

# FANTA III

FOOD AND NUTRITION  
TECHNICAL ASSISTANCE



**USAID**  
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REPUBLIC OF GHANA  
MINISTRY OF HEALTH



GHANAIANS AND AMERICANS  
IN PARTNERSHIP TO FIGHT HIV/AIDS  
**PEPFAR**

## Integration of Nutrition Indicators into Ghana's HIV and Tuberculosis Monitoring and Evaluation System

### Summary Report

April 2013

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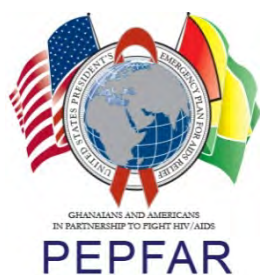
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## Abbreviations and Acronyms

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AIDS	Acquired Immunodeficiency Syndrome
ART	antiretroviral therapy
ARV	antiretroviral (drug)
BMI	body mass index
cm	centimetre(s)
FANTA	Food and Nutrition Technical Assistance III Project
FBF	fortified-blended food
GHS	Ghana Health Service
HIV	human immunodeficiency virus
HMIS	health management information system
kg	kilogram(s)
M&E	monitoring and evaluation
MAM	moderate acute malnutrition
mm	millimetre(s)
MUAC	mid-upper arm circumference
NACP	National AIDS Control Programme
NACS	nutrition assessment, counselling, and support
NTP	National Tuberculosis Control Programme
PEPFAR	U.S. President’s Emergency Plan for AIDS Relief
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission of HIV
RUTF	ready-to-use therapeutic food
SAM	severe acute malnutrition
TB	tuberculosis
USAID	U.S. Agency for International Development
WFP	World Food Programme

## 1 Background

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Global efforts to strengthen and scale up HIV prevention, treatment, care, and support increasingly integrate food and nutrition interventions. Given the range of activities implemented, and the multiple stakeholders requiring monitoring and evaluation (M&E) information, there is a wide range of possible M&E indicators. It is therefore necessary to harmonise the indicators allowing for consistency and comparability across countries and between programs, as well as for stakeholders to track progress in integrating nutrition into HIV services.

Since 2010, the Ghana Health Service (GHS) has been integrating nutrition assessment, counselling, and support (NACS) into routine HIV services with the support of partners (the U.S. Agency for International Development [USAID]/Ghana, the Food and Nutrition Technical Assistance III Project [FANTA], the DELIVER Project, and the World Food Programme [WFP]/Ghana). In December 2011, a rapid review of 11 NACS pilot sites in Ghana was conducted. The review aimed to assess strengths, challenges, and opportunities in these sites to inform the scale-up of NACS throughout other facilities in the country. One of the key findings of the rapid review was the need to improve integration between nutrition and HIV systems as a way of maximising resource effectiveness. An important opportunity identified in the review included integrating nutrition indicators into the routine HIV M&E system.

The GHS and the Ghana AIDS Commission recognise the critical role that food and nutrition plays in HIV care and treatment, thus the inclusion of nutrition in the national HIV strategic plan for 2011–2015. The GHS, with technical support of partners, commissioned the activities outlined in this report to strengthen efforts to integrate nutrition into HIV treatment, care, and support, including integrating nutrition indicators into HIV planning and M&E for effective tracking of progress and decision making at the different levels of service delivery.

## 2 Objective

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This report provides a summary of the activities that were completed to strengthen the capacity of the National AIDS Control Programme (NACP), GHS/Nutrition, and the National Tuberculosis Control Programme (NTP) to reach agreement on global NACS indicators and collection of indicators through national and subnational tools and the health management information system (HMIS), ensuring that information on nutrition inputs, outputs, and outcomes within HIV services are adequately and consistently reported.

## 3 Activities and Methods

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The following activities were completed as part of this assignment:

1. A desk review of relevant documents of global, national, and subnational NACS M&E tools, policies, and strategies
2. Field visits of selected NACS facilities to identify gaps, opportunities, and challenges for harmonising NACS indicators
3. Collaboration with NACP, GHS/Nutrition, NTP, and partners to determine how to integrate nutrition indicators into revised tools, resources, and training materials

The assignment was performed in two phases.

1. In the first phase, a desk review of relevant M&E documents was performed to examine indicators relating to NACS implementation, integration, and performance in Ghana in order to understand the context, structure, and performance of NACS services. This included a review of various global and national documents and reports, including the Livelihoods and Food Security Framework, the Nutrition Care Framework, the 2012 Framework for Prevention of Mother-to-Child Transmission of HIV (PMTCT), the Summary of Harmonised Indicators for Nutrition and HIV, NACS guidelines and/or protocols, and other reports on the national NACS program. The desk review also involved reviewing various national HIV and tuberculosis (TB) program documents, such as the strategic framework, and M&E tools and frameworks.
2. The second phase involved field visits to selected NACS implementation sites, including Effie Nkwanta (Western Region), St. Francis Xavier (Central Region), Princess Marie Louis (Greater Accra Region), and Attua and St. Martins Hospitals (Eastern Region). During the site visits, observations were made and key informant interviews were conducted with service providers to assess their basic awareness of the role of nutrition interventions as part of HIV treatment, care, and support. This aimed to identify available tools and opportunities and challenges associated with data capturing at the facility levels, as well as to identify systems that have been put in place to facilitate the process of capturing and disseminating NACS indicators.

## 4 Findings

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### 4.1 Desk Review

The M&E framework developed by the Ghana AIDS Commission helps focus the selection of M&E indicators on nationally defined strategic objectives and targets, and guides the systematic collection, processing, and analysis of data at various levels. The framework also facilitates the standardisation of M&E methods and tools among multiple actors and provides a platform for partnership, networking, and collaboration among national and subnational stakeholders. As part of the national HIV M&E system, HMIS data are collated through the NACP. This consists of service delivery data related to counselling and testing, PMTCT; antiretroviral therapy (ART), prophylaxis and management of opportunistic infections, blood safety, and prevention and management of sexually transmitted infections. Nutrition indicators are not collected through the current system managed by NACP.

At the global level, a range of program approaches are used to provide nutrition services to people living with HIV (PLHIV) and HIV-affected households. The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) focuses on integrating NACS into facility-based HIV care and treatment. WFP provides food support to ART clients and their households, and provides food as a safety net to HIV-affected households as well as households that support orphans and vulnerable children. In several countries, UNICEF supports provision of therapeutic food for children with severe acute malnutrition (SAM) and links these services to PMTCT and paediatric HIV services. The Global Fund to Fight AIDS, Tuberculosis and Malaria supports a range of nutrition interventions based on country proposals. For all of these programs, there are frameworks developed to summarise the services provided, including nutrition care, PMTCT and infant and young child feeding, and economic strengthening/food security activities.

Indicators differ from one country to the other and from one HIV program to the other due to the types of activities implemented and stakeholders. This can make it difficult to compare progress and results consistently across countries or programs, or even to aggregate results at the regional or global level, hence the need for harmonised indicators at the country level.



As NACS services are introduced and scaled up in Ghana, the GHS has adopted the following indicators, which are reported on a monthly basis:

- Number and proportion of PLHIV and/or TB patients who receive nutrition assessment
- Number and proportion of PLHIV and/or TB patients who receive nutrition counselling
- Number and proportion of PLHIV and/or TB patients who have SAM, who have moderate acute malnutrition (MAM), who have healthy body weight (normal), and who are overweight and obese
- Number and proportion of undernourished PLHIV and/or TB patients who receive therapeutic or supplementary food at any point during the reporting period
- Number of service providers who receive training on nutrition

These indicators are currently collected separately, and are not reported as part of the existing national HIV or TB M&E system.

## 4.2 Site Visits

Among facilities visited, the number of clients attended to on a typical clinic day ranged from 20 to 100. Client flow throughout the facilities and the sequence by which clients received services was not uniform among facilities visited; according to the service providers interviewed, this makes data capturing difficult.

Data capturing and report submission are done manually using data forms or electronically using a database designed by the data officers in facilities with access to a computer. At the end of the month, the NACS focal person, usually a nutrition officer or data management officer, sums up the various categories of data, and the generated report is sent to the district health management team, then to the regional level, and then to the nutrition department at the national level. Because there is no section within the client folders for capturing NACS data, the national databases used at the various levels to capture HIV and TB information does not have columns for capturing the NACS information. The information is therefore not captured or reported as part of the national data for services provided to PLHIV or TB patients.

Some of the challenges identified by service providers as affecting the integration of nutrition indicators into the national HIV M&E system included:

- Heavy workload and insufficient staffing; in addition to providing services at the ART clinic, some of the service providers carry out other responsibilities within the facilities
- Lack of computers for data capturing in some of the facilities, resulting in manual compilation of the monthly report
- Re-training NACP M&E and data officers on capturing the harmonised indicators into the M&E system

Existing opportunities for integrating nutrition into the HIV and TB M&E systems include:

- The interest of service providers in the inclusion of NACS in the routine services provided to PLHIV. This will facilitate stakeholder engagement and ownership of NACS.
- The possibility of incorporating nutrition information into the existing client folders and forms for the next reprinting. This will limit the reporting burden, increase the likelihood of capturing NACS data, and emphasise that nutrition is key to health outcomes of PLHIV.
- An enabling environment—the HIV M&E system and structure is already in place; there is planned national scale-up of NACS; there is a national HIV framework and an HMIS in place; and the NTP has incorporated NACS indicators into the TB M&E tools.

## 5 Recommendations

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1. Because efforts to scale up NACS will cover half of all ART facilities in the country in 2013, there is an urgent need for the agreed indicators to be integrated into the national HIV M&E systems.
2. All facilities rendering ART and TB services should capture the body mass index (BMI) of all adults and the mid-upper arm circumference (MUAC) of children, pregnant and lactating women, and adults who are too weak to stand, at every visit to the clinic.
3. To effectively integrate NACS indicators into the national HIV and TB M&E systems, nutrition data and reports should be managed together with all the other HIV and/or TB data by the assigned data officers at the various levels.
4. For ease in data capturing at the facility level, client flow should be streamlined to ensure that the sequence in which clients receive services reflects how data are collected and used.
5. Capitalise on the existing enabling environment for integrating nutrition indicators. This includes the HIV and TB systems and structures already in place, the planned national scale-up of NACS, and the national HIV and TB framework, which prioritises nutrition.

## 6 Actions Taken to Address Some of the Recommendations

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A series of meetings were conducted between NACP, GHS/Nutrition, NTP and partners (USAID/Ghana, FANTA, the DELIVER Project, and WFP/Ghana) to identify and agree on portions of the client folders and report forms where nutrition indicators should be included. Partners have also proposed that as the new client folders and reports are being reprinted by NACP, agreed-on nutrition indicators should be incorporated. The NACP M&E team has identified how and where nutrition indicators can be captured within the HIV database, including the HMIS. NACS training materials have also been updated to capture the agreed-on integrated M&E system. See Annex 1 for the proposed integrated national HIV program M&E tools.

The NTP has also acknowledged the importance and need for integrating nutrition into the TB M&E system. Thus, NTP has adopted lessons learned from the process of integrating nutrition indicators into the HIV system and initiated the process of integrating nutrition indicators into the TB M&E system. NTP has already incorporated NACS indicators into the paediatric and adult client cards and reporting formats at the facility, district, regional, and national levels. See Annex 2 for the integrated NTP M&E tools.

## 7 Next Steps

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GHS/Nutrition and NACP, in collaboration with partners, will conduct the following activities to facilitate the integration of nutrition indicators into the HIV and TB M&E systems:

1. Sensitise all stakeholders on the importance of integrating nutrition indicators into the national HIV and TB M&E systems.
2. Ensure that all agreed-on nutrition indicators are included in the reprint of new client folders and reports, and are captured in the HIV and TB databases at the facility, district, region, and national levels.

3. Orient all HIV M&E data officers and service providers at the various levels on the use of the tools in which nutrition indicators have been integrated.
4. Conduct follow-on supportive supervision to the facilities to ensure that data are accurately captured and reported using the new integrated tools.
5. Promote the systematic integration of quality improvement systems within health facilities to identify and respond to situations that impede the collection and dissemination of M&E data.
6. Conduct a review of implementation using the integrated tools to document lessons learned and make suggestions for improvements.

## Annex 1. Integrated National HIV Program Monitoring and Evaluation Tools

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### Recommended NACS Indicators for Integration into the National HIV M&E System

#### Nutrition Care and HIV:

- The number and proportion of PLHIV in care and treatment that received nutrition assessment during the reporting period
- The number and proportion of PLHIV in care and treatment that received nutrition counselling during the reporting period
- The number and proportion of undernourished PLHIV that received therapeutic or supplementary food at any point during the reporting period

#### PMTCT and Infant Feeding:

- The number and percentage of HIV-positive women that have a MUAC < 220 mm at the first postnatal visit
- The number and percentage of HIV-exposed infants with acute malnutrition at the 12-month follow-up visit
- The percentage of HIV-exposed infants that are exclusively breastfed at 3 months of age, the percentage of HIV-exposed infants that are on replacement feeding at 3 months of age, and the percentage of HIV-exposed infants that are on mixed feeding at 3 months of age (these are already being captured as part of the M&E system)

### Proposed Indicators for Integration into HIV Data Collection Tools

#### Client Folders:

1. Adults Folder
  - a. Initial Adult Assessment Form
    - i. As part of the **Vital signs** on page 1, add **BMI** followed by **MUAC** (for pregnant women or clients who are too weak to stand) after portion where the weight (kg) is recorded.
    - ii. On page 4, under the **Plan** include **Nutrition Care: SAM, MAM, Normal, Overweight and Obese**. Also indicate: “**if SAM or MAM use the Client Management form on page v for detailed record.**”
    - iii. On page 4 (**Plan**) insert **Nutrition Counselling**. Modify item 6 “**Adherence Counselling**” to have 2 parts: Adherence Counselling and Nutrition Counselling Yes/No, if Yes, Name of Nutritionist.....
2. Adult Follow-Up Visit Form
  - a. As part of the **Vital signs** on page 1, add **BMI** followed by **MUAC** (for pregnant women or clients who are too weak to stand) after portion where the weight (kg) is recorded.
  - b. On page 3, under the **Plan** include Nutrition Care: SAM, MAM, Normal, Overweight and Obese. Also indicate: “**if SAM or MAM use the Client Management Form on page v for a detailed record.**”

- c. On page 4 (**Plan**) insert **Nutrition Counselling**. Modify item 6 “**Adherence Counselling**” to have 2 parts, Adherence Counselling and Nutrition Counselling Yes/No, if Yes, Name of Nutritionist.....
3. Insert the NACS Client Management Form on page v which should come right after page iv (**Lab Investigations**) in the client folder.

**Paediatrics Folder:**

1. Initial Paediatric Assessment Form
  - a. On page 1, add “**length at birth (cm)**” after Birth Weight (kg).
  - b. On page 1, add **MUAC (cm)** as part of the **vital signs** in the blank column after **Height (cm)**.
  - c. On page 4, under the **Plan** include Nutrition Care: SAM, MAM, Normal, Overweight and Obese. Also indicate: “**if SAM or MAM use the Client Management Form on page iv for detailed record.**”
2. Art Paediatric Follow-Up Form
  - a. On page 1, add **MUAC (cm)** as part of the **vital signs** in the blank column after **Height (cm)**.
  - b. On page 4, under the **Plan** include Nutrition Care: SAM, MAM, Normal, Overweight and Obese. Also indicate: “**if SAM or MAM use the Client Management Form on page iv for detailed record.**”
3. Insert the NACS Client Management Form on page iv right after page iii (**Lab Investigations**).

## NACS Client Management Form

Visit no.	Date	Weight (kg)	MUAC (cm)	BMI	Medical complications? Y/N	Appetite?	Bilateral pitting oedema? Y/N	Pregnant? Y/N or N/A	Counselled on diet? Y/N	Nutritional status					Food Support Provided				Exit reason																						
										SAM Inpatient	SAM Outpatient	MAM	Normal	Overweight/ Obese	RUTF (Sachets)	FBF (kg)	Enabler's Package	Food Support	Graduated/ Recovered (G)	Defaulted (D)	Died (X)	Referred (R)	Non-recovered																		
1																																									
2																																									
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**Graduated/Recovered (G)** = Has attained the target weight or BMI  
**Defaulted (D)** = Is absent for two consecutive visits (on the third visit)  
**Died (D)** = Died while receiving NACS treatment  
**Referred (R)** = Referred to continue treatment in another facility  
**Non-Recovered (NR)** = Has failed to attain the discharge criteria

## NACP ART Data Form

Name of Site..... Name of District..... Region.....

Month/Year.....

Indicators	Adult		Paediatric		Total
	Male	Female	Male	Female	
# of new clients receiving HIV clinical care					
# of new clients on co-trimoxazole prophylaxis					
# of new clients started on ARVs					
# of ART clients screened for TB					
# of positive clients with TB on ART					
# of clients who stopped treatment due to death					
# of clients who stopped treatment due to adverse clinical status/event					
# of clients who stopped treatment due to loss to follow-up					
# of clients on second line					
<b># of clients who received nutrition assessment</b>					
<b># of clients who received nutrition counselling</b>					
<b># of clients who have SAM</b>					
<b># of clients who have MAM</b>					
<b># of clients who have healthy body weight (normal)</b>					
<b># of clients who are obese or overweight</b>					

Form Completed by: Name.....

Designation.....

Signature.....

Phone Number.....

Remarks:.....

## NACS Logistics Information

Site: \_\_\_\_\_ Month: \_\_\_\_\_ Year 20[\_\_\_][\_\_]

	# of patients on specialised foods	Quantity brought forward (A)	Quantity received this month (B)	Total A+B (C)	Quantity consumed (D)	Quantity damaged (E)	Quantity expired (F)**	Total of D+E+F (G)	Balance (C-G)	Orders***
FBF										
RUTF (Plumpy'Nut)										

### Instructions

\*\* Expiry: report amount of products where expiry date is in the next 2 months and likely to go to waste.

\*\*\* Orders should be submitted as need arises—give a 2-week lead time.

**Quantity: For all food apart from RUTF and WaterGuard®, quantity is in bags. Quantity for RUTF is sachets, and bottles for WaterGuard®.**

1 bag of any of the following products (First Food, Foundation Plus, or Advantage) is allowed for demonstrations.

Comments: \_\_\_\_\_

**Prepared By: dispensing officer – (nutritionist/nurse/pharmacist)**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



## Annex 2. Integrated National Tuberculosis Control Programme Monitoring and Evaluation Tools

### 1. Indicators included in the TB paediatrics client card (TB01P)

- a. **Enrolment Information:** On page 1 of the card, include Nutrition Status: SAM, MAM, Normal, Overweight or Obese
- b. **Follow up:** Page 1 of the card includes two rows under the row with the weight measurement, MUAC and **bilateral pitting oedema**. The two additional indicators are monitored on each monthly follow-up visit

Another row should be included after the row with any TB medications missed. The row should read “**referred for nutrition counselling? Yes/No**”

### 2. List of nutrition indicators included in the NTP reporting format at the facility, district, regional, and national level

Indicators	Adult		Paediatric		Total
	Male	Female	Male	Female	
# of TB clients who received nutrition assessment and counselling					
# of TB clients who have SAM					
# of TB clients who have MAM					
# of TB clients who have healthy body weight (normal)					
# of TB patients provided with specialised foods					