

USAID | Food By Prescription Program

Trainer Guide

**Orientation on Food By Prescription and its Logistics
Requirements to Pharmacy personnel working in Healthcare
Facilities**

Trainer Guide

Orientation on Food By Prescription and its Logistics Requirements to Pharmacy personnel working in Healthcare Facilities

This Participants manual is intended to orient pharmacy personnel working in ART dispensaries and medical store in healthcare facilities so as to acquire knowledge and skills on the dispensing and logistics requirements of FBP

Contents	3
Acronyms	5
Introduction	6
Unit 1: Why Food By Prescription Program (FBP)?	10
1.1. Overview of FBP	10
1.2. Nutrition brief overview	11
1.3. Overview of Interaction between Nutrition and HIV	13
Unit 2: Brief overview of NACS	15
2.1. Overview of NACS	15
2.2. Nutritional indices	16
Unit 3: RUTF and RUSF Products: Desirable characteristics and indications	18
3.1. Desirable features of RUTF & RUSF and other food supplements	18
3.2. Indications and dosage of RUTF & RUSF	25
Unit 4: Commodities supporting Nutritional Assessment	27
Unit 5: RUTF & RUSF logistics Overview	30
5.1. FBP Commodities Flow	30
5.2. Storage of RUTF & RUSF	32
5.3. Organizing and Dejunking storage places	35
Unit 6: Stock keeping records: Bin card & stock card	37
6.1. Logistics Management Information System (LMIS) in IPLS	37
6.2. Maintaining Bin card and stock record card	40
Unit 7: Reporting and ordering	42

7.1. Completing RRF	42
7.2. Assessing stock status	44
Unit 8: Issuing and receiving FBP Products & ensuring auditable transactions within the facility	46
8.1. Issuing and receiving RUTF & RUSF within healthcare facilities	46
8.2. Auditable RUTF & RUSF transactions in healthcare facilities	47
Unit 9: Client counseling/consultation at Dispensary	49
9.1. Counseling skills	49
9.2. Message for clients/ caregivers on RUTF & RUSF use	51
Unit 10: Use Monitoring and Misuse management	52
10.1. RUTF & RUSF Misuse features	52
10.2. Actions in RUTF/RUSF Misuse Management	53
Annex 1: Stock Record Card	55
Annex 2: Bin Card	56
Annex 3: IFRR	58
Annex 4: RRF	60
Annex 5: Pre-test & post-test Questions	61

Acronyms:

IPLS	Integrated Pharmaceuticals Logistics System
BC	Bin Card
SRC	Stock Record Card
NACS	Nutrition Assessment, Counseling & Support
RUTF	Ready-to-use Therapeutic Food
RUSF	Ready-to-use Supplementary Food
FBP	Food By Prescription
ART	Anti-retroviral Drug Therapy
RRF	Facility Combined Report and Resupply Form
IFRR	Internal Facility Report & Resupply Form
PLHIV	People Living With HIV/AIDS
MUAC	Mid-Upper Arm Circumference
SAM	Severe Acute Malnutrition
MAM	Moderate Acute Malnutrition
BMI	Body Mass Index
GIT	Gastro intestinal Tract
OVC	Orphan and Vulnerable Children
NNP	National Nutrition Program
NNS	National Nutrition Strategy
WASH	Water Sanitation & Hygiene
HAART	Highly Active Anti-retroviral Drug Therapy
PFSCM	Partnership For Supply Chain Management

Introduction

Objective of the Training: By the end of the training, trainees are expected to recognize the importance of Food By Prescription Program (FBP) and thereby to comprehend dispensing and logistics requirements of the program.

This Participants manual is intended to orient pharmacy personnel working in health facilities at ART dispensaries and medical store to acquire knowledge and skills on the dispensing and logistics requirements of FBP. The target audiences of the manual are pharmacy personnel dispensing in ART pharmacy and store managers in FBP targeted healthcare facilities.

The training is a one day orientation which can be run by two or three facilitators in a venue that can hold at most 30 participants. The facilitators will use teaching methodologies indicated in this manual and they are expected to have sufficient knowledge and skills on the program, adult learning, nutrition, malnutrition, HIV, ART, dispensing counseling skills, logistics and IPLS.

Table: Summary of Trainers' Guide (Total time= 480 Min)

Unit	Contents	Methodology	Time Required	Materials Needed	Activities/Exercises
Introduction Part	Training Introduction: Registration, participants' introduction, managing expectation of the participants (5 Min), setting group norms (5 Min), describing objectives of the training and reviewing training schedule (5 min)	Introduction	10 Min	Flip chart Marker VIIP cards	
1	Introduction to FBP: Why Food by Prescription program? Overview of Project (FBP) Background (Goal, core strategies, targets, beneficiaries, thematic areas and outcome of the program) (15 Min) Overview of Nutrition and HIV & food interaction (Food, Nutrition, Nutrients, Malnutrition, classification, Nutrition and HIV interaction) (40 Min)	Interactive Presentation, Brainstorming & Discussion	60 Min	Flip charts LCD projector Power point slides Markers Adhesive tape	Brainstorming: Could you tell us on what area FBP is working? Who are the target beneficiaries of this program? What are the difference b/n food & nutrition? What happens to the body when there is deficiency of food? What malnutrition means & its category? Think-pair-share: Tell us the effects of malnutrition on HIV? Describe how good nutrition affects HIV medication?

2	Brief overview of NACS: including components & nutritional indices	Interactive Presentation & discussion	30 Min	LCD Projector	Brainstorming: what are the indicators/ criteria used to assess malnutrition and target beneficiaries?
3	RUTF & RUSF Products Descriptions: Products' desirable characteristics, indications, dosage, ingredient contents, precautions, treatment care plans	Interactive Lecture, demonstration & plenary discussion	60 Min	Flip charts LCD Projector Markers Samples of RUTF & RUSF Power point slides	Brainstorming: What kind of therapeutic & supplementary foods you know? What does RUTF & RUSF mean? Major differences among the foods? Plenary discussion: Describe the nutritional care plans for Malnourished PLWHIA, OVC & TB?
4	Commodities supporting NACS: Type & desirable nature/features of the commodities and uses	Presentation & discussion	20 Min	Power point Slides Samples of anthropometric Equipments	Brainstorming: List anthropometric supplies or equipment supporting NACS
5	RUTF & RUSF Logistics Overview	Interactive presentation, brainstorming & Buzz group discussion	60 Min	Power point slides/ LCD projector Flip charts Markers	Buzz group discussion: explain flow of commodities & information? Brainstorming: What are the storage conditions of RUTF & RUSF? Have you maintained the required storage conditions? What are the responsibilities of store man & dispenser in FBP? Why storage space should be well organized? What they think are the benefits of dejunking a storage space?
6	Stock keeping records: Bin card & stock card	Interactive Presentation, Discussion & Demonstration	40 Min	Flip Charts Markers Sample of Bin card & stock record Card Adhesive Tape	Brainstorming: Why do you think it's important to keep records when managing pharmaceuticals? What are essential data items required to run logistics system? Is there a need to report those data items up the system? What are the benefits of reporting? When to perform recording BC & SRC? Explain the difference in BC & SRC? Demonstrate: How to record transactions using sample of BC & SRC?

7	Reporting and ordering	Interactive Presentation, Discussion & demonstration	60 Min	Flip charts Markers Samples of RRF Calculator	Brainstorming: Explain how information that is used to re-supply/order RUTF & RUSF flows & its frequency b/n health facilities & PFSA? Explain how to use the information from BC to complete RRF? Demonstration: How to complete RRF using sample of RRF Individual exercise: How to calculate consumption, Max. Stock Qty, Qty needed to reach Max & Qty ordered? Plenary Discussion: Describe purpose of inventory control system & explain the inventory control parameters? How they determine how much stock they have in terms of MOS? Individual exercise: How to calculate MOS?
8	Issuing and receiving RUTF & RUSF & ensuring Auditable transactions within the facility	Interactive Presentation, Demonstration & discussion	50 Min	Flip Charts Markers LCD Projector Power point slides Samples of IFRR Form	Describe the process of issuing & receiving RUTF & RUSF within health facility? Show flow of information and commodities within health facility? Demonstration: IFRR form & explain the data required to complete the form Were the transactions of RUTF & RUSF in your health facility auditable? What are the processes of auditable transaction?
9	Client counseling/Consultation at Dispensary	Interactive presentation & brainstorming	40 Min	LCD Projector Power point slides Flip charts Markers	Brainstorming: Have they provided counseling/consultation during RUTF & RUSF dispensing & what makes consultation of clients better? What are the key messages in client counseling during dispensing of RUTF & RUSF?

10	Use Monitoring and Misuse management	Presentation, Think-pair-share, Buzz group discussion	50 Min	Flip charts Markers LCD projector Power point slides	Think-pair-share: What are the main misuse problems of these foods in your health facility? Buzz Group Discussion: What are the main actors of the misuse in health facilities? What measures were taken against these problems? What do you propose to alleviate these problems in your facility?
----	--------------------------------------	---	--------	---	---

Trainer Preparation:

- Acquire basic knowledge in nutrition, HIV/AIDS & Logistics
- Review the National logistics system (IPLS)
- Avail samples of RUTF, RUSF, BC, SRC, RRF, IFRR & if possible samples of some anthropometric equipments one day before the training for demonstration purpose
- Prepare power point presentation slides prior to the training session based on this trainer guide
- Prepare flip chart presentations one day before the presentation
- Review methodologies, materials needed & notes indicated in this guide before joining this training
- Be familiar with related content & review exercises in the guide

Unit 1: Why Food By Prescription Program (FBP)?

Unit Objectives: By the end of the training, participants are expected to:

- Recognize the goal, core strategies and expected outcome of the FBP
- Identify target beneficiaries of the program
- Recognize the magnitude and outcomes of malnutrition among people living with HIV/AIDS (PLHIV)
- Describe types of malnutrition
- Understand the interaction of nutrition, HIV and ART

1.1. Overview of Food By Prescription Program (FBP)

Ask participants 'Could you tell us on what area FBP is working?' After entertaining the brainstorming, clearly describe the scope, goal & outcomes of the program using Power point slides.

HIV/AIDS has become one of the world's most serious health and development challenges. Since the first cases were reported in 1981, more than 25 million people have died of AIDS worldwide, and another 33 million are currently living with the virus. The large majority of these people lives in sub-Saharan Africa and suffers the added burden of food insecurity and malnutrition. In recent years, anti-retroviral drug therapy (ART) has been made more widely available for HIV treatment in developing countries. Although the rollout of ARTs has contributed to increased survival and has decreased the incidence of AIDS, *weight loss and wasting* remain the strongest predictors of mortality among people living with HIV/AIDS (PLWHA), even for those undergoing anti-retroviral treatment.

In an attempt to address this mortality, there has been a growing interest in food supplementation for PLWHA on ART. Food supplementation programs *can improve adherence to medications, reduce drug side effects, and may also improve survival, recovery, and disease progression*. However, thus far, very few studies have examined these relationships in resource-poor environments.

Ask participants this question 'Who are the target beneficiaries of this program?' (Brainstorming)

The goal of the program is to ensure improved nutrition clinical and functional outcomes among HIV positive individuals, pregnant and postpartum women, TB patients and highly vulnerable children. This goal can be achieved through providing therapeutic and supplementary foods to these targeted beneficiaries at health facility (hospital, health center)

level, Procure and distribute ready-to-use therapeutic and supplementary foods and providing nutritional counseling and education.

Food by Prescription provides food and nutritional support to malnourished HIV+ individuals in the form of therapeutic and supplementary feeding at health facility levels. The project serves severely malnourished people living with HIV/AIDS, HIV+ pregnant women, HIV+ women in their first six months post-partum, their infants, and orphans and vulnerable children. The expected results of the program are *providing nutritional assessment and counseling and RUTF/RUSF to malnourished patients PLHIA so as to maintain adequate nutritional status of PLHIA.*

1.2. **Nutrition in brief overview:**

Ask participants ‘What is nutrition? What is the difference between nutrition & food?’ Describe key terminology in nutrition which is relevant to FBP by displaying in power point slides.

Nutrition is the sum of all *processes involved in the intake, assimilation, and utilization* of the proper amounts of nutrients to maintain health, well-being, and productivity. Good nutrition relies on a diverse, adequate diet and is essential for the development and maintenance of the body from infancy to old age. Nutritional status can be both the “cause” and the “outcome” of good or poor health.

The terms “nutrition” and “food” are closely related but not interchangeable. Nutrition is a *process of events*, while food is a *product* that is eaten or taken into the body. Food is essential because it contains nutrients that the body needs for the following:

- Developing, growing, maintaining, replacing, and repairing cells and tissues
- Resisting and fighting infection and recovering from illness
- Producing energy, warmth, movement, and work
- Carrying out chemical processes such as digestion

Definition of terms:

Nutrients are the substances in food that the body uses to function properly. Nutrients are divided into macronutrients and micronutrients.

Macronutrients are nutrients needed by the body in relatively large quantities (many grams per day and include carbohydrates, fats, and proteins).

Micronutrients are nutrients needed by the body in very small quantities (usually less than 1 gram per day) and include vitamins and minerals.

Metabolic process: The body ingests, assimilates, and utilizes the nutrients in food to meet its needs for macronutrients and micronutrients - The body’s physical and chemical process of breaking down food and converting it into a useful form of energy.

Energy is essential for maintenance of the body's functions and daily activities. The ability to metabolize food may vary from person to person and may be affected by illness or disease. Balancing the body's ability to metabolize food with an appropriate quantity of nutrients and food types will help ensure good health.

Each person processes and uses nutrients differently. The body responds either positively or negatively when it absorbs a nutrient or group of nutrients. The response affects the body's condition and health status. The body's response to nutrients and the subsequent outcome is called **nutritional status**.

The amount and type of food and drink a person eats is called the **diet**.

A nutritious or balanced diet includes a variety of foods and the proper nutrients in the correct amounts and combinations to meet the body's functional needs. A healthy and balanced diet should contain food free of harmful substances and in the optimal amounts and mixtures. Eating a variety of foods is important for good health, especially for people with special needs, such as infants and young children, pregnant and lactating women, and the elderly. Eating a wide assortment of foods increases the likelihood of getting the necessary nutrients. Except for breast milk, no single food provides all the nutrients the body needs to function properly.

In summary, good nutrition involves eating a variety of safe and appropriate foods in the correct quantities to meet the body's needs for *health and well-being*.

Brainstorming Question: What happens to the body when there is deficiency of food? Please ask this question & give them 2 minutes for brainstorming discussion. Summarize the discussion with explaining what malnutrition is and category of malnutrition through showing power point slides.

Malnutrition: The World Food Program defines malnutrition as 'a state in which the physical function of an individual is impaired to the point where he or she can no longer maintain adequate bodily performance process such as growth, pregnancy, lactation, physical work and resisting and recovering from disease'. Malnutrition means 'bad nutrition' or 'inappropriate nutrition' and includes both **over and under-nutrition**. Although under-nutrition is generally the main issue of concern in the resource poor countries, industrialization and changes in life style and eating habits have increased the prevalence of over nutrition in many of these countries. *With respect to this guideline, malnutrition refers to under-nutrition but specifically "acute" under-nutrition unless otherwise specified.*

Malnutrition is categorized as **acute or chronic**. Chronic malnutrition is identified by calculating under-weight and stunting and measured by assessing weight - for - age and height - for - age. Acute malnutrition is identified by wasting, using weight and height indicators and mid upper

arm circumference measurements (MUAC). Individuals can suffer from a combination of both acute and chronic malnutrition. Acute malnutrition can further be categorized into moderate acute malnutrition (MAM) and severe acute malnutrition (SAM) based on the degree of body wasting and presence or absence of bilateral oedema.

1.3. Overview of Interaction Between Nutrition and HIV

Think-pair-share: Ask participants 'Tell us the effects of malnutrition on HIV?' Let them discuss for 2 minutes with the one sitting beside you. Summarize interaction between nutrition and HIV in brief presentation by showing power point slides.

Malnutrition is one of the major complications of HIV/AIDS infections and a significant factor in advance disease. A combination of HIV infection and malnutrition further reduces a person's ability to remain health.

Malnutrition and HIV infection negatively affect each other.

1. Causes that lead to reduced food consumption
 - Mouth and throat sores; Loss of appetite and fatigue; Depressions and changes in mental state; Side effect of medication; Abdominal pain; House hold food insecurity
2. HIV impairs nutrient absorption
 - HIV affects the Gastric Intestinal Tract (GIT); Malabsorption of the fats and carbohydrates at all stages; Frequent diarrhea and vomiting; Opportunistic infections; Poor absorption of fats affecting use of fat soluble vitamins (A,D,E,K)
3. HIV changes body metabolism
 - Increased energy need above normal requirement (by 10-15%) in asymptomatic (not AIDS) and even higher in AIDS cases; Increased use of antioxidants due to frequent infections (Vit E, C, β -carotene, zinc, selenium, and iron).

The diagram below demonstrates the relationship between nutritional status and HIV.

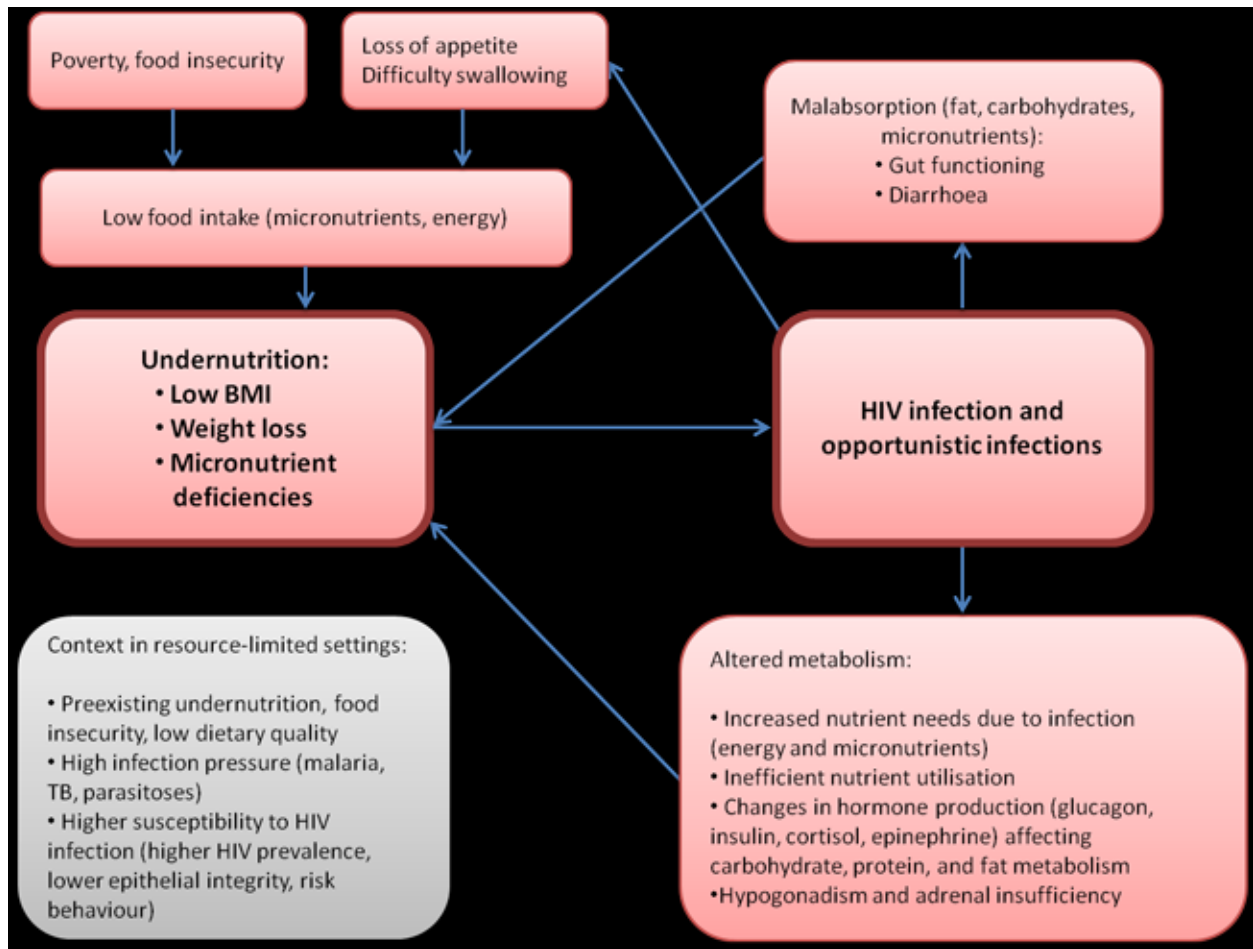


Figure 1: Relationship between HIV and Nutrition. Source: Adapted from depee and Semba (2010)

Think-pair-share: Ask the participants to describe how good nutrition affects HIV medication? Discuss for 2 minutes with the one sitting beside you.

For pre-antiretroviral treatment and antiretroviral treatment patients, clinical malnutrition is a risk factor for HIV and mortality. Malnutrition can also negatively impact birth outcomes among HIV-positive women. As HIV infection progresses, challenges to maintenance of adequate nutritional status—mal-absorption of nutrients, hyper-metabolism, etc.—increase and can adversely affect adherence to and effectiveness of drug treatments.

Unit 2: Brief overview of NACS

Unit Objectives: By the end of the training, participants are expected to:

- Describe the components of NACS
- Recognize indicators used to assess acute malnutrition
- Describe treatment care plans of acute malnutrition

Using power point slides, point out briefly on NACS overview, components and nutritional indices.

2.2. Overview of NACS:

Nutritional care and support for PLHIV and OVC is part of the National Nutrition Strategy (NNS) and National Nutrition Program (NNP). Improving the Care and Nutritional Status of People Living with HIV and AIDS is one component of the NNS and it is one of nutritional services for health facilities in NNP. PLHIV and OVC are priority targets of NNS and NNP. The national Nutrition and HIV guideline is developed with an objective to improve the nutritional care for PLHIV and OVC through nutritional assessment, counseling, and support.

The goal of Nutrition Care for PLHIV and OVC is to improve their Nutrition Status. The Nutritional care is called Nutrition Assessment, Counseling & Support (NACS). The components of NACS are:

- Assessment
 - Anthropometry (BMI, MUAC, Wt/Ht, Growth monitoring)
 - Clinical
 - Dietary
 - Household food security
- Counseling
 - Clinical (including adherence)
 - Dietary (including WASH & food safety)
 - Psychosocial
 - Referral to social services including , Economic strengthening, livelihood &
 - food security support
- Commodity Support
 - Therapeutic/supplementary Food support (Food By Prescription)
 - Safe Water Treatment
 - Multi-micronutrient supplements

Why NACS?

1. NACS recognizes the reciprocal impact between health & nutrition. It is the most powerful nutrition intervention for most AIDS patients is HAART & treatment of opportunistic infections.
2. NACS should support both corrective nutrition management, often for undernourished/wasted AIDS patients early in treatment, and chronic nutrition management as patients are stabilized on HAART
3. NACS is an element of health system strengthening, establishing the capacity of clinics to provide NACS for all adults and children, not just those who are HIV infected or affected.
4. NACS includes patient referrals to community social services, including Economic strengthening, livelihood and food security support, and referrals from the community (nutrition surveillance) for nutrition and clinical care.

Note: NACS should be considered Standard of Care for patients from diagnosis to end-of-life care.

2.2. Nutritional Indices

There are four nutritional indices that can help to assess the nutritional status of individuals:

1. Weight-for-Height or length (W/H, W/L)
2. Weight-for-age
3. BMI and
4. MUAC

Acute malnutrition indicates wasting, most of the time, as a result of recent weight loss. Weight- for -Height and MUAC are the two indicators used to assess acute malnutrition in children 0 – 5 years. Weight - for – age is used to monitor growth and identify children with growth faltering.

Weight-for-height (W/H) compares a child's weight (in kilograms) with the weight (in kilograms) of a standard/reference child of the same height (in centimeters). It assesses for wasting. It is particularly very useful in rural settings where families may not remember the exact age of the child. For children <24 months weight for length is taken.

Weight for age is used to monitor the growth of children. It measures the velocity of growth, whether weight gain is occurring as expected for the age and sex of the child. Down ward crossing of growth curves indicate loss of weight and such children require further evaluation with regard to their nutrition and disease stage even if they may not be classified malnourished. Weight for age does not differentiate between acute and chronic weight loss unless the child has been under follow up with at least two or more plotted weight measurements at different times.

MUAC is the circumference of the left upper arm, measured at the midpoint between the tip of the shoulder and the tip of the elbow using measuring or MUAC tape. It is a simple, low-cost,

objective method of assessing nutritional status. The MUAC is generally as good as other anthropometric measures in predicting subsequent mortality in community-based studies and among hospital admissions. MUAC is not used for infants less than 6 months.

Studies have shown that there is only partial overlap among children indentified as having severe malnutrition using the two indicators. MUAC tends to pick young malnourished infants while W/H picks older malnourished children. For this reason it is advised to screen children 6m – 5 years using both indicators.

Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI is a reliable indicator of body fatness for people. BMI does not measure body fat directly. BMI is also used as measurement of malnutrition in children > 5 Years and adults in HIV care and treatment programs, although measurement of weight loss is the most common one.

NB: Tell to the participants that based on the assessment & other clinical considerations, nutritional status of the individual will be classified to severe, Moderate and Mild acute malnutrition and Normal (Not malnourished) and then treatment care plans will be assigned based on the National algorithm.

UNIT 3: RUTF and RUSF Products: Desirable characteristics and indications

Unit Objectives: By the end of the training, participants are expected to:

- Describe what RUTF & RUSF means
- Distinguish desirable features of RUTF and RUSF, and other food supplements
- Identify the clinical indications and dosages of RUTF & RUSF

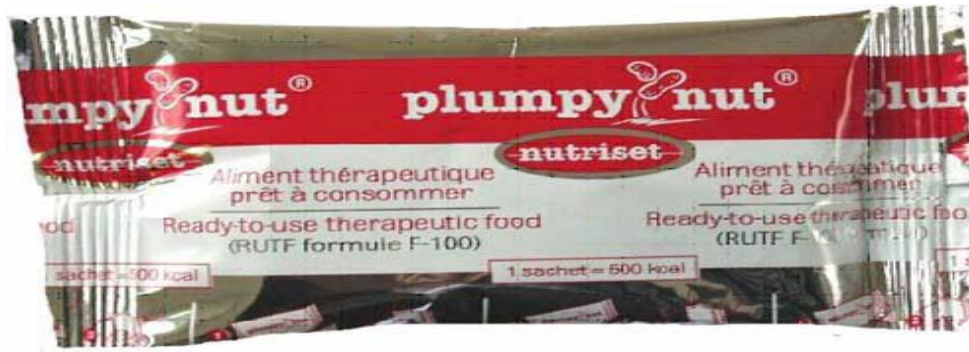
Ask participants to describe what does RUTF and RUSF mean? What kind of therapeutic & supplementary foods they know? Major difference among the foods? Show power point presentation slides and summarize the desirable features of RUTF & RUSF and their indications.

3.1. Desirable features of RUTF & RUSF, and other Food Supplements

What is RUTF? 'Ready-to-use therapeutic food' is a term that could be used generically to refer to any food known or reliably believed to have special benefits as therapy, in particular in cases of severe acute under nutrition. However, as now used, the term refers to a nutrient-dense and energy-dense peanut-based paste originally designed primarily for the treatment of severe acute malnutrition individuals. It can be consumed directly by the child, and does not need to be mixed with water. Any child consuming RUTF will, however, need water in addition. It can be stored for three to four months without refrigeration, even at tropical temperatures.

"RUTF stands for Ready-to-Use Therapeutic Food. It means that the food does not need to be refrigerated or mixed with water. Children can open it and eat it directly. Although it is used as a treatment, and is produced under strict quality criteria, it is a food, NOT a medicine. Plumpy'nut[®] is the only RUTF the PlumpyField[®] network produces." Plumpy Field with Nutriset

Plumpy'Nut is a ready-to-use therapeutic spread produced by Nutriset, a French firm, and presented in individual sachets. It is a paste of groundnut composed of vegetable fat, peanut butter, skimmed milk powder, lactoserum, maltodextrin, sugar, mineral and vitamin complex. It is high energy, fortified ready to eat food suitable for treatment of severely malnourished children. This food should be soft or crushable, palatable and easy for children to eat without any preparation. At least half of the proteins contained in the product should come from milk products.



There are different types of RUTF. Almost all are commercial products. The type most widely used is Plumpy'nut[®], shown above. This is a patented branded product, originally formulated in the late 1990s. It is provided in 92 gram foil sachets, each providing 500 kilocalories.

UNICEF has stated that this '*nutritional paste (peanuts, powdered milk, vegetable oil, sugar, vitamin and mineral mix) contains the right mix of nutrients to treat a child with severe acute malnutrition, and in a form that is easy to consume and safe*'. It is used in health facilities and in the community'.

The RUTF shall conform to the following: *The RUTF will be used by multiple ethnic and cultural groups. No alcohol, animal products other than dairy products, nor any known allergens except peanuts, soy, tree nuts, and dairy products shall be used in the manufacture of these items. According to UN guidance the RUTF ". . . should be soft or crushable and should be easy for young children to eat without any preparation."*

Benefits and composition of RUTF: In addition, up to 25% of a product's weight can come from oil-seeds, groundnuts or cereals like oats. As well as containing the necessary proteins, energy and micronutrients.

RUTF should also have the following attributes:

- Taste and texture suitable for young children
- No need for cooking before consumption
- Resistant to contamination by micro-organisms and
- Long shelf-life without sophisticated packaging
- Product should be oil-based

Nutritional	Composition
Moisture content	2.5% maximum
Energy	520-550 Kcal/100g
Proteins	10 to 12 % total energy
Lipids	45 to 60 % total energy
Sodium	290 mg/100g maximum
Potassium	1100 to 1400 mg/100g
Calcium	300 to 600 mg/100g
Phosphorus (excluding phytate)	300 to 600 mg/100g
Magnesium	80 to 140 mg/100g
Iron	10 to 14 mg/100g
Zinc	11 to 14 mg/100g
Copper	1.4 to 1.8 mg/100g
Selenium	20 to 40 µg
Iodine	70 to 140 µg/100g
Vitamin A	0.8 to 1.1 mg/100g
Vitamin D	15 to 20 µg/100g
Vitamin E	20 mg/100g minimum
Vitamin K	15 to 30 µg/100g
Vitamin B1	0.5 mg/100g minimum
Vitamin B2	1.6 mg/100g minimum
Vitamin C	50 mg/100g minimum
Vitamin B6	0.6 mg/100g minimum
Vitamin B12	1.6 µg/100g minimum
Folic acid	200 µg/100g minimum
Niacin	5 mg/100g minimum
Pantothenic acid	3 mg/100g minimum
Biotin	60 µg/100g minimum
n-6 fatty acids	3% to 10% of total energy
n-3 fatty acids	0.3 to 2.5% of total energy

Plumpy'Nut is specifically designed to treat acute malnutrition without complications and has the following characteristics:

- It is nutritionally equivalent to F-100 (therapeutic milk used for in-patient care in Phase 2)
- One sachet has an energy value of 500Kcal; One sachet has a weight of 92 g
- Each carton of Plumpy'Nut contains 150 sachets (around 15.1 kg)

Benefits of RUTF:

- The quantity distributed to each child is easy to calculate based on the weight
- No preparation or cooking is necessary
- Does not need to be diluted with water & this eliminates risk of contamination

- Can be used at home with supervision from the health center
- Reduces number of staff necessary for preparation and distribution of therapeutic food
- One simply needs to open the sachet by cutting one corner and eat the paste
- Reduces length of stay in hospital or Therapeutic Feeding Centre
- Has a faster recovery rate and higher acceptability than F100
- Can be stored at room temperature for long periods of time
- Has a long shelf life, even without refrigeration (24 months)

Who should receive Plumpy'Nut? A child over six months, an adolescent, malnourished PLHIA & TB patients according to the following criteria:

- Severely Malnourished without medical complications, have passed *appetite test*, and have been enrolled in outpatient care.
- HIV positive, moderately malnourished without medical complications, have passed the appetite test, and have been enrolled in outpatient care.
- Can drink liquids.
- Not allergic to milk or nuts.

What should be the dosing for Plumpy'Nut be?

The number of packets per day to be given to a child/adolescent depends on the weight of the child. The table below provides the accurate dosing based on the weight range of the child/adolescent:

Weight (kg)	Packets/day	Packets/W
3.5 - 3.9	1.5	11
4.0 - 5.4	2	14
5.5 - 6.9	2.5	18
7.0 - 8.4	3	21
8.5 - 9.4	3.5	25
9.5 - 10.4	4	28
10.5 - 11.9	4.5	32
12.0-13.5	5	35
>13.5	200kcal/kg/day	200kcal/kg/day

How should Plumpy'Nut be administered?

- The Plumpy'Nut should be given to the child in small amounts and frequently (e.g. ½ sachet * 8 times per day) provided that the daily amount is according to prescription.
- Always have safe drinking water nearby whenever the child is eating Plumpy'Nut.
- Make sure that the child consumes and finishes the Plumpy'Nut before eating their porridge.
- A family food meal can be gradually introduced as the child's health improves.
- Children should be supervised while they consume their Plumpy'Nut and meals.

Allergic Reaction to Plumpy'Nut: Although it is unlikely, there is a small chance of a child having an allergic reaction to the peanut butter in Plumpy'Nut. It is important to ask for a history of allergy to the ingredients in Plumpy'Nut.

The allergy may cause reactions in the form of:

- Skin changes: hives, rashes and infections
- Body swelling
- Shortness of breath
- Anaphylactic shock

If the child develops any of these symptoms, discontinue administering Plumpy'Nut. The child should be treated for allergic reaction in the nearest health facility immediately.

Ready-to-use Supplementary Foods (RUSF):

RUSF (Plumpy'Sup™) is a ready-to-use food supplement (RUSF) developed for the treatment of moderate acute malnutrition in children more than 6 months old. Plumpy'Sup™ can be used to prevent severe malnutrition, particularly with children just finishing therapeutic feeding program. It can also be used to treat moderate acute malnutrition in adult PLHIA & TB patients.



Main characteristics, target population and benefits obtained:

As a ready-to-use supplementary food (RUSF) Plumpy'Sup™ is mainly intended for the treatment of moderate acute malnutrition in young children over 6 months old. It can also be used in moderate acute malnutrition in Adult PLHIA & TB patients.

Ingredients: Blend of vegetable oil (contains one or more of the following: palm oil, soybean oil, rapeseed oil), sugar, peanuts, whey, maltodextrin, soy protein isolate, cocoa, vitamin and mineral complex, emulsifier: lecithin. It is composed of vegetable fat (providing the essential fatty acids), sugar, peanut paste, soy proteins, maltodextrin and whey, enriched with a mineral and vitamin complex. Plumpy'Sup™ contains no ingredients of animal origin, except for those derived from milk. The following table shows ingredients of Plumpy'Sup:

Nutrition Facts	
Serving size 1 sachet (92g)	
Amount per serving:	
Calories 500 kcal	
Protein 13 g	
Fat 30.5g	
Vitamins	
Vitamin A (840µg)	Vitamin C (49mg)
Vitamin D (15 µg)	Vitamin E (18.4mg)
Vitamin B1 (0.6 mg)	Vitamin B2 (1.7mg)
Vitamin B6 (0.6 mg)	Vitamin B12 (1.7 µg)
Vitamin K (19.3 µg)	Biotin (60 µg)
Niacin (4.9mg)	Folic Acid (193 µg)
Pantothenic Acid (2.9 mg)	
Minerals	
Calcium (276mg)	Phosphorus (276 mg)
Potassium (1007mg)	Magnesium (83 mg)
Zinc (13mg)	Copper (1.6 mg)
Iron (11 mg)	Iodine (92 µg)
Selenium (28 µg)	Sodium (<267 mg)

Like Plumpy'Nut®, Plumpy'Sup™ is available in 92 g sachets which can be used up to 24 months after the date of manufacture, without refrigeration. It does not require any preparation (no dilution, no cooking) and can be consumed direct from the sachet. This means it can be used in the home, which makes the product particularly well adapted to emergency situations or malnutrition prevention feeding program.

Plumpy'Sup™ is produced by Nutriset at its Malaunay (Normandy, France) site, but it is also produced by certain members of the PlumpyField® network, particularly Hilina Enriched Foods, our partner in Ethiopia.

Recommendations for use:

- Plumpy'Sup™ does not require any prior cooking or dilution and does not need to be refrigerated. Simply open the package and eat the contents.
- Recommended daily dose: around 75 kcal / kg / day, or 1 sachet per day for a child weighing 7 kg.
- For severe acute malnutrition: 200 kcal/kg/day (i.e. two sachets/day/5 kg child). For moderate acute malnutrition: 75 kcal/kg/day (i.e. one sachet/day/5 kg child).
- One carton is enough to provide nutritional support for about 2 children for a period of two months in the context of a targeted food supplementation program.

Packaging:

- Primary packaging: 92 g sachets providing 500 kcal and 12.5 g of proteins.
- Secondary packaging: cartons of 150 x 92 g sachets (net weight: 13.8 kg; gross weight : 14.7 kg).

Storage:

- The shelf life is 24 months. See best before date stamped on each sachet.
- It is recommended to keep the product in a cool and dry place at a temperature below 86°F (30°C). It is recommended not to stack the pallets.
- Palletisation: pallets with 64 cartons (for container transport, 960.8 kg) or 48 cartons (for air transport, 725.6 kg).

Main Nutritional Products:

Ready to Use Therapeutic Food (RUTF): either peanut-based therapeutic spreads or cereal-based (e.g. BP-100), and used for the treatment of children with severe acute malnutrition. Peanut-based products are fortified with vitamins, minerals, sugar, milk powder, peanut butter and oil. Cereal-based RUTFs come as a compressed food bar made from baked wheat and oat flours, vegetable oil, sugar, milk and vegetable proteins, skimmed milk powder, minerals, amino acids and vitamins. Can be used as a biscuit or made into porridge.

F-75 and F-100: formulas used in the treatment of severely malnourished children. Consisting of dried skimmed milk, sugar, cereal flour, oil, mineral and vitamin mix, available as a powder that's mixed with water. F-75 (75 kcal/100 ml) used during initial phase of treatment. F-100 (100 kcal/100 ml) during the rehabilitation phase. Both formulas require dilution with water.

F - 75 F-75 therapeutic milk was specially developed for the stabilization phase of people suffering from severe acute malnutrition, designated as phase 1 in the treatment protocol

drawn up by the World Health Organisation (WHO). This product must be used in therapeutic renutrition center with medical supervision, and must not be distributed directly to families.

F - 100 F-100 low osmolarity therapeutic milk was specially developed for the nutritional rehabilitation of people suffering from severe acute malnutrition, in phase 2 of the treatment protocol drawn up by the World Health Organization. This product must be used in therapeutic renutrition centers with medical supervision, and must not be distributed directly to families.

Ready to Use Supplementary Food (RUSF): high energy, fortified food, containing vegetable fat, peanut paste, sugar, skimmed milk powder, whey, minerals, vitamins, and cocoa– used to treat children with moderate acute malnutrition.

High Energy Biscuits (HEBs): wheat biscuits containing high protein cereals and vegetable fat. Contain 450 kcal, 15 grams of protein, and vitamins and minerals per 100g pack. Used as a food supplement to prevent protein and micronutrient deficiencies in the general population.

Corn Soya Blend Products (e.g. UNIMIX): supplementary foods used to prevent protein and micronutrient deficiencies in the general population. Require dilution with water and cooking before use.

3.2. Indications and dosage of RUTF and RUSF

Ask participants to describe the nutritional care plans for malnourished PLHIA, OVC & TB patients. Summarize the nutritional care plans as described below in a power point slides.

RUTF (Plumpy'Nut):

Indication: Treatment care plan A – Severe Acute Malnutrition:

- Severe acute malnutrition in children irrespective of their HIV or TB status
- Severe acute malnutrition in Adults with HIV or TB

Dosage: Children: Daily dose depends on weight category

Adults: Daily dose of four sachets per day

RUSF (Plumpy'Sup):

Indication: Treatment care plan B – Moderate Acute Malnutrition

- For children, irrespective of their HIV or TB status

- For adults, if they are HIV+ or if they have MDR TB or if they are in TB retreatment
- Signs of symptomatic diseases: for adults and children with HIV (irrespective of their Anthropometry)
- Significant weight loss (failure to gain weight in children): for adults and children with HIV (irrespective of their Anthropometry)

Dosage: Children: Daily dose depends on age category

Adults: Two sachets of RUSF daily

Unit 4: Commodities supporting Nutritional Assessment

Unit Objectives: By the end of the training, participants are able to:

- List common anthropometric equipments
- Describe desirable features of the commodities and
- Identify the uses of these supplies & equipments

Anthropometric Equipments & Supplies:

Brainstorming question: Ask the participants to list anthropometric equipments they came up before and supplies and their intended use.

1. **Baby Scales:** used to measure and closely monitor baby's weight.



Electronic and Mechanical baby scale

2. **Column Weight Scales:** Used to take weight, height and BMI. It can have an accessory of height measuring rod.



Mechanical Column scales with eye-level beam and Mechanical column scales with automatic BMI display

3. **Flat scales:** used to take height and it can have mother/child function. It can have an accessory of height measuring rod



Mobile flat scales for mobile use with push buttons and double display

4. **Height measuring instruments** – it good to buy those which are connected with column weight scales and flat scales.



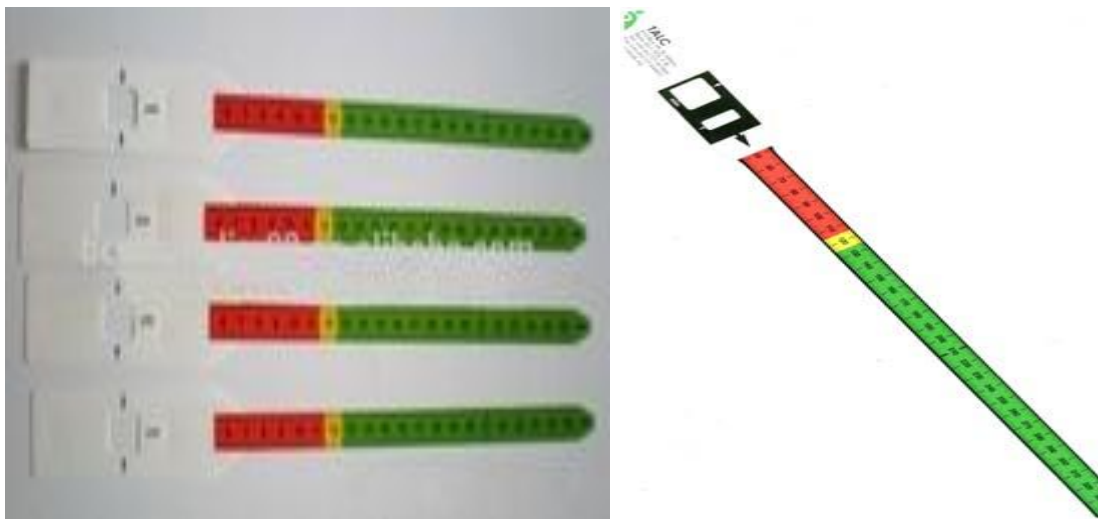
Stable standimeter for mobile height measurement- can be connected to flat scales

5. **Length measuring board:** used to measure length of babies and toddlers.



Infantometer and light, space saving and stable measuring board

6. **MUAC measuring tape pediatric and adult:** Used to measure the mid-upper-arm circumference (MUAC) of pediatrics and adults.



Insertion tape for measuring mid upper arm circumference to assess malnutrition

Unit 5: RUTF and RUSF Logistics Overview

Unit objectives: By the end of the training, participants are able to:

- Identify standard store management procedures for RUTF & RUSF
- How to manage and dispense FBP commodities

5.1. Information and Commodities Flow

Buzz group Discussion: Ask the participants to explain the flow of commodities and information in the national logistic system. Give them 3 minutes for buzz group discussion and 2 minutes reflection. Summarize the discussion by drawing the flow of information & commodities in a flip chart.

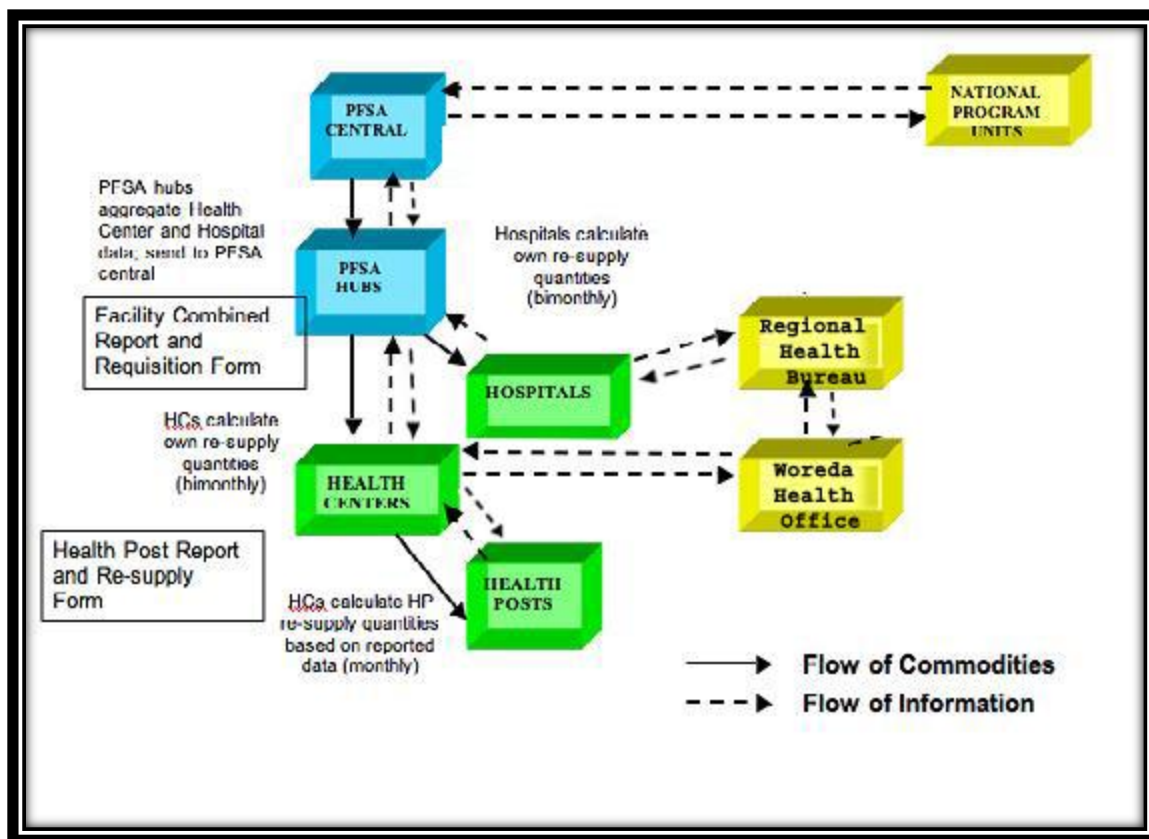


Fig. Flow of commodities and Information

Role & Responsibilities:

Plenary discussion question: Ask participants to list their responsibilities in FBP and reflect to the class. Summarize the discussion by showing list of their responsibilities in a power point slides.

Health workers (Doctors, Health officers, and Nurses,) have the following responsibilities with regard to FBP commodities management at health facilities

- Provide Prescription with the right amount of RUTF and RUSF to clients according to the national protocol for Nutrition and HIV
- Counsel clients on proper utilization of RUTF and RUSF
- Register the amount of RUTF and RUSF on the registration book
- Make sure beneficiaries get their entitled amount in the previous visit
- Check the amount the client consumed during each visit

In consultation with the pharmacist,

- Ensure the RUTF and RUSF are available
- Inform the Pharmacists the estimated beneficiaries per month
- Make sure RUTF and RUSF are refilled regularly

Pharmacists Responsibilities include:

a) Before Dispensing

- Avail space in the dispensary room.
- Request and withdraw RUTF, RUSF and Waterguard (*WohaAgar*) food from store based on the suitable factor... (Beneficiary number, Consumption data, Space...)
- Ensure the quality of commodity is according to the standard procedure for storage.
- Update bin card.

b) During Dispensing

- Verify client identity.
- Ensure the right amount of RUTF, RUSF and Waterguard (*WohaAgar*) is issued to clients
- Conduct random check of expiry dates.
- Ensure clients get proper nutrition counseling before leaving the dispensary room

c) After Dispensing.

- Conduct a brief inventory of the day or the week.
- Reconcile receipt, issue and balance along with number of clients or complete Bin card.
- Record information in prescription to dispensing register
- Compile consumption and report bi-weekly to place request to refill from the store (Complete IFRR)

5.2. Storage of RUTF & RUSF:

Brainstorming question: Ask the participants to tell proper storage conditions of RUTF & RUSF. Have you maintained the required storage conditions? Summarize proper storage conditions of RUTF & RUSF through power point presentation slides.

Factors that may affect the shelf life of RUTF or RUSF

- Aflatoxin contamination: This is a toxin that is produced by fungi, which contaminate the peanuts after they have been harvested.
- Bacterial contamination: The inherent microbiological safety of RUTF allows it to be packaged under clean and dry, but not sterile, conditions. Care must be taken to prevent the introduction of water into RUTF during production, transportation & storage. Increasing the water content of RUTF allows bacteria and mould to grow within the food, *promoting product degradation and exposing the malnourished child to potential pathogens.*
- RUTF or RUSF stored in an environment infested with rodents

Basics of Storage

A store provides transit storage for food commodities that are received, stored, and dispatched. The storage period for a given food commodity is for short periods of time, frequently for less than three months and almost never for more than twelve months.

An ideal store:

- Must be situated in a secure area to protect against theft
- Must have strong doors secure from theft and rodents
- Must have safe and intact roof to protect against rain
- Must be easily accessible by road or rail
- Must allow for easy commodity intake & dispatch
- Must have complete files for record keeping
- Must have proper and adequate ventilation
- Must have a strong concrete floor or packed earth to protect against rodents burrowing under stacks

RUTF/RUSF storage, the aspect Shelf life is fundamental

- General understanding: Maximum interval during which a material may be stored and remain in a usable condition.
- Specific to Food commodities: The specified length of time prior to use for which items which are inherently subject to deterioration are deemed to remain fit for use under prescribed conditions.

RUTF & RUSF are full supply items in the IPLS so it is essential that their sufficient supplies be maintained at all times.

RUTF/RUSF Ordering is dependent on the Following:

- Flow of commodities from store
- Beneficiary caseload/turnover (phase-in/Phase-out)
- Buffer stock aspect
- Storage space availability

Commodity receipts: Important things to note during offloading

- Inspect seal: before cutting the seal, the number should be checked against the voucher
- Visually inspect the cargo upon opening the truck doors & goods should be counted when offloading
- After offloading the store keeper will then sign the voucher indicating the number of cartons received and their condition
- Commodities should be placed on pallets.

Distribution Mechanism: There are several methods of food Distribution

- Health facility based food Distribution System
- Community level food Distribution System

Health facility Based RUTF Distribution:

RUTF distribution will be done through health facilities as this presents an opportunity to combine RUTF distribution with other services for PLHIVs. This will be the last activity after the beneficiary has completed the required consultations with health staff.

Advantages

- RUTF/RUSF (food) distribution can be linked with triage, nursing care, nutrition monitoring, counseling and HIV awareness.
- Linkage to conditionality is more direct (e.g. clinic/program attendance).
- Many malnourished clients can be easily reached.
- Potential for complementarities with other support services offered by other agencies.

All times two principles must be observed when moving food related commodity from stores:

- First in – First out (FIFO)
- First expiry – First out

RUTF & RUSF Delivery Strategies: RUTF & RUSF distribution to health facilities for FBP is channel through PFSA. The delivery of RUTF/RUSF will be based on the Beneficiaries number primarily in the starter stock allocation then the delivery based on consumption needs of the facilities. There is a distribution channel beside the national health commodities distribution channel (PFSA) for RUTF. That is UNICEF, will distribute RUTF through RHB to health centers to supply their satellite health posts to avail the product for community based SAM management which is carried out by health extension workers.

Rodents:

- Food commodities in stores vulnerable to attack by rodents such as rats and mice - food eaten, spoiled or contaminated, costs incurred
- Rodents are capable of transmitting diseases to people either directly by bites or handling of rodent carcasses, or indirectly through contact with food contaminated with rodent droppings and urine or by infected blood sucking arthropods.
- Rats and mice gnaw inedible materials including electrical wiring. Hence their presence in a building can constitute a fire hazard.
- Rodent proofing: Blocking all unnecessary openings that are accessible to rodents with materials that are proof against gnawing (e.g. Sheet metal and concrete).
- Rodent extermination:
 - Using rodenticides
 - Acute rodenticides (zinc phosphide) – immediate effect
 - Chronic rodenticide (take much longer time to produce effects)
 - Fumigation
 - Trapping

Safety Precautions

- Protection against diseases
- Live or dead rodents should not be handled unless gloves are worn
- All scratches and abrasions need to be treated and kept covered until healed
- Protection against rodenticides
- Baits containing zinc phosphide that give rise to phosphine gas, should be mixed in open air.
- Gloves should be worn when handling rodenticides
- There should be no smoking/eating in places where rodenticides are prepared or stored

5.3. Organizing and De-junking storage places:

Prepare flipcharts with the following two questions and ask participants to answer the questions by discussing in pairs with a colleague sitting beside. Give them 5 minutes for discussion and reflection. 1. Why storage space should be well organized? 2. What they think are the benefits of de-junking a storage space?

Organizing a storage facility:

In the activity above, point out to the participants that there are several reasons why a storage space should be well organized. It saves time, because you can find thing quickly. It helps prevent errors, because you do not forget about stock that you have in two different places, for example. And most of all, it helps prevent stock outs. This is because with good organization you can easily count how much stock you have and calculate how long it will last, your MOS. You will know if you are at EOP and need to do an emergency order or if you are OK or if you are overstocked.

- Organize the storage area into zones as needed: a cold storage area for vaccines and other supplies requiring cold storage; a secure room or locked cage for narcotics and controlled substances; a zone in which to store flammable materials, ideally in a separate building or room.
- Within each area, group health supplies by product type/form. This means that all tablets/capsules will be stored together, all syrups together, all injectables together, and so on. Liquids should be stored on lower shelves. Non-drug consumables will also all be stored together.
- Within grouping by product type, arrange supplies in alphabetical order according to their generic name, not brand or trade name.
- Have a specific place for each product and mark the shelf with the generic name of the health commodity.
- Organize supplies on their shelves according to FEFO, first-to-expire, first-out. Put supplies that will expire sooner in front of or on top of supplies that will expire later.
- When possible, use adjustable shelving so that space can be adjusted to the size and quantities of commodities in storage.
- Organize the storage area in an orderly manner so health supplies can be found easily and re-stocked easily.
- Designate a specific space for temporary storage of unusable items before their disposal.

Steps in Dejunking a Storage facility:

In the activity mentioned in the box above, make sure that the participants have responded the right answer and list the answer on the flip chart. They should include: Increased storage capacity; more space for proper handling & store management; Makes monitoring of stocks easier, and Maintain quality of Pharmaceuticals. Next ask them to turn to the page on de junking in their Participant Workbooks. Ask them to study the page with a partner for five minutes and to be ready to answer a plenary discussion question on the steps in de-junking storage places.

Dejunking means getting rid of the “junk” in a storage facility, including DEPS (Damaged and Expired Products) and any other items that do not belong in storage facility for health products (These items can include old furniture, outdated forms, fuel barrels, vehicle parts, etc.).

Dejunking is also a time for reorganizing a storage facility and getting bin cards and stock record cards up to date. Dejunking can greatly increase storage space.

1. Assign “Dejunking Team”
2. Gather materials & equipment for dejunking (boxes for collecting unusable items, push carts, etc).
3. Separate unusable items from usable items.
4. Update Bin Cards and Stock Record Cards if loss not previously recorded.
5. Sort unusable items by final disposition: Return to PFSA; Sell/auction; Repair & Use; Recycle; Destroy.
6. Complete Record for Returning Unusable Commodities for Pharmaceuticals to be returned to PFSA.
7. Dispose of unusable items per final disposition.
8. Prepare report of dejunking activity.
9. Deposit income from sale of unusable items into facility account.
10. Clean storage facility and adjust shelving as needed.
11. Reorganize storage facility taking advantage of reclaimed space.
12. Assign staff responsible for routine disposal of unusable items.
13. Establish routine schedule of disposal of unusable items.
14. Monitor implementation for routine disposal.

Unit 6: Stock keeping records: Bin card & stock record card

Unit Objectives: By the end of the training, participants are able to:

- List essential data items for supply management
- List records and reports used in managing pharmaceutical in IPLS
- Record transactions on a bin card and stock record card

Prepare flipcharts with the following three questions and ask participants to answer the questions by discussing in pairs with a colleague sitting beside (Think-pair-share). Give them 5 minutes for discussion and reflection.

1. Why do you think it is important to keep records when managing pharmaceuticals?
2. What are essential data items required to run logistics system?
3. Is there a need to report these data items up the system? What are the benefits of reporting?

After the discussion, point out the answers of the questions through interactive lecturing using power points slides.

6.1. Logistics Management Information system (LMIS) in IPLS:

Summarize the questions in the above box by saying that records help supply managers capture essential data that is needed to make supply decisions like how much to order. Point out the three essential data items that are needed to manage Pharmaceuticals as listed below and review the definitions for these data items. Explain to the participants that these same data items must also be reported up the system so that managers at other levels have access to information to make supply decisions.

The purpose of a Logistics Management Information System (LMIS) is to collect, organize, and report information to other levels in the system in order to make decisions that govern the logistics system and ensure that all six rights are fulfilled for each client.

The primary function of the LMIS is to support the management of essential pharmaceuticals. Three essential data items are required to run a logistics system and, therefore, must be captured by the LMIS. These three essential data items are:

1. **Stock on Hand**: Quantities of usable stock available at a particular point in time.
2. **Consumption Data**: The quantity of pharmaceuticals used during the reporting period.
3. **Losses/Adjustments**: Losses are the quantities of products removed from your stock for anything other than in the provision of services to patients or issuing to another facility (e.g. expiry, lost, theft, or damage) and are recorded as negative (-) numbers. Adjustments are quantities of a product received from any source other than PFSA, or

issued to anyone other than your facility's health. An adjustment may also be a correction due to an error in mathematics. An adjustment may be a negative (-) or positive (+) number.

There are only three activities that happen to pharmaceuticals within a logistics system: they are stored in inventory, moved between facilities, and used to provide health services to patients. A well-designed logistics management information system will include records and forms that collect and report the three essential data items as they relate to these three activities.

Records and reports Used in Managing Pharmaceuticals including RUTF & RUSF:

Ask participants to their participants' manual and to take a few minutes to review the table below, and ask them if there are any questions.

Level	Name of LMIS Record or Report	Purpose	Disposition	Data Items Recorded or Reported	Reports to/orders from
Health Post	Bin Card	Stock keeping – track stock in storage	Kept with item	Stock on hand, quantity received/issued, losses and adjustments	
	Health Post Monthly Report and Re-supply Form (HPMR)	Report – report essential data items to Health Centre for use in commodity re-supply and monitoring	Submitted monthly to Health Centre Used by the health center store to issue pharmaceuticals to health posts.	For each item: Preprinted – item & unit; stock on hand, quantity received, losses and adjustments, calculated consumption, quantity to reach max.	Health center every month
Health Centre & Hospital	Bin card	Stock keeping – track stock in storage	Kept in store with item	Stock on hand, quantity issued/received, losses and adjustments Additional information: batch number and expiry date	
	Stock Record Card	Stock keeping –	Kept in the Cabinet in the office of the	Stock on hand, quantity issued/received,	

Level	Name of LMIS Record or Report	Purpose	Disposition	Data Items Recorded or Reported	Reports to/orders from
		track stock in storage	Pharmacy Manager	losses and adjustments Additional information: unit price, expiry date & location	
	Internal Facility Report and Resupply form(IFRR)	Report & Transaction – Report essential data items, issue and receive pharmaceuticals within a health facility	Submitted following the reporting schedule developed by the health center or The Hospital Used by the Health Centre or Hospital store to issue commodities to wards and units within the facility	For each item – Reprinted- item & unit Stock on hand, Quantity received, losses/adjustments, Calculated consumption, quantity needed to reach max, quantity supplied, price ,	
	Report & Requisition Form (RRF)	Report & Transaction-report essential data items, order pharmaceuticals from PFSA	Submitted every other month to PFSA with copy to Woreda (Health Centre) or ZHD/RHB (Hospital)	For each item: Preprinted – item & unit; Calculated Consumption, stock on hand, quantity received, losses and adjustments, quantity needed to reach max and quantity requested	WOHO/PFS A: Every two months on 10 th day after the reporting period

Level	Name of LMIS Record or Report	Purpose	Disposition	Data Items Recorded or Reported	Reports to/orders from
Woreda and Regional Health Bureau	Aggregated Logistics Report (RHB/ZHD/WOHO)	Report - to aggregate facility level data for analysis		Beginning balance, quantity received, quantity issued, losses/adjustments, ending balance	WHO reports to RHB every two months at 15 th day after the reporting period
	Feedback reporting format (RHB/ZHD/WOHO/PFSA)	To provide feedback to lower level facilities from upper level on basic indicators: <ul style="list-style-type: none"> • Availability of key pharmaceuticals • Consumption trends • Reporting rates • Quality of data on RRF 	Will be sent from higher level facilities to lower level facilities	Stock status of priority (Key) pharmaceuticals, reporting rate or increases/decreases in consumption	SDPs every two months at 15 th day after the reporting period

6.2. Maintaining Bin card (BC) and Stock Record Card (SRC)

Ask the participants to describe the procedures for maintain BC & SRC and to mention when to perform recording in BC & SRC for pharmaceuticals. Demonstrate how to record transactions using sample of BC & SRC cards and clearly explain the procedures to record stock transactions in BC & SRC using flip chart additionally.

Ask the participants to explain the difference in record in BC & SRC. Give them two minutes for think-pair-share discussion and reflection.

After the discussion, summarize to the participants using a flip chart when to perform recording in BC & SRC as summarized below. Also point out the difference of BC & SRC using a flip chart. The difference are: BC is kept close to where pharmaceuticals are being stored and issued/ SRC is kept in the pharmacy manager's office; Batch number is recorded in BC using a separate row for each batch number; Unit price is recorded in the SRC which is obtained from the invoice received from PFSA; SRC is not used at health post level.

When to Perform recording in BC & SRC:

- When supplies are received or issued
- When supplies are transferred to another facility/When supplies are transferred in from another facility
- When supplies are removed from the storage area for reasons other than for use in health services (e.g., for demonstrations, expiration, damage)
- At the end of every other month when physical counts are conducted (SRC)

One *BC* should be maintained for each pack size, form or presentation of each commodity. The *Bin Card* should be kept with the product in the storage area. Recording a transaction in BC is completed when:

- A separate *Bin Card* has been completed for each health commodity managed in the store (e.g. Separate Bin card for RUTF & RUSF).
- The Name of Health Facility, Product Name, Strength and Dosage Form, and Unit of Issue have been written at the top of the *Bin Card*.
- Each transaction is recorded on the *Bin Card* as it occurs.
- The *Bin Card* is kept close to where the commodities are stored and issued.

One *Stock Record Card* should be maintained for each pack size, form or presentation of each commodity. Recording a transaction in SRC is completed when:

- A separate *Stock Record Card* has been completed for each pharmaceutical managed in the store (e.g. Keep separate BC & SRC for RUTF & RUSF).
- The Name of Health Facility, Product Name, Strength and Dosage Form, Unit of Issue, Location, Maximum Stock Level and Minimum Stock Level have been written at the top of the *Stock Record Card*.
- Each transaction is recorded on the *Stock Record Card* as it occurs.
- The *Stock Record Card* is kept in the Pharmacy manager's office.

Unit 7: Reporting and ordering

By the end of this Part participants will be able to:

- Complete the Report and Requisition Form (RRF)
- Assess stock status and monitor expenditures for Pharmaceuticals
Place an emergency order for a Health Centre or Hospital

7.1. Completing the RRF:

Ask the participants to explain how information that is used to re-supply/orders RUTF & RUSF flows & its frequency between healthcare facilities and PFSA. After this brainstorming question, explain the information flows & their frequencies by drawing a flow diagram on a flip chart. Then ask the participants to describe the purpose of RRF. Give them 2 min to discuss in pairs with a colleague and after the discussion & reflection, summarize the answer using a flip chart. Demonstrate how to complete RRF using poster of RRF. Explain to the participants how to use the information from bin card to complete RRF.

Hospitals and Health Centres use the *Facility Combined Report and Requisition Form (RRF)* to:

- Report on the quantities of pharmaceuticals used, lost or transferred, and the quantities of stock available
- Order pharmaceuticals

Facilities that submit their *RRF* on time should always have sufficient stocks of pharmaceuticals to serve their patients. Facilities should send their completed and approved *RRF* to PFSA by the 10th day of the month following the end of the reporting period. For example, if the last month of the reporting period was Tikimt, the *RRF* would be due at PFSA by Hidar 10th.

In addition, Hospitals and Health Centres should submit a copy of the *RRF* to the appropriate administrative body by the 10th day of the month following the reporting period as specified below:

Hospitals report to → Regional Health Bureaus

Health Centres report to → Woreda Health Offices

Remind participants that the RRF has 3 copies for each page. Tell participants that the health facility keeps one copy, sends one copy to PFSA to process the order, and one copy to Health Bureaus - Health Centers to the pharmacy department at the Woreda Health Office, Hospitals to the pharmacy department of the Regional Health Bureau .

Based on the exercise below, show the participants, using a flip chart, how to get the key information and calculate the quantities needed to complete RRF after they carry out individual exercise.

Exercise: Give the participants 10 minutes to carry out the following individual exercise.

The reporting period of Debretabor Hospital is Tir 1 – Yekatiti 30. The facility has reported RRF to PFSA on 10/07/2005. The facility has received 8,750 sachets of RUTF (Plumpy’Nut) on 30/05/2005. The stock on hand at the beginning of the period was 2,250 sachets. On 15/05/2005, they transferred 900 sachets of RUTF to Debretabor health center keeping the formal procedures. The stock on hand at 30/06/2005 was 3,750 sachets. There has been nine days of stock out from 21/05/2005 to 29/05/2005. Calculate the following data which are required to complete RRF.

- 1. The total sachets of RUTF issued out of the pharmacy store*
- 2. Max stock quantity*
- 3. Quantity needed to reach Max*
- 4. Quantity ordered*

After the participants completed the exercise, conclude it on a flip chart. Display the formulas which are used to calculate the data elements of the RRF as shown below:

- 1. Calculated consumption = Beginning Balance + Qty Received ± Loss/ Adjustment – Ending Balance in the store.*

$$= 2,250 + 8,750 - 900 - 3,750$$

$$= \underline{6,350 \text{ Sachets of RUTF}}$$

- 2. Maximum stock Qty = $120 \times (\text{calculated consumption}) / (60 - \text{Days of stock out (DOS)})$*
$$= 120 \times 6,350 / (60 - 9)$$
$$= \underline{14,942 \text{ Sachets of RUTF}}$$

- 3. Qty needed to reach Max = Maximum stock Qty – Ending balance in the store*
$$= 14,942 - 3,750$$
$$= \underline{11,192 \text{ sachets of RUTF}}$$

- 4. Qty Ordered= 11,192 sachets of RUTF since RUTF is supplied on Free basis or has no budgetary concern to the hospital.*

7.2. Assessing Stock Status:

For the purpose of plenary discussion, ask participants to describe the purpose of inventory control system and explain the inventory control parameters (Max, Min, and EOP). After the discussion, summarize it through interactive lecture by displaying the issue in power point slides. The issue is summarized below. Tell to the participants that these parameters are based on months of stock.

The purpose of an inventory control system is to inform personnel when and how much of a commodity to order and to maintain an appropriate stock level to meet the needs of patients. A well designed and well operated inventory control system helps to prevent shortages, oversupply, and expiry of commodities. To help maintain adequate stock levels, the *maximum months of stock*, *minimum months of stock* and an *emergency order point* have been established for each service delivery point in the system.

- The maximum months of stock is the largest amount of each pharmaceutical a facility should hold at any one time. If a facility has more than the maximum, it is overstocked and risks having stocks expire before they are used. Health centers and Hospitals can have 4 Max months of stocks & health posts can have 2 Max months of stock.
- The minimum months of stock is the approximate level of stock on hand at the end of the reporting period when an order is placed. Health centers and Hospitals can have 2 Min months of stock and health posts can have 1 Min months of stock.
- The emergency order point is the level where the risk of stocking out is likely, and an emergency order should be placed immediately. EOP for health centers and Hospital is 0.5 months (2 weeks) and it's 0.25 Months (1 week) for health posts.

Explain that to avoid stock outs in unforeseen circumstances, such as increased consumption or commodity damage, an emergency order should be made before a stock out occurs. Explain that at Health Centers and Hospitals emergency orders should be placed when stock levels reach 2 weeks of stock.

A maximum/minimum inventory control system is designed so that facilities always have enough stock to serve their clients and to prevent emergency orders. However, every system must have a procedure for placing emergency orders if they are ever needed. An emergency order would be needed to avoid reaching a stockout before the end of the review period.

Note: Never let your stock level reach "0" (stockout). Take action before a stockout occurs!

Note: When making an emergency order, only report on the product(s) that require the emergency order. Do not report on all products managed by the health facility.

Determining Months of Stock (MOS):

For the purpose of plenary discussion, ask participants how they determine how much stock they have in terms of months of stock. Tell them the equation to determine MOS and write the formula on the flip chart. Allocate 2 minutes to carry out the exercise, as shown below and conclude the exercise by showing the calculation on the flip chart.

To determine your months of stock, use the following formula:

Stock on Hand	=	Months of Stock on Hand
Average Monthly Issues		

Point out to participants that the average monthly issue is the reported issues divided by 2 to get one month of issues.

Based on the exercise on completing RRF, ask participants to calculate MOS for RUTF at the end of Yekatit.

The calculated consumption of RUTF in the RRF is 6,350 sachets and the average monthly issue is 3,175 sachets. The stock on hand at the end of Yekatit was 3,750 sachets.

$$\text{Months of stock on hand} = 3,750/3,175 = 1.2 \text{ MOS}$$

Ask participants what the 1.2 months of stock means. They should explain that this is how much longer the stock you have will last. Ask how this compares to the emergency order point of 0.5 months. Note that the months of stock are fairly close to, but still above the emergency order point.

Unit 8: Issuing and receiving FBP Products and ensuring auditable transactions within healthcare facility

Unit objectives: By the end of the training, participants are able to:

- Describe the processes of issuing and receiving RUTF & RUSF in health facility
- Recognize auditable RUTF & RUSF transactions in health facilities

8.1. Issuing and receiving RUTF & RUSF with health facility:

Buzz group discussion: Ask participants to describe the process of issuing and receiving RUTF & RUSF with in health facilities and also show the flow of information and commodities with in health facilities. Allow each group to reflect on the issue. Using Flip chart, explain the process of issuing and receiving these commodities with in health facilities.

Demonstrate IFRR form and explain the data required to complete the form and how the information to complete the form is obtained by using flip chart.

Summarize that, like other pharmaceuticals, RUTF & RUSF are generally issued from the hospital or health centre pharmacy store and issued to ART dispensing units within the facility. Reinforce that RUTF & RUSF in a facility should be stored in the pharmacy storeroom and that they should be managed by the pharmacy store manager and the pharmacist. Explain that Health Centers are also responsible for issuing RUTF to Health Posts. However, RUTF & RUSF supplied by PFSA is for medical treatment of acute malnutrition (FBP) in health centers & hospitals. It's not intended to be supplied to health posts for the purpose of community based management of SAM. Tell to the participants that RUTF supplied by UNICEF to WOHO Store can be issued to health posts through the health center for community based management of SAM.

When commodities are issued from the storeroom to dispensing Units (DU), DU will provide essential logistics data on the Internal Facility Report and Re-supply Form (IFRR). After completing the report section of the form, the health worker will take the IFRR to the pharmacy store to obtain the needed quantity of RUTF & RUSF. The store manager will use the information in the report section to determine re-supply quantities and issue the commodities.

When issuing the pharmaceuticals both the person receiving the commodities and the pharmacist or pharmacy store manager sign the IFRR. After issuing, the pharmacist or pharmacy store manager updates the Bin Card and the Stock Record Card and files the IFRR.

Like other pharmaceuticals, PFSA delivers RUTF & RUSF to Hospitals and Health Centres which have submitted a completed and approved RRF on time. Hospitals and Health Centres receive pharmaceuticals every other month. At the time of delivery, PFSA trucks will wait while

products are counted and verified, to take note of any discrepancies, to obtain proof of delivery (Model 19), to collect signed and sealed PFSA Delivery for the commodity shipment.

RUTF & RUSF are delivered with two copies of PFSA Delivery Invoices (DIP). But, the facility will use the RRF copy to check if they are receiving the quantity Ordered.

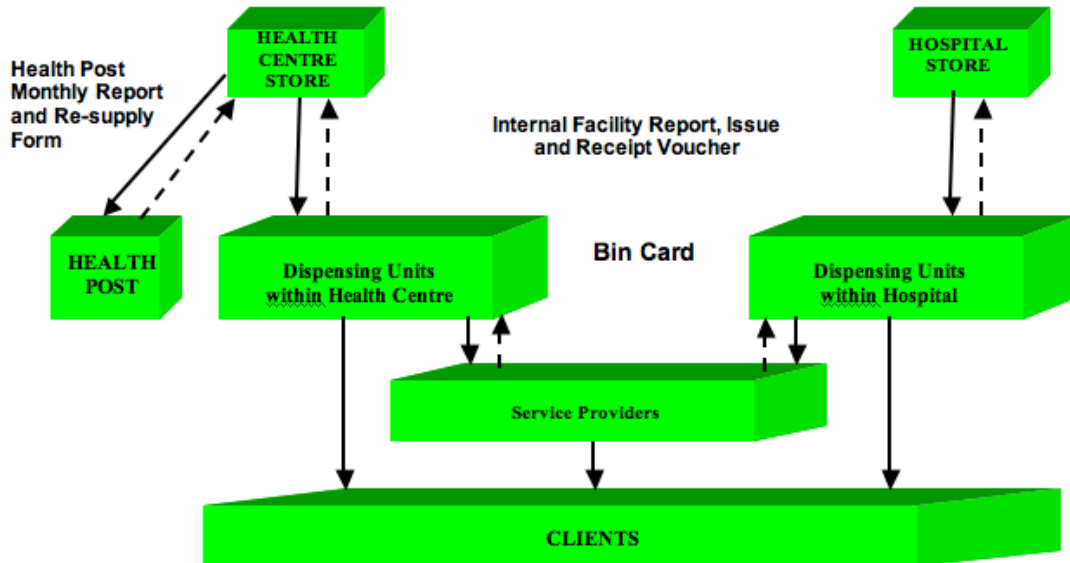


Figure 2 Movement of products and information between health center and health posts and among facilities and internal dispensing units.

8.2. Auditable RUTF & RUSF Transactions in Healthcare Facility

Ask participants these brainstorming questions: Are the transactions of RUTF & RUSF in health facilities you are working auditable? What are the processes of auditable transactions? After the discussion, summarize the answer via interactive lecture by using power point slides.

Managing RUTF & RUSF transactions:

- Assign accountable personnel in each unit to work in an auditable period of time
- Receiving the products using formal transaction and financial records, as shown in the table below
- Estimate cost and setting prices of RUTF & RUSF and put it in the transactions records
- Requesting from the pharmacy store with Model 20/ IFRR approved

- Issuing from the pharmacy store using formal transaction and financial records, as shown in the table below
- Record RUTF & RUSF dispensed in free sales dispensing register and prepare daily summary of dispensed RUTF & RUSF, and clients confirm the transaction by signing on the register
- The dispenser receives standard prescriptions approved by a well known prescribers from the clients and checks whether or not the client is eligible for the program
- Compile dispensed prescriptions by assigning a number in chronological order
- Carry out physical inventory at pharmacy store and dispensing outlets every quarter. Stock cards & bin cards are used to track the movement of stock at store while free sales registers are used to monitor the stock movement and value of inventory at the ART dispensary
- Random sample inventory and auditing and reconcile it with daily dispensing summary report
- Do internal audit every quarter and external audit annually based on quarterly & annual inventory respectively
- Assess stock status to predict excess stock & quantity liability for expiry

For transactions to be audited properly, the health facility should ensure the availability of organized and complete information on RUTF & RUSF transactions at store and dispensary unit.

Table: RUTF & RUSF transactions processes and sources of information for auditing

Transaction processes	Sources of information
Receiving	Receiving voucher (Model 19) completed & accompanied by delivery invoice Updated Bin card & stock record card
Issuing	Receiving voucher (Model 22) completed and accompanied by approved requisition (Model 20) Update bin card & stock record card
Dispensing (ART pharmacy)	Free sales dispensing register Daily freely dispensed summary
Reporting (finance office)	Monthly/quarterly financial report Quarterly physical inventory result

Unit 9: Client counseling/consultation at Dispensary

Unit objectives: By the end of the training, participants are able to:

- Recognize client counseling skills
- Comprehend key messages to clients during RUTF & RUSF dispensing

9.1. Counseling skills:

Ask participants that 'Have they provided client counseling/consultation during RUTF & RUSF dispensing and what makes consultation of clients better?'. Using power point slides, please describe the client counseling/ consultation skills.

- 1. The consultation area:** The consultation area should be comfortable, clean and confidential. In order to maintain professionalism it is vital that any reference materials, learning aids or equipment be in place.
- 2. First impressions:** For patients to be willing to agree to a consultation it is vital that you and the rest of the pharmacy team are seen as *approachable*. The counter should be *clean and free of clutter*. Staff should be *smartly dressed*. Co-coordinating uniforms and name badges, complete with job title, can help create a professional appearance. Customers should be *greeted with a smile and a polite welcome*; if a customer *receives good service* they are more likely to return. The development of a *good relationship* with a particular pharmacy and its staff is important to many patients, especially those receiving ongoing medication for long term conditions. A customer is unlikely to stay for a consultation with the pharmacist if they do not *feel comfortable with their surroundings*.
- 3. Body language:** Body language is extremely important. The patient may feel vulnerable or embarrassed discussing their health problems, especially if it is their first visit to the pharmacy. Once in the consultation room, *do not sit too close to the patient or invade their personal space*. Use *open body language*: closed body language, such as sitting with arms folded or with your body facing away from the patient, is unlikely to encourage them to be very forthcoming. Make *eye contact, smile and – most importantly – listen* to the patient. Try and put the patient at ease. This could be achieved by appearing *relaxed yourself*. Even if the pharmacy is extremely busy and the prescriptions are piling up on the dispensing bench, it is vital that the patient feels they have your *whole attention*. If not, they may feel rushed and therefore less likely to reveal all that they would like to discuss. This may also make them less likely to return for a follow-up appointment.

4. Asking questions: Try and keep the consultation *focused and to the point*. In other consultations, remember that different types of questions will elicit different types of response. *Closed questions* should be used to determine the information required quickly and concisely, while open questions can lead to the patient divulging relevant information that they would not otherwise have volunteered.

- *Ask questions to see what the patient already knows and whether they have any misconceptions. What does the patient need help with?*
- *Show that you are listening by summarizing and repeating what you have been told.*
- *Do not assume the patient is taking their medicine, or that they understand which condition the drug treats.*
- *Use language the patient understands and avoid technical words or jargon.*
- *Ask the patient to repeat something after you have explained it to them so you can determine whether they have understood or not.*

Obviously, each patient will be different, so being able to *adapt to and deal with different levels* of questioning and understanding is a skill you may need to master.

Topics that should be covered when providing medication counseling include:

- *Why the medication has been prescribed and its expected benefits or action*
 - *How to use/take the medication and the duration of treatment*
 - *What the patient should do if a dose is missed*
 - *Any special storage instructions*
 - *What precautions, contraindications and side effects the medicine has*
 - *Any special monitoring required*
 - *Opportunistic advice on healthy living or public health topics in line with the promotion of healthy lifestyles.*
- 4. Recording:** After a consultation it is usually appropriate to make notes or complete any corresponding paperwork. This should be done concisely and without impacting too much on the consultation itself. It can sometimes be best to take rough notes and then write these up at a quieter time during the working day. It may be possible to train a colleague to help you with this.

9.2. Messages for Clients/Caregivers on RUSF/RUTF:

Ask the participants the key messages to clients/caregivers on RUSF/RUTF use. Summarize the answer on a flip chart.

- Is only for malnourished children & PLHIA & TB adults and should *not be shared* with other members of the family who are hungry.
- Should be kept in a *secure place and out of reach of children* in the house. It should be kept away from the *sun* to preserve nutrients.
- Should be given soon after a *feed if the child breastfeeds*.
- Should always be given *before any other family food*.
- Should be given to the child in *small amounts and frequency*.
- After eating, the remaining amount in the sachet should be kept for the next feed. The top of the sachet should be rolled down for safety.
- May cause choking. Therefore, a generous amount of clean water must always be given to the child, at least 1 cup (100ml) of clean water for each dose of RUSF/RUTF. If choking persists the child should be taken to the nearest health facility.
- A balanced, nutritious meal can be given/taken after the correct amount of RUTF/RUSF.
- May cause complications such as *diarrhea, vomiting, fevers, swelling, rashes, hives, skin infections, and shortness of breath or shock*. If these symptoms are present, the caregiver must stop giving Plumpy'Nut and take the child to nearest health facility.
- Empty sachets should be kept and presented at each visit.

Key Message: RUTF/RUSF is a treatment for malnourished children. Only the malnourished children/PLHIA & TB should eat it.

Unit 10: Use Monitoring and Misuse management

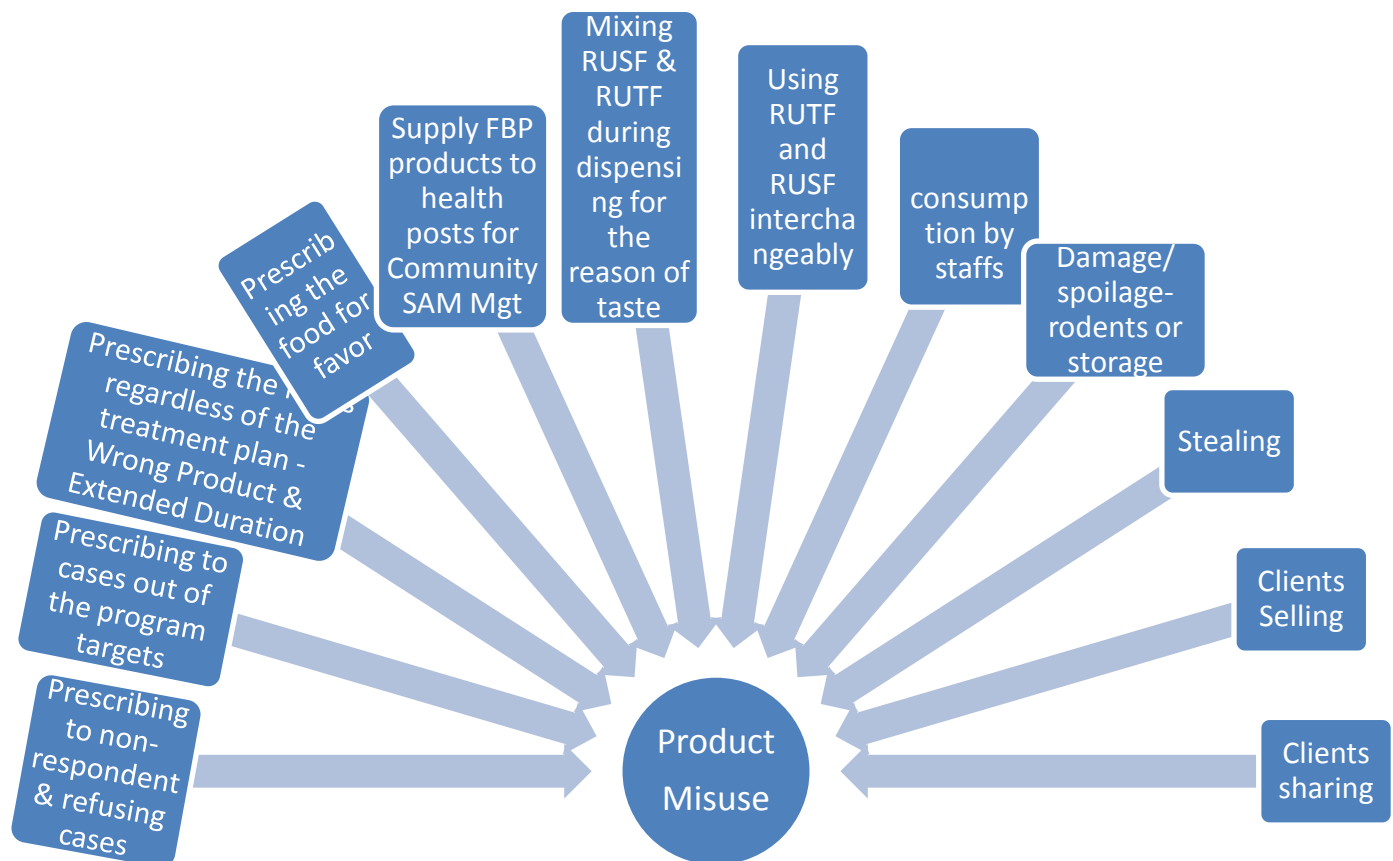
Unit objective: By the end of the training, participants are able to:

- Identify common RUTF & RUSF misuse features
- Recognize possible solutions to curb misuse of RUTF & RUSF

10.1. RUTF & RUSF Misuse Features

Think- Pair-share (3 Min): Ask the participants 'What are the main misuse problems of RUTF/RUSF in your health facility?' (Let them to have 2 minutes discussion and minute reflections). Tell to the participants that the common misuse problems are:

- Abuse @Facility Level
- Stealing
- Sharing by Clients
- Selling by clients and service Providers



RUTF & RUSF Misuse features

10.2. Actions in RUTF/RUSF Misuse Management:

Buzz Group Discussion: 10 min discussion & 3 min reflection. Ask the participants to discuss on the following questions: What are the main actors of misuse in health facilities? What measures were taken against these problems? What do you propose to alleviate these problems in your facility?

Actions to reduce misuse of RUTF/RUSF which is practiced through stealing from health facilities, breaking commodity distribution channels, sharing of the products by clients to family members and selling to commercial vendors:

Actions	Contact points
1. Facility Level actions	
Strengthen recording system at the clinic and dispensary: Make sure there is a complete record.	Dispensary, clinics
Auditing: Keep complete dispensing information of all clients in dispensing registration book (Form, below); Periodically summarize the quantity dispensed and reconcile it with quantity issued from the warehouse; make sure that there's a tolerable difference because of appetite testing or other wastages.	Dispensary Store
Compare the case loads with commodity consumption data which shows us the extent of misuse in the facility by the staffs.	Dispensary Clinics
Make sure that beneficiaries are GRADUATED at the right treatment plan which may close gaps of abuse by the prescribers which is happen sometimes in collaboration with clients.	Clinics
Restrict prescriptions serial numbers to limited and duly prescribers at the well known SDPs and ensure dispensing for only prescriptions which are within the restricted range of serial numbers.	Clinics Dispensary
Use clearance slip at exit doors: clients shall carry a slip which shows the quantity and kind of product issued with a signature of the prescribers or dispensers.	Clinics Dispensary
So as to control clients who come repetitively regardless of the appointment day, recording appointment dates & checking this during prescribing & dispensing are advisable.	Dispensary Clinics
Advice that there is a need for continuous and regular supervision by facility managers.	Facility Manager

<p>User monitoring: Linkage to health extension workers and peer educators/groups to authenticate the right user; Counting returned empty sachets during dispensing</p> <p>Strengthen IPLS – stock recording card and bin card are available & updated, RRF, intra facility recording & reporting and recording product batch number.</p> <p>2. Managing Clients sharing and selling:</p> <p>Improve quality of client counseling</p> <p>Assess the livelihood of the family members of the individual under malnutrition to avoid possible sharing among family members.</p> <p>IEC: Additional awareness creation using the proper media channels which target the clients; Client education</p> <p>3. Community level interventions</p> <p>Media interventions: Awareness creation about the products & introducing legal implications of misuse.</p> <p>Streamline stakeholders’ coordination: create key stakeholders coordination events, establish zonal task forces, develop joint action plans and follow interventions. Support leading role of FMHACA and regional regulatory wings and work with drug abuse and misuse control committee at Woreda level.</p> <p>Engage FMHACA in joint effort to control misuse of RUSF/RUTF.</p>	<p>ART clinic Dispensary</p> <p>Store</p> <p>Clinics</p> <p>Clinics</p> <p>Clinics</p> <p>FMHACA Health Bureaus Woreda health offices</p>
--	---

Table: RUTF/RUSF Dispensing Registration Form

S/ N	Patient's Information				Prescription Sr. No	Diagnosis	Product Name	Unit	Unit price	Quantity		New (N) Repeat (R)
	Name	Card no	Age	Sex						Ordered	Dispensed	
						SAM	RUTF	Sachets				
						MAM	RUSF	Sachet				

Annex 1: Stock Record Card

Name of Health Facility: _____

Product Name, Strength and Dosage Form: _____

Unit of Issue: _____

Location: _____

Maximum Stock Level: _____

Emergency Order Point: _____

Average Monthly Consumption (AMC): _____

Date	Doc. No. (Receiving or Issuing	Received from or Issued to	Quantity				Price		Expiry Date	Remarks
							Unit Price			
			Received	Issued	Loss/Adj	Balance	Birr	Cent		

Annex 2: BIN CARD

Name of Health Facility: _____

Product Name, Strength and Dosage Form _____

Unit of Issue: _____

Maximum Stock Level: _____

Emergency Order Point: _____

Average Monthly Consumption (AMC): _____

Date	Doc. No. (Receiving or Issuing)	Received from or Issued to	Quantity				Batch No.	Expiry Date	Remarks
			Received	Issued	Loss/Adj	Balance			

Annex 3: Internal Facility Report and resupply Form (IFRR)

Name of Dispensing Unit: _____

Reporting Period From: _____ To: _____

Maximum Level (ML): _____

Ser. No.	Item	COMPLETED BY UNIT				COMPLETED BY STORE				
		Stock on Hand at Start of Period	Quantity Received	Stock on Hand at End of Period	Loss/Adjustment	Calculated Consumption E = A+B-C+/-D	Average Consumption	Maximum Quantity G = F * 2	Quantity Needed to Reach Max. H = G - C	Quantity Supplied
		A	B	C	D	E	F	G	H	I
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

11										
12										
13										

Requested by:

Signature:

Date:

Issued by:

Signature:

Date:

Approved by:

Signature:

Date:

Received by:

Signature:

Date:

Annex 4: Facility Combined Report and Requisition Form (RRF)

Health Facility: _____ Region: _____ Zone: _____ Woreda: _____
 Reporting Period: _____ From: _____ To: _____
 (month/day/year) (month/day/year)

Sl. No.	Product Code	Product Description	Unit of Issue	Report Part						Requisition Part	
				Beginning Balance in Store	Quantity Received	Losses/ Adjustments	Ending Balance in Store	Calculated Consumption	Days Out Of Stock	Maximum Stock Quantity	Quantity Ordered
				A	B	C	D	E = A + B +/- C - D	F	G = E * 2	H = G - D
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

Completed by: _____ Signature: _____ Date: _____
 Verified by: _____ Signature: _____ Date: _____
 Approved by : _____ Signature : _____ Date : _____

Annex 5: Pre-test and Post-test Questions

No	MCQ	Answer
1	The followings are true about HIV and nutrition except, A. HIV infection causes that leads to reduced food consumption B. HIV infection impairs nutrient absorption C. HIV infection can decrease energy need above normal requirement D. Under nutrition worsen HIV infection	C
2	HIV positive adults with moderate acute malnutrition receive A. Two sachets of RUTF daily B. Four sachets of RUTF daily C. Two sachets of RUSF daily D. Daily dose depends on age category	C
3	One of the following is not the target beneficiary of Food By prescription A. Malnourished HIV positive Adults B. Malnourished HIV positive women in the first 6 months postpartum C. Malnourished women regardless of their HIV or TB status D. Malnourished orphans & vulnerable children	C
4	Food supplementation for PLHIA on ART A. Improves adherence to medications B. Improve recovery and disease progression C. Reduce ART drug side effects D. All of the above	D
5	Which one of the following is true? A. BMI & MUAC can assess the nutritional status of individuals B. Food commodity support is not one component of NACS C. Client counseling on adherence of RUTF should be given only on clinical areas D. All of the above	A
6	One of the following is not true about client counseling at dispensary A. Client consultation area should be comfortable, clean & confidential B. Good first impression to the clients helps clients to stay in the consultation C. Closed questions should not be used to determine the information quickly and concisely D. Use open body language in consultation room	C
7	One of the following is not used for anthropometric measurement A. Presence of oedema B. Column weight scales C. Length measuring board D. MUAC measuring tape	A
8	Ready-to-Use Therapeutic Food (RUTF) is not: A. Believed to have special benefits as therapy in cases of SAM	D

	<p>B. Refers to a nutrient-dense and energy-dense peanut-based paste</p> <p>C. It's a food which doesn't need to be refrigerated or mixed with water</p> <p>D. It's a food as well as a medicine</p>	
9	<p>Ready-to-use Supplementary Food (RUSF) is not:</p> <p>A. a fortified food</p> <p>B. It contains vegetable fat, peanut paste, sugar, skimmed milk powder, whey and cocoa</p> <p>C. It's enriched with vitamins and minerals</p> <p>D. None of the above</p>	D
10	<p>According to the National Algorithm for the Management of Malnutrition in PLHIV, clients eligible for Nutrition Care Plan B have one of the following classifications,</p> <p>A. Moderate acute malnutrition in adults irrespective of their HIV status</p> <p>B. Moderate acute malnutrition in children irrespective of HIV or TB status</p> <p>C. Severe malnutrition without complication</p> <p>D. All of the above</p>	B
11	<p>One of the following statements is not true about stock keeping records</p> <p>A. The <i>Stock Record Card</i> is kept in the pharmacy manager's office while the <i>Bin Card</i> is kept with the product on the shelf.</p> <p>B. The <i>Stock Record Card</i> is not used at Health Posts</p> <p>C. <i>Bin Cards</i> and <i>Stock Record Cards</i> are the main source of essential logistics data that will be reported and used in making supply decisions.</p> <p>D. Separate <i>BC</i> should be maintained for each pack size, form or presentation of each commodity</p>	D
12	<p>Which one is not true?</p> <p>A. Health centres and hospitals are re-supplied every other month</p> <p>B. Hospitals send their report and order to PFSA hub & Regional health bureau</p> <p>C. In IPLS, stocks are held at woreda and regional health bureau levels</p> <p>D. Health posts get RUTF from health centers</p>	C
13	<p>Which one is not true?</p> <p>A. Stock on hand, Qty received, & adjustments are the three essential data items in logistics system</p> <p>B. The Bin Card include Price and Unit Price</p> <p>C. Each transaction does not need to be recorded on the <i>Stock Record Card</i> as it occurs.</p> <p>D. All of the above</p>	D
14	<p>In Gondar Health centre, beginning balance of RUSF in the store at January 1, 2008 was 1000 sachets. The facility has received 1000 sachets of RUSF in January 28, 2008. The facility transferred out 20 sachets to Teda health centre on Feb 10, 2008 in formal basis. The ending balance in the store on February 29, 2008 was 930 sachets. Which is false about the situation in Gondar health centre?</p>	D

	<p>A. Calculated consumption of RUSF in the RRF was 1050 sachets</p> <p>B. Max. stock Qty of RUSF was 2100 sachets</p> <p>C. Qty of RUSF in sachets needed to reach Max was 1170</p> <p>D. There was no need to order RUSF in the RRF</p>	
15	<p>The stock status of RUTF in a health facility with stock on hand of 1120 sachets of RUTF and average monthly issues of 1040 sachets is:</p> <p>A. The months of stock is fairly close to, but still above the EOP</p> <p>B. The stock of RUTF will last in 1.1 months</p> <p>C. The stock of RUTF is below the minimum stock levels</p> <p>D. All of the above</p>	D
16	<p>One is incorrect about issuing RUTF & RUSF with in health facilities</p> <p>A. IFRR is used to issue RUTF or RUSF to ART dispensing unit</p> <p>B. Reporter, issuer, approver and receiver signs in IFRR</p> <p>C. RUTF and RUSF are stored in pharmacy store and dispensing in ART dispensing unit</p> <p>D. None of the above</p>	D
17	<p>Auditable RUTF & RUSF transactions can be ensured by:</p> <p>A. Record RUTF & RUSF dispensed in free sales dispensing register</p> <p>B. The dispenser receives standard prescriptions approved by duly prescribers and checks whether or not the client is eligible for the program</p> <p>C. Carry out physical inventory at pharmacy store and dispensing outlets every quarter</p> <p>D. All of the above</p>	D
18	<p>It is not source of information for auditing RUTF & RUSF transactions in health facilities</p> <p>A. Model 19 B. RRF C. Free sales dispensing register D. Model 20 & 22</p>	B
19	<p>RUTF & RUSF misuse features are:</p> <p>A. Sharing and selling by clients</p> <p>B. Damage/spoilage due to rodents or inappropriate storage</p> <p>C. Prescribing to non-respondent and refusing cases</p> <p>D. All of the above</p>	D
20	<p>Which units of the IPLS are responsible for ordering, receiving, and storing public Pharmaceuticals?</p> <p>A. PFSA Hubs</p> <p>B. Hospitals</p> <p>C. Health Posts</p> <p>D. All of the above</p>	D

