a Hearth session
3. Be able to adequately prepare participating caregivers for a Hearth sessions

### Preparation

Arrange for children from the community to participate in the hearth session implementing practice, if possible.

### Materials

- Food/ingredients for recipes
- Cooking pots
- Utensils which include spoons, cups, plates etc.
- Household measures
- Energy saving jikos
- PD Hearth Registers
- Local playing materials for hand washing facilities with soap

### STEPS

#### 5 MIN

#### 1. PD Hearth Session Practice

Explain that today's lesson will be a practice on Hearth session, including preparation of the meal and snacks, just as the CHPs will do for the actual Hearth sessions. CHPs will act as the caregivers of malnourished children for the role play.

The Hearth menu is based on the information gathered in the PDI. The menu will be developed and evaluated by Health care workers to ensure that it meets programme requirements. For example, menus must have enough nutrients (nutrient density) to enable children to recover quickly from malnutrition. CHPs are not expected to do these menu calculations. Tell the CHPs that each menu will include a main dish and a snack. Each menu has the exact type and amount of food that children need to have energy (to GO), build their bodies (to GROW) and not become sick (to GLOW). Explain that this is a special meal that is used as medicine, to help malnourished children gain weight quickly. It is an 'extra meal', not a replacement for other meals eaten at home.

## Prepare for the Hearth sessions

Remind the CHPs that their job is to guide and support caregivers while they develop new habits to care for their children. Caregivers learn by doing the activities. Caregivers will take turns doing different jobs. The jobs include:

- Helping to prepare the venue and start the fire (caregivers need to come 15 minutes early)
- Hand washing
- Food sorting, preparation and feeding of children
- Cooking
- Playing with children
- Cleaning up and plan for the next day

### 105 MIN

#### 2. Practice and discuss together the steps of the Hearth session

The facilitator will act as the CHP and the participants will act as the caregivers coming to the Hearth session. Ideally, a few children from the community will be involved as well.

### 10 MIN

- 1) As each 'caregiver' arrives, thank them for attending and for their contribution of food. Gather around the table or mat with the foods on it. Ask CHPs what types of food varieties we need to eat to make sure we are healthy (GO, GROW, GLOW foods). Ask them to rearrange the food on the table in the various7 food groups. Explain any corrections that are needed. Ask them to further categorize the food groups into GO, GROW and GLOW as a review of the three types of stones that hold up the cooking pot. Congratulate them on their great work. If PD foods or recipes were identified in the PDI, ask the CHPs to point out which foods these were or explain the combination used.

### 10 MIN

- 2) Explain to the CHPs that we are going to learn how to prepare and cook the meals they will use in the sessions. Check for short nails. Wash hands. Explain how to wash (with soap), when (before cooking, eating, feeding children, after using latrine) and why (to get rid of germs that can make us sick). Emphasize the importance of good hygiene.

### 10 MIN

- 3) Prepare the snack. Wash the hands of the children before giving them the snack. Show them good hand-washing technique. During hand washing, talk to the children about why, when and how to wash their hands. Point out to the CHPs that a snack provides nourishment for children while they play as the caregivers cook the food. Explain that children need to eat small amounts frequently, and the snack provides nutrients in addition to those in the main meals.

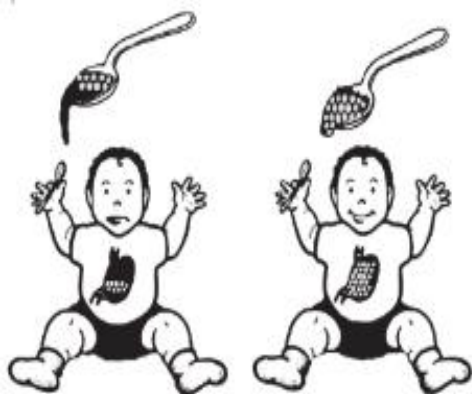
If no children are present for this session, the CHPs can eat the snack. Explain as they do that during a Hearth session some caregivers would play with the children and

others would be cooking. These jobs would alternate on different days. Sing a child's action song together. Review together some games they can play with the children: singing games, clapping games, telling stories, playing peek-a boo, action songs, stacking blocks, rolling a ball.

#### FOOD PATH FOR COOKED FOOD



#### 45 MIN



4) Divide the CHPs into groups. Have each group cook the Hearth menu food. Guide them. Demonstrate food preparation and cooking techniques. Talk about food safety (heating leftovers, cooking foods well, washing food before preparation, washing hands). Emphasize the importance of good consistency in the food; if there is too much liquid the child's stomach gets full without an adequate amount of the food, he or she needs to keep healthy and to grow. The food should fall off the spoon in globs, not pour off. Let them know that this is what they will do with the caregivers during the Hearth sessions.

If grandmothers will be participating in the Hearth sessions as additional Caregivers (e.g., caregiver grandmother pairs), explain that their role during the cooking session is to support the caregivers in the preparation of the meal, through conducting small tasks or providing advice.

#### 45 MIN

5) When the meal is prepared, gather the participants and explain the menu. Discuss the consistency of the food, whether it includes GO, GROW and GLOW foods, and the amount each child will need to eat. Divide participants into pairs or groups of 3 for a role play. 1 person will act as the caregiver, 1 as the child, and if there are three people, the third will act as the grandmother. Give each caregiver' or 'caregiver-grandmother pair' a child's portion. They will feed the child'. The 'child' will pretend not to eat, or to need help.

## Prepare for the Hearth sessions



she will be able to eat more and more. Repeat the exercise two more times to give every person an opportunity to play all the roles.

**Discuss the role play:** Explain about active feeding and why it is important. Show how caregivers and grandmothers can encourage children to eat. Some children will not be able to eat all the food during the 1st few days. Sometimes a malnourished child vomits the meal or has diarrhoea. If this happens, CHPs should encourage the caregiver to clean the child up and offer the child more food. As the child improves over a couple of days, he or

### 45 MIN

- 6) Clean up the cooking area. Talk about the menu for the next day, the contribution that each caregiver will bring, and who will do which jobs.

### 45 MIN

#### 3. Observing changes in children

The goal of the Hearth sessions is to help children quickly gain weight and become healthier. By using the special menus as extra food, or 'medicine', and by practicing good food/feeding, care, hygiene and health behaviors, caregivers will begin to see changes in their children. Ask the participants what changes they think they might see. (Child more active, less crying, eats more, more alert, smiles more, gains weight, less frequently sick)

### 15 MIN

#### 4. Summary of the hearth session with the CHPs

Discuss the session together with the CHPs. Answer any questions they may have. How did they feel about the session?

### 30 MIN

#### 5. Monitoring growth progress of the PD Hearth participating Children

Discuss the importance of being able to follow the progress of each child and of the Hearth sessions overall.

This is called **monitoring**. Ask the CHPs what they think is important information to keep track of (how many children attend Hearth, how many caregivers attend, what caregivers contribute, do children gain weight). Explain that this information will help decide if any changes should be made on the way the Hearth sessions are conducted. It will also help the CHPs to talk to community leaders and health care providers about the changes they see in the children and why those changes are taking place. The monitoring forms should be shared with the supervisor or trainer of PD Hearth every time they visit. The supervisor or trainer will also provide support in communicating to the community members about the information CHPs have collected on the Hearth sessions.

**Discuss with CHPs how to fill the Child growth progress monitoring tools**

Introduce the monitoring form 3 “Child Registration and Attendance” that CHPs will use (see monitoring forms at end of the Session). Explain it carefully and guide in a practice of filling out the form correctly. This Monitoring helps to keep track of the children, caregivers and grandmothers (if applicable) who attend the Hearth session, and to see how often they come. Carefully go through this form together, filling in the information at the top of the page and then the information for 1 child. Show the CHPs how they will keep track of the attendance by putting a check mark (√) or ‘x’ beside the child’s name each day as they attend with caregiver attend. This form must be used to monitor the Hearth sessions. Use the version which includes grandmother attendance if applicable.

**Attendance form**

County..... Sub County ..... Ward .....

Facility ..... Community unit/village.....

Hearth.....

Hearth Session Dates (dd/mm/yyyy): From..... To .....

# Of children participating ..... Community Health promoter..

#	Name of Child	Caregiver's Name	Relationship to the child	Child's Gender (M/F)	Date of Birth (dd/mm/yyyy)	Age (months)	Disability (Y/N)	Deworming (Y/N)	MNPs (Y/N)	Vitamin A (Y/N)	Immunization null (Y/N)
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											



## Prepare for the Hearth sessions

2 OF 2

#	Attendance and Appetite Test for Hearth Participant Child and Primary Caregiver* Attendance (Att). Appetite (App)																				
	1		2		3		4		5		6		7		8		9		10		11
	Att	App	Att	App	Att	App	Att	App	Att	App	Att	App	Att	App	Att	App	Att	App	Att	App	Att
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

**\*IMPORTANT:**

Indicate with a checkmark (✓) under the column 'Att' if the PD Hearth child and Primary Caregiver attended the Hearth session for the corresponding day under the column 'Att'. Please also indicate with a check mark (include (✓) under the column 'App' if child passes the appetite test. If the child is 'Red' for MUAC and does not pass the appetite test, please refer the child to the health facility urgently. Appetite test is conducted by determining if the child finishes the hearth menu

- Attendance (Att), Appetite (App)

**CHP home visit form**

County..... Sub County ..... Ward .....

Facility ..... Village..... Community Unit.....

Hearth ..... Community Health promoter .....

<b>OBSERVATION LIST</b>	Day #	Day #	Day #	Day #	Day #	<b>COMMENTS</b>
Answer with Yes (Y) or No (N) or Somewhat (S) or a number where appropriate. Add comments to explain answers.						
Drinking water from safe source (Tap water, borehole or protected well)						
Water is treated (Boiled/ chlorinated)						
Water is covered with fitted cover or lid						
Clean separate cup is used for pouring drinking water from the pot						
Handwashing station exists (e.g., tippy tap)						
Jerry cans or water storage containers are clean						
Toilet/latrine is available and used or hole is dug and covered for defecation						
House and/or kitchen is clean						
Food utensils are clean						
Handwashing with running water and soap is practiced by: Caregivers						
Children						
Other family members						

# Hearth Register and Monitoring Form 4

1 OF 2

## Hearth Register and monitoring form

Child's name										
Caregiver's Name										

CHILD	1	2	3	4	5	6	7	8	9	10
Child's Sex (M/F)										
Date of Birth (dd/mm/yyyy)										
Child with Disability (Y/N)										
Hearth Session/Round # (e.g., if it is the child's second time attending Hearth, please write '2')										
<b>At Day 1 of Hearth</b>	Date of Birth (dd/mm/yyyy)									
	Weight (Kg)*									
	Underweight Nutritional Status (Indicate colour)									
<b>At Day 12 of Hearth</b>	Date of Birth (dd/mm/yyyy)									
	Weight (Kg)*									
	Weight Gain (Day 12 - Day 1) in grams									
	Underweight Nutritional Status (Indicate colour)									
	MUAC Optional									

Village .....

Hearth ..... Promoter's .....

CHILD		1	2	3	4	5	6	7	8	9	10
At Day 30 of Hearth	Date (dd/mm/yyyy)										
	Weight (Kg)*										
	Weight gain (Month 1 - Day 1 weight) in grams										
	Gained 400g+ (Y/N)										
	Underweight Nutritional Status (Indicate colour)										
	MUAC (Optional)										
At 3 months (Since 1st day of Hearth)	Date (dd/mm/yyyy)										
	Weight (Kg)*										
	Underweight Nutritional Status (Indicate colour)										
	Change in Status (Y/N)										
	MUAC (Optional)										
6 months (since 1st day of Hearth)	Date (dd/mm/yyyy)										
	Weight (Kg)*										
	Underweight Nutritional Status (Indicate colour)										
	MUAC (Optional)										
At 12 months (since 1st)	Date (dd/mm/yyyy)										
	Weight (Kg)*										
	Underweight Nutritional Status (Indicate colour)										
	MUAC (Optional)										
CHILD		1	2	3	4	5	6	7	8	9	10
COMMENTS: (Explain reason for default if child has defaulted due to death (D), migration (M), referred to hospital (H), etc.		/	/	/	/	/	/	/	/	/	/

**\*NOTE: Please write "DEFAULT" in the column for weight if child has defaulted and explain reason for default in the 'Comments' section.**

## Prepare for the Hearth sessions

### 40 MIN

6. Discuss the importance of being able to follow the progress of each child and of the Hearth sessions overall. This is called monitoring. Ask the CHPs what they think is important information to keep track of (how many children attend Hearth, how many caregivers attend, what caregivers contribute, do children gain weight). Explain that this information will help show if any changes should be made to the way the Hearth sessions are being conducted. It will also help the CHPs to talk to community leaders and health care providers about the changes they see in the children and why those changes are taking place.

The monitoring forms should be shared with the supervisor or trainer of PD/ Hearth every time they visit. The supervisor or trainer will also provide support in talking with community members about the information CHPs have collected on the Hearth sessions. Introduce the monitoring form “Child Registration and Attendance” that CHPs will use (see monitoring forms at end of the Session). Explain it carefully and practice filling the form out correctly.

Monitoring Form 3: The Child Registration and Attendance form is to help keep track of the children, caregivers and grandmothers (if applicable) who attend the Hearth session, and to see how often they come. Carefully go through this form together, filling in the information at the top of the page and then the information for one child. Show beside the child’s name each day they and their caregiver attend. This form must be used to monitor the Hearth sessions. Use the version which includes grandmother attendance if applicable

### 40 MIN

#### 7. Field Work

Conduct home visits for participant caregivers (or caregiver- grandmother pairs) and conduct orientation meeting to prepare for the 1st day of Hearth. Note:

- The field work could be done before the day’s training session if more appropriate.
- Following this session, the Hearth sessions will be conducted and Day 6 of this training will continue after the 1st week of the Hearth session, before the second week begins.

# Reflection and Follow Up to Hearth Session; Graduation Criteria and Follow-up Growth Monitoring

DAY 6

150 MIN

This day of training should take place after the 1st week of Hearth sessions but before the second week begins.

The session is very important and should be conducted by nutritionist, CHA and CHPs

## Preparation

- To practice conducting a reflection time with caregivers
- To understand the reasons for follow-up visits and how to conduct them

## Materials

- None

STEPS

10 MINS

- 1. Explain that new habits take time to learn.** Caregivers have a good start during the Hearth sessions but they need help to recognize the changes in their children. This can be done by having a reflection time together. Caregivers also need encouragement to continue the new practices in the weeks after the Hearth session. CHPs will visit caregivers and grandmothers in their homes during the two weeks after the Hearth sessions to help caregivers overcome any problems, they might have in maintaining the new practices and to encourage grandmothers in supporting the new practices.

25 MIN

## 2. Role play a reflection time

To help caregivers recognize changes in their children and relate those changes to the extra food and care they are giving, it is important to spend time reflecting with them on the last day of Hearth. The facilitator plays the part of the CHP and each CHP represents one caregiver or grandmother during the role play.

Gather all the 'caregivers' in a circle on a mat. Say, 'We are on the last day of Hearth. What do you think? Did you like it? What was your child like before the Hearth sessions started?' Allow time for each 'caregiver' to answer.

Then ask, 'What is your child like now? What do you think has made the difference? Do you think you will be able to continue these practices at home? What problems do you think you might have?' Brainstorm together on ways to overcome obstacles that caregivers might face. Congratulate them on their great work.

After the role play answer any questions, the CHPs have. Ask:

- What new behaviors do we want caregivers to learn during Hearth sessions?
- Do you think caregivers will be able to do these things at home?  
Do you think the grandmothers can support the caregivers in doing these things at home?

10 MIN

### 3. Role play a home visit

To encourage caregivers to continue implementing the new practices from Hearth, a CHP will visit each one in her home every two or three days for two weeks following the Hearth sessions. These are not just social visits. Emphasize the importance of the follow-up home visits in ensuring behaviour change and helping families find solutions. Perform the following role play of a home visit with different facilitators acting as the 'CHP', 'mother' and 'grandmother'. The CHP 'drops in', chats with the mother and the grandmother about neighborhood news, and inquiries about the child. (The child is off playing at the neighbors.) The CHP points out to the mother and the grandmother that the child's new-found energy and interest in playing are good signs of recovery. The mother mentions that the child had a bout of diarrhoea.

When the CHP asks how she treated it, she says she had ORS but gave tea instead because she couldn't remember how to prepare ORS and the grandmother couldn't either and so suggested tea. The CHP explains how to prepare ORS to both the mother and grandmother and asks them to repeat the directions. She asks whether the child's appetite is good and the mother says yes and that she is giving extra food. The CHP says she will check in the day after tomorrow, reminds the mother and grandmother of the final weigh-in next Friday and congratulates them for their efforts to make their child healthy.

After the role play, ask participants:

- What examples of encouraging the caregivers did you see?
- What good behaviours did the CHP emphasize?
- How did the CHP help the mother and grandmother see the change in the child?
- What behaviours and feeding practices did the CHP reinforce?
- How long was this home visit? How many visits could a CHP do in one day?

Emphasize once again the importance of the follow-up home visits in ensuring behaviour change and helping families find solutions.

### 5 MIN

### 4. Indicators of behavioral change

Ask participants to list some indicators of behavioral change they might observe on the home visits. Write these on a flip chart. Examples include:

- The child is receiving extra food.
- There is evidence of better health-seeking behaviours (what the caregiver does when the child is sick, attendance at health post, extra feeding).

See the sample PDI questions/checklist (Session 6, Number 3) for other indicators.

# Reflection and Follow Up to Hearth Session; Graduation Criteria and Follow-up Growth Monitoring

DAY 6

10 MIN

## 5. Challenges

Ask participants what challenges caregivers might have in practicing the new 'good' behaviours at home. Brainstorm to discover some possible solutions to each of the following problems

The caregiver

- forgot what was taught
- is instructed by the grandmother who is resistant to the new practices
- doesn't have the ingredients for the menu
- doesn't know where to get affordable fish or vegetables
- is encountering resistance from her husband
- has a sick child
- has a child who refuses to eat

60 MIN

## 6. Monitoring

Introduce Monitoring Form 4: "Hearth Register and Monitoring Form" and Monitoring Form 5: "Home Visit" that CHPs will use (see monitoring forms at end of the session).

**Monitoring Form 4: The Hearth Register and Monitoring form** helps keep track of the growth of the PD Hearth participant children during follow-up visits at 1 month, 3 months, 6 months, and 1 year from their 1st day of Hearth. It is helpful to keep these monitoring forms in a binder at a CHP leader's home, community leader's home or the health facility (if it is in close proximity to the community).

This form **MUST** be used to follow-up the PD Hearth participant children.

**Monitoring Form 5 (Job Aid): The Home Visit form** helps keep track of information that is observed during the home visits.

Work through a sample home visit scenario and help the CHPs fill out this form properly. This form is not mandatory to use, but can be helpful.

**NOTE:** *Health care workers should ensure CHPs have sufficient forms and should supply the CHPs with binders and office supplies to monitor the programme.*



20 MIN

## 7. Role play follow-up visits

Remind the CHPs that during home visits it is important to be as encouraging as possible. The purpose is to help the caregivers solve any problems with child feeding and care they might have. Before leaving the home, the CHP should have the caregiver (and grandmother if present) repeat the action steps they will take before the next visit.

Divide participants into groups of two or three. Give them the following (or adapted) scenarios to practice related to the home visit. Discuss together each scenario and agree on one thing the caregiver could try.

**Scenario 1:** You are visiting Jane who has a 22-month-old boy. He does not want to eat at all. He appears to be sick and cries a lot. The child has diarrhoea and the mother-in-law does not want Jane to give him food or breastfeed him. Jane cannot remember how to make an oral rehydration solution. What will you do?

**Scenario 2:** You are visiting Beatrice who has a 13-month-old girl. Before Hearth the baby breastfed but did not eat much else. She was very thin and lacked energy. She put on some weight during Hearth. The mother is very happy. She is breastfeeding more now, and the baby loves the porridge that she learned to make in Hearth. She makes the porridge with milk, groundnuts, maize and small dried fish. Her husband says she cannot continue to make special food for the child because it is too expensive and that she is paying too much attention to the child. What will you do?

**Scenario 3:** You are visiting Mary who has 18-month-old twins. She is very happy because both twins like the food she makes. But she is concerned that she will not always be able to get the same ingredients that she learned to use in the Hearth sessions. She is afraid the twins will stop growing if she does not use the same menu. What will you do?

Have several groups perform their role play for the whole group. Discuss each one. What was good about the visit? What was good about what the CHP said? Was any information left out? What could be improved? How did the 'CHP' feel about the visit?

Emphasize the importance of encouraging both caregivers and grandmothers, being positive and trying to get the caregiver(s) to agree to try one thing before the next visit.

## Reflection and Follow Up to Hearth Session; Graduation Criteria and Follow-up Growth Monitoring

20 MIN

### 8. Hearth Graduation Criteria

**Ask the CHPs: How will we know if children have successfully completed Hearth?**

Explain that on the last day of Hearth sessions health care workers will weigh the children with the assistance of the CHPs. If they have gained at least 200 grams that is satisfactory. However, children need to keep gaining weight at home, so they should be weighed again two weeks after the end of the session (i.e., one month after starting Hearth). If they have gained at least 400 grams from the start of Hearth, that is satisfactory.

Children need to continue to gain about 200–250 grams each month. They need to be weighed regularly to ensure that they continue to gain weight and are growing well for their age. They should be weighed at 3, 6 and 12 months after starting Hearth, at least. When children continue to gain weight, they are growing well. Their families and the Hearth CHPs can be proud.

Those who have gained less than 900 grams by the end of the 3 months of their Hearth session should go to another session as soon as it is scheduled. If a child is still not gaining enough weight after two complete 10–12-day Hearth sessions, he or she should be referred to the health post or doctor to make sure there is no underlying reason.

**Note:** Children who gain less than 900 grams may repeat the Hearth session as determined by the criteria set by the Ministry of Health guidelines or partners (e.g., the graduation criteria are not only gaining 900 grams, but also that the child's nutritional status has improved to normal or at risk).

Discuss together the following situations. Decide if the child will graduate and what is best next step for the child:

**Case 1:** Aisha is 3 years old and an only child. After two Hearth sessions, she has gained 90 grams but is still malnourished. Her mother, who is pregnant, appears to be following the new PD behaviours and working hard to rehabilitate Aisha, but she is feeling discouraged.

**Case 2:** During the sessions, John gained 500 grams. By the end of the follow-up period, he had lost the 500 grams. His mother does not know what the problem is, but she is concerned.

**Case 3:** Nginyang Village has many malnourished children, and Hearth sessions are proceeding well, but some segments of the population are semi-nomadic, moving with the seasons to find work. Though these mothers have been enthusiastic participants, it is difficult to follow their children during the dry season. Many returns during the rainy season having lost weight again.

**Case 4:** Christine was very thin and sickly. During the Hearth sessions he gained 300 grams and was starting to be more active. His mother noticed a great difference. In the next two weeks Christine gained another 100 grams.

**Case 5:** Martha was very thin and could not walk at 22 months of age. Her parents were very concerned and wanted to do everything they could to help Martha. During the Hearth sessions she gained 400 grams. In the next two weeks she gained another 300 grams. By the end of another month, Martha had gained an additional 400 grams. Her parents are very happy that she is gaining weight.

**Purpose**

- To learn ways to show how many children have graduated
- To practice sharing the information

**Materials**

- A number of fist-sized stones
- Several green and yellow leaves

**1. Introduction**

It is important to communicate the programmes progress with community members. Discuss the following questions:

- Who do you think might like to know about the progress of the PD Hearth programme? (Caregivers and families of participant children, community leaders, village health committee and CHPs, community leaders)
- What information do you think they need to know? (How many children were involved, what were they like before, what they are like now, how many have graduated, what support the community could give to help improve or maintain results)
- Why do they need to know this information? (To see that what they are doing makes a difference, to recognize improvements in children, to help them learn about child malnutrition, to help them realize that there are solutions in their own community)

Brainstorm: How do participants think they could communicate this information to the various groups of people in the community? Several suggestions follow within the examples listed below.

**2. Role play a meeting with caregivers****Example 1**

(Ask each CHP to represent a family in the Hearth sessions.)

Welcome each person to the meeting. Talk about how hard they have been working to improve the health of their children and how well the children are doing as a result. The children were weighed the 1st day and last day of Hearth. Ask caregivers to pick up a fist-size stone to represent each child in their family. Ask them to put each stone in one of three piles – one for a child who was healthy and had good weight before the Hearth sessions; another for a child who was not growing well or was underweight; and a third for a child who was very underweight. Compare the size of the three piles. Which is biggest? We want to see all the children in the 'good' weight pile.

## Community Feedback on Hearth

Again, ask caregivers to pick up a fist-size stone for each child in their family. Repeat the process for the children's weights now. Make the piles close enough to the 'before Hearth' piles so that you can compare them.

Compare the 'now' piles. Which pile is biggest? What does this tell us? Now compare the 'Before Hearth' piles with the 'now' piles. Which are bigger? What does this tell us? (Note – if there are many stones in the underweight piles still, there should be another Hearth session to help these children improve.)

Ask several of those who have a child who has improved to tell the group what differences they have seen in their child. What made the difference? Draw out the positive behaviours they practiced. Can these behaviours be practiced by everyone in the community or only by a non-poor family? Are these practices doable? affordable?

Encourage them to continue the feeding and caring practices they learned in Hearth sessions in the home to make sure the 'good' weight pile gets bigger and no stones remain in the 'underweight' piles.

### Example 2

Use green and yellow leaves to show healthy and unhealthy plants. Discuss why the yellow leaves are unhealthy and ways to make the plants healthy. (Use manure, weed them, water them, space them properly, fertilize them). Can we make yellow leaves grow better? How? (The same answers as above.) Make a connection between the leaves and children. Some children are growing well, and some are not. Why? (Not fed enough, not fed often enough, not well spaced, sickly, not enough variety of food, parents absent)

Use stones to show the proportion of children who were like yellow leaves (malnourished) and those who were like green leaves (well-nourished) at the start of the Hearth programme. Pile a stone beside the yellow leaves for every malnourished child and beside the green leaves for every well-nourished child. Ask: Can these children move from the yellow pile to the green pile? How? (Feeding more, giving variety of food, washing hands, taking care of child when sick). What makes the difference between these groups of children? How have caregivers in the community tried to help their children grow better? What do some families do to keep their children well-nourished?

Discuss with the community whether children's growth has improved with the Hearth programme. Take a stone from the yellow pile and move it to the green pile for each child who has improved in growth.

**Example 3**

Post two large growth charts on the wall (see samples at end of this session). One chart will show the beginning weights of the children. These can be colour-coded with green, yellow and red. Let the group see how many children are in each category, emphasizing which children were growing well and which ones were not. The second large growth chart shows the weights of children at the end of Hearth. Plot every child on the growth charts. Explain the green, yellow and red categories (normal weight, underweight, very underweight). Help them see the number of children in each category before Hearth and now. Discuss together whether there are fewer children in the yellow and red categories. Are there more children in the green area? Is this an improvement? What has caused these changes? Are some children still not growing well enough? Are they happy with the current situation? What should they do now?

**Example 4:****Presenting information comparing community norms with the PDI information.**

Present two skits. The first shows a family (including the grandmother) with children who are sick. The family demonstrates poor behaviors (caregiver goes to the field in the morning without feeding the children, eat only maize without washing hands, poor overall hygiene). Include behaviors that are seen in the community. Exaggerate to make the skit funny. The second skit shows a family (including the grandmother) with happy, healthy children demonstrating good practices (feeding a variety of foods, washing hands, helping a child eat, giving snacks, talking to children). Include any practices that have been discovered in the PDI. Talk with the community about how poor families with good practices have been able to keep their children healthy. Talk about the practices discovered in the PDI. Do they contribute to children being healthy? Could every family in the community do them?

**30 MIN****3. Role play**

Divide participants into 2 groups. Each group decides what group in the community it will have an information exchange meeting with and how it will share information. Develop a role play of the community meeting. Each group will act its role play for the whole group, who will be the 'community'. Discuss each role play. What was good? What was the reaction of the community? What could be improved? Was this hard?

**5 MIN****4. Closing**

Explain that the CHPs have come to the end of the training. Thank them for coming. Congratulate them on their hard work and all that they have learned. Encourage them to use what they have learned with their own families and also to help many children in their community to become healthier.

## Action Plan for PD Hearth Implementation

DAY 6

## Action Plan for PD Hearth Implementation

Prepared by ..... Date .....

Objectives	Activities	Responsible person	Time frame	Resources/ input	Source of funds	Comments
To conduct nutritional assessment of children 6-59 months	Taking weight and MUAC measurements of children on a regular basis					
	Screening children for oedema					
To conduct community mobilization	Support the identification of community leaders, religious leaders and women representatives					
To conduct community situation analysis	Conduct community mapping and transect walk					
	Conduct Wealth Ranking with community members					
	Conduct Weighing of all children 0 - 59 months of age; Seasonal Calendar; and Market Survey					
	Analyze the situation analysis findings					
	Conduct community feedback session: Share the results of the situation analysis.					
	Identification of PD and non-PD households					
To conduct PDI in the community	Design key Hearth messages					
	Conduct community feedback session: Share PDI findings with community.					
Conducting Hearth sessions	Identify PDHEARTH participant children and primary caregivers. Meet with PD Hearth participants 1-2 weeks before 1st day of Hearth to discuss location and time for meeting and decide what and how much of ingredients each primary caregiver will					

## Action Plan for PD Hearth Implementation

## DAY 6

Objectives	Activities	Responsible person	Time frame	Resources/ input	Source of funds	Comments
	bring. Check the mother and child health handbook to ensure child received full immunization for age, Vitamin A in last 6 months and deworming					
	Conduct 1st Hearth session - 12 days long.					
Home visits and follow-up	Conduct household follow-up visits for 2 weeks after Hearth.					
Monitoring & evaluation	Repeat Hearth sessions as needed. Monitor weight of PD Hearth participant children at Day 12, 1 month, 3 months, 6 months, and 12 months from 1st day of Hearth.					
	Record data collected during hearth sessions in the respective tools					
	Monitor progress in the nutritional status of all children in the target group or PD Hearth participant children					
	Conduct Appreciation/ Graduation Day for community					
To scale up PD Hearth	Identify additional communities that can be enrolled for PD Hearth program					



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MINISTRY OF HEALTH



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