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Foreword
The Government of the Republic of Zambia through the Ministry of Community Development Mother and Child Health (MCDMCH), Ministry of Health (MoH) and the National Food and Nutrition Commission (NFNC) working with cooperating partners, is committed to the fundamental principle of improving the health care system. This commitment is highlighted in the government’s vision of providing equity of access to cost effective quality health care as close to the family as possible. In order to facilitate the attainment of this vision, the health system emphasizes greater efforts to strengthen partnership and community participation.

The health delivery system in Zambia supports the functions of the community-level structures such as the Neighbourhood Health Committees, and jointly plans and implements community based programmes with health facility staff.

Children under the age of five years are affected by a number of preventable childhood illnesses which can lead to morbidity, disability and mortality if not identified and addressed early. The most common illnesses for children under five years are malaria, acute respiratory infections, diarrhoea, measles, and malnutrition. Malnutrition worsens the progression of other diseases in children and develops most rapidly in children under two years of age. The current statistics indicate that 40% of the children are stunted, 6% are wasted and 15% are underweight (CSO, 2013/2014). The status quo is not acceptable because malnutrition is preventable.

Early identification of malnutrition requires that children’s growth is monitored regularly. Government has identified the growth monitoring and promotion programme as a key strategy for early detection of growth faltering. This programme will be implemented at health facility and community levels. However, effective and efficient implementation of GMP calls for training of health providers at supervisory (provincial and district), health facility and community levels. Thus, implementation of these activities requires development of guidelines.
These guidelines on GMP provide a clearly defined and standardized procedure of conducting GMP. The guidelines are designed and meant for use by all health providers at various levels of implementation.

It is my sincere hope that the guidelines will provide appropriate guidance to all users to conduct GMP, thus ensuring optimal growth and ultimately reduce malnutrition levels in Zambia.

Permanent Secretary

MINISTRY OF HEALTH
Abbreviations

BMI - Body Mass Index
CHP - Child Health Promoter
CHW - Community Health Worker
GMP - Growth Monitoring and Promotion
IYCF - Infant and Young Child Feeding
IMAM - Integrated Management of Acute Malnutrition
MoH - Ministry of Health
MUAC - Middle Upper Arm Circumference
NFNC - National Food and Nutrition Commission
NGO - Non Governmental Organization
NHC - Neighbourhood Health Committee
SD - Standard Deviation
UNICEF - United Nations Children’s Fund
WFP - World Food Programme
WHO - World Health Organization
ZDHS - Zambia Demographic Health Survey
1 Introduction

According to CSO (2013/2014), about 75 of every 1000 Zambian children die before they reach their fifth birthday every year. The major causes of these deaths are malaria, diarrhoea, pneumonia, measles and malnutrition, all of which are preventable. Malnutrition contributes to about 42% of these deaths. Malnutrition affects a child’s physical and mental development and future productivity.

In Zambia, 40% of the children under five years are stunted (short for age), 15% are underweight (small for age) and 6% are wasted (thin for weight).

Most of the mildly and moderately malnourished children do not have signs of malnutrition that are obvious to parents, and may be missed even by health workers if they rely only on the child’s physical appearance. All malnourished children are at an increased risk of dying from common childhood illnesses. By monitoring their growth regularly it is possible to detect growth faltering early and take action to prevent severe malnutrition, which is very difficult to treat. The prevention of malnutrition is paramount.
because malnutrition not only undermines children’s physical growth, but also their brain development and future productivity. In addition it predisposes them to conditions such as obesity, diabetes and metabolic syndrome later in life. Malnutrition can be detected early through GMP.

Growth monitoring and promotion is a preventive and promotional activity. It facilitates communication and interaction between health care providers and caregivers so as to encourage appropriate timely intervention to promote optimal child development and growth. In these guidelines, the term Growth Monitoring and Promotion is used to describe the process of weighing children regularly and using the information on their growth to decide the action that the caregiver should take to promote optimal growth and development. The information in this document is presented in a simple way.

1.1 Purpose of these Guidelines

The purpose of these guidelines is to facilitate coordination and implementation of an effective GMP program at various levels of care. The guidelines describe the components of GMP to the managers and implementers; provide information and skills necessary for implementation. They outline the major steps for planning and implementation of GMP and the key roles and responsibilities of stakeholders promoting child health in both governmental and non-governmental sectors at all levels.

These guidelines provide information on how to conduct GMP activities on children under five in a systematic and standardized way. Emphasis is placed on the children aged 0-24 months because of the critical and rapid growth and development that occurs around this period which needs to be supported nutritionally. Evidence has revealed that the peak of under nutrition in children is between 18 ï¿½ 24 months; hence the focus for intervening with GMP is on the children 0-24 months, which encompasses the peak period. In addition, attendance to under-five clinic is reduced after children receive their last immunization at 18 months. The guidelines describe the components of a growth monitoring and promotion programme.
2 Growth Monitoring and Promotion

Growth monitoring is the process of following the growth rate of a child in comparison to a reference population, by periodic anthropometric measurements in order to assess growth adequacy and identify faltering at early stages. Assessing growth allows capturing growth faltering before the child reaches the status of malnutrition. The promotion (P) aspect uses growth monitoring (GM), i.e. measuring and interpreting growth, to facilitate communication and interaction with caregivers to generate adequate action to promote child growth.

The purpose of growth monitoring & promotion is prevention, not rehabilitation or treatment. The overall objective is to make child growth visible, to enable the analysis of causes, to support the development of corrective actions to address the causes of poor growth, therefore improving or maintaining the child's growth and prevent malnutrition.

It also provides opportunities for linkages to other services such as safe water and sanitation, home gardening, community development activities and access to social protection services. GMP is a critical element in prevention of malnutrition. All malnourished children are at an increased risk of dying from common childhood illnesses.
2.1 Objectives of Growth Monitoring and Promotion Programme

The main objectives of growth monitoring and promotion are:

- To assess the child’s growth through regular anthropometric measurements.
- To analyse the adequacy of the child’s growth and take appropriate action.
- To provide regular contact with other services to facilitate their use.
- To increase awareness about the child’s growth so as to improve caring practices.

In order to achieve these objectives there are a number of components that have been developed for use at all levels, these are listed and discussed in details.

3 Components of Growth Monitoring and Promotion Package

i) Regular anthropometric measurements (weight, length/height and MUAC) of children

ii) Determining the child’s growth pattern.

iii) Assessing the child’s health, growth and nutrition status.

iv) Using the information on the child’s health and growth chart

v) Counselling on the care and feeding of the child

vi) Referring the child for appropriate services

vii) Deciding on follow up or return visit

viii) Giving IEC key messages on child health
3.1 Regular Anthropometry Measurements (Weight, Length/Height and MUAC) of Children

Weighing schedule

The period between 0 and 24 months is critical as this is the time when there is rapid growth, changing diet, increased exposure to infections and inadequate child caring practices. Good caring practices by caregivers and regular monthly monitoring in this vulnerable age group are important elements. In Zambia the schedule for weighing children for growth monitoring and promotions is:-

1. Weigh all children from 0 up to 24 completed months, once every month
2. Weigh children aged 25 to 36 completed months, once every 2 months.
3. Weigh children from 37 to 59 completed months, once every 3 months.

NB: The emphasis for GMP is the age group 0 up to 24 months. However, it is important to note that caregivers who opt to bring their children older than 24 months for GMP every month should be attended to.

Equipment and Tools

Weighing Scales

The Salter Weighing Scale is the most common scale used in health facilities in Zambia. However, a digital Uni/SECA scale is a good option if available.

Weighing Bags/pants

The most commonly used weighing bags or weighing pants in Zambia are those made of canvas material. These are only used when the salter hanging scale is used.

Length /Height board

This is a tool used to measure the length/height of a child under five years.
MUAC tapes

MUAC is a very good and easy tool to assess acute malnutrition. It is most useful especially when weight and height cannot be measured such as in bed-ridden children.

Children’s Clinic Card

The children’s clinic card is a key tool to assist health workers in providing integrated care to an individual child. It contains a chart needed to record and assess the growth of a child from birth up to 5 years of age. The card also contains recommendations on child feeding and care, a useful reference for parents, other caregivers and health care providers.

Boys and girls have different Children's Clinic Cards because they have different growth patterns. A Child's Clinic Card should be opened for each child and kept by the Mother/ caregiver. Immediately after birth of the baby, the health worker should explain the importance of the Children's Clinic Card. It is important for health workers to record and provide appropriate support for the infant feeding method that is being practiced in all infants and children at all visits, and specifically the different ages stated on the card. The children's clinic card should be obtained from a health facility AT NO COST.
Features of the Children’s clinic card

The growth chart has 5 lines that run across the page. What is important about this chart is the interpretation of the direction and the position of the child’s growth curves. (Refer to procedural manual

On the left side of the weight column, are two boxes. The bottom one is for the Birthdate. Write as Date, Month and Year e.g. 01.04. 07. If the birth month is not known, leave the box blank, until you establish the birth day of the child.

At the bottom of the growth chart there is a row of boxes. There is a box for each month in the child’s life till he reaches five years old. The first box of the first year has a thick line around it. Write the month following the birth month

On the left vertical side, there are different weights starting with 0 Kg up to 30Kgs.

The top box is for the Birth weight. Record the weight of the child at birth. If weight is not known leave it blank.
Weighing and reading using a salter scale

- Hang the scale securely to a firm stand ensuring it is at eye level
- Hang the weighing bag to the hook of the scale
- Adjust the scale to zero before starting the weighing session
- Before beginning the weighing session, check accuracy of the scale using a known standard weight to avoid errors in weighing and plotting.
- Ensure the child has minimum clothing before weighing.
- Remove the weighing pants from the scale before placing the child in the weighing pants
- When reading, ensure the dial is at eye level
- Read the weight of the child when the dial is stable
- After weighing every 10 children remember to zero scale.

Weighing and reading using a digital Uni/seca scale

- Find a flat surface where to put the UNI scale
- Ensure the scale is reading correctly by weighing objects of known weights
- Explain to the mother that her child will be weighed with her help.
- Ask the mother to remove the shoes or slippers and other heavy clothing.
- Then ask her to step on the scale and to stand up right with feet apart.
- Ensure that the clothes are not covering the display or solar panel of the scale
- When the mother’s weight appears on the display, tell her to remain standing on the scale. In case of a solar scale, re-set the reading to zero by covering the solar panel of the scale (thus blocking out the light).
- Give the baby to the mother to hold and the child’s weight will appear on the scale
- Take the child’s weight in kilograms to 1 decimal place and plot on the child’s clinic card in the column of the corresponding month.
- Thank the mother for her cooperation

**NB:** For older children, who are able to stand on the scale, let them stand on their own. If a scale goes up to 100kg and a caregivers’ weight is over 100kg, use another person weighing less than 100kgs.

**Plotting the weight of the child on the Child’s Clinic Card (under five cards).**

Proper plotting requires that the child’s weight is plotted accurately in the child’s clinic card. Remember plotting in the wrong month will result in inaccurate interpretation of the child’s growth.

Plot a dot in the middle of the appropriate column and write the weight of that particular month in figures vertically above the dot (along the same column) as shown in the graph.

Insert weight in the column on the graph
How to plot the Child’s subsequent Weight

Repeat the same steps for subsequent months.

How to Draw a Growth Curve on The Child’s Clinic Card

Draw a line from the previous dot, if any, to the new dot you have just made in order to link up the dots with a continuing line to form a continuous curve. This forms the child's growth curve (A). This curve indicates how the child has been growing in the past month and also reveals the health and nutritional status of the child.

Note: If you do not have the previous weight for the child from one or two months, connect the dots with a dotted line (B).

If a child has not been weighed for three months or more, do not connect the dots with any lines (C). This is because one does not know how the child's growth has been progressing.
Length/Height Measurements

Length or Height is another important measurement for growth assessment to determine the nutrition status of a child. Length or Height in relation to age, determines stunting (chronic malnutrition) and length/height in relation to weight, determines wasting.

The Length or Height should be measured with a height board only. It is important to measure children for height when they are barefoot and there should be two people to hold the child in the correct position on the height board.

Children under 2 years old (or ≤ 87 cm) should be measured while lying down (length) and those over 2 years old (or > 87 cm) should be measured while standing up (height).

If a child is above 2 years and is not able to stand, length can be taken. Subtract 0.7cm to get its height.

Taking accurate Length measurements of a child

- Two people are needed to take a good length measurement. If there is no assistant, the mother may help by holding the head straight.
- Place the measuring board horizontally on a flat level surface.
- Remove the child's shoes and any head covering.
- Place the child, lying down and face up on the middle of the board.
- Let the assistant hold the sides of the child's head and position the head until it is touching firmly against the headboard (with the hair compressed).
- Let the measurer place his/her hands on the child and firmly hold the child's knees together while pressing down.
- The soles of the feet should be flat on the foot piece, toes pointing up at right angles.
- The measurer should keep the child's feet in contact with the footboard with one hand while holding the footboard securely in place with the other hand.
- The length is read to the nearest 0.1cm
- Read and record the measurement immediately
- Also record the gender of the child.
Measuring length - lying down

1. Record form and pencil on clipboard on floor or ground
2. Assistant on knees
3. Measurer on knees
4. Arms comfortably straight
5. Hands on knees or shins; legs straight
6. Line of sight perpendicular to base of board
7. Child flat on board
8. Feet flat against footpiece
9. Hands cupped over ears; head against base of board
**Taking accurate HEIGHT measurements**

- This measurement is taken for children over 2 years old and/or > 87 cm.
- Two people are needed to take a good height measurement. If there is no assistant, the mother may help by holding the feet and legs against the board.
- Set the measuring board vertically on a stable level surface.
- Remove the child’s shoes and any head-covering.
- Place the child on the measuring board, standing upright in the middle of the board.
- The child’s heels and knees should be firmly pressed against the board by the assistant while the measurer positions the head and the cursor.
- The child’s head, shoulders, buttocks, knees and heels should be touching the board.
- Read the measure to the nearest 0.1 cm.
- Record and repeat the measurement to the measurer to make sure it has been correctly heard.
- Also record the gender of the child.
How to interpret the Growth Curve

The important points in interpreting growth are the curve and the position. The direction of the growth curve is the most important on the growth chart. The ideal direction of the growth curve is shown by the four reference lines. However, there is need to counsel caregivers/ mothers to strive towards achieving optimal growth.

The line labelled 0 on the growth chart is the median which generally speaking, is the average.

The other lines, called Z score lines indicate the distance from the average. A point or trend which is far from the median, such as +3 or -3, indicates a problem.

However, the service provider should pay more attention to children moving below the -2 Z-score line as they are at risk of becoming underweight and above the +2 Z-score as they are at risk of being overweight.

3.2 Determining the Child’s Growth Pattern

The main way to determine a child’s growth pattern is by; comparing the slope of the child’s growth curve to the slope of the closest z-score line on the growth chart.

When comparing the growth curve;

The growth curve of an individual child can show 3 directions:

1. Upwards direction (Good)
2. Flat (Static) i.e. danger sign
3. Downward direction (very dangerous)

The reference line shows only an upward movement. In the beginning (in the first year) the line is steeper than later. If the direction of the growth curve is downwards or flat, it means that the child is At Risk.
It is important to explain to the mother/caregiver the significance of the direction of the growth curve.

It is recommended to give appropriate feeding counseling when the child's weight gain is inadequate, static or going downwards. Mothers/caregiver with children who are growing well, also need encouragement. However, there will be children who will be born small but continue to grow steadily along the reference line

**Explanation of Z score lines**

<table>
<thead>
<tr>
<th>Z-score*</th>
<th>Length/height-for-age</th>
<th>Weight-for-age</th>
<th>Weight-for-length/height</th>
<th>BMI-for-age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 3</td>
<td>See note 1</td>
<td></td>
<td>Obese</td>
<td>Obese</td>
</tr>
<tr>
<td>Above 2</td>
<td>See note 2</td>
<td>Overweight</td>
<td>Overweight</td>
<td></td>
</tr>
<tr>
<td>Above 1</td>
<td></td>
<td>Possible risk of overweight (See note 3)</td>
<td>Possible risk of overweight (See note 3)</td>
<td></td>
</tr>
<tr>
<td>0 (median)</td>
<td></td>
<td>Underweight</td>
<td>Wasted</td>
<td>Wasted</td>
</tr>
<tr>
<td>Below -1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below -2</td>
<td>Stunted (See note 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below -3</td>
<td>Severely stunted (See note 4)</td>
<td>Severely underweight (See note 5)</td>
<td>Severely wasted</td>
<td>Severely wasted</td>
</tr>
</tbody>
</table>

*The z-score label in this column refers to a range. For example ‘above 2’ means 2.1 to 3.0; ‘median’ includes -1.1 to 1.0; below -2’ refers to -2.1 to -3.0, etc.

**Notes:**

1. A child in this range is very tall. Tallness is rarely a problem, unless it is so excessive that it may indicate an endocrine disorder such as a growth-hormone-producing tumour. Refer a child in this range for assessment if you suspect an endocrine disorder (e.g. if parents of normal height have a child who is excessively tall for his or her age).

2. A child whose weight-for-age fails in this range may have a growth problem, but this is better assessed from weight-for-length/height or BMI-for-age.

3. A plotted point above 1 shows possible risk. A trend towards the 2 z-score line shows definite risk.

4. It is possible for a stunted or severely stunted child to become overweight.

5. This is referred to as very low weight in IMCI training modules. (Integrated Management of Childhood Illness, In-service training. WHO, Geneva, 1997).
Mid upper arm circumference (MUAC) measurements

How to measure Mid-Upper Arm Circumference (MUAC)

MUAC tape is a very good and easy tool to assess acute malnutrition. It is most useful especially when weight and height cannot be measured such as in bed-ridden children. The upper arm is very sensitive to rapid weight loss. MUAC measurement is also a good tool for predicting death risk; the lower the reading the higher the risk of death in children. The special arm tape (shown below) is easy, small and light to carry. MUAC should not be taken on babies less than 6 months because they have not yet developed their muscles but have a lot of fat tissues. One should be able to take simple measurements such as MUAC and interpret results for appropriate actions to be taken, especially if it requires nutrition interventions.

Taking accurate MUAC measurements

Use the MUAC measuring tape for children

The color coding of MUAC Tape allows for easy classification of severe acute malnutrition (SAM)

- First remove any clothing covering the left arm
- Bend the arm at right angle (90°) and measure the length of the upper arm, between the bone at the top of the shoulder and the tip of the elbow
- Find the midpoint of the upper arm and mark it with a pen
- Then relax the arm, letting it fall alongside the body
- Wrap the MUAC tape around the arm, such that all of it is in contact with the skin
- It should not be too tight or too loose
- Pass the end of the tape down through the first opening and up through the second opening.
- The measurement is read from the middle window where the arrows point inward. Read and call out the measurement to the nearest 0.1cm.
- For the three-color tape (red, yellow, green), slide the end through the first opening and then through the second opening. Read the color that shows through the window at the point the two arrows indicate.
### MUAC cut off points MUAC screening

<table>
<thead>
<tr>
<th>MUAC reading and colour coding</th>
<th>Adequately nourished</th>
<th>Moderately malnourished</th>
<th>Severely malnourished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children age 6 – 59 months</td>
<td>&gt; 12.5 cm</td>
<td>11.5 cm – 12.5 cm</td>
<td>&lt; 11.5 cm</td>
</tr>
<tr>
<td>Action</td>
<td>Congratulate and encourage the good practice</td>
<td>Identify possible causes of malnutrition and refer for supplementary feeding</td>
<td>Refer to health facility for admission and further management</td>
</tr>
</tbody>
</table>

#### 3.3 Assessing the Child’s Health, Growth and Nutrition Status

After interpreting the growth pattern of the child, find out about his or her health. The state of health, growth and feeding practices determine the action to be taken. Poor
growth may be due to poor feeding practices, inadequate food intake and recent or current illness. All these factors require specific attention. The mother/caregiver need counselling on how to feed the child during and after illness.

The care that is given to the sick child depends on the appropriate advice contained in IMCI, IYCF, or IMAM guidelines, for caring of sick children and maintaining wellness. Where need be, refer the sick child to the next level of care.

**Assessing Oedema**

At all times, CHWs, CV and HCWs should be able to detect bilateral pitting oedema. Nutritional oedema is always on both feet (bilateral).

**Steps for diagnosing OEDEMA accurately (see figure xx):**

- Oedema is evaluated first on the top of the feet.
- Press gently with both your thumbs on each foot (so press on both feet at the same time), while you count: 121, 122, 123 (approx. 3 seconds).
- After removing the thumb, a pit (indentation) is left in the foot. The pit will remain in both feet for several seconds. **NOTE:** Bilateral pitting oedema usually starts in the feet and ankles. It is important to test both feet; if the pitting is not bilateral, the oedema is not of nutritional origin
- Do the same thing for the leg (above the knee) and for the back of the hands and the face (around the eyes).

Oedema can be classified as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent</td>
<td>No bilateral pitting oedema</td>
</tr>
<tr>
<td>Grade +</td>
<td>Mild: Both feet/ankles</td>
</tr>
<tr>
<td>Grade ++</td>
<td>Moderate: Both feet, plus lower legs, hands or lower arms</td>
</tr>
<tr>
<td>Grade +++</td>
<td>Severe: Generalised bilateral pitting oedema, including both feet, legs, arms and face</td>
</tr>
</tbody>
</table>
### Bilateral Pitting Oedema

<table>
<thead>
<tr>
<th>Grade of Oedema</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 0</td>
<td>Absent</td>
</tr>
<tr>
<td>Grade +</td>
<td>MILD</td>
</tr>
<tr>
<td>Both feet/ankles</td>
<td>Change picture</td>
</tr>
<tr>
<td>Grade ++</td>
<td>MODERATE</td>
</tr>
<tr>
<td>Both feet, plus lower legs, hands, or lower arms</td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>+++</td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>SEVERE</td>
<td>Generalized oedema including both feet, legs, hands, arms, and face</td>
</tr>
</tbody>
</table>
3.4 Using the Information on the Child’s Health and Growth Chart

Using the information on the child’s health and growth chart depends on nutritional status, health status and the age of the child.

Not gaining weight for one or two months may be due to recent illness or inadequate feeding or both. Not gaining weight for three or more consecutive months may signal serious feeding, health, or social problems or a combination of these factors and needs more attention than the one who has not gained weight for one or two months only.

3.5 Counseling on Care and Feeding of the Child

Without counselling, growth monitoring is not a useful exercise. Counselling should always follow the measuring and recording of the child’s measurements. Individual counselling of the caregiver should be specific and tailored to the child’s needs and family resources. Counselling should constitute dialogue and negotiation for behaviour change in order to improve the health of the child if there is growth faltering. The counselling session should enable the caregiver to state the practices she/he will try at home.

To motivate the caregiver to adopt the recommended practices, the child’s growth curve should be shown to her/him. S/he should be praised for all the good practices employed. Congratulate the caregiver if the child is growing well. Counselling should be provided to encourage continuation of good practices that will help maintain the child’s good health.

Steps in Counselling to Promote Child Health

- Provide feedback to the caregiver on the child’s growth by showing her/him the child’s growth curve.
- Praise the caregiver for good practices.
- Find out about the health of the child.
- Find out how about the feeding practices and give information on the recommended feeding practices for her/his child's age.
- Explore with the caregiver the changes which can help to achieve recommended feeding practices depending on child nutrition status, health and age, using the available resources.
- Negotiate with the caregiver the changes which can be made and come to an agreement on what can be done.
- Ask the caregiver to explain what can be done at home, to make sure s/he understands the practices.
- Refer the child for other needed services, where available.
- Make appointments for follow-up or return visit. Explain the expected progress for the child at the next visit.
- Always check the child's immunization status and refer if due.
- Promote behaviours that help to reduce diarrhoea incidence, worm infestation, malaria etc.
- Give the caregiver written support educational materials (if available).
- Always check Vitamin A supplementation.

It is helpful to use counselling cards when counselling Caregivers. **It is necessary to train** Health care provider how to use the counselling cards correctly.

**Effective counselling**

Behaviour change requires effective counselling using appropriate counselling skills taught during training.

3.6 Referring the Child for appropriate services

The child's nutrition and health status may require immediate medical care or referral.

If he/she is recuperating from a serious illness, the caregiver should be counselled to feed the child more (quantity and frequency) to help regain any lost weight.
information on the child’s health therefore helps the service provider to decide what action to recommend for the child.

The age of the child guides how to counsel about feeding. If the child’s growth curve is in the upward direction, less time may be needed in counselling, but it is still important to show the mother the growth curve, congratulate her, and then talk about how the child’s good growth can be maintained by continuing appropriate feeding and care. This is important because many children who have current good growth later experience growth faltering.

3.7 Deciding on Follow Up or Return Visit
Every child seen every month should be given an appointment for return visit. A child needs closer follow-up (within the month) and/or home visit if he/she:

- Has an acute or chronic illness,
- Has not gained adequate weight for three months or more.
- Has lost weight.
- Has breastfeeding problem.
- Social and family problems (such as being an orphan).
- Misses two consecutive monthly sessions.
- Has been discharged from the health facility for malnutrition.
- A follow up date should be written in the child clinic card.

3.8 Giving IEC Key Messages on Child Health
- It is important to give key messages during every GMP session to caregivers e.g. hygiene, family planning, breastfeeding, complementary feeding, HIV counselling and testing, immunization, prevention of communicable diseases, ITN use, Vitamin A supplementation, feeding during illness etc.
4 Planning a Growth Monitoring and Promotion Programme

Growth Monitoring and Promotion (GMP) is offered at health facilities and the community.

Community based GMP is conducted by community volunteers normally under the supervision of a health staff. Successful GMP implementation requires adequate planning.

The duration of the planning phase depends on whether or not the GMP programme is building on an existing child health programme or is to start as a completely new GMP programme.

The planning should take account of each of the following:

1. Meeting and planning with the key players
2. Training
3. Conduct baseline
4. Monitoring and record keeping
5. Supportive supervision
6. Motivating the community workers/community volunteers
7. Linking with the other health services
8. Linking with community services
9. Referral system

Meeting and planning with the key players
Action to improve GMP programme success should include meeting and planning with key players to create awareness and demand. If nutrition concerns have been mentioned by key players in previous interactions (such as during a participatory learning for action) it may be necessary to guide them to understand that a GMP programme can help monitor the health of the children and take action to prevent malnutrition. Even if there is an existing GMP programme, it is necessary to talk with the key players, raise awareness of the objectives of the programme and create demand for it.
Initial dialogue will likely be with the various leaders who will need to understand the programme and be advocates for it.

**Training**

Training will be necessary for all those whose participation is needed for effective implementation of the program. These include

- Program managers
- Child health promoters (could be Community leaders, community health workers, Neighbourhood Health Committee members, trained Safe motherhood action groups, etc.)
- Health Care Workers (HCWs)

Training materials should be available for the various training needs. For the community members, such as NHCs, the objective of the training is to help them understand the importance of GMP as outlined under planning and also prepare them to oversee and support the program.

**Content of the Training**

For the child health promoters, the trainers, and supervisors, the key information to be contained in the training should include: IYCF (breastfeeding and complementary feeding principles), growth promotion and prevention of common childhood illnesses and counselling. Participants will be given an opportunity to learn about the growth promotion and what to expect from it. In order to counsel effectively, participants will need to be knowledgeable about recommended feeding practices.

During the training, participants should have the chance to discuss common feeding practices and how they compare with the recommended practices; the recommended practices will be incorporated in the counselling cards prepared for use by participants.
Use of Support materials

Any materials should be discussed and its use during the training. These include children’s clinic cards, counselling cards to be used by individuals, groups, take-home materials, growth promotion registers and manuals for the participants.

Collecting baseline information
The baseline information is important as it will show the nutrition status of children before beginning any intervention. Collecting baseline information with participation of community members should include information on nutrition status and feeding of children under two years of age (such as frequency of feeding, quality and consistency of food), and a local map showing local landmarks and location of eligible children. Share the results with the community the baseline results to raise awareness of the nutritional and feeding problems and create a demand for the programme.

Monitoring and Record keeping
Records kept on the programme activities will help keep track of the progress made in the programme. The basic record keeping should include;

- A register of all under five children in the community or in all the villages in the catchment area of the health unit.
- Activity sheet to record the number of children seen
- Monthly aggregation form
- A monthly record to indicate the month’s activities.

Supportive Supervision
Provisions for supportive supervision should be in place before the programme is started in any community. This should be designed to strengthen the skills at all levels of service delivery. Supervisors may be drawn from all levels including the central (regional) Provincial, district and community. Supervisors should review the objective of the programme, update their knowledge and skills on growth promotion and use of any materials developed to aid supervision. Note that all supervisors MUST be trained in GMP.
Motivating Child Health Promoters
This has been discussed under planning, but it is an issue that should be of concern to all involved in programme. All participants and community members should be on the lookout for ways to motivate and encourage the child health promoters in most communities regular payments will be non-sustainable. Prior to the training, it MUST be made clear that they will be purely on voluntary basis. It is crucial that ways of motivating the child health promoters are discussed during the planning of the program. All channels of motivation should be discussed and the most appropriate for the community identified. If the child health promoters are to be volunteers this should be clearly conveyed to them right from the start.

Some of the motivating actions that can be built into the program are:

- Providing certificates to the volunteers. If possible have the certificates be issued from as high a level of government office as possible to let the volunteers know they are appreciated.
- Frequent supportive supervision is essential.
- Materials to help them do their work (such as IEC tools, bags to carry their supplies, T-Shirts, badges, etc.)
- Means of transport, as needed and the means to maintain it
- Community leader’s support in a form decided locally
- Training allowances (transport and lunch)
- Public recognition of the volunteers at every appropriate occasion
- If a new programme related to child health comes up, CHPs working with similar programmes need to be considered.
- Providing feedback and sharing successes
- Recognition by those in authority
- Special consideration for health benefits, such as priority services at health units for the volunteers, donation of bed-nets and similar benefits.
- Exchange visits
- Refresher courses
Link with other health services
Growth monitoring and promotion is not a standalone programme. GMP implementation entails working with other services provided in the health care system. Its success largely depends on linkages with other health services.

Health care workers will be expected to provide technical and logistical support and all opportunities for links to the health services should be used.

Link with community services
Community support will strengthen the programme and at its best find ways of responding to the needs of children. It is desirable to identify existing structures and resources and make them aware of the program. Any chance to build mother to mother support systems, such as with existing social groups should be grasped and promoted. Members in this type of network can be trained to provide assistance and encourage the adoption of improved feeding practices and reinforce the work of child health promoters. Mothers with healthy children can be positive examples and help those who have doubts about new recommended feeding practices. Wherever possible male support should be cultivated as appropriate

Referral system
It must be anticipated that some children who will be brought to the GMP sessions will need medical care. If there are no persons on site trained to provide that care, plans should be made with the community on how referrals will be achieved. The programme should:

- Identify existing referral mechanisms, or
- Develop a feasible referral mechanism to the nearest trained health worker.
5 Roles and Responsibilities of key players

Families:
- Take children for growth monitoring and promotion activities as per schedule
- Follow advise given by the health provider
- Keep children’s clinic card safe and bring it to all GMP sessions and when accessing other child health services.
- Share helpful information with others and give support to other mothers
- Participate in referral activities.

Community members:
- Help create infrastructure where needed.
- Participate in mobilization activities.
- Support families to adopt improved child care practices.
- Share good ideas with others
- Motivate the child health promoters through public recognition

Community volunteers/ child health promoter:
- Weigh children and counsel parents and other caregivers.
- Follow up children as needed.
- Identify new born and enrol in the GMP programme register.
- Keep records and provide information to the health facility.
- Share programme information with community.
- Identify gaps in resources and pass on information to supervisor.
- Maintain a link between the community and health service.

Community leaders/ neighbourhood Health Committee
- Participate in the planning of the programme.
- Mobilize the community for activities.
- Organize venue and provide some logistical support
- Monitor the programme.
- Be a link between community and the child health promoter.
- Mobilize resource to fill resource gaps.
- Facilitate motivation of the child health promoters.
- Incorporate Community based GMP activities in the annual community action plan

**Health Workers**
- Participate in planning with promoters and communities
- Carry out GMP activities at the health facility and outreach posts
- Provide technical supportive supervision to child health promoters
- Conduct mentorship of child health promoters
- Provide supplies and equipment to the child health promoters
- Hold review meetings with the community
- Refer and receive referrals and provide feedback from referrals
- Provide advocacy/sensitization support
- Assist in record keeping and analysis of records for local use
- Provide reports to the districts as required

**District Community Medical Offices:**
- Plan for GMP activities
- Mobilize and allocate resources for GMP activities
- Provide for procurement and maintenance of equipment
- Support training and supervision of promoters
- Coordinate with all other sectors on GMP activities in the District
- Monitoring and evaluation of the GMP activities
**Provincial Medical Offices:**
- Plan for GMP activities
- Mobilize and allocate resources for GMP activities
- Provide for procurement and maintenance of equipment
- Support training and supervision of districts
- Coordinate with all other sectors on GMP activities in the Province
- Monitoring and evaluation of the GMP activities

**National level**
- Plan for GMP activities
- Mobilize and allocate resources for GMP activities
- Provide for procurement and maintenance of equipment
- Support training and supervision of provinces
- Coordinate with all other sectors on GMP activities in the country
- Monitoring and evaluation of the GMP activities
6 Implementation of the GMP programme

Selection of child health promoters
The issue of who will be trained to conduct the GMP activities needs to be discussed with the communities and the selection left to them after the needed skills of the community health workers or child health promoters have been explained to them. The child health promoters may be:

- Newly selected by the community
- Community health workers from existing programmes
- Volunteers from Community Based Organizations (CBOs), such as women’s groups

6.1 Selection criteria for the child health promoters may include the following

- Permanent residents in the community.
- Ability to read and write (at least in the local language)
- Respected by the community
- Committed to the community’s welfare
- Considerations of gender sensitivity and balance (for example, if men will not have credibility in the community as feeding counsellors, then they are not likely to be the most appropriate choice).
- Number of child health promoters needed will depend on the size of the community, but in every case consideration should be given to selecting at least four (4) child health promoters per zone to ensure that some will be available if others are not there sometimes.

If there are current community health workers, it should be assumed that they would not be able to take on more responsibilities, it may be necessary to consider selecting others to be child health promoters.

Venue for growth monitoring and promotion sessions
The venue(s) selected for monthly weighing and counselling sessions should be convenient to most of the potential users in order to encourage participation. The decision should be made mutually by the community and the child health promoters.
If the village is large and homes dispersed over large area, it may be necessary to identify more than one location in the village for the sessions. The venue could be in public places such as schools or churches, or in a private home, if suitable homes can be found in the community and the owner’s consent to their use. It is desirable that the venue be protected from sun, rain, so that the child health promoters and mothers can sit comfortably during counselling. In some situations such as distances, it may be decided that local child health promoters move from home to home to weigh the children and provide counselling. If that is the case then the child health promoters will need to be provided with means of transportation.

6.2 Scheduling Growth Monitoring and Promotion Sessions

Growth monitoring and promotion sessions should be conducted on a fixed schedule, on days set by mutual agreement within the community. If the sessions are held on fixed days and the schedule is kept, families are more likely to plan for it and not depend on reminders each time. The time and day should be convenient to most members of the community.

Depending on the size of the village and its layout, sessions may be held in groups or in homes or a combination of the two. Whatever the case it is better if community members can expect a regular schedule.

**Resources needed for GMP session**

During the planning process the resources needed for the programme, and their procurement should be mentioned and discussed. Identifying the contributions to be made by the community helps them appreciate the investment being made in the programme.

Resources needed are:-

- Weighing scales
- Weighing bags
- Growth charts
- Table and chairs and mats for the health promoters and mothers to sit on
• Water-proof/dust-proof containers for the supplies and stationery
• Re-supply system (identify how the supplies, such as growth cards, will be replenished when needed)
• Record-keeping materials (such as registers, monthly return forms)
• Existing information on the children (there may already be a community register)
• Existing partners (from other sectors, such as extension officers, charity organisations that may be called upon to help families needing external assistance or who can help communities develop related projects)
• Technical support/supervision
• Locally available foods
• Means of transportation for referral

**Advocacy and awareness-raising:** this should include community meetings, drama performances, electronic or print media, school debates and road shows.

### 6.3 HOME VISITS

Follow-up for some children may take place in the home; the programme should have guideline on when and how to conduct a home visit. During a home visit, behave appropriately, show respect to the family and take particular care not to offend. A home visit provides an opportunity to assess the child in her/his usual surrounding, be observant and gather more information on the child through conversation with the caregiver. Home visits should be taught during the training.

### 7 Sharing GMP information with all stakeholders on the Nutritional Status and Health of the Children

Information gathered during GMP sessions should be shared with all stakeholders including the community. This will provide a point of discussion on the health and nutrition status of the children. The type of information to share;

• Child 0-23 months weighed
• Child 24-59 months weighed
• Child <5 years weighed total
- Not gaining weight 0-23 months
- Not gaining weight 24-59 months
- Not gaining weight <5 years total
- Weight between -2Z and -3Z scores 0-23 months
- Weight between -2Z and -3Z scores 24-59 months
- Weight below -3Z scores 0-23 months
- Weight below -3Z scores 24-59 months
- Weight above +2Z scores 0-23 months
- Weight above +2Z scores 24-59 months

Regular meetings should be arranged with the community leadership and members, health workers and other stakeholders. The information should be analysed to determine the factors that prevent children from growing well (such as diarrhoea) and the community should be stimulated to plan actions to improve the situation.

8 Determinants of program success

In sum, a growth promotion programme has the best chance to succeed if the following elements are present; full participation of mothers and families and support of the community; guidelines for decision making are clear; individual counselling is provided, negotiated with caregivers. Other key features are: targeting the most vulnerable age group so as to allow time for counselling; link with health and community services, good follow up of the children needing it, effective monitoring and supervision, and a good planning and training of all relevant persons, including health workers, supervisors and the growth promoters prior to the initiation of the programme.