

## **Tool and Guide for Reviewing the Nutrition Content of Pre-Service Training Curricula**



## About USAID Advancing Nutrition

USAID Advancing Nutrition is the Agency's flagship multi-sectoral nutrition project, led by JSI Research & Training Institute, Inc. (JSI), and a diverse group of experienced partners. Launched in September 2018, USAID Advancing Nutrition implements nutrition interventions across sectors and disciplines for USAID and its partners. The project's multi-sectoral approach draws together global nutrition experience to design, implement, and evaluate programs that address the root causes of malnutrition. Committed to using a systems approach, USAID Advancing Nutrition strives to sustain positive outcomes by building local capacity, supporting behavior change, and strengthening the enabling environment to save lives, improve health, build resilience, increase economic productivity, and advance development.

## Disclaimer

This report is made possible by the generous support of the American people through the U.S. Agency for International Development. It was prepared under the terms of contract 7200AA18C00070 awarded to JSI Research & Training Institute, Inc. (JSI). The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the U.S. Government.

## Recommended Citation

USAID Advancing Nutrition. 2023. *Tool for Reviewing the Nutrition Content of Pre-Service Training*. Arlington, VA: USAID Advancing Nutrition.

Photo Credit: Karen Kasmauski/MCSP

## USAID Advancing Nutrition

JSI Research & Training Institute, Inc.

2733 Crystal Drive

4<sup>th</sup> Floor

Arlington, VA 22202

Phone: 703-528-7474

Email: [info@advancingnutrition.org](mailto:info@advancingnutrition.org)

Web: [advancingnutrition.org](http://advancingnutrition.org)

# Contents

Acronyms.....	iv
Acknowledgements .....	v
Introduction .....	1
Purpose of the Tool .....	1
How We Developed the Tool .....	1
Contents of the Tool.....	2
When to Use the Tool.....	2
How to Use the Tool .....	3
Limitations of the Tool.....	5
The Tool .....	6
Resource Tool for the Review of the Policy Environment.....	6
Resource Tool for the Selection of the Cadres.....	6
Resource Tool for Identification of the Relevant Competencies and Determination of the Competencies Addressed.....	7
References .....	34
Annex 1. Instructions for Using the Tool .....	41
Annex 2. Illustrative Tables for Reporting Findings.....	45
Annex 3. Resources for Strengthening Nutrition Content of Pre-Service Training Curricula.....	50

# Acronyms

AIDS	acquired immunodeficiency syndrome
BMI	body mass index
HIV	human immunodeficiency virus
MAMI	Management of Small and Nutritionally At-Risk Infants under Six Months and Their Mothers
MUAC	mid-upper arm circumference
NCD	noncommunicable disease
NGO	nongovernmental organization
NR-NCD	nutrition-related noncommunicable disease
USAID	U.S. Agency for International Development
WASH	water, sanitation, and hygiene

# Acknowledgements

USAID Advancing Nutrition acknowledges Sascha Lamstein, Amanda Yourchuck, Tori O'Halloran, Katie Beck, Ann Miceli, and Courtney Meyer from USAID Advancing Nutrition for preparing this updated tool. Kristen Devlin, Kristen Cashin, Cat Kirk, Tina Lloren, Denish Moorthy, Altrena Mukuria Ashe, Lisa Sherburne, and Kelsey Torres from USAID Advancing Nutrition and Adam Bailes from Save the Children reviewed early versions of the tool.

To develop this tool, we conducted small group discussions to identify relevant resources and clarify the need for such a tool with Alice Nkoroi, Kristen Cashin, Laura Caulfield, Héctor Romeo Menéndez Arriola, Douglas Heimbürger, Keith West, Justine Kavle, Michel Pacque, Melanie Morrow, Habtamu Fekadu, and Rachel Deussom.

The commitment and technical oversight provided by Lindy Fenlason while with USAID was invaluable. We would also like to recognize the input and support provided by Erin Milner, Elaine Gray, Taskeen Chowdhury, Emma Din, Lutuf Abdul-Rahman, Aida Estevesova, and Violet Orchardson of USAID. Piloting the tool in Bangladesh, the Democratic Republic of the Congo, Ghana, the Kyrgyz Republic, and Malawi would not have been possible without support and input from key stakeholders, USAID Missions staff, and USAID Advancing Nutrition staff, including Selorme Azumah, Nazgul Abazbekova, Aida Shambetova, and Damira Abdrahmanova. During the pilot, a team of experts contributed substantially to the work, including Shimul Koli Hossain, Mala Ali Mapatano, Roger Baulana, Amos Laar, Tursun Mamyrbaeva, and Chawanangwa Jere.

# Introduction

Around the world, frontline health workers are often the first and only point of contact that most people have with the health system. For this reason, it is critical that they can provide quality nutrition services for the prevention, management, and treatment of illness and diseases and improved growth, development, and well-being. They need to monitor nutritional status; detect and manage malnutrition; track child growth and development; prescribe and administer medicines, vitamins, and supplements; and counsel clients on proper nutrition, feeding, and hygienic practices.

To deliver nutrition services effectively, nurses, community health workers, midwives, auxiliary workers, clinical officers, nutritionists, and doctors must develop key competencies—knowledge, skills, and attitudes—to meet a range of needs for patients. This requires pre-service training that adequately prepares health workers to appropriately address nutrition.

While in-service training helps to reinforce skills, quality pre-service training is crucial for creating long-term change. It equips health professionals with the competencies required to deliver quality services from their first day on the job, forming the core of their future performance. This is why strengthening pre-service training is a critical, sustainable, and scalable approach to improve the quality of services and, ultimately, achieve better health outcomes (WHO 2018b).

Often, the development of nutrition competencies receives inadequate attention in pre-service training to prepare health workers for providing the services expected of them. By including nutrition as a key component of competency-based pre-service training for these health workers, governments can help ensure a skilled workforce capable of delivering quality services to patients.

To support government ministries, universities/colleges, professional associations, regulatory bodies, donors, and nongovernmental organizations (NGOs) in preparing health workers to deliver nutrition services, USAID Advancing Nutrition developed, piloted, and revised a tool for reviewing the nutrition-related content of pre-service training curricula. This tool includes a list of the competencies essential for delivering frontline nutrition services, guidance on its use, and resources that might be useful if reviewers identify gaps.

## Purpose of the Tool

USAID Advancing Nutrition developed this tool to support the assessment and revision of pre-service training for frontline health workers responsible for providing nutrition services. A range of stakeholders may find it useful, including government ministries of health and education, academic institutions, professional associations, regulatory bodies, donors, and nongovernmental organizations. These stakeholder groups may wish to use the findings from a review to—

- Identify the nutrition competencies that educational institutions should include in each curriculum.
- Make a general assessment of how well a curriculum covers nutrition.
- Determine the need for and the scope of a more in-depth review of selected curricula.

You may also wish to use the resources included in Annex 5 for updating the content of pre-service training curricula to better address each competency.

## How We Developed the Tool

In 2020, USAID Advancing Nutrition drafted a tool to support the assessment and revision of the nutrition content in the pre-service training. We consulted with a variety of key stakeholders to identify relevant resources and clarify the need for such a tool. Ultimately, we took into consideration the

principles outlined by USAID's Educational Quality Improvement Program,<sup>1</sup> as well as guidance on the process of updating pre-service training curricula from the World Health Organization (2001), Jhpiego (Schaefer 2002), the Maternal and Child Health Improvement Project (MCHIP 2011), the Maternal and Child Survival Program (MCSP 2016), and the Food and Nutrition Technical Assistance Project (FANTA 2018a).

To define nutrition-related competencies, we reviewed existing guidance and lists of competencies for the provision of nutrition services (Davis, et al. 2016; Dixon and Johnston 2010; Hughes et al. 2011; Society for Nutrition Education and Behavior 2021; USAID and HRH 2030 2018; USAID Advancing Nutrition 2020; USAID Advancing Nutrition 2021; USAID ENGINE and Save the Children 2012; WHO and UNICEF 2020b). Finally, we asked experts in several nutrition-related fields to review the list of competencies we had developed to make each competency distinct and appropriate for inclusion in pre-service training.

Then, in 2021 and 2022, we piloted the tool in five countries. We used it to review pre-service training curricula for several cadres of frontline health workers in Bangladesh, the Democratic Republic of the Congo, Ghana, the Kyrgyz Republic, and Malawi. Following this experience, we identified areas in need of revision to further operationalize the tool, and updated the competencies.

## Contents of the Tool

The tool includes several resources for prioritizing cadres, identifying relevant competencies, determining if pre-service training curricula addressed competencies, and updating curricula. The last three center on a list of 68 nutrition-related competencies that we consider necessary for the delivery of frontline (primary care-level) nutrition services in most countries. We organized the competencies into 13 categories (box 1). To keep the list manageable, we focused on higher level competencies, such as the ability to correctly take anthropometric measurements for all age groups or counsel caregivers on the nutrition requirements of and feeding practices for infants under six months old, based on nutritional status and/or growth. However, instructors will need to develop more specific competencies, such as how to calibrate a scale or measure the length of a child or how to prescribe iron to children under five years. It is also important to note that these competencies are linked across categories. We have also included relevant resources—global guidance and globally-recognized training packages—for each competency.

## When to Use the Tool

We envision two primary opportunities for using this tool:

1. **As part of a larger effort to update pre-service training curricula:** The process of updating pre-service training curricula will most often focus on the entire curriculum, rather than only one technical area, such as nutrition. This tool serves as a reference for the nutrition competencies that reviewers should consider as part of that assessment.

---

<sup>1</sup> These guiding principles, adapted for our focus on nutrition pre-service training, include—

- Establish a shared vision for a coherent pre-service system.
- Eliminate fragmentation in the training system.
- Align pre-service training with professional standards for effectiveness.
- Ensure the inclusion of a strong practicum in pre-service training.
- Develop and maintain strong linkages with universities, colleges, and training institutions.
- Don't overlook the infrastructure and resource needs for implementing effective pre-service training.
- Foster effective professional development and it leads to better program development and implementation.
- Develop professional learning communities for continuing professional development (EQUIPI 2011).



2. **As a focused effort to look specifically at the nutrition content of pre-service training curricula:** This tool can help nutrition champions make a clear case for revising the curriculum and support advocacy for updating curricula and drawing greater attention to nutrition overall.

In either case, you will need to consider the process of updating pre-service training curricula in your context. Albeit essential, the task is often complex, influenced by a range of priorities, and time consuming (EQUIP I 2011; Schaefer 2002). Figure 1 depicts this process. We see this tool being particularly relevant for planning and assessing.

#### Box 1. Categories of Competencies for the Provision of Nutrition Services by Health Workers at the Frontline or Primary Care Level

- Assessment of nutritional status
- Management of wasting
- Detection and treatment of anemia and other micronutrient deficiencies
- Nutrition and dietary practices of adults
- Nutrition and dietary practices of pregnant and lactating adolescent girls and women
- Nutrition and dietary practices of people living with chronic diseases
- Nutrition and feeding practices of infants (< six months)
- Nutrition and feeding practices of infants and young children (6–59 months)
- Nutrition and dietary practices of adolescents
- Nutrition in the context of emergencies
- Behavior change communication and counseling

**Figure 1. Process of Updating Pre-Service Training Curricula**

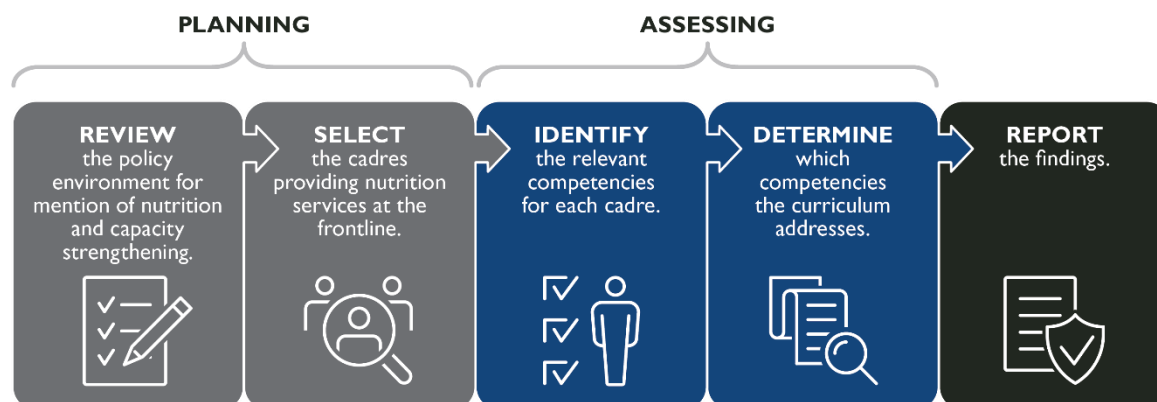


## How to Use the Tool

When we piloted the tool in Bangladesh, the Democratic Republic of the Congo, Ghana, the Kyrgyz Republic, and Malawi, we followed five steps, which we illustrate in figure 2 below. Depending on whether you are using the tool to support an overall revision of a curricula or are a nutrition champion assessing the nutrition content only, you may decide to skip some steps. For example, you may already be familiar with the policy environment or have already identified the cadre(s) whose pre-service training curriculum you will review. However, given that actors within several levels of the health system can overlook nutrition, a comprehensive approach can be worthwhile.



**Figure 2. The Process of Reviewing the Nutrition Content of Pre-Service Training Curricula**



### **Review of the Policy Environment**

To better understand national plans and priorities, we suggest beginning with a review of national documents, such as policies, plans, strategies, and protocols. This may include documents such as the national nutrition plan; the human resource for health strategy; a strategy for community health workers; national guidance for human resources development; a health, nutrition, and population strategic investment plan; a guide to supportive supervision in health; a national health policy; or a plan of action for nutrition.

### **Selection of the Cadres**

Next, you will identify the cadres of health workers responsible for or best placed to provide nutrition services at the frontline or primary care level, based on the structure of the health system and a review of national job descriptions. You can identify the cadres responsible for providing frontline nutrition services by reviewing health system organograms, conducting key informant interviews, skimming policy documents, reviewing health facility structures. You can record this and other information in the table in Annex 3 to inform cadre mapping.

### **Identification of the Relevant Competencies**

Next, you will determine which nutrition competencies are relevant for each cadre by reviewing national job descriptions, certification requirements, service delivery protocols, policies, and guidelines such as the national guidelines for community-based management of acute malnutrition, infant and young child feeding counseling, or growth monitoring and promotion. You may wish to consult with key stakeholders and health workers themselves (providers and managers). You will need to consider carefully the breadth and depth of the curriculum and the competencies that should (and should not) be covered, recognizing that frontline health workers have a wide range of responsibilities—not only the delivery of nutrition services, but also immunization, family planning, and antenatal care services, among others.

### **Determination of the Competencies Addressed**

Once you determine which competencies are relevant for each cadre, you can begin reviewing the relevant pre-service curriculum. Using the information available, you will determine as best you can how well the curricula address the competency to deliver nutrition services. Where national curricula exist, we encourage you to focus on those. Where they do not exist, you may wish to review materials from several universities.

The tool includes three main sections: 1) a description of the pre-service training program and corresponding curriculum, 2) a list of courses<sup>2</sup> that currently address nutrition-related topics or where nutrition content would add value, and 3) the list of the competencies<sup>3</sup> required for the delivery of frontline nutrition services.

## Reporting the Findings

After conducting this assessment, it will be important to think through how you want to share your findings and with whom. Annex 2 includes examples of tables and graphs that you might use in a report or slide show. When presenting the findings, consider how pre-service training fits into the continuum of learning that includes apprenticeships, internships, and/or practicums; supportive supervision, mentorship, and/or coaching; and continuing education (on-the-job or in-service training).

## Limitations of the Tool

Insufficient detail in the curricula under review limited how well we could understand whether/to what extent each competency was covered. Often, the curricula we reviewed, did not include a significant amount of detail beyond a list of topics or high-level learning objectives. This yielded a high-level understanding of the nutrition content, which is useful for advocacy, but not for decisions regarding specific updates to curricula. To truly inform a curricula update, you will need to review more detailed documents such as course syllabi, lesson plans, and reading lists to determine if the curricula address specific competencies.

In addition, it can be particularly challenging to determine if curricula address specific competencies, such as those related to counseling. Courses tend to teach general counseling skills and it may not be immediately evident if the course content includes nutrition-related counseling messages. In piloting the tool, we tended to assume that the combination of nutrition technical knowledge and counseling techniques was likely satisfactory for developing the competencies necessary for counseling on nutrition-related topics. It may be necessary to make a number of assumptions as part of the review process, especially if course content or job descriptions lack detail. It is important to document and review these assumptions with stakeholders before proceeding.

In summary, we designed this tool and the accompanying guidance to identify gaps in the nutrition content of pre-service training curricula. Apart from providing a list of resources that may be useful for designing or updating curricula, the tool does not provide assistance in the development and/or adaptation of curricula.

---

<sup>2</sup> We have found that stakeholders in each country use different terms to refer to topics or categories of content in a curriculum. They are sometimes referred to as courses, classes, sections, or even modules. In this document, we use the term “course” to refer to content covered in 25–30 hours of teaching/learning.

<sup>3</sup> In an effort to shorten the list of competencies, we have focused almost exclusively on higher-level skill-based competencies, which require knowledge and attitudes to attain them.

# The Tool

## Resource Tool for the Review of the Policy Environment

Document Title	Is Nutrition Mentioned? (Yes/No)	Are Roles and Responsibilities Mentioned? (Yes/No)	Is Capacity Strengthening Mentioned? (Yes/No)	Is Pre-Service Training Mentioned? (Yes/No)	Key Content
1.					
2.					
3.					
4.					
5.					
6.					

## Resource Tool for the Selection of the Cadres

### Primary Care Health Facilities

Type	Number	Location (e.g., District, Province, Urban/Rural)	Types of Services Provided	Types of Cadres Who Typically Work There	Source(s) of Information

### Primary Care Health Workers

Characteristics	Findings	Source(s) of Information
<b>Cadre X</b>		
Number graduated		

Characteristics	Findings	Source(s) of Information
Number registered		
Number of positions created by the government		
Number of vacant positions		
Supervisor		
Place of work (types of facilities)		
Roles and responsibilities		
Certification requirements		
Comments from key informants on services this cadre provides ( <i>Please keep this brief!</i> )		
Cadre X		
Number graduated		
Number registered		
...		

## Resource Tool for Identification of the Relevant Competencies and Determination of the Competencies Addressed

### Section I: Description of the Curriculum

Title of the curriculum: \_\_\_\_\_

Degree/certificate: \_\_\_\_\_

Time to complete requirements of curriculum: \_\_\_\_\_

Objectives of the curriculum: \_\_\_\_\_

Additional requirements for completion of the curriculum: \_\_\_\_\_

Content of the curriculum: \_\_\_\_\_

## Section 2: Courses Included in the Curriculum

Course Number and Title	Required (Yes/No)	Amount of Nutrition Content (None, Some, Very Much, Don't Know)	Objectives	Length (Hours)	Teaching Method(s) Used

## Section 3: Nutrition-Related Competencies

### I. Assessment of Nutritional Status and Growth

Frontline or primary care-level health workers should be able to assess the nutritional status of clients of all ages, which is critical for determining a client's general nutritional status, diagnosing malnutrition, noting underlying pathologies that could contribute to malnutrition, and planning an appropriate care plan (Kesari and Noel 2022). Interpreting growth among children is a critical step in detecting and addressing growth problems before they develop into more severe malnutrition.

Note: Because of their importance and the difficulties of detection, we list competencies related to the detection and treatment of anemia and other micronutrient deficiencies separately.

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Knowledge of the operational guidance for assessing and classifying nutritional status for all age groups					
2. Ability to correctly take anthropometric measurements of all age groups (mid-upper arm circumference [MUAC], height/length, weight, waist circumference)					
3. Ability to determine and classify nutritional status of all age groups using z-scores, MUAC, and body mass index (BMI)					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
4. Ability to assess trends in child growth					
5. Ability to assess clients for clinical signs of malnutrition					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 2. Management of Wasting

Health workers responsible for or best placed to provide nutrition services at the frontline or primary care level should be able to manage wasting in infants, children, adolescents, and adults. If health workers do not manage wasting properly, it leads to an increased risk of death (WHO n.d.).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
<b>Infants (Under Six Months)</b>					
I. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among infants (e.g., Management of					



Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
small and nutritionally at-risk infants under six months and their mothers [MAMI])					
2. Ability to manage wasting in infants in line with operational guidance					
<b>Young Children (6–59 Months)</b>					
3. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among young children					
4. Ability to manage wasting in young children in line with operational guidance					
<b>Older Children and Adolescents (5–18 Years)</b>					
5. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among older					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
children and adolescents					
6. Ability to manage wasting in older children and adolescents in line with operational guidance					
<b>Adults (18+ Years)</b>					
7. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among adults					
8. Ability to manage wasting in adults in line with operational guidance					
<b>All Ages</b>					
9. Ability to counsel clients on the management of wasting, including causes and consequences (short- and long-term) of					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
malnutrition at different stages of life and life-cycle nature of nutritional requirements					
<b>Explanation/comments:</b>					
<b>Spotlight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

### 3. Detection and Treatment of Anemia and Other Micronutrient Deficiencies

Frontline or primary care-level health workers should be able to detect and treat anemia and other micronutrient deficiencies. Anemia, or low levels of healthy red blood cells, remains a persistent public health problem in the world today. It affects 40 percent, 30 percent, and 36 percent among children aged 6–59 months, non-pregnant women aged 15–49 years, and pregnant women, respectively (Stevens et al. 2022). Anemia decreases the oxygen-carrying capacity of red blood cells, impacting critical aspects of human function and development. Anemia in pregnancy increases the risk of preterm delivery, low birthweight, and maternal and child mortality; it reduces the cognitive and physical development of children, causes fatigue, and reduces the physical stamina and productivity of people of all ages (Balarajan et al. 2011). Causes of anemia include malaria, helminthic infections (primarily hookworm and schistosomiasis), other micronutrient deficiencies, chronic infections including HIV and tuberculosis, causes related to reproduction and contraception, and genetic disorders such as thalassemia and sickle cell anemia (Balarajan et al. 2011). In addition to be able to detect and treat anemia and other micronutrient deficiencies, health workers need the competencies to counsel clients to practice behaviors to prevent and treat deficiencies (e.g., regularly consuming iron-folic acid supplements, dietary diversity, hygiene practices).

<b>Competencies</b>	<b>Relevance of Competency to the Cadre's Responsibilities*</b>	<b>Justification for Decision of Relevance (optional)</b>	<b>Course(s) Addressing Competency and Relevant Objectives and/or Topics**</b>	<b>Extent Course(s) Address Competency***</b>	<b>Explanation of Decision of Extent Competency is Addressed (optional)</b>
1. Knowledge of policies, programs, protocols, and operational guidance related to anemia and other micronutrient deficiencies					
2. Ability to accurately assess clients for anemia and other micronutrient deficiencies through clinical, biochemical, or dietary assessment		-			
3. Ability to treat anemia and other micronutrient deficiencies in line with operational guidance		-			
4. Ability to counsel clients on the prevention and treatment of anemia and other micronutrient deficiencies, including causes; risk factors; signs, symptoms, and					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
consequences; prevention; management; dietary sources; digestion/absorption; and indications for treatment/referral					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

#### 4. Nutrition and Dietary Practices of Adults

Health workers providing nutrition services at the frontline or primary care level should be able to address the nutrition status, requirements, and practices. Counseling based on nutritional status is critical for preventing problems. Nutritional status and practices play a large role in improving health outcomes and may result in the reduction in healthcare use, since nutrition problems increase a person's susceptibility and vulnerability to infection. As indicated by the World Health Organization, "A healthy diet helps to protect against malnutrition in all its forms, as well as noncommunicable diseases (NCDs), including diabetes, heart disease, stroke and cancer. [An] unhealthy diet and lack of physical activity are leading global risks to health" (WHO 2020).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
I. Knowledge of policies, programs, protocols, and operational					

<b>Competencies</b>	<b>Relevance of Competency to the Cadre's Responsibilities*</b>	<b>Justification for Decision of Relevance (optional)</b>	<b>Course(s) Addressing Competency and Relevant Objectives and/or Topics**</b>	<b>Extent Course(s) Address Competency***</b>	<b>Explanation of Decision of Extent Competency is Addressed (optional)</b>
guidance related to the nutrition and dietary practices of adults					
2. Knowledge of digestion, causes and consequences of excesses, the relationship between energy intake and expenditure and body weight					
3. Ability to counsel clients on nutrition requirements and appropriate dietary practices based on nutritional status					
4. Ability to counsel clients on nutrition requirements and appropriate dietary practices during and after illness, including the relationship between nutrition and infectious diseases					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
5. Ability to counsel clients on water, sanitation, and hygiene (WASH) (e.g., handwashing, water storage and treatment, food storage and handling, safe human waste disposal practices)					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 5. Nutrition and Dietary Practices of Pregnant and Lactating Adolescent Girls and Women

Health workers responsible for or best placed to provide nutrition services at the frontline or primary care level should be able to counsel clients on appropriate nutrition practices for pregnant and lactating women. Nutritious diets during pregnancy and breastfeeding are fundamental for maternal and infant survival and well-being (Lowensohn, Stadler, and Naze 2016).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Knowledge of policies, programs, protocols,					



Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
and operational guidance related to the nutrition and dietary practices of pregnant and lactating women					
2. Ability to counsel pregnant and lactating women on the importance of iron-folic acid supplementation					
3. Ability to counsel clients on nutrition requirements and appropriate dietary practices during pregnancy based on pregnancy weight gain					
4. Ability to counsel clients on nutrition requirements and appropriate dietary practices during lactation, including the effect of maternal nutritional status on nutrient composition of breastmilk					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
5. Ability to counsel clients on the unique nutritional requirements of pregnant adolescents		-			
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 6. Nutrition and Dietary Practices of People Living with Chronic Diseases

Frontline or primary care-level health workers should be able to counsel clients living with chronic diseases such as the human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), tuberculosis, and nutrition-related noncommunicable diseases (NR-NCDs) on appropriate dietary practices for the management of the disease. HIV can lead to undernutrition as a result of reduced food intake, increased energy needs, and poor nutrient absorption. This can, in turn, weaken the immune system, increasing the risk of infection, reducing the effectiveness of treatment, and worsening the effects of infection (FANTA 2016). People living with the NR-NCD diabetes need to pay close attention to their dietary practices to maintain optimal blood glucose, lipid and lipoprotein, and blood pressure levels. Increasing the consumption of a range of foods and eating less salt, sugars, and saturated and trans fats can reduce the likelihood of developing secondary conditions like heart disease, type II diabetes, and cancer (WHO 2013a).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Knowledge of policies, programs, protocols, and operational guidance related to the					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
nutrition and dietary practices of people living with HIV/AIDS					
2. Knowledge of policies, programs, protocols, and operational guidance related to the management of NR-NCDs					
3. Ability to counsel clients on nutrition requirements and dietary practices when living with HIV/AIDS		-			
4. Ability to counsel clients on nutrition requirements and appropriate dietary practices when living with HIV/AIDS and pregnant and/or lactating					
5. Ability to counsel clients on appropriate dietary practices for					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
the management of NR-NCDs					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 7. Nutrition and Feeding Practices of Infants (Under Six Months)

The frontline health worker should be able to provide quality counseling and support to caregivers of infants under six months of age. This includes being familiar with and able to implement the International Code of Marketing of Breast-Milk Substitutes in a health facility and being able to explain to a caregiver how breastfeeding works, assist a mother getting her baby to latch, teach a caregiver to respond to feeding cues, help with milk expression, and more (WHO and UNICEF 2020b; UNICEF 2012a).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
I. Knowledge of policies, programs, protocols, and operational guidance related to nutrition and feeding practices of infants under six months old, in particular the International Code of Marketing of Breast-Milk Substitutes					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
2. Knowledge of ways a birthing facility should support breastfeeding					
3. Ability to counsel caregivers of infants under six months old, based on nutritional status and/or growth					
4. Ability to counsel caregivers on the nutrition requirements of and feeding practices for infants under six months old (e.g., the relationship between optimal nutrition, growth, illness, and development; breastfeeding initiation; breastfeeding physiology, techniques, and positions; exclusive breastfeeding; the benefits of breastfeeding for child and mother; feeding cues or early signs of hunger)		-			
5. Ability to counsel caregivers on the					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
nutrition requirements and appropriate feeding practices during and after illness of infants under six months old					
6. Ability to counsel caregivers on the management of different types of feeding difficulties among infants under six months old, including those with disabilities		-			
7. Ability to help caregivers whose infant under six months old needs fluids other than breast milk					
8. Ability to help mothers manage milk expression and feeding expressed milk					
9. Ability to help (explain, support, and demonstrate) mothers breastfeed a small or sick newborn					
10. Ability to help (explain, support, and					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
demonstrate) mothers achieve comfortable and safe positions for breastfeeding; ensure an effective and comfortable latch; prevent and/or address common breastfeeding problems (e.g., sore nipples, breast engorgement and mastitis, breastfeeding challenges faced by working women, latching, difficulty sucking, and insufficient milk)					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 8. Nutrition and Feeding Practices of Infants and Young Children (6–59 Months)

The frontline or primary care-level provider of nutrition services should be able to counsel clients on nutrition and feeding practices for infants and young children 6–59 months of age. This includes the promotion of continued breastfeeding as well as the introduction of a variety of nutrient-rich semi-solid and solid foods at about six months, when breast milk is no longer enough. Caregivers need to provide a variety of foods with the appropriate frequency, in the appropriate amount, and with the appropriate thickness. They need to provide these foods using good hygiene practices and in a way that responds to the child's needs (UNICEF 2012).



Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Knowledge of policies, programs, protocols, and operational guidance related to nutrition and feeding practices of children 6–59 months old					
2. Ability to monitor feeding/eating developmental milestones and notice feeding/eating warning signs (e.g., difficulty controlling head or body, chewing or swallowing, or self-feeding)					
3. Ability to counsel caregivers of children 6–59 months old based on nutritional status and/or growth					
4. Ability to counsel caregivers on the nutrition requirements of and feeding practices for children 6–59 months					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
old (e.g., the relationship between optimal nutrition, growth, illness, and development; nutrition requirements; continued breastfeeding up to two years and beyond; introduction of semi-solid or solid foods; frequency, quantity, consistency, and diversity of foods; responsive feeding; feeding cues or early signs of hunger)					
5. Ability to counsel caregivers on the management of different types of feeding difficulties among children 6–59 months old, including those with disabilities		-			
6. Ability to counsel caregivers on the nutrition requirements during					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
and after illness of children 6–59 months old and appropriate feeding practices					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record “Not applicable” if the competency is not relevant. Record “No course” if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 9. Nutrition and Dietary Practices of Adolescents

The frontline or primary care-level provider of nutrition services should be able to counsel clients on the appropriate nutrition practices for adolescents (10–19 years old), addressing their unique nutritional requirements and challenges. Nutrition-related behaviors developed during adolescence, have the potential to mitigate nutritional deficits generated during the first decade of life, break intergenerational cycles of malnutrition, and limit obesity and NCDs in adulthood (SPRING 2018).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
I. Knowledge of policies, programs, protocols, and operational guidance related to nutrition and dietary practices of adolescents					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
2. Ability to counsel clients on nutrition requirements and dietary practices of adolescents based on nutrition status (e.g., specific nutritional needs of adolescents related to their growth, development and maturation)					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 10. Nutrition in Emergencies

In humanitarian settings, primary care providers should continue to offer preventive and curative nutrition services through the existing health system whenever possible. In the event of displacement or a disruption of functioning health systems, humanitarian implementing partners, including international NGOs, and local organizations may provide temporary nutrition services with the support of national health staff. Nutritional risks in emergencies include increased risk of wasting due to disease exposure and/or inadequate dietary intake and sub-optimal infant and young child feeding practices due to displacement, stress, disruption in health services. Whenever possible, community health workers retain community health workers to work with their communities to implement activities, such as MUAC screening for children 6–59 months and pregnant and lactating women to detect wasting and refer for appropriate management, providing key infant and young child nutrition information to mitigate the risk of illness. Health workers should provide micronutrient supplements groups at risk of deficiencies depending on specific target group needs and contextual risks; they may provide vitamin A supplements in conjunction with mass vaccination campaigns (Global Nutrition Cluster 2017; IFE Core Group 2017; WHO 2013b).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Knowledge of policies, programs, protocols, and operational guidance related to nutrition in emergency contexts/situations					
2. Ability to counsel clients on dietary practices, taking into consideration the unique nutrition challenges common in the context of emergencies (e.g., limited food available, poor sanitation)					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## 11. Behavior Change Communication and Counseling

Because behaviors are central to the immediate and underlying causes of malnutrition, social and behavior change plays an important role in sustaining improved nutrition outcomes. Nutrition social and behavior change (SBC) is particularly challenging due to the nature of the behaviors—small, frequent, and additive. High-quality SBC is a key element in effective nutrition programs, particularly at the community level (USAID Advancing Nutrition 2021). The frontline or primary care-level provider of nutrition services should be able to communicate and counsel clients in a manner that creates a positive experience of care and promotes SBC. This includes being culturally appropriate and

respecting individual values, personal resources, and clients' right to self-determination. To support improved behaviors, counseling should focus on salient actions that meet clients' needs and are feasible to do in their daily lives and context.

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Ability to employ adult learning techniques for nutrition counseling and education		-			
2. Ability to counsel clients on nutrition in a culturally appropriate, client-centered way that demonstrates respect for social, cultural, and economic differences and avoids language that stigmatizes or discriminates in any way		-			
3. Ability to effectively uses counseling materials and resources (e.g., infant and young child feeding counseling cards)		-			
4. Ability to demonstrate empathy for each client's situation					
5. Ability to hold bi-directional conversations with					

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
clients to assess and analyze a client's situation, particularly related to nutrition and dietary practices					
6. Ability to make suggestions (not commands) of small, doable actions and ways to overcome barriers to progressively lead to the desired behavior change		-			
7. Ability to help clients identify and achieve their nutrition goals					
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).



## 12. Management of Nutrition Services

The frontline or primary care-level provider of nutrition services should be able to manage and lead nutrition services. This includes overseeing the work of other members of the health care team, collaborating with providers of support services, undertaking quality assurance activities, forecasting needs and procuring nutrition-related supplies, and dealing with nutrition data (collection, reporting, use, etc.).

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
1. Ability to respectfully, constructively, and supportively supervise other facility- and community-based workers and volunteers		-			
2. Ability to work collaboratively with nutritionists/dietitians and other members of the health team to provide quality nutrition services		-			
3. Ability to engage relevant community actors (leaders, professionals, and members) openly and collaboratively to promote and support nutrition		-			
4. Ability to collect, manage, and report nutrition-related data		-			

Competencies	Relevance of Competency to the Cadre's Responsibilities*	Justification for Decision of Relevance (optional)	Course(s) Addressing Competency and Relevant Objectives and/or Topics**	Extent Course(s) Address Competency***	Explanation of Decision of Extent Competency is Addressed (optional)
5. Ability to use nutrition data for decision-making		-			
6. Ability to design, plan, and manage community nutrition programs					
7. Ability to identify and address barriers to provision of effective, high quality, equitable nutrition services, using a quality improvement or other similar approach					
8. Ability to plan for and manage nutrition commodities, equipment, medicines, and other inputs (e.g., forecasting orders, oversight/management of stock)		-			
<b>Explanation/comments:</b>					
<b>Stoplight assessment:</b>	[GREEN = WELL ADDRESSED; YELLOW = SOMEWHAT ADDRESSED; RED = NOT WELL ADDRESSED]				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

# References

- Balarajan, Y., U. Ramakrishnan, E. Ozaltin, A.H. Shankar, and S.V. Subramanian. 2011. "Anaemia in Low-Income and Middle-Income Countries." *The Lancet* 378(9809): 2123–35. [https://doi.org/10.1016/S0140-6736\(10\)62304-5](https://doi.org/10.1016/S0140-6736(10)62304-5)
- Cashin, K. and L. Oot. 2018. *Guide to Anthropometry: A Practical Tool for Program Planners, Managers, and Implementers*. Washington, DC: Food and Nutrition Technical Assistance III Project (FANTA)/FHI 360. <https://www.fantaproject.org/tools/anthropometry-guide>
- CDC (Centers for Disease Control and Prevention). 2013. "NCD Training Modules." Accessed April 27, 2023. [https://www.cdc.gov/globalhealth/healthprotection/fetp/ncd\\_modules.htm](https://www.cdc.gov/globalhealth/healthprotection/fetp/ncd_modules.htm)
- CDPH (California Department of Public Health). 2013. "Adolescent Nutrition." Accessed May 5, 2023. <https://www.cdph.ca.gov/Programs/CFH/DMCAH/CDPH%20Document%20Library/NUPA/Adolescent-Nutrition-Guideline.pdf>
- Davis, Robb, Edye Kuyper, Andrea Bohn, Cristina Manfre, and Paul McNamara. 2016. "Competency Framework for Integrating Gender and Nutrition within Agricultural Extension Services." *Integrating Gender and Nutrition within Agricultural Extension Services (INGENAES) project*. Accessed May 12, 2021. [https://www.agrilinks.org/sites/default/files/resource/files/INGENAES%20%282016\\_11%29%20Nutrition%20and%20Gender%20in%20Extension%20Competency%20Framework.pdf](https://www.agrilinks.org/sites/default/files/resource/files/INGENAES%20%282016_11%29%20Nutrition%20and%20Gender%20in%20Extension%20Competency%20Framework.pdf)
- Dixon, Diane and Marie Johnston. 2010. "Health Behaviour Change Competency Framework: Competences to Deliver Interventions to Change Lifestyle Behaviours That Affect Health." *Scottish Government*. Accessed May 11, 2021. [http://www.healthscotland.com/uploads/documents/4877-Health\\_behaviour\\_change\\_competency\\_framework.pdf](http://www.healthscotland.com/uploads/documents/4877-Health_behaviour_change_competency_framework.pdf)
- ECSAC (East, Central and Southern Africa Health Community). 2017. "Nutrition Facilitator's Manual." Accessed March 13, 2023. [https://ecsahc.org/wp-content/uploads/2017/05/HF\\_FM\\_FINAL.compressed.pdf](https://ecsahc.org/wp-content/uploads/2017/05/HF_FM_FINAL.compressed.pdf)
- ECSAC-HC (East, Central and Southern Africa Health Community). 2008. *Nutrition and HIV/AIDS: A Training Manual for Nurses and Midwives*. Arusha, Tanzania: ECSA-HC.
- ECSAC-HC (East, Central and Southern Africa Health Community). 2021. "Regional Model Nutrition Curriculum for Frontline Health Workers." Accessed March 13, 2023. <https://ecsahc.org/wp-content/uploads/2021/07/Regional-Model-Nutrition-Curriculum-for-Frontline-Health-Workers.pdf>
- ENN (Emergency Nutrition Network). 2007. "Infant Feeding in Emergencies for Health and Nutrition Workers in Emergency Situations. Module 2, Version 1.1." Accessed April 27, 2023. <https://www.ennonline.net/attachments/141/module-2-v1-1-core-manual-english.pdf>
- ENN (Emergency Nutrition Network) and IFE (Infant Feeding in Emergencies) Core Group. 2021. "Operational Guidance: Breastfeeding Counselling in Emergencies." Accessed March 23, 2023. <https://www.ennonline.net/breastfeedingcounsellinginemergencies>.
- ENN (Emergency Nutrition Network) and NutritionWorks. 2011. "Harmonized Training Package (HTP) version 1." Accessed April 27, 2023. <https://www.ennonline.net/resources/htpversion2>
- ENN (Emergency Nutrition Exchange). 2020. "Special Issue: Child Wasting in South Asia." *Field Exchange* 63. Accessed May 1, 2023. <https://www.advancingnutrition.org/resources/field-exchange-63>
- ENN (Emergency Nutrition Network). 2021. "[Management of Small and Nutritionally At-Risk Infants Under Six Months and Their Mothers] MAMI Care Pathway Package." Accessed September 29, 2021. <https://www.ennonline.net/attachments/4004/MAMI-Care-Pathway-Package-Documents-07June2021.pdf>
- ENN (Emergency Nutrition Network). n.d. "IFE Interactive Lessons." Accessed April 28, 2023. <https://lessons.ennonline.net/>
- EQUIPI (Educational Quality Improvement Program I). 2011. "First Principles: Designing Effective Pre-Service Teacher Education Programs Compendium." Accessed March 20, 2023. [https://pdf.usaid.gov/pdf\\_docs/PNADZ721.pdf](https://pdf.usaid.gov/pdf_docs/PNADZ721.pdf)

- FANTA (Food and Nutrition Technical Assistance Project). 2016. *Nutrition Assessment, Counseling, and Support (NACS): A User's Guide*. Washington, DC: FHI 360/FANTA. <https://www.fantaproject.org/tools/NACS-users-guide-modules-nutrition-assessment-counseling-support>
- FANTA (Food and Nutrition Technical Assistance Project). 2018a. *Improving Pre-Service Nutrition Education and Training of Frontline Health Care Providers*. Washington, DC: FHI 360/FANTA. <https://www.fantaproject.org/news-and-events/pre-service-nutrition-education-frontline-health-workers>
- FANTA (Food and Nutrition Technical Assistance). 2018b. *Training Guide for Community-Based Management of Acute Malnutrition (CMAM)*. Washington, DC: FHI 360/FANTA. <https://www.fantaproject.org/focus-areas/nutrition-emergencies-mam/cmam-training>
- Guyon Agnes, Victoria Quinn, Jennifer Nielsen, and Maryanne Stone-Jimenez. 2015. *Essential Nutrition Actions and Essential Hygiene Actions Reference Manual*. CORE Group: Washington, DC. <https://coregroup.org/resource-library/essential-nutrition-actions-and-essential-hygiene-actions-framework/>
- FHI 360. 2017. "Malawi Nutrition Care, Support, and Treatment for Adolescents and Adults: Training Materials for Facility-Based Service Providers." Accessed March 13, 2023. <https://www.fantaproject.org/tools/malawi-nutrition-care-support-and-treatment-adolescents-and-adults-training-materials-facility>
- FSN (Food Security and Nutrition) Network and CORE Group. 2015. *Make Me a Change Agent: A Multi-Sectoral SBC Resource for Community Workers and Field Staff*. Washington, DC: The TOPS Program. <https://www.fsnnetwork.org/resource/make-me-change-agent-multisectoral-sbc-resource-community-workers-and-field-staff>
- FSN (Food Security and Nutrition) Network Social and Behavioral Change Task Force. 2014. *Care Groups: A Training Manual for Program Design and Implementation*. Washington, DC: Technical and Operational Performance Support Program.
- Global Health Media. n.d. "Our Videos." <https://globalhealthmedia.org/videos/>
- Global Nutrition Cluster. 2017. "Decision Tool for Management of Moderate Acute Malnutrition (MAM) in Emergencies." Accessed June 6, 2023. <https://www.nutritioncluster.net/resources/decision-tool-mam-emergencies-2014-updated-2017>
- Holt International. 2019. "Holt International's Feeding and Position Manual: Guidelines for Working with Babies and Children." Accessed April 23, 2023. <https://www.holtinternational.org/about/child-nutrition/feeding-and-positioning-manual/>
- Hughes Roger, Roger Shrimpton, Elisabetta Recine, and Barrie Margetts. 2011. "A Competency Framework for Global Public Health Nutrition Workforce Development: A Background Paper." *World Public Health Nutrition Association*. Accessed May 11, 2021. <http://www.wphna.org/htdocs/downloadsapr2012/12-03%20WPHNA%20Draft%20competency%20standards%20report.pdf>
- IFE (Infant and Young Child Feeding in Emergencies) Core Group. 2017. "Operational Guidance on Infant and Young Child Feeding in Emergencies (OG-IFE), Version 3.0." Accessed June 6, 2023. [https://www.enonline.net/attachments/3127/Ops-G\\_English\\_04Mar2019\\_WEB.pdf](https://www.enonline.net/attachments/3127/Ops-G_English_04Mar2019_WEB.pdf)
- Kesari, A. and J.Y. Noel. 2022. *Nutritional Assessment*. Treasure Island: StatPearls Publishing. <https://pubmed.ncbi.nlm.nih.gov/35593821/>
- Krames. 2018. "Applying Adult Learning Theories for Effective Patient Education." Accessed April 23, 2023. <https://www.krames.com/insights/applying-adult-learning-theories-for-effective-patient-education>
- Lowensohn, Richard I., Diane D. Stadler, and Christie Naze. 2016. "Current Concepts of Maternal Nutrition." *Obstetrical & Gynecological Survey* 71(7): 413. <https://doi.org/10.1097/ogx.0000000000000329>
- The MAMI (Management of Small and Nutritionally at-Risk Infants under Six Months and Their Mothers) Global Network, ENN (Emergency Nutrition Network), LSHTM (London School of Hygiene and Tropical Medicine). 2021. "MAMI Care Pathway Package. v3." Accessed April 27, 2023. <https://www.enonline.net/mamicarepathway>

- Mason, J., D. Sanders, P. Musgrove, Soekirman, and R. Galloway. 2006. "Chapter 56: Community Health and Nutrition Programs." In *Disease Control Priorities in Developing Countries*. 2nd ed. Washington, DC: International Bank for Reconstruction and Development/World Bank.
- MCHIP (Maternal and Child Health Improvement Project). 2011. *Program Roadmap: Pre-Service Education*. Baltimore: Jhpiego. <https://seedglobalhealth.org/wp-content/uploads/2015/01/MCHIP-Preservice-Roadmap-January-2013-v1.3.pdf>
- MCSP (Maternal and Child Survival Program). 2016. *Operational Guidance for Maternal and Child Survival Country Programs: Pre-Service Education Current Evidence and Recommendations to Support Design and Implementation of Pre-Service Education Programs*. Washington, DC: MCSP. [https://pdf.usaid.gov/pdf\\_docs/PA00MTTR.pdf](https://pdf.usaid.gov/pdf_docs/PA00MTTR.pdf)
- MoH (Ministry of Health, Ghana). 2013. *Nutrition Technical Update for Nursing and Midwifery Tutors in Ghana: Tutors' Teaching Aids*. Washington, DC: FHI 360/FANTA.
- MoH (Ministry of Health, Government of Zambia) National Food and Nutrition Commission, and FANTA (Food and Nutrition Technical Assistance) III Project. 2017. *Nutrition Assessment, Counselling, and Support (NACS) Training Materials for Facility-Based Providers: Facilitators' Guide*. Lusaka: MoH.
- Mukhalalati, B.A., & A. Taylor. 2019. "Adult Learning Theories in Context: A Quick Guide for Healthcare Professional Educators." *Journal of Medical Education and Curricular Development*, 6. <https://doi.org/10.1177/2382120519840332>
- PAHO (Pan-American Health Organization). 2016. "Virtual Courses—Diabetes Self-Management Support Course (ND)". Accessed April 27, 2023. [https://www.paho.org/hq/index.php?option=com\\_content&view=article&id=12811:virtual-courses&Itemid=42225&lang=en](https://www.paho.org/hq/index.php?option=com_content&view=article&id=12811:virtual-courses&Itemid=42225&lang=en)
- Rosenbaum, J. and R. Bery. 2017. "Essential WASH Actions to Improve Child Growth." *FHI360*. Accessed April 27, 2023. <https://globalhandwashing.org/wp-content/uploads/2017/08/Essential-WASH-Actions.pdf>
- Save the Children. 2017. "IYCF-E Toolkit: Rapid Start-Up for Emergency Nutrition Personnel." Accessed April 27, 2023. <https://resourcecentre.savethechildren.net/library/infant-and-young-child-feeding-emergencies-iycf-e-toolkit-rapid-start-emergency-nutrition>
- Schaefer, L., ed. 2002. *Preservice Implementation Guide: A Process for Strengthening Pre-Service Education*. Baltimore: Jhpiego. <https://healtheducationresources.unesco.org/library/documents/preservice-implementation-guide-process-strengthening-preservice-education>
- Society for Nutrition Education and Behavior. 2021. "Nutrition Educator Competencies for Promoting Healthy Individuals, Communities, and Food Systems." Accessed March 20, 2023. <https://www.sneb.org/nutrition-educator-competencies/>
- SPRING (Strengthening Partnerships, Results, and Innovations in Nutrition Globally). 2018. *Adolescent Nutrition Call to Action: Better Data Now to Drive Better Policies and Programs in the Future*. Arlington, VA: SPRING project. <https://www.spring-nutrition.org/about-us/news/adolescent-nutrition-call-action-better-data-now-drive-better-policies-and-programs>
- Stevens, G.A., C.J. Paciorek, M.C. Flores-Urrutia, E. Borghi, S. Namaste, J.P. Wirth, Parminder S. Suchdev, et al. 2022. "National, Regional, and Global Estimates of Anaemia by Severity in Women and Children for 2000–19: A Pooled Analysis of Population-Representative Data." *Lancet Global Health* 10(5): e627–39. [https://doi.org/10.1016/S2214-109X\(22\)00084-5](https://doi.org/10.1016/S2214-109X(22)00084-5)
- TOPS (The Technical and Operational Performance Support Program). 2016. *Care Groups: A Reference Guide for Practitioners*. Washington, DC: The Technical and Operational Performance Support Program.
- UNDDR (United Nations Office for Disaster Risk Reduction). 2020. "Early Warning System." Accessed September 9, 2021. <https://www.undrr.org/terminology/early-warning-system>
- UNHCR (United Nations High Commissioner for Refugees). 2015. "Infant and Young Child Feeding Practices: Standard Operating Procedures for the Handling of Breastmilk Substitutes (BMS) in Refugee Situations for Children 0–23 Months" Accessed April 23, 2023. [https://www.ennonline.net/attachments/2413/UNHCR\\_BMS-SOP-LAY2-MAINFILE-D-\(1\).pdf](https://www.ennonline.net/attachments/2413/UNHCR_BMS-SOP-LAY2-MAINFILE-D-(1).pdf)

- UNICEF (United Nations Children's Fund). 2012a. "Community Based Infant and Young Child Feeding Counselling Package: Key Message Booklet." Accessed April 23, 2023. <https://www.unicef.org/documents/community-iycf-package>
- UNICEF (United Nations Children's Fund). 2012b. "Community Based Infant and Young Child Feeding Counselling Package: Planning Guide." Accessed April 23, 2023. <https://www.unicef.org/documents/community-iycf-package>
- UNICEF (United Nations Children's Fund). 2013a. "Community Based Infant and Young Child Feeding Counselling Package: Facilitator Guide." Accessed April 23, 2023. <https://www.unicef.org/documents/community-iycf-package>
- UNICEF (United Nations Children's Fund). 2013b. "Community Based Infant and Young Child Feeding Counselling Package: Participant Materials." Accessed April 23, 2023. <https://www.unicef.org/documents/community-iycf-package>
- UNICEF (United Nations Children's Fund). 2013c. "Community Based Infant and Young Child Feeding Counselling Package: Supportive Supervision/Mentoring and Monitoring." Accessed April 23, 2023. <https://www.unicef.org/documents/community-iycf-package>
- UNICEF (United Nations Children's Fund). 2017. *Guidance on Including Children with Disabilities in Humanitarian Action: WASH*. New York: UNICEF. [https://sites.unicef.org/disability/emergencies/downloads/UNICEF\\_WASH\\_English.pdf](https://sites.unicef.org/disability/emergencies/downloads/UNICEF_WASH_English.pdf)
- UNICEF (United Nations Children's Fund). 2018. *Guidance on Including Children with Disabilities in Humanitarian Action: Nutrition*. New York: UNICEF. [https://sites.unicef.org/disability/emergencies/downloads/UNICEF\\_Nutrition\\_English.pdf](https://sites.unicef.org/disability/emergencies/downloads/UNICEF_Nutrition_English.pdf)
- UNICEF (United Nations Children's Fund). 2021a. "Guidance on National Nutrition Information Systems: The Fundamental Series, Modules 1–5." Accessed April 21, 2023. <https://data.unicef.org/resources/nutrition-nnis-guides/>
- UNICEF (United Nations Children's Fund). 2021b. *Programming Guidance: Nutrition in Middle Childhood and Adolescence*. New York: UNICEF. <https://www.unicef.org/media/106406/file>
- UNICEF (United Nations Children's Fund). 2021c. "Strengthening Nutrition Information Systems." Accessed April 21, 2023. <https://data.unicef.org/resources/strengthening-nutrition-information-systems/>
- UNICEF (United Nations Children's Fund). n.d.a. "Nutrition Programme Brief." Accessed May 4, 2023. <https://www.unicef.org/pacificislands/media/3731/file/Nutrition%20Programme%20Brief.pdf>
- UNICEF (United Nations Children's Fund). n.d.b. "Essential Actions on Disability-inclusive Nutrition: Checklist." Accessed May 4, 2023. <https://www.unicef.org/documents/essential-actions-disability-inclusive-humanitarian-action-checklist-nutrition>
- UNICEF (United Nations Children's Fund). n.d.c. "Essential Actions on Disability-inclusive WASH: Checklist." Accessed May 4, 2023. <https://www.unicef.org/documents/essential-actions-disability-inclusive-humanitarian-action-checklist-wash>
- UNICEF (United Nations Children's Fund). n.d.d. *Routine Data for Nutrition: Development of a Core Standardized Set of Nutrition Data Indicators*. Forthcoming.
- UNICEF (United Nations Children's Fund) East Asia and Pacific Regional Office (EAPRO). 2016. "Nutrition-WASH Toolkits: Guide for Practical Joint Actions Nutrition-Water, Sanitation and Hygiene (WASH)." Accessed April 21, 2023. <https://www.unicef.org/eap/media/1181/file/Nutrition-WASH>
- UNICEF (United Nations Children's Fund) and WHO (World Health Organization). 2009. "WHO Child Growth Standards and the Identification of Severe Acute Malnutrition in Infants and Children. A Joint Statement by the World Health Organization and the United Nations Children's Fund." Accessed April 21, 2023. <https://www.ncbi.nlm.nih.gov/books/NBK200775/>
- UNICEF (United Nations Children's Fund) and WHO (World Health Organization). 2012. "Care for Child Development Package." Accessed March 13, 2023. <https://www.unicef.org/documents/care-child-development>



- UNICEF (United Nations Children's Fund (UNICEF) and WHO (World Health Organization). 2023. "DHIS2 Standard Nutrition Module (Nutrition Aggregate Package)." Accessed April 21, 2023. <https://dhis2.org/metadata-package-downloads/>
- USAID Advancing Nutrition. 2020. "Defining Social and Behavior Change Competencies for Multi-Sectoral Nutrition." Accessed May 11, 2021. [https://www.advancingnutrition.org/sites/default/files/2020-05/defining\\_social\\_and\\_behavior\\_change\\_brief.pdf](https://www.advancingnutrition.org/sites/default/files/2020-05/defining_social_and_behavior_change_brief.pdf)
- USAID Advancing Nutrition. 2021. "Community Health Worker Competency List for Nutrition Social and Behavior Change." Accessed April 17, 2023. <https://www.advancingnutrition.org/resources/community-health-worker-competency-list-nutrition-social-and-behavior-change>
- USAID Advancing Nutrition. 2022. "Responsive Care and Early Learning Addendum." Accessed March 22, 2023. <https://www.advancingnutrition.org/what-we-do/early-childhood-development/RCELaddendum>
- USAID Advancing Nutrition. n.d. "Strengthening Growth Monitoring and Promotion: A Core Child Health and Nutrition Service." Accessed March 22, 2023. <https://www.advancingnutrition.org/what-we-do/activities/strengthening-growth-monitoring-and-promotion-core-child-health-and-nutrition>
- USAID ENGINE (Empowering New Generations to Improve Nutrition and Economic Opportunities) and Save the Children. 2012. "Nutrition Core Competencies for Health Science Cadres and Undergraduate Nutritionists in Ethiopia." Accessed March 22, 2023. [https://pdf.usaid.gov/pdf\\_docs/PA00KWJS.pdf](https://pdf.usaid.gov/pdf_docs/PA00KWJS.pdf)
- USAID and HRH 2030 (Human Resources for Health in 2030). 2018. "Defining and Advancing Gender-Competent Family Planning Service Providers." *Human Resources for Health in 2030*. Accessed May 12, 2021. <https://hrh2030program.org/gender-competency-tech-brief/>
- WHO (World Health Organization). 2001. *Integrated Management of Childhood Illness (IMCI): Planning, Implementing, and Evaluating Pre-Service Training*. Geneva: WHO. [https://cdn.who.int/media/docs/default-source/mca-documents/child/imci-integrated-management-of-childhood-illness/imci\\_planning\\_implementing\\_evaluating\\_pre-service-training.pdf?sfvrsn=cfed526d\\_5&download=true](https://cdn.who.int/media/docs/default-source/mca-documents/child/imci-integrated-management-of-childhood-illness/imci_planning_implementing_evaluating_pre-service-training.pdf?sfvrsn=cfed526d_5&download=true)
- WHO (World Health Organization). 2002. *WHO Training Course on the Management of Severe Malnutrition*. Geneva: WHO. <https://apps.who.int/iris/handle/10665/70449>
- WHO (World Health Organization). 2003. *WHO Guidelines for the Inpatient Treatment of Severely Malnourished Children*. Geneva: WHO. <https://apps.who.int/iris/bitstream/handle/10665/42724/9241546093.pdf?sequence=1>
- WHO (World Health Organization). 2006. *WHO Child Growth Standards: Height/Length-for-Age, Weight-for-Age, Weight-for-Length, Weight-for-Height and Body Mass Index-for-Age: Methods and Development*. Geneva: WHO. <https://www.who.int/publications/i/item/924154693X>
- WHO (World Health Organization). 2008a. *WHO Child Growth Assessments: Training Course on Child Growth Assessment*. Geneva: WHO. <https://www.who.int/publications/i/item/9789241595070>
- WHO (World Health Organization). 2008b. *WHO Child Growth Assessments: Investigating Causes of Undernutrition*. Geneva: WHO. [https://apps.who.int/iris/bitstream/handle/10665/43601/9789241595070\\_jobaidCauses\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/43601/9789241595070_jobaidCauses_eng.pdf?sequence=1&isAllowed=y)
- WHO (World Health Organization). 2010a. "Essential Newborn Care Course." Accessed March 13, 2023. <https://www.who.int/publications/i/item/essential-newborn-care-course>
- WHO (World Health Organization). 2010b. *IMCI Pre-Service Education: Orientation and Planning Workshop: Facilitator Guide*. Cairo: WHO Regional Office for the Eastern Mediterranean. <https://applications.emro.who.int/dsaf/dsa1061.pdf?ua=1>
- WHO (World Health Organization). 2011. "WHO Haemoglobin Concentrations for the Diagnosis of Anaemia and Assessment of Severity." *Vitamin and Mineral Nutrition Information System*. Accessed May 5, 2023. <https://www.who.int/vmnis/indicators/haemoglobin.pdf>

- WHO (World Health Organization). 2012. *WHO Recommendations: Optimizing Health Worker Roles to Improve Access to Key Maternal and Newborn Health Interventions Through Task Shifting (Optimize MNH)*. Geneva: WHO. [https://www.who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/978924504843/en/](https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/978924504843/en/)
- WHO (World Health Organization). 2013a. *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020*. Geneva: WHO. <https://www.who.int/publications/i/item/9789241506236>
- WHO (World Health Organization). 2013b. *Guideline: Updates on the Management of Severe Acute Malnutrition in Infants and Children*. Geneva: WHO. [http://www.who.int/nutrition/publications/guidelines/updates\\_management\\_SAM\\_infantandchildren/en/](http://www.who.int/nutrition/publications/guidelines/updates_management_SAM_infantandchildren/en/)
- WHO (World Health Organization). 2014. “Integrated Management of Childhood Illness: Distance Learning Course.” Accessed April 21, 2023. <https://apps.who.int/iris/handle/10665/104772>
- WHO (World Health Organization). 2016. *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*. Geneva: WHO. <https://www.who.int/publications/i/item/9789241549912>
- WHO (World Health Organization). 2017. *WHO Recommendations on Adolescent Health*. Geneva: WHO. <http://apps.who.int/iris/bitstream/handle/10665/259628/WHO-MCA-17.09-eng.pdf?sequence=1>
- WHO (World Health Organization). 2018a. *Guideline: Implementing Effective Actions for Improving Adolescent Nutrition*. Geneva: WHO. <https://www.who.int/publications/i/item/9789241513708>
- WHO (World Health Organization). 2018b. *WHO Guideline on Health Policy and System Support to Optimize Community Health Worker Programmes*. Geneva: WHO. <https://apps.who.int/iris/bitstream/handle/10665/275474/9789241550369-eng.pdf?ua=1&ua=1>
- WHO (World Health Organization). 2019a. *Analysis and Use of Health Facility Data: Guidance for RMNCAH Programme Managers*. Geneva: WHO. <https://www.who.int/publications/m/item/analysis-and-use-of-health-facility-data-guidance-for-rmncah-programme-managers>
- WHO (World Health Organization). 2019b. *Guidelines on Physical Activity, Sedentary Behaviour, and Sleep for Children under 5 Years of Age*. Geneva: WHO. <https://www.who.int/publications/i/item/9789241550536>
- WHO (World Health Organization). 2020. *Guidelines on Physical Activity and Sedentary Behaviour*. Geneva: WHO. <https://www.who.int/publications/i/item/9789240015128>
- WHO (World Health Organization). 2020. “Healthy Diet Factsheet.” Accessed April 29, 2023. <https://www.who.int/news-room/fact-sheets/detail/healthy-diet#:~:text=Key%20facts,leading%20global%20risks%20to%20health>
- WHO (World Health Organization). n.d. “Health Topics: Malnutrition.” Accessed April 28, 2023. [https://www.who.int/health-topics/malnutrition#tab=tab\\_1](https://www.who.int/health-topics/malnutrition#tab=tab_1)
- WHO (World Health Organization) and UNICEF (United Nations Children’s Fund). 2011. *Caring for Newborns and Children in the Community: Caring for the Sick Child in the Community*. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789241548045>
- WHO (World Health Organization) and UNICEF (United Nations Children’s Fund). 2015a. *Caring for Newborns and Children in the Community: Caring for the Child’s Healthy Growth and Development*. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789241504997>
- WHO (World Health Organization) and UNICEF (United Nations Children’s Fund). 2015b. *Caring for Newborns and Children in the Community: Caring for the Newborn at Home*. Geneva: World Health Organization. <https://apps.who.int/iris/handle/10665/204273>
- WHO (World Health Organization) and UNICEF (United Nations Children’s Fund). 2015c. *Caring for Newborns and Children in the Community: Planning Handbook*. Geneva: World Health Organization. <https://www.who.int/publications/i/item/978924150859>
- WHO (World Health Organization) and UNICEF (United Nations Children’s Fund). 2020a. *Baby-Friendly Hospital Initiative Training Course for Maternity Staff: Trainer’s Guide*. Geneva: World Health Organization. <https://apps.who.int/iris/handle/10665/333676>



- WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2020b. *Competency Verification Toolkit: Ensuring Competency of Direct Care Providers to Implement the Baby-Friendly Hospital Initiative*. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789240008854>
- WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2021a. *Indicators for Assessing Infant and Young Child Feeding Practices: Definitions and Measurement Methods*. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789240018389>
- WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2021b. *Infant and Young Child Feeding Counselling: An Integrated Course. Director's Guide, second edition*. Geneva: World Health Organization. <https://www.who.int/publications/i/item/9789240032828>
- WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2021c. *Infant and Young Child Feeding Counselling: An Integrated Course: Participant's Manual: 2nd Edition*. Geneva: WHO. <https://www.who.int/publications/i/item/9789240032408>
- WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2022. *Nurturing Care Practice Guide: Strengthening Nurturing Care through Health and Nutrition Services*. Geneva: WHO. <https://www.who.int/publications/i/item/9789240032828>

# Annex I. Instructions for Using the Tool

## Review of the Policy Environment

Review each document for information relevant to pre-service training of frontline health workers or frontline nutrition services. Indicate if the documents mention nutrition, roles and responsibilities, capacity strengthening, or pre-service training. Record any significant or relevant quotes, priorities, or strategies that would help you make the case for reviewing and revising the nutrition content of pre-service training curricula.

## Selection of the Cadres

To select the cadres, you will need to collect and record information related to the frontline health workers and the primary health care facilities where they do so. You can obtain this information from health system organograms, key informants, policy documents, health facility hierarchies, and other information. Most likely, you will want to select the cadre that reaches the most clients either because there are more available or employed or because of where they work or the population(s) they serve.

## Identification of the Relevant Competencies and Determination of the Competencies Addressed

To complete this form, you will need to understand the pre-service training program for each selected cadre. To do this, you should review standard/national curricula and any materials that accompany them. These may include—

- description of curriculum
- assessment requirements
- course<sup>4</sup> descriptions
- course syllabi
- course lesson plans.

In section 1, record key characteristics of each pre-service training program, such as the title of the curriculum, the degree/certificate earned from program (in accordance with the curriculum); time required for completion (i.e., to earn the degree/certificate); any additional requirements for earning the degree/certificate (e.g., internship/practicum); and courses (e.g., objectives, intended learning outcomes, content, lesson plans, reading materials, teaching methods).

In section 2, record all of the courses in the curriculum, indicating those required to earn the specified degree as well as your assessment of the amount of nutrition or nutrition-related content included in each course (none, some, or very much). Depending on the information available, you could base this on time indicated for nutrition-related topics compared to the total length of the course or the number of nutrition-related objectives/topics compared to the total number of objectives/topics of the course. For courses that have nutrition-related content, record the following additional information:

- course objectives
- course length (hours)

---

<sup>4</sup> We have found that stakeholders in each country use different terms to refer to topics or categories of content in a curriculum. They are sometimes referred to as courses, classes, sections, or even modules. In this document, we use the term “course” to refer to content covered in 25–30 hours of teaching/learning.

- teaching method(s) used (e.g., practice, theory).

Section 3 is organized into 12 tables for each of the categories of competencies. In each table, for each competency, record the following information:

- **Relevance of competency to the cadre's responsibilities:** You will need to determine<sup>5</sup> the relevancy of each nutrition competency for the particular cadre of health worker:
  - **Not relevant:** This competency is not necessary for any of the responsibilities of the cadre as indicated in the documents reviewed or agreed with key stakeholders.
  - **Somewhat relevant:** This competency is not necessary or required for any of the responsibilities of the cadre, but is helpful for the cadre to complete his/her responsibilities or is considered best practice.
  - **Definitely relevant:** This competency is necessary for any of the responsibilities of the cadre as indicated in the documents reviewed or agreed with key stakeholders.
  - **Assumed to be relevant:** You presume this competency is necessary for any of the responsibilities of the cadre, but there was not enough information to confirm. In cases where a competency may not be specifically mentioned in the documents reviewed, but you consider the competency relevant, please include a brief justification for your decision in the space provided at the bottom of each table or section of a table. You should review these decisions—particularly those subjective judgment calls—during the final validation meeting with key stakeholders.
  - **Unable to determine relevance:** You are unable to determine or assume if this competency is relevant for the cadre.
- **Justification for decision of relevance:** This column is optional, but recommended. Recording your justification for your decision whether a competency is relevant or not relevant will help you to ensure consistency and explain your decisions to others later when sharing your findings, and possibly making the case for reviewing or revising a curriculum.
- **Course(s) addressing competency and relevant objectives and/or topics:** Record here the course or courses which appear to address the competency and the relevant objectives and/or topics that led you to conclude that the course addressed the competency. Since objectives/content may be broader or more general than competencies, the same objective/content may address more than one competency. We suggest recording “Not applicable” if you determined that the competency was not relevant and “No course” if you were unable to find any information related to the competency in any of the courses in the curriculum. If you do this, when you complete the review, there will be no remaining blank cells in the tables.
- **Extent course(s) address competency:** Record your determination, based on the information available, regarding the extent to which the curriculum addresses the competency:
  - **Not applicable:** The competency is not relevant to that cadre's responsibilities.
  - **Not addressed:** The course does not mention this competency at all.
  - **Somewhat addressed:** The course mentions this competency at least once but with minimal detail.

---

<sup>5</sup> To do this, at a minimum you will need to review the cadre's job description. You may need to review in-service training materials, service delivery guidelines or protocols, and standard operating procedures. You may also wish to consult with key stakeholders for a more comprehensive or realistic picture of who does what.

- **Well addressed:** The course mentions this competency with extensive detail.
- **Unable to determine:** You are unable to determine whether the course addresses the competency.

To facilitate your review, you may wish to add a “stop light” assessment of the extent that course(s) address each competency by changing the fill color of this cell: green (well addressed), yellow (somewhat addressed), orange (unable to determine), red (not addressed), or gray (not applicable).

- **Explanation of extent to which competency is addressed (optional):** This column is optional, but recommended. Since a curriculum may not provide a great deal of detail and there is no gold standard regarding the extent (time or detail) to which a curriculum should cover each competency, this column provides an opportunity to record your justification for your decision regarding the extent to which it addressed the competency. This will help you to ensure consistency and to explain your decisions to others later when sharing your findings, and possibly making the case for reviewing or revising a curriculum.
- **Summary of extent to which category of competencies is addressed:** At the bottom of each table, you should summarize your conclusions regarding the extent to which the category of competencies is addressed and your justification for that conclusion. You may also wish to give an overall “stop light” assessment as you did for each competency, indicating the extent that the curriculum addresses the category of competencies, by changing the fill color of the cell: green (well addressed), yellow (somewhat addressed), or red (not well addressed).

Below we show an example of how to complete the tables.

**Table 1. Example of Nutrition-Related Competencies**

<b>Competencies</b>	<b>Relevance of Competency to the Cadre's Responsibilities*</b>	<b>Justification for Decision of Relevance (optional)</b>	<b>Course(s) Addressing Competency and Relevant Objectives and/or Topics**</b>	<b>Extent Course(s) Address Competency***</b>	<b>Explanation of Decision of Extent Competency is Addressed (optional)</b>
<i>Ability to counsel clients on nutrition requirements and dietary practices of adolescents based on nutritional status</i>	<i>Somewhat relevant</i>	<i>Adolescents are not explicitly mentioned in the job description, but the nurse is expected to serve clients of all ages.</i>	<i>Course 1.2.1: Nutrition Foundations</i>  <i>Course topics:</i> <i>Puberty and growth</i> <i>Nutritional requirements of adolescents</i>	<i>Somewhat addressed</i>	<i>There is no mention of adjusting counseling based on the adolescent's nutritional status.</i>
<b>Explanation/ comments:</b>	<i>Overall, the curriculum does a good job addressing this category of competencies. Six out of the eight competencies included in this category were somewhat or well addressed.</i>				
<b>Stoplight assessment:</b>	<i>Well addressed</i>				

\* Response options regarding the relevance of competencies for a particular cadre include: not relevant, somewhat relevant, definitely relevant, assumed relevant, and unable to determine.

\*\* Record "Not applicable" if the competency is not relevant. Record "No course" if unable to find any information related to the competency in any of the courses in the curriculum.

\*\*\* Response options regarding the extent to which a curriculum addresses a competency include: not applicable (gray), not addressed (red), somewhat addressed (yellow), well addressed (green), and unable to determine (orange).

## Annex 2. Illustrative Tables for Reporting Findings

Depending on the circumstances of your assessment and your objectives, you may want to begin with a presentation of data from nationally representative surveys on key nutrition indicators to draw attention to some of the priority nutrition issues impacting your country. These might include, but are not limited to, rates of food insecurity; chronic disease (HIV, AIDS, or NR-NCDs); wasting; underweight; overweight; obesity; anemia; as well as nutrition practices such as early initiation of breastfeeding, exclusive breastfeeding, continued breastfeeding, minimum dietary diversity, minimum meal frequency and minimum acceptable diet. These statistics will help you decide or explain which competencies are more or less important in your country. An example of how you might present this information is included in table 2 below.

**Table 2. Nutrition-Related Country Statistics**

Indicator	Rate
<b>Children under Five</b>	
Stunting	xx%
Wasting	xx%
Underweight	xx%
Overweight	xx%
Obesity	xx%
<b>Women of Reproductive Age</b>	
Anemia	xx%
Underweight	xx%
Overweight	xx%
Obesity	xx%
<b>Nutrition Practices</b>	
Ever breastfed	xx%
Early initiation of breastfeeding	xx%
Exclusive breastfeeding	xx%

Indicator	Rate
Continued breastfeeding	xx%
Minimum dietary diversity	xx%
Minimum meal frequency	xx%
Minimum acceptable diet	xx%
<b>Emergency</b>	
Household food security	xx%
<b>Chronic Disease</b>	
HIV/AIDS	xx%
Diabetes	xx%

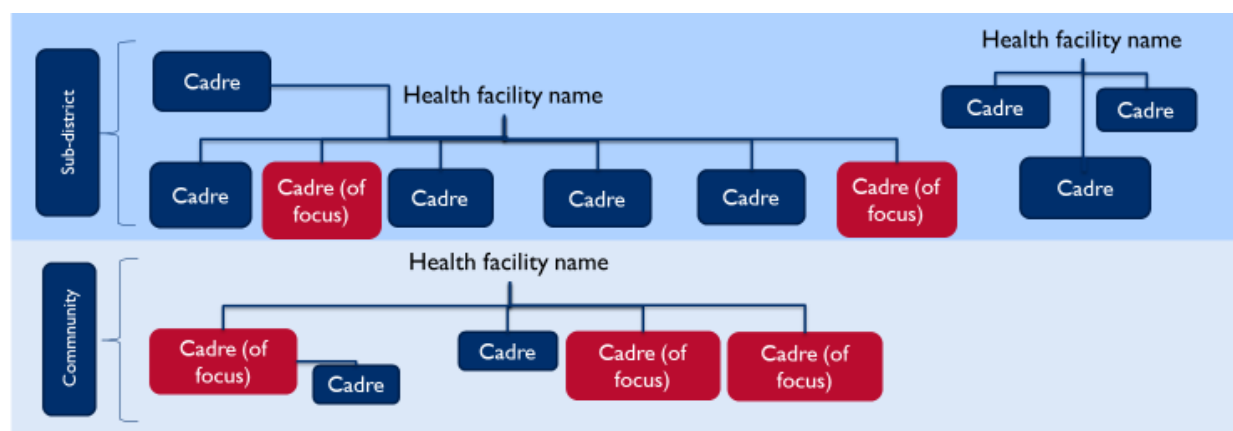
We suggest presenting what you found regarding the policy environment in a table like the one presented below (table 3) and including in your report any excerpts or quotes related to national priorities, strategies, or plans relevant to pre-service training or to the roles and responsibilities of frontline health workers.

**Table 3. Illustrative Table of Relevant Content in the National Documents**

Document	Is Nutrition Mentioned?	Are Roles and Responsibilities Mentioned?	Is Capacity Strengthening Mentioned?	Is Pre-Service Training Mentioned?
Document 1	✗	✓	✓	✗
Document 2	✓	✗	✗	✗
Document 3	✓	✗	✓	✗
Document 4	✗	✓	✗	✓

You can present the information you found regarding the health facilities and cadres of health workers responsible or best placed for providing frontline nutrition services in an organogram or chart such as the one presented below (figure 3).

**Figure 3. Illustrative Mapping of Frontline Health Workers**



Then, you will expand on the roles and responsibilities of the selected cadres of health workers found in the pre-service training curricula, including nutrition-related competencies relevant to the selected cadres of health workers. It is critical to share which roles are responsible for completing different topic areas.

**Table 4. Illustrative Table of Nutrition-Related Roles and Responsibilities Mentioned in the Job Descriptions, by Cadre and Topic Area**

Roles and Responsibilities Mentioned in the Job Descriptions	Cadre 1	Cadre 2
Assessment of nutritional status and growth	✓	✓
Management of wasting	✓	✗
Detection and treatment of anemia and other micronutrient deficiencies	✓	✓
Nutrition and dietary practices of adults	✗	✗
Nutrition and dietary practices of pregnant and lactating adolescent girls and women	✓	✓
Nutrition and dietary practices of people living with chronic diseases	✓	✓
Nutrition and feeding practices of infants (under six months)	✓	✓
Nutrition and feeding practices of infants and young children (6–59 months)	✗	✗
Nutrition and dietary practices of adolescents	✓	✓
Nutrition in emergencies	✗	✗



Roles and Responsibilities Mentioned in the Job Descriptions	Cadre 1	Cadre 2
Behavior change communication and counseling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Management of nutrition services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

\* Examples of the roles and responsibilities we considered related to the management of nutrition services include the conduct of community assessments, report preparation, compliance with quality assurance guidelines, and liaising with other agencies like social welfare to assist clients in need of support.

For background, include a table with key characteristics of the pre-service training for the selected cadres of health workers providing frontline nutrition services such as the length of the program, the date of the last curriculum update, the degree/certificate earned, the institutions offering the program or degree/certificate, title of the curriculum, objectives of program, courses with nutrition-related content, content of the curriculum, and whether the program requires an internship or practicum.

**Table 5. Characteristics of the Pre-Service Training Program for Selected Cadres of Health Workers Providing Frontline Nutrition Services, by Cadre**

Characteristics	Cadre 1	Cadre 2
Length of program in months		
Date of last curriculum update (year)		
Degree/certificate earned		
Institutions offering program or degree/certificate		
Title of the curriculum		
Objectives of the curriculum		
Courses with nutrition-related content		
Content of the curriculum (lesson plans, teaching methods)		
Internship or practicum requirement(s)		

Use this data, to provide information on nutrition competencies addressed and not addressed in your country's pre-service training curricula as well as justifications for your determination (optional). You may want to summarize the information with the total number of competencies addressed and the percent of relevant competencies addressed.

























**Table 6. Illustrative Table of Nutrition-Related Competencies Addressed in Pre-Service Training Curricula, by Cadre and Topic Area**

Key:

 = <40% of competencies somewhat addressed or well addressed

 = 40–79% of competencies somewhat addressed or well addressed

 = ≥ 80% of competencies somewhat addressed or well addressed

Category of Content (Number of Competencies)	Cadre 1	Cadre 2
Assessment of nutritional status and growth (5)		
Management of wasting (9)		
Detection and treatment of anemia and other micronutrient deficiencies (4)		
Nutrition and dietary practices of adults (5)		
Nutrition and dietary practices of pregnant and lactating adolescent girls and women (5)		
Nutrition and dietary practices of people living with chronic diseases (5)		
Nutrition and feeding practices of infants (under six months) (10)		
Nutrition and feeding practices of infants and young children (6–59 months) (6)		
Nutrition and dietary practices of adolescents (2)		
Nutrition in emergencies (2)		
Behavior change communication and counseling (7)		
Management of nutrition services (8)		

Share and validate your findings with key stakeholders to finalize conclusions and recommendations together. We suggest including stakeholders involved in the development, revision, and use of curricula, as well as those involved in the definition of roles and responsibilities (e.g., job descriptions), certification requirements, mentorship programs, and supervision tools or processes.

## Annex 3. Resources for Strengthening Nutrition Content of Pre-Service Training Curricula

1. Assessment of Nutritional Status and Growth	
Competencies	Resources that Cover These Competencies
1. Knowledge of the operational guidance for assessing and classifying nutritional status for all age groups	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Ability to correctly take anthropometric measurements of all age groups (MUAC, height/length, weight, waist circumference)	Cashin and Oot 2018; ECSAC 2017; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2006; WHO 2008a
3. Ability to determine and classify nutritional status of all age groups using z-scores, MUAC, and BMI	Cashin and Oot 2018; ECSAC 2017; FHI 360 2017; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; UNICEF and WHO 2009; WHO 2006; WHO 2008a
4. Ability to assess trends in child growth	Cashin and Oot 2018; FHI 360 2017; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2006; WHO 2008a
5. Ability to assess clients for clinical signs of malnutrition	ECSAC 2017; FHI 360 2017; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2008a
2. Management of Wasting	
Competencies	Resources that Cover These Competencies
Infants (Under Six Months)	
1. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among infants (e.g., MAMI)	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Ability to manage wasting in infants in line with operational guidance	ENN 2021; FANTA 2018b; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Save the Children 2017; WHO 2002; WHO 2003; WHO 2013b

Young Children (6–59 Months)	
3. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among young children	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
4. Ability to manage wasting in young children in line with operational guidance	FANTA 2018; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Save the Children 2017; WHO 2002; WHO 2003; WHO 2013b
Older Children and Adolescents (5–18 Years)	
5. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among older children and adolescents	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
6. Ability to manage wasting in older children and adolescents in line with operational guidance	MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2002; WHO 2003
Adults (18+ Years)	
7. Knowledge of policies, programs, protocols, and operational guidance related to the management of wasting among adults	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
8. Ability to manage wasting in adults in line with operational guidance	ECSAC-HC 2008; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017
All Ages	
9. Ability to counsel clients on the management of wasting, including causes and consequences (short and long term) of malnutrition at different stages of life and life-cycle nature of nutritional requirements	ENN 2021 (mothers only); MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2003; WHO 2002; WHO 2013b (children only)
3. Detection and Treatment of Anemia and Other Micronutrient Deficiencies	
Competencies	Resources that Cover These Competencies
1. Knowledge of policies, programs, protocols, and operational guidance related to anemia and other micronutrient deficiencies	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Ability to accurately assess clients for anemia and other micronutrient deficiencies through clinical, biochemical, or dietary assessment	ECSAC 2017; FHI 360 2017; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2002; WHO 2003; WHO 2011; WHO 2013b
3. Ability to treat anemia and other micronutrient deficiencies in line with operational guidance	MoH National Food and Nutrition Commission and FANTA III Project 2017

4. Ability to counsel clients on the prevention and treatment of anemia and other micronutrient deficiencies, including causes; risk factors; signs, symptoms, and consequences; prevention; management; dietary sources; digestion/absorption; and indications for treatment/referral	ECSAC 2017; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017
<b>4. Nutrition and Dietary Practices of Adults</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Nutrition and Dietary Practices of Pregnant and Lactating Adolescent Girls and Women, Nutrition and Dietary Practices of People Living with HIV/AIDS, and Nutrition and Dietary Practices of People with Nutrition-Related Noncommunicable Diseases	
1. Knowledge of policies, programs, protocols, and operational guidance related to the nutrition and dietary practices of adults	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Knowledge of digestion, causes and consequences of excesses, the relationship between energy intake and expenditure and body weight	ECSAC-HC 2008; Guyon et al. 2015; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017
3. Ability to counsel clients on nutrition requirements and appropriate dietary practices based on nutritional status	ECSAC 2017; Guyon et al. 2015; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017
4. Ability to counsel clients on nutrition requirements and appropriate dietary practices during and after illness, including the relationship between nutrition, infectious diseases, chronic diseases, and common illnesses	ECSAC 2017; ECSAC-HC 2008; MoH 2013; Save the Children 2017
5. Ability to counsel clients on WASH (e.g., handwashing, water storage and treatment, food storage and handling, safe human waste disposal practices)	MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Rosenbaum and Bery 2017; Save the Children 2017; UNICEF EAPRO 2016; UNICEF 2017; UNICEF n.d.c
<b>5. Nutrition and Dietary Practices of Pregnant and Lactating Adolescent Girls and Women</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Nutrition and Dietary Practices of Adults, and Nutrition and Dietary Practices of People Living with HIV/AIDS	

1. Knowledge of policies, programs, protocols, and operational guidance related to the nutrition and dietary practices of pregnant and lactating women	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Ability to counsel pregnant and lactating women on the importance of iron-folic acid supplementation	MoH National Food and Nutrition Commission and FANTA III Project 2017
3. Ability to counsel clients on nutrition requirements and appropriate dietary practices during pregnancy based on pregnancy weight gain	MoH National Food and Nutrition Commission and FANTA III Project 2017
4. Ability to counsel clients on nutrition requirements and appropriate dietary practices during lactation, including the effect of maternal nutritional status on nutrient composition of breastmilk	Guyon et al. 2015; MoH National Food and Nutrition Commission and FANTA III Project 2017
5. Ability to counsel clients on the unique nutritional requirements of pregnant adolescents	CORE Group 2015
6. Ability to counsel clients on optimal nutrition practices for pregnant and lactating women (e.g., effect of maternal nutritional status on nutrient composition of breastmilk, breastfeeding and the benefits for the health and well-being of mothers, increased food intake, <sup>2</sup> diet diversity, consumption of animal-source foods, iron-folic acid intake, adequate rest, reduced physical labor, and keeping physically active)	Guyon et al. 2015; ENN & IFE Core Group 2021; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Save the Children 2017
<b>6. Nutrition and Dietary Practices of People Living with Chronic Diseases</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Management of Wasting, Nutrition and Dietary Practices of Adults, and Nutrition and Dietary Practices of Pregnant and Lactating Adolescent Girls and Women	
1. Knowledge of nutrition-related policies and programs for people living with HIV/AIDS	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance. FANTA 2016
2. Knowledge of policies, programs, protocols, and operational guidance related to the management of NR-NCDs	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance. FANTA 2016

3. Ability to counsel clients on nutrition requirements and dietary practices when living with HIV/AIDS	ECSAC-HC 2008; ECSAC 2017; FHI 360 2017; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Save the Children 2017
4. Ability to counsel clients on nutrition requirements and appropriate dietary practices when living with HIV/AIDS and pregnant and/or lactating	Save the Children 2017
5. Ability to counsel clients on appropriate dietary practices and physical activity for the management of NR-NCDs	CDC 2013; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; WHO 2019; WHO 2020
<b>7. Nutrition and Feeding Practices of Infants (Under Six Months)</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Management of Wasting, and Nutrition and Dietary Practices of Adults	
1. Knowledge of policies, programs, protocols, and operational guidance related to nutrition and feeding practices of infants under six months old, including in particular the International Code of Marketing of Breast-Milk Substitutes	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Knowledge of ways a birthing facility should support breastfeeding	ENN and IFE Core Group 2021; MoH 2013; UNHCR 2015
3. Ability to counsel caregivers of infants under six months old, based on nutritional status and/or growth	ECSAC 2017; WHO 2008a; WHO 2008b; WHO 2010; WHO and UNICEF 2021b; WHO and UNICEF 2021c
4. Ability to counsel caregivers on the nutrition requirements of and feeding practices for infants under six months old (e.g., the relationship between optimal nutrition, growth, illness, and development; breastfeeding initiation; breastfeeding physiology, techniques, and positions; exclusive breastfeeding; and the benefits of breastfeeding for child and mother; feeding cues or early signs of hunger)	ENN 2007; ENN and IFE Core Group 2021; Global Health Media n.d.; Guyon et al. 2015; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Save the Children 2017; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; WHO 2008a; WHO 2008b; WHO 2010; WHO and UNICEF 2015a; WHO and UNICEF 2015b; WHO and UNICEF 2021a; WHO and UNICEF 2021b
5. Ability to counsel caregivers on the nutrition requirements and appropriate feeding practices for infants under six months old during and after illness	ENN and IFE Core Group 2021; Guyon et al. 2015; MoH 2013; Save the Children 2017; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; WHO 2008a; WHO 2008b; WHO 2010; WHO 2014; WHO and UNICEF 2011; WHO and UNICEF 2015a; WHO and

	UNICEF 2015b; WHO and UNICEF 2021b; WHO and UNICEF 2021c
6. Ability to counsel caregivers on the management of different types of feeding difficulties among infants under six months old, including those with disabilities	ECSAC 2017; Holt International 2019; Save the Children 2017; UNICEF 2018; UNICEF n.d.b; USAID Advancing Nutrition 2022; WHO and UNICEF 2021b
7. Ability to help caregivers whose infant under six months old needs fluids other than breast milk	UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; WHO 2008b; WHO and UNICEF 2015a; WHO and UNICEF 2015b; WHO and UNICEF 2021b; WHO and UNICEF 2021c
8. Ability to help mothers manage milk expression and feeding expressed milk	ENN & IFE Core Group 2021; Global Health Media n.d.; MoH 2013; Save the Children 2017; UNICEF 2013; WHO and UNICEF 2021b
9. Ability to help (explain, support, and demonstrate) mothers breastfeed a small or sick newborn	ENN 2007; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017
10. Ability to help (explain, support, and demonstrate) mothers achieve comfortable and safe positions for breastfeeding, to ensure an effective and comfortable latch, to prevent and/or address common breastfeeding problems (e.g., sore nipples, breast engorgement and mastitis, breastfeeding challenges faced by working women, latching, difficulty sucking, and insufficient milk)	ENN 2007; ENN and IFE Core Group 2021; Guyon et al. 2015; Global Health Media n.d.; MoH 2013; Save the Children 2017; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; WHO 2010b; WHO and UNICEF 2015a; WHO and UNICEF 2015b; WHO and UNICEF 2021b; WHO and UNICEF 2021c
<b>8. Nutrition and Feeding Practices of Infants and Young Children (6–59 Months)</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Management of Wasting, and Nutrition and Dietary Practices of Adults	
1. Knowledge of policies, programs, protocols, and operational guidance related to nutrition and feeding practices of children 6–59 months old	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Ability to monitor feeding/eating developmental milestones and notice feeding/eating warning signs (e.g., difficulty controlling head or body, chewing or swallowing, or self-feeding)	MoH 2013; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; UNICEF 2018; UNICEF and WHO 2012; USAID Advancing Nutrition 2022; WHO 2003; WHO and UNICEF 2015a; WHO and UNICEF 2021
3. Ability to counsel caregivers of children 6–59 months old based on nutritional status and/or growth	MoH 2013; WHO 2008a; WHO 2008b; WHO and UNICEF 2015a; WHO and UNICEF 2021b; WHO and UNICEF 2021c
4. Ability to counsel caregivers on the nutrition requirements of and feeding practices for	ENN and IFE Core Group 2021; MoH National Food and Nutrition Commission and



children 6–59 months old (e.g., the relationship between optimal nutrition, growth, illness, and development; nutrition requirements; continued breastfeeding up to two years and beyond; introduction of semi-solid or solid foods; frequency, quantity, consistency, and diversity of foods; responsive feeding; feeding cues or early signs of hunger)	FANTA III Project 2017; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; USAID Advancing Nutrition 2022; WHO 2008a; WHO 2008b; WHO and UNICEF 2015a; WHO and UNICEF 2021b; WHO and UNICEF 2021c
5. Ability to counsel caregivers on the management of different types of feeding difficulties among children 6–59 months old, including those with disabilities	ECSAC 2017; Holt International 2019; Save the Children 2017; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; UNICEF 2018; UNICEF n.d.b; USAID Advancing Nutrition 2022; WHO and UNICEF 2015a; WHO and UNICEF 2021a; WHO and UNICEF 2021b
6. Ability to counsel caregivers on the nutrition requirements and appropriate feeding practices of children 6–59 months old during and after illness	MoH 2013; Save the Children 2017; UNICEF 2012a; UNICEF 2013a; UNICEF 2013b; WHO 2008b; WHO 2014 WHO and UNICEF 2011; WHO and UNICEF 2015a; WHO and UNICEF 2021b
<b>9. Nutrition and Dietary Practices of Adolescents</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Nutrition and Dietary Practices of Adults, and Nutrition and Dietary Practices of Pregnant and Lactating Adolescent Girls and Women	
1. Knowledge of policies, programs, protocols, and operational guidance related to nutrition and dietary practices of adolescents	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.
2. Ability to counsel clients on nutrition requirements and dietary practices of adolescents based on nutrition status (e.g., specific nutritional needs of adolescents related to their growth, development, and maturation)	CORE Group 2015; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; UNICEF 2021a; WHO 2018a
<b>10. Nutrition in Emergencies</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
Also see the competencies listed under Assessment of Nutritional Status and Growth, Detection and Treatment of Anemia and Other Micronutrient Deficiencies, Management of Wasting, Nutrition and Dietary Practices of Adults, and Nutrition and Dietary Practices of Pregnant and Lactating Adolescent Girls and Women	
1. Knowledge of policies, programs, protocols, and operational guidance related to nutrition in emergency contexts/situations	Each country will need to reference nationally-approved policies, programs, protocols, and operational guidance.

2. Ability to counsel clients on dietary practices, taking into consideration the unique nutrition challenges common in the context of emergencies (e.g., limited food available, poor sanitation)	CDPH 2013; ECSAC 2017; ENN 2007; ENN and NutritionWorks 2011; Save the Children 2017; UNICEF 2017; UNICEF 2018; UNICEF n.d.b; UNICEF n.d.c; WHO 2017; WHO 2018
<b>11. Behavior Change Communication and Counseling</b>	
<b>Competencies</b>	<b>Resources that Cover These Competencies</b>
1. Ability to employ adult learning techniques to nutrition counseling and education	FANTA 2016; FHI 360 2017; FSN Network and CORE Group 2015; Krames 2018; MoH 2013; Mukhalalati and Taylor 2019; Save the Children 2017; USAID Advancing Nutrition 2020; USAID Advancing Nutrition 2021
2. Ability to counsel clients on nutrition in a culturally appropriate, client-centered way that demonstrates respect for social, cultural, and economic differences and avoids language that stigmatizes or discriminates in any way	Davis et al. 2016; ECSAC 2017; FANTA 2016; FSN Network and CORE Group 2015; Guyon et al. 2015; Save the Children 2017; UNICEF 2013; USAID and HRH 2030 2018
3. Ability to effectively uses counseling materials and resources (e.g., infant and young child feeding counseling cards)	ECSAC 2017; FANTA 2016; FHI 360 2017; FSN Network and CORE Group 2015; Guyon et al. 2015; Krames 2018; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; Mukhalalati and Taylor 2019; Save the Children 2017; UNICEF 2013; USAID Advancing Nutrition 2020; USAID Advancing Nutrition 2021; WHO and UNICEF 2021
4. Ability to demonstrate empathy for each client's situation	FANTA 2016; FSN Network and CORE Group 2015; Guyon et al. 2015; UNICEF 2013
5. Ability to hold bi-directional conversations with clients to assess and analyze a client's situation, particularly related to nutrition and dietary practices	ECSAC 2017; FANTA 2016; FHI 360 2017; Guyon et al. 2015; Save the Children 2017; UNICEF 2013
6. Ability to make suggestions (not commands) of small, doable actions and ways to overcome barriers to progressively lead to the desired behavior change	FANTA 2016; FHI 360 2017; Guyon et al. 2015; MoH 2013; MoH National Food and Nutrition Commission and FANTA III Project 2017; UNICEF 2013
7. Ability to help clients identify and achieve their nutrition goals	ECSAC 2017; FANTA 2016; USAID Advancing Nutrition 2020; USAID Advancing Nutrition 2021; FSN Network and CORE Group 2015

12. Management of Nutrition Services	
Competencies	Resources that Cover These Competencies
1. Ability to respectfully, constructively, and supportively supervise other facility- and community-based workers and volunteers	FANTA 2016; Guyon et al. 2015; UNICEF 2012b; UNICEF 2013b; WHO 2012
2. Ability to work collaboratively with nutritionists/dietitians and other members of the health team to provide quality nutrition services	We were unable to identify specific resources for this competency.
3. Ability to engage relevant community actors (leaders, professionals, members) openly and collaboratively to promote and support nutrition	MoH National Food and Nutrition Commission and FANTA III Project 2017; UNICEF 2012b; UNICEF 2013b
4. Ability to collect, manage, and report nutrition-related data	FANTA 2016; Save the Children 2017; MoH National Food and Nutrition Commission and FANTA III Project 2017; UNICEF 2021b; UNICEF n.d.a; UNICEF and WHO 2023 WHO and UNICEF 2021a
5. Ability to use nutrition data for decision-making	FANTA 2016; UNICEF 2021b; UNICEF n.d.a; UNICEF and WHO 2023; WHO and UNICEF 2021a
6. Ability to design, plan, and manage community nutrition programs	FANTA 2016; FSN Network Social and Behavioral Change Task Force 2014; Mason et al. 2006; TOPS 2016; UNICEF 2012b; WHO and UNICEF 2015c
7. Ability to identify and address barriers to provision of effective, high quality, equitable nutrition services, using a quality improvement or other similar approach	FANTA 2016; FSN Network Social and Behavioral Change Task Force 2014; TOPS 2016; UNICEF 2012b
8. Ability to plan for and manage nutrition commodities, equipment, medicines, and other inputs (e.g., forecasting orders, oversight/management of stock)	FANTA 2016; FSN Network Social and Behavioral Change Task Force 2014; MoH National Food and Nutrition Commission and FANTA III Project 2017



## USAID ADVANCING NUTRITION

Implemented by:  
JSI Research & Training Institute, Inc.  
2733 Crystal Drive  
4<sup>th</sup> Floor  
Arlington, VA 22202

Phone: 703-528-7474  
Email: [info@advancingnutrition.org](mailto:info@advancingnutrition.org)  
Web: [advancingnutrition.org](http://advancingnutrition.org)

June 2023

USAID Advancing Nutrition is the Agency's flagship multi-sectoral nutrition project, addressing the root causes of malnutrition to save lives and enhance long-term health and development.

---

This document is made possible by the generous support of the American people through the the U. S. Agency for International Development. It was prepared under the terms of contract 7200AA18C00070 awarded to JSI Research & Training Institute, Inc. The contents are the responsibility of JSI and do not necessarily reflect the views of USAID or the U.S. Government.