



**USAID**  
FROM THE AMERICAN PEOPLE

# Call to Action for Strengthening Nutrition Content in Pre-Service Training

## PRIORITY COUNTRY-LED ACTIONS FROM A SIX-COUNTRY CONSULTATION

Investing in pre-service training is an especially effective and sustainable approach to improving nutrition services at scale. However, it requires a collaborative effort by all stakeholders—government ministries, academic institutions, professional associations, funders, and technical experts—to ensure curricula prepare frontline health workers<sup>1</sup> to deliver quality nutrition services.

On March 1, 2023, USAID Advancing Nutrition engaged key stakeholders in Bangladesh, the Democratic Republic of Congo (DRC), Ghana, Malawi, Mozambique, and the Kyrgyz Republic in a virtual consultative meeting to better understand the complexity of the challenges and opportunities around strengthening the nutrition components of pre-service training for health workers. More than 100 stakeholders participated, reflecting on the importance of country-led, high-quality, up-to-date, and evidence-based pre-service training.

This brief summarizes the consultation discussions generated, the opportunities highlighted, the lessons shared, and the recommendations jointly formulated as a way forward. Most importantly, it issues a call to action to all stakeholders to better integrate nutrition into pre-service education and more regularly facilitate curriculum review and updates.

**“Delivering quality nutrition service to communities is like constructing a house—focus on the foundation, or it will fall down! The quality of services depends on the quality of health professionals, which depends on the training they received. If we want quality services, we must have good training.”**

— Consultation participant, describing the importance of nutrition in pre-service training for health professionals

## RECOMMENDATIONS

1. Strengthen collaboration between stakeholders (e.g., government Ministries of Health and Education, universities, and professional associations) when reviewing pre-service curricula.
2. Ensure nutrition content of pre-service training aligns with policies, needs, job descriptions, and competencies outlined in job descriptions.
3. Curriculum reviews should examine both nutrition content and training methods to strengthen results.
4. Monitor professional performance to determine competencies to strengthen quality nutrition service delivery.
5. Leverage regional and international knowledge and learnings to close gaps and strengthen the nutrition content of pre-service training.



Midwives training in Ghana

PHOTO CREDIT: KAREN KASMAUSKI/MCSP

1. The cadre of health workers of concern meet the following criteria: (1) trained prior to employment at an academic institution; (2) require professional certification; (3) provide services at the frontline or primary care level; and (4) provides services to populations prioritized for nutrition services (e.g., pregnant and lactating women, children under two years old).

## COUNTRY EXAMPLES OF CHALLENGES

**In Ghana**, changing a policy or curricula to align with a new global standard is a painstaking process, requiring a review process in addition to funding. The Ministry of Health takes the lead, but must consult with the Ghana Education Services, the Ministry of Education, and the tertiary institutions that will teach the content.

**In DRC**, there is no collaboration between the public health schools, research, and teaching units. Education modules can become disconnected from standard pre-service education requirements and job descriptions.

**In Malawi**, the main challenge to routine curriculum review is funding, including for nutrition integration into pre-service training for frontline health workers. For example, some institutions are still teaching outdated approaches, such as community-based therapeutic care, rather than community management of acute malnutrition (CMAM), even though CMAM is the nationally endorsed program.

## RECOMMENDATIONS

Meeting participants described significant challenges to ensuring nutrition included in pre-service training is accurate and up-to-date, but these are not insurmountable. They noted opportunities and assets in each country that national and global stakeholders can leverage, such as skilled human resources, existing policies, pre-service education regulatory bodies, and international commitment to improve health systems.

Cognizant of both the challenges and opportunities, meeting participants formulated the following set of prioritized recommendations to strengthen the nutrition content included in pre-service curricula in their countries:

### 1. Strengthen collaboration between stakeholders (e.g., government Ministries of Health and Education, universities, and professional associations) when reviewing pre-service curricula.

As a cross-cutting topic, nutrition involves a complex web of actors and their priorities and collaboration on nutrition for pre-service education can be ad hoc. Stakeholders emphasized that government Ministries of Health and Education each have their own mandates, policies, and systems regarding nutrition service provision. Professional associations, employers, private sector, and civil society organizations interpret professional standards within their divergent perspectives and priorities, further magnifying the disconnect. (See box 1). Universities in some countries develop pre-service curricula independent of one another, creating inconsistencies and gaps in the nutrition education provided to doctors, nurses, and other frontline health professionals. Without a formal collaboration structure, pre-service curricula reviews only occur when the need is critical or external resources are available.

Overcome fragmentation and close gaps to strengthen nutrition content in pre-service education with the following steps:

#### Map stakeholders

Unlock the complexity of stakeholder collaboration by documenting the different actors involved in pre-service education of frontline health workers and the role each plays in delivering quality services to communities.

#### Create a mechanism for consultation and collaboration

Identify or create the appropriate working group, technical coordination council, or directorate to lead stakeholder consultation in-country. Give that body a clear mandate for collaboration on shared interest. (See box 2).

#### Hold regular multi-stakeholder curriculum reviews

Engage all stakeholders in regular reviews (i.e., at least every five years) to identify the gaps, needs, and challenges of the pre-service curriculum for frontline health workers. Involving the spectrum of stakeholders, including nutrition experts, will ensure that the curriculum is relevant and comprehensive, and implemented consistently across training institutions.

#### Engage existing coordination mechanisms

Aside from formal, government-led coordination, take advantage of existing mechanisms, such as technical working groups focused on health or nutrition and the Scaling Up Nutrition platform, to break down silos. These are spaces for stakeholders to share policy updates and compare experiences, challenges, and innovations.



A student takes notes

PHOTO CREDIT: KAREN KASMAUSKI/MCSP

## 2. Ensure nutrition content of pre-service training aligns with policies, needs, job descriptions, and competencies outlined in job descriptions.

Integrating updated national nutrition guidelines and protocols into the pre-service training of health workers is needed for health workers to perform their jobs correctly. Yet stakeholders noted that: a) the Ministry of Health has not always updated national guidelines to reflect current conditions or international standards, b) pre-service training content can be out-of-sync with the latest national guidelines, and c) health worker job descriptions can be out-of-date (or nonexistent). Without a unified approach to updating nutrition guidelines, job descriptions and pre-service training content, overlapping, and conflicting guidance proliferate.

Additionally, the availability of resources to convene multi-stakeholder pre-service curriculum reviews is a significant obstacle for most countries involved in the consultation. Initiating the lengthy and cumbersome review processes only when donor funding is available delays needed curriculum updates, which makes service provision perpetually lag behind current practice.

Stakeholders should take the following steps to identify the core documents that create the structural framework for nutrition service delivery, cadre-specific professional development, and content coherence:

### **Align national nutrition policies, strategies, and investments with country and international health and development goals**

Review national policies to ensure they align with international goals and commitments related to nutrition.

### **Determine core competencies for relevant cadres**

Use data from human resource policies and labor market assessments to identify the health workers providing nutrition services, and harmonize their functional responsibilities, and required knowledge and skills. Use existing core competency lists or develop country-specific ones based on context and need (See box 3).

### **Budget national resources for regular multi-stakeholder curriculum reviews**

Demonstrate government commitment to quality nutrition services by including resources for regular pre-service curriculum reviews within the relevant ministry's budget.



Skills lab for midwives

PHOTO CREDIT: KATE HOLT/MCSP

## BOX 2

### **A SUCCESS STORY FROM THE KYRGYZ REPUBLIC**

When the right people meet to work through the barriers, change can emerge. On May 13, 2023, Kyrgyz Republic Minister of Health Baatyrova G.M. signed an order to establish a working group with the mandate to update training programs related to nutrition and anemia in women and children, as well as responsive care and early learning of infants and young children. The meeting was a catalyst for the establishment of this working group. The group comprises eight members, including representatives from the Ministry of Health and staff from local medical educational institutions. The main objective of this working group is to enhance the quality of healthcare services by strengthening the knowledge and skills of health workers and ensuring they receive comprehensive, up-to-date training in the areas of nutrition, anemia, responsive care, and early learning education. The established working group is responsible for updating the training programs in these technical areas by June 2023 and then evaluate the curricula currently being used in medical educational institutions, and based on the findings, approve the revised curricula by September 2023.



Midwifery training in Madagascar

PHOTO CREDIT: KATE HOLT/MCSP

## BOX 3

### COMPETENCY CHECKLISTS

Countries can use and/or adapt global competency checklists to develop country-specific nutrition core competencies:

- The [Competency Verification Toolkit: Ensuring Competency of Direct Care Providers to Implement the Baby-Friendly Hospital Initiative](#) (WHO 2020) was developed to assist countries and health care systems to link breastfeeding competencies to clinical practice.

Two tools for assessing nutrition competencies in pre-service training content also contain core competencies practitioners can use to develop country-specific nutrition competencies:

- [Tool and Guide for Reviewing the Nutrition Content of Pre-Service Training Curricula](#) (USAID Advancing Nutrition 2023)
- [A tool for mapping of maternal, infant, and young child nutrition competencies](#) (Becker et al. 2022)

### 3. Curriculum reviews should examine both nutrition content and training methods to strengthen results.

The effectiveness of pre-service curricula relies on the quality of education provided by the training institutions.

Improve the quality and relevance of pre-service nutrition education through the following:

#### Conduct a needs assessment to identify gaps and prioritize needs

Practitioners can also use competency checklists (see box 3) to identify gaps in nutrition content in pre-service training by comparing the content of the curricula with competency checklists. Assessing the needs of current health workers to identify gaps in knowledge and skills can help to identify what type of content is needed in pre-service training. A nutrition situational analysis, including review of key nutrition indicators, can help to identify priority topics to include in the curricula.

#### Align nutrition content with current nutrition science

Use up-to-date global and domestic nutrition standards to revise pre-service curriculum for frontline workers, drawing from competency checklists and nutrition modules (e.g., *Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals* [WHO 2009]). Connect nutrition research findings from national and international academic institutions to training curriculum. Curricula must teach the basics, but should also include contemporary topics, such as nutrition and climate change.

#### Ensure that content and practice take into consideration local variability

Engage diverse groups in the development of the pre-service training content to ensure that content takes into consideration gender equality, disability inclusion, and urban-rural differences and that students are prepared to adapt to the context, local challenges, and individual needs. Relevant competencies may be best addressed through internships, practicums, and field exercises in community clinics and settings. Ensure the participation of local actors who know the context best.

#### Identify a variety of opportunities for integrating nutrition content

Rather than only introducing or updating a standalone nutrition course or module, look for opportunities to also integrate up-to-date nutrition content into other existing and relevant courses. This can help to avoid the challenge of too many courses in each curriculum.

#### Enhance the capacity and teaching methods of pre-service education teachers and tutors

Provide advanced training and mentoring to pre-service education teachers and tutors to strengthen their capacity in modern and innovative training methodologies (e.g., digitizing training content, using role playing for practicals). (See box 4). Establish systems for regular improvement of the knowledge and skills of tutors based on current science and global standards so they can effectively teach frontline service providers and the future workforce. When institutions develop new protocols or guidelines or provide in-service trainings, invite tutors to participate to ensure they can equip themselves with the most current information.

#### 4. Monitor professional performance to determine competencies to strengthen for quality nutrition service delivery

Establish feedback mechanisms to monitor whether frontline health workers absorb key nutrition knowledge and skills and put them to use:

##### Strengthen competency-based licensing

Move toward competency-based licensing and renewal of government and professional qualifications to ensure the professionals are exercising the nutrition-related core competencies required of their role.

##### Engage communities

Since communities are the end users of health and nutrition services, engage them in consultations to learn their views of the strengths and challenges in the quality of nutrition services received from frontline health workers.

#### 5. Leverage regional and international knowledge and learnings to close gaps and strengthen the nutrition content of pre-service training.

Support national efforts through information sharing, guidance distribution, and mentoring so that countries can learn from one another and continuously elevate the content quality of pre-service education for frontline health workers.

##### Facilitate international exchange

Create national and international consultation platforms for stakeholders to share nutrition research findings, information, and experience.

##### Develop guidelines for a simplified curriculum review process

Provide model curriculum review guidance to simplify the process and avoid lengthy delays. Outline stakeholder roles and responsibilities, process timelines and milestones, and research information to collect in advance for an efficient pre-service curriculum review.

##### Distribute model clinical nutrition guidelines

Make clinical nutritional guidelines based on up-to-date information available to facilitate their uptake within countries.



Nursing students watch a breastfeeding demonstration

PHOTO CREDIT: KAREN KASMAUSKI/MCSP

#### BOX 4

### A VIRTUAL PRE-SERVICE TRAINING PROGRAM IN MOZAMBIQUE

With financing from UNICEF, Lurio University, a public university in Nampula Province, Mozambique, created a virtual training program for students studying to become nutritionists. The process involved a comprehensive needs assessment that collected feedback from students, teachers, professionals from various fields, employers, and professionals with different levels of experience. This helped to identify the essential topics to cover and competencies to build in the training program.

Based on the assessment, the university developed a virtual training program. They piloted the program with 40 students who completed the program and evaluated the quality. The program had a completion rate of 90 percent, compared to online courses that typically have a completion rate of 20–30 percent. More than 70 percent of the students expressed a willingness to pay the cost of the course.

With feedback from the pilot, Lurio University made improvements and adjustments to the program. They added additional modules on topics such as the relationship between theory and practice, political determinants of health, the correlation between health and the economy, data analysis, food systems, evidence-based programming, program management, leadership and communication, ethics and professionalism, dissemination of information, and entrepreneurship.

## A CALL TO ACTION

Implementation of the recommendations and creating a breakthrough in the current situation will only be successful if each of the diverse stakeholders play their part in concert with the others and there is an enabling environment (e.g., political commitment at the highest level) to do so. The participants in the consultation meeting issued the following call to action to stakeholders to better integrate nutrition into pre-service education:

### The Ministry of Health

- In close collaboration with the Ministry of Education, convene a multi-stakeholder mechanism to coordinate the technical review of pre-service curricula; ensure adequate budget resources for these regular reviews.
- Align national nutrition policies, strategies, and investments with global goals and commitments related to nutrition.
- Conduct an assessment of the cadres of health workers most appropriate to providing frontline nutrition services and identify the core nutrition competencies required.
- Lead in developing nutrition content for pre-service training programs that align with national job descriptions, up-to-date national nutrition policies and strategies, and the core nutrition competencies identified.

### The Ministry of Education

- In close collaboration with the Ministry of Health, contribute to the development of a multi-stakeholder mechanism to support this process.
- Oversee training institutions to ensure that course syllabi and teaching methods support strengthening of nutrition content in pre-service training programs.

### Universities and Training Institutions

- Review the nutrition content in pre-service course syllabi to ensure that it meets specifications outlined within the national curriculum.
- Share research findings with other stakeholders to benefit from the most direct in-country knowledge.
- Engage students in health and nutrition-related research to expose them to current research findings that can advance their nutrition knowledge.
- Elicit feedback from professors and tutors to understand challenges and gaps and provide advanced learning opportunities to improve their capacities to teach nutrition content and upgrade their teaching methods.
- Expand options for field-based training by offering community rotations and practicums for students to develop practical understanding and skills for working with communities.
- Engage communities to understand their nutrition-related needs and share their views on the quality of services they are receiving from frontline health workers. Use community feedback mechanisms and consult community leadership to learn of existing strengths and challenges in nutrition services.

### Professional Associations

- Monitor the effectiveness of nutrition content in pre-service training through competency-based licensing and membership.
- Poll members, particularly recent graduates, to assess their satisfaction with the content and quality of education they received to prepare them to provide nutrition services; share those results with training institutions to improve the quality of pre-service training.
- Make use of the tools, competency checklists, and best practices available globally, as well opportunities to upgrade knowledge frequently such as continuous professional development courses, to elevate the knowledge and skills of their membership.

### Donors, Implementing Partners, and International Organizations

- Connect in-country professionals to best practices in other places through meetings and working groups.
- Develop and share standards, competency lists, checklists, and curriculum review guidelines for adoption by in-country stakeholders.
- Provide financial resources, technical assistance, and advocacy to support governments to convene meetings, train personnel, conduct data collection, and facilitate training exercises.



Nurses receive training in Ghana

PHOTO CREDIT: KAREN KASMAUSKI/MCSP



Demonstration during training for nurses

PHOTO CREDIT: KAREN KASMAUSKI/MCSP

## ACKNOWLEDGEMENTS

USAID Advancing Nutrition would like to thank all the people who contributed to the insights and recommendations contained in this brief. The following individuals contributed to the writing of this brief (in alphabetical order): Cholpon Abdimalipova, Mapatano Mala Ali, Esi Foriwa Amoafu, Gifty Ampah, Higino Andre, Zenus Alfa Banda, Kathryn Beck, Sofia Costa, Ridaudo Daudo, Geeta Rani Debi, Chawa Jere, Margaret Kinghorn, Sascha Lamstein, Tursun Mamyrbayeva, Frederique Wandji, Ann Miceli, Victor Mogre, Roger Baulana Musubi, and Amanda Yourchuck.

We would also like to acknowledge the critical contributions made by stakeholders who participated in the virtual convening on March 1, 2023, and key discussions following the convening, the outputs of which informed the recommendations and priority actions in this brief.

## REFERENCES

Becker, Genevieve E., Jennifer Cashin, Tuan T. Nguyen, Paul Zambrano. 2022. "Expanding Integrated Competency-Focused Health Worker Curricula for Maternal Infant and Young Child Nutrition." *Education Series*. 12(8):518. <https://doi.org/10.3390/educsci12080518>

USAID Advancing Nutrition. 2023. *Tool and Guide for Reviewing the Nutrition Content for Pre-Service Training Curricula*. Arlington, VA: USAID Advancing Nutrition. <https://www.advancingnutrition.org/resources/tool-and-guide-reviewing-nutrition-content-pre-service-training-curricula>

WHO (World Health Organization). 2009. *Infant and Young Child Feeding: Model Chapter for Textbooks for Medical Students and Allied Health Professionals*. Geneva: WHO. <https://apps.who.int/iris/handle/10665/44117>

WHO (World Health Organization) and UNICEF (United Nations Children's Fund). 2020. *Competency Verification Toolkit: Ensuring Competency of Direct Care Providers to Implement the Baby-Friendly Hospital Initiative*. Geneva: WHO. <https://www.who.int/publications/item/9789240008854>.



**USAID**  
FROM THE AMERICAN PEOPLE

### USAID Advancing Nutrition

Implemented by  
JSI Research & Training Institute, Inc.  
2733 Crystal Drive  
4th Floor  
Arlington, VA 22202

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

August 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 brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of JSI Research & Training Institute, Inc. (JSI), and do not necessarily reflect the views of USAID or the United States government.