Nutrition Assessment, Counseling, and Support (NACS)

A User's Guide

MODULE 5. Monitoring and Evaluation of NACS Services

MAY 2018

In this module

What is NACS?

What are M&E?

Why are M&E necessary for NACS?

Why is an M&E framework and plan important for NACS?

What indicators should be measured to monitor and evaluate NACS activities/ services?

How are indicators for NACS selected?

What are the steps in the facility-level NACS M&E process?

How should facility-level NACS information be collected and reported?

What tools can be used to collect NACS data?

Who should collect the data and how often?

Why is data quality important?

How and why are indicator targets set?

How are NACS data used?

How are NACS data reported and disseminated?

What additional tools are available to support NACS M&E?

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This module introduces health care providers and their managers to the basic principles of monitoring and evaluation (M&E) and why they are important for nutrition assessment, counseling, and support (NACS) activities. Specifically, this module provides guidance on how to select indicators for an M&E framework and how to collect, analyze, and use data to help health care providers monitor the performance and quality of NACS services at the health facility and community levels.

NACS glossary

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What is NACS?

NACS is a client-centered, programmatic approach for integrating a set of priority nutrition interventions into health care services at the health facility and community levels. NACS seeks to strengthen the health care system by linking health facilities with community-based organizations to ensure that malnourished clients and those at risk of malnutrition receive the treatment and support they need. This includes linking clients to nutrition-sensitive interventions, such as economic strengthening and livelihood activities, to help address underlying barriers to optimal health and nutrition. NACS addresses nutrition on a continuum of care across the life cycle, beginning in infancy and continuing throughout an individual's life, with a particular emphasis on key periods when an individual is most vulnerable to poor nutrition (e.g., under 5 years of age, during adolescence, during pregnancy).
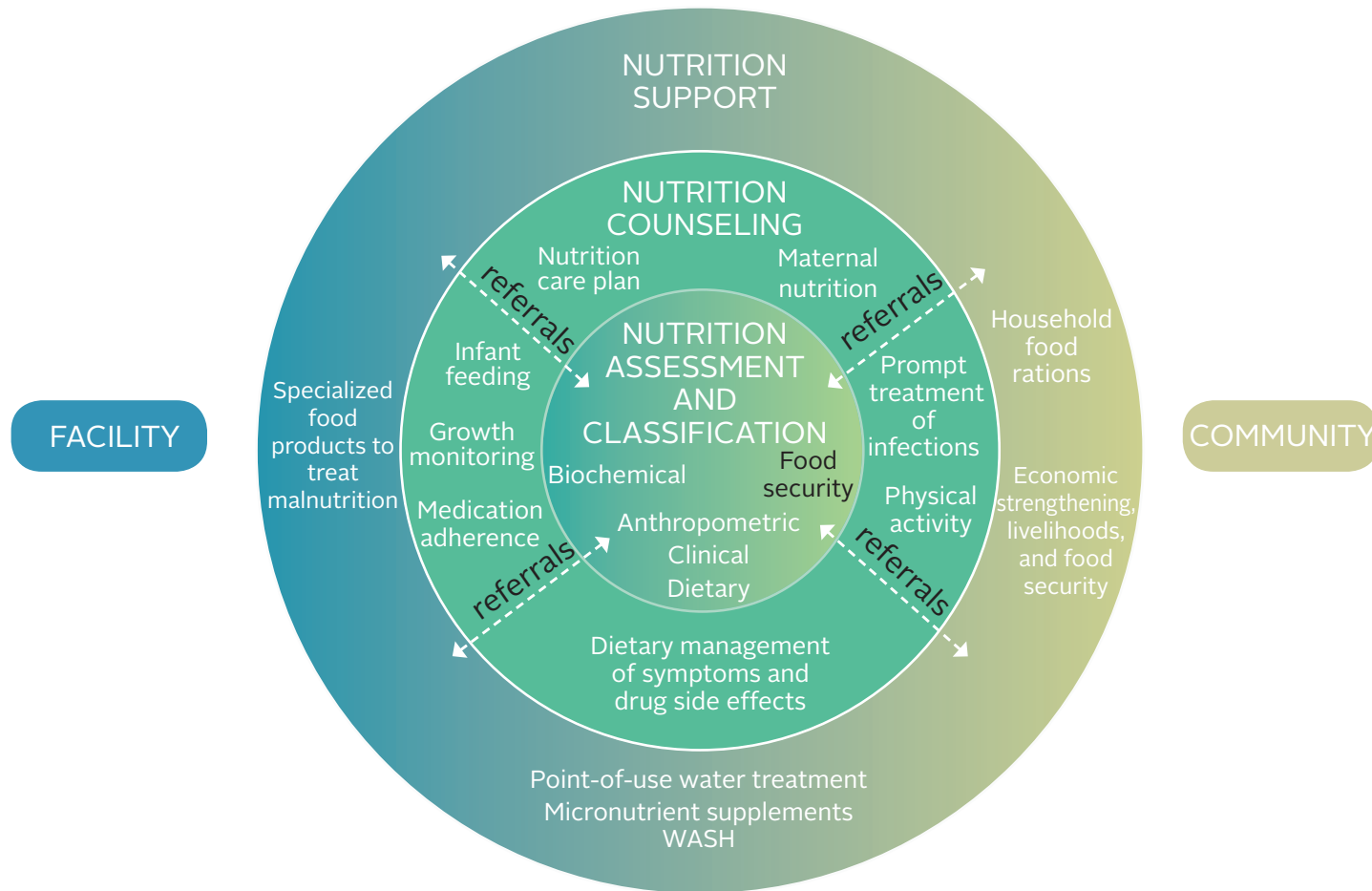
The **primary components of NACS** are:

1) nutrition assessment and classification

2) nutrition counseling

3) nutrition support within the health care continuum

Figure 1 shows the interaction among the three NACS components, as well as the roles that health facilities and communities play in implementing NACS. Because NACS is a comprehensive approach, no component of the approach should be implemented without the others (FANTA 2016a). See Module 1 of the *NACS User's Guide* for more information on the NACS approach.

Module 1 of the NACS User's Guide

FIGURE 1. COMPLEMENTARITY OF NACS COMPONENTS AT THE FACILITY AND COMMUNITY LEVELS

NUTRITION SUPPORT

NUTRITION COUNSELING

NUTRITION ASSESSMENT AND CLASSIFICATION

Nutrition care plan

Maternal nutrition

Infant feeding

Prompt treatment of infections

Growth monitoring

Biochemical

Food security

Medication adherence

Anthropometric
Clinical
Dietary

Physical activity

Dietary management of symptoms and drug side effects

Specialized food products to treat malnutrition

Household food rations

Economic strengthening, livelihoods, and food security

Point-of-use water treatment
Micronutrient supplements
WASH

referrals

FACILITY

COMMUNITY

Source: FANTA. 2012. *Defining Nutrition Assessment, Counseling, and Support (NACS). Technical Note No. 13.* Washington, DC: FHI 360/FANTA.

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What are M&E?

Performance monitoring: Performance monitoring is the ongoing, systematic collection of performance indicator data and other quantitative or qualitative information to indicate whether implementation is on track to achieve desired results. Performance monitoring includes monitoring outputs as well as project and strategic outcomes (USAID 2016).

Performance evaluations: Performance evaluations encompass a broad range of evaluation methods. They often incorporate before-and-after comparisons. In certain instances, impact evaluations with a rigorously defined counterfactual[1] are conducted to analyze what would have happened if the intervention had not occurred. Performance evaluations may address descriptive,

normative, or cause-and-effect questions: what has a particular project or program achieved (at any point during or after implementation), how is it being implemented, how is it perceived and valued, are the expected results occurring, and other questions that are pertinent to design, management, and operational decision-making (USAID 2016).

In summary, monitoring is an ongoing, routine process to assess a program's progress towards achieving planned goals and objectives in order to make timely decisions and necessary changes, whereas evaluations are not continuous; rather, it is a periodic assessment of the overall impact and relevance of the program.

Why are M&E necessary for NACS?

NACS data are used to manage clients and ensure that the best possible care is being provided. Having reliable data is critical to providing the right kind of care at the right time. The nutrition information collected at contact points throughout the health service delivery continuum of care can be used to determine and monitor clients' nutritional status and survival outcomes. This information can also help facilitate discussions between clients and health care providers on the role of nutrition in relation to health care and treatment. In addition, the data can be used in aggregate to review how well services are being provided and to determine whether the intended outcomes are

being achieved. This type of data is also reported to governments and donors.

Health care providers use NACS data to determine clients' nutritional status; counsel clients on dietary options; discuss with clients the components of care; decide whether treatment for malnutrition is necessary and, if so, what type of treatment should be provided; and evaluate client progress (which informs the type of counseling provided to clients). It is recommended that health care providers review Clients' NACS data at each contact to monitor client nutritional status and to ensure the completeness and accuracy of clients' health information.

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1 For more information on an evaluation counterfactual see guidance from USAID at http://pdf.usaid.gov/pdf_docs/Pnadw119.pdf.

Program managers use aggregated NACS data to measure specific outputs and outcomes to identify gaps, improve services, account for resources expended, and assess program results. This includes monitoring to ensure that services are provided according to required standards and that clients are referred to the right services. In addition, supply stocks should be monitored to ensure that all necessary supplies are available. In the long term, NACS data can provide information on whether program goals are being met. Program managers need to report aggregate data to the government for national-level monitoring of the services provided, which informs resource allocation, program decisions (e.g., replication, scale-up), and policy decisions.

BOX 1. OTHER USES OF NACS DATA

Implementing organizations can use NACS data to inform and improve program design (e.g., to increase cost-effectiveness and efficiency), implementation, supervision, and management; share information with other programs and stakeholders (e.g., to improve programming and support advocacy for nutrition services); and report progress and results to national governments, donors, and others.

Governments can use NACS data to illustrate the benefits of investments and inform resource allocation and policy decisions.

Donors and global agencies such as the U.S. Agency for International Development (USAID), the World Health Organization (WHO), and the Joint United Nations Programme on HIV/AIDS (UNAIDS) can use NACS data to track global nutrition progress, assess needs, identify action areas, and set global targets.

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Why is an M&E framework and plan important for NACS?

All programs should have an **M&E framework** and an **M&E plan** to guide their M&E processes and data collection strategies. An M&E framework outlines the objectives, outcomes, and outputs of the intended program and, using these as a foundation, serves as the basis for selecting indicators that will be used to measure the program's progress. A **LogFrame** is an example of an M&E framework (see sample template below). More specifically, a LogFrame is a "rigorous methodology used for project design that focuses on the causal linkages between project inputs, outputs, and desired outcome (or purpose)" (USAID Automated Directives System [ADS] 2018). An M&E plan describes how the program will achieve the M&E goals outlined in the framework, identifying related resource needs, including personnel, time, and materials. An M&E plan complements the M&E framework, which identifies the indicators necessary to monitor a program's progress and results, by providing information on who will collect the data; how and how often it will collected; how data quality will be monitored; and how the data will be analyzed and disseminated (e.g., to monitor and report on the program's progress, to make programmatic course corrections).

To develop an M&E framework, programs must have clear objectives and goals as well as a clear plan for achieving those goals. Developing a **Theory of Change (ToC)** can help guide the design of an M&E framework by clarifying all of the outcomes that are needed to achieve a project's goal. Ideally, the ToC should be developed before the M&E framework, as the former guides the overall program strategy and design.

Theory of Change explained

BOX 2. PERFORMANCE MONITORING PLAN

A performance monitoring plan (PMP) is the type of M&E plan typically used by USAID-supported programs. Ideally, a PMP is based on a ToC and/or LogFrame and specifies the program's objectives, pathways, and indicators. Once appropriate indicators have been identified, the PMP allows program staff to capture details such as indicator definitions, disaggregations, targets, periodicity, and data sources, along with plans for analysis, use, and reporting.

For more information, see USAID's guidance on PMPs.

Sample logical framework

Sample Logical Framework Template

Level	Narrative Summary	Indicators	Data Sources	Assumptions
Program Goal				
Program Purpose				
Sub-Purpose				
Immediate Outcome				
Output				
Input				

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What indicators should be measured to monitor and evaluate NACS activities/services?

Once a LogFrame is developed, indicators should be identified to measure NACS implementation. Indicators measure change or progress toward a goal. They provide a "valid and reliable way to measure achievement, assess performance, or reflect changes connected to an intervention" (UNAIDS 2010). Indicators can be written as numbers (e.g., # of sites providing NACS services) or as percentages, with numerators and denominators (e.g., % of clients that received nutrition counseling, with the numerator being the # of clients that received nutrition counseling and the denominator being the # of clients that received nutrition assessment).

The NACS M&E plan must include indicators at each level of the M&E framework (i.e., input, process, output, outcome, impact). See Table 1 for a list, by level, of various types of indicators, what each measures, and examples of each.

TABLE 1. TYPES OF INDICATORS

Type	What It Measures	Example(s)
Input	Human, financial, and/or material resources needed to implement an intervention	# of health facilities with working adult weighing scales and other anthropometric equipment (e.g., stadiometers, mid-upper arm circumference tapes for adults and children, body mass index wheels)
Process	How resources are used to achieve the expected results	# of supervision and mentoring visits to trained health care providers
Output	Immediate effects (i.e., direct products or deliverables) of interventions	# of health care providers trained in NACS # of clients that received nutrition assessment # of clients informed on their nutritional status # of clients counseled adequately # of malnourished clients that received therapeutic or supplementary food
Outcome	Changes that occur as a result of an intervention	% of children under 5 that recovered from severe acute malnutrition (SAM) % defaulted on treatment
Impact*	Long-term results or effects of an intervention, achieved by changing practices, knowledge, or attitudes	Reduced child mortality Improved food security Reduced stunting

* Impact is typically measured through population-based surveys, not through routine and/or annual monitoring. Because they are affected by many factors besides nutritional status, it can be difficult to attribute changes in impact indicators such as reduced mortality and morbidity, to NACS interventions. Thus, although measuring impact is an important component of an M&E framework, this module focuses on monitoring and evaluation of program inputs, processes, outputs, and outcomes, to assess whether NACS service provision meets established standards and program implementation is proceeding as planned.

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How are indicators for NACS selected?

Programs should use their M&E framework to select indicators to monitor their NACS service delivery and outcomes. Including indicators for each level of the M&E framework ensures that programs will collect data specific to their project's objectives, interventions, and context, and that they will have enough indicators to measure all the components of their program. They should make sure that they will be able to collect all the data required for reporting to donors (which typically track specific indicators and have special requirements for program reporting) and other key stakeholders.[2]

Client-level NACS data are necessary to monitor services provided and to assist in delivering quality clinical care at the individual level. However, certain individual-level indicators also need to be aggregated to allow for sub-national and national-level analysis. For this latter purpose, programs should utilize existing indicators, data collection tools, and processes from the national M&E system[3] (e.g., the country's Health Management and Information System, or HMIS), whenever possible. It is generally preferable to utilize existing data and M&E systems rather than creating external systems, processes, and tools that can overwhelm health facility staff and make reporting more difficult. Programs may wish to consider working with the Ministry of Health and/or other government stakeholders to incorporate indicators into national systems that the project has identified as critical, but that are currently lacking (see Box 4 for more information on integrating NACS indicators into a national system). In some instances, it may

BOX 3. HEALTH MANAGEMENT AND INFORMATION SYSTEMS AND NACS

A national HMIS typically has four key functions: data collection, compilation, analysis, and use. An effective HMIS is the foundation for decision-making, policy development and implementation, and health research. It also allows for national and global tracking and reporting (e.g., progress on the Sustainable Development Goals), informs health education and training, enables planning (including service delivery and financing), supports client and health facility management, provides alerts and early warning capabilities, and supports the communication of health challenges to multiple audiences (WHO 2008).

Effective implementation of NACS services depends on a robust HMIS that identifies, treats, and refers malnourished clients to appropriate services and follow-up care.

not be possible to leverage national M&E systems. Serious quality issues may exist in the current national system (in which case, programs can consider helping to strengthen national M&E capacity and systems), or the national system may not collect data on indicators that are critical to the program. In these instances, programs should determine which data elements can be culled from the national system; which require a parallel, project-driven system; and whether the project wishes to play a role in national M&E systems strengthening.

2   Donor-funded programs typically have their own set of indicators to monitor and evaluate program progress and to compare that progress with program impact (i.e., evaluation). These indicators may differ from those in the HMIS, as program and national goals and objectives may differ.

3   An M&E system refers to the indicators, tools, and processes used to determine whether a program has been implemented in accordance with the M&E plan (monitoring), and whether it is achieving its desired results (evaluation).

BOX 4. FOR PROGRAM MANAGERS: RECOMMENDATIONS FOR INTEGRATING NACS INDICATORS INTO NATIONAL DATA COLLECTION SYSTEMS

- Build collaborative partnerships with ministries of health, national nutrition units, local government authorities, health facilities, bilateral and multilateral agencies, and other stakeholders, to support one national system, foster coordination, and minimize fragmentation and duplication of effort.

- Involve medical and health information system stakeholders in identifying NACS indicators to ensure stakeholder ownership of the system. If nutrition is seen as a special interest or as a parallel system, it may be difficult to obtain commitment from stakeholders who manage the M&E system.

- Use standardized forms to collect and record NACS information across health facilities to facilitate data analysis—including comparisons of results across facilities, districts, or regions.

- Link NACS information to other health information and establish a system to share the data with other service providers to monitor services across the continuum of care (e.g., health facility and community-level services) and facilitate collaborative learning and experience sharing to help address both the immediate and underlying causes of malnutrition.

- Ensure that NACS data are aggregated at the district, provincial/ state, and national levels in a way that allows national assessment of results and contributes to global tracking.

- Ensure data quality in countries using paper-based systems by:
  - Ensuring that personnel are adequately trained to use the data collection tools (e.g., forms) and that a routine is established to detect and troubleshoot errors.
  - Preparing written instructions for every form and making them accessible to facility staff for their reference.
  - Using registers in facilities to reduce the likelihood of losing client records.
  - Developing a regular method of summarizing the data (e.g., this can be at the end of each page of the register), which can reduce the need to review all the individual records during reporting periods, ensure all data are accounted for, and ease aggregate review.

All indicators should be specific, measurable, achievable, relevant, and time-bound (**SMART**), but facility-based activities and services should also have indicators that:

- Capture performance results for each service component
- Can detect changes in performance or trends over time

- Preferably draw from data sources that are readily available and already reported on routinely

Tables 2 and 3 provide examples of indicators used to monitor and evaluate NACS implementation. The examples are categorized by the NACS service component—nutrition assessment, counseling, or

support—that they relate to. Table 2 provides sample indicators that are typically used to monitor the provision of routine NACS services, including the identification of malnourished clients, treatment options, and referral services, as well as recovery rates, at the facility level. The indicators in Table 3 are typically used at the national level to assess the overall national nutrition situation. Both types of indicators can be collected through either a national HMIS or other systems (e.g., parallel governmental systems or non-governmental systems).

TABLE 2. EXAMPLES OF COMMON INDICATORS THAT ARE TYPICALLY USED TO MONITOR ROUTINE NACS SERVICE PROVISION

Number and % of individuals who were nutritionally assessed via anthropometric measurement (e.g., weight, length/height, mid-upper arm circumference [MUAC])
Number and % of clients classified as having moderate acute malnutrition (MAM)
Number and % of clients classified as having severe acute malnutrition (SAM)
Proportion of clinically undernourished individuals receiving therapeutic or supplementary food
Number and % of MAM clients receiving supplementary food
Number and % of SAM clients receiving therapeutic food
Number and/or % of clients who recovered from SAM
% of clients with SAM/MAM referred for HIV testing

TABLE 3. EXAMPLES OF NACS-RELATED INDICATORS INCLUDED IN NATIONAL M&E SYSTEMS

Type	Country	Indicator
Nutrition Assessment-Related Indicators (Malnutrition)	Haiti	Prevalence of chronic malnutrition among children under 5 years
	Kenya	Percentage of children under 5 years who are wasted
	Nigeria	Proportion of overweight children under 5 years
Nutrition Counseling-Related Indicators	Vietnam	Number of nutrition/food demonstration sessions organized in the communes
	Malawi	Breastfeeding initiation within the first hour of birth
	Uganda	Number of pregnant and lactating women who received infant feeding counseling (total and HIV-positive)
Nutrition Support-Related Indicators	Mozambique	Vitamin A routine supplementation coverage
	Zambia	Deworming dose given to children 12–59 months
	Lesotho	Number of children and adults who received a nutrition supplement (HIV and tuberculosis)
	Ethiopia	Proportion of clinically undernourished people living with HIV who received therapeutic or supplementary food

Source: FANTA 2016b.

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The links below provide additional examples of NACS indicators.

▶ Indicators from Uganda: The Health Management Information System (HMIS) for Nutrition Reference Manual

▶ Global Indicators for Nutrition and HIV Activities

▶ U.S. President's Emergency Plan for AIDS Relief (PEPFAR) Indicators

▶ Landscape of Nutrition Indicators within Government-Led M&E Systems in 16 PEPFAR-Funded Countries

▶ List of Identified Nutrition-Related Indicators in Government-Led M&E Systems in FANTA-Supported Countries (Excel download)

For some indicators that are relevant to NACS implementation, USAID has performance indicator reference sheets (PIRSs) that provide all of the information above. The following links provide additional information on USAID indicators and their PIRSs.

▶ USAID Nutrition Indicator Reference Sheets: External Source Data

▶ USAID: The Feed the Future Indicator Handbook Definition Sheets

▶ USAID: PEPFAR Monitoring, Evaluation, and Reporting (MER 2.0) Indicator Reference Guide

When **program managers** select an indicator to use in their NACS M&E plan, they need to make sure the following are outlined clearly in the plan:

• The definition of the indicator
• The indicator's link to the M&E framework (e.g., LogFrame)
• Unit of measure (e.g., percent, number)
• Data disaggregation (e.g., sex, age)
• Data source
• Method of data collection, construction, and/or analysis
• Reporting frequency
• Who is responsible for data collection
• Who is responsible for analysis and dissemination

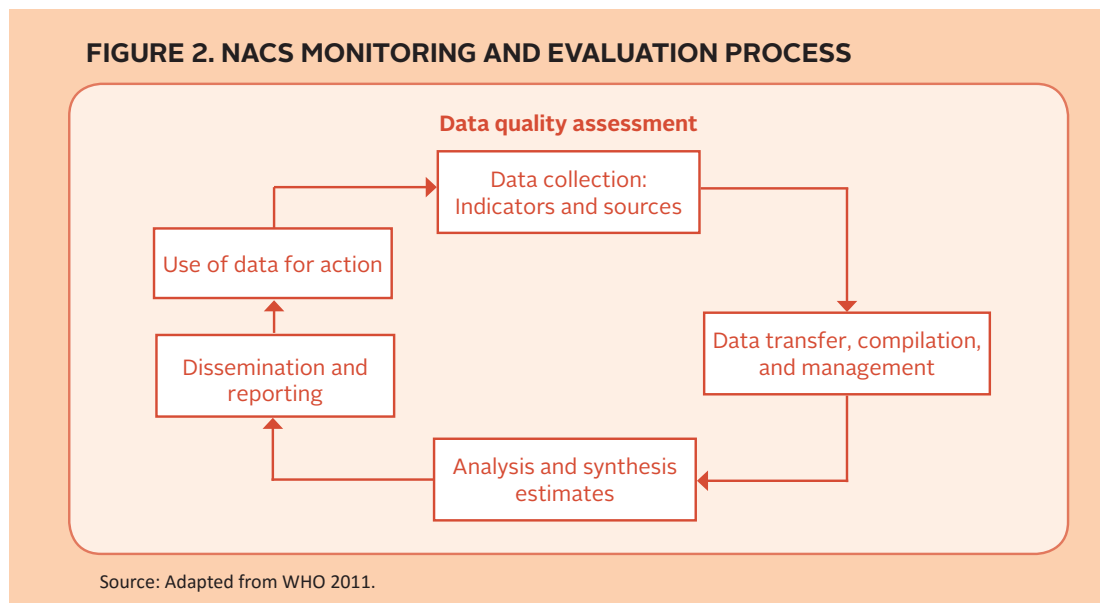**BOX 5. IMPORTANCE OF DISAGGREGATED DATA FOR NACS M&E**

Indicator disaggregation can show how a component or unit of interest (e.g. malnutrition, vitamin A supplementation, training) is provided or applied to different segments of the population.

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What are the steps in the facility-level NACS M&E process?

Figure 2 highlights the steps in the facility-level NACS M&E process. The figure describes both the process for frequent routine reporting (at least monthly) and the process for annual reporting (which is similar except for an additional data quality assessment).[3]

Routine data collection involves collecting and recording data daily from individual clients.[4] In addition to daily collection, data are transferred into weekly or monthly collection forms, where they are compiled. The data are then analyzed and sent to the subnational and national levels for further analysis and dissemination; this is often done monthly. Throughout the data collection and reporting process, there should be checks to ensure accuracy. Routine checks on data entries and processes (data quality checklists, dual entry checks, etc.) help improve the overall quality of the data and increase confidence in the results. The data can be used by the program to track progress toward targets and goals, while governments or donors can utilize the data for reporting, determining priorities, and setting action steps (e.g., assessing program needs, informing budget decisions, advocating for more resources).

FIGURE 2. NACS MONITORING AND EVALUATION PROCESS

Source: Adapted from WHO 2011.

COUNTRY EXAMPLE: NUTRITION DATA MANAGEMENT RESOURCES IN UGANDA

Reference and facilitation materials from Uganda on its Health Management Information System (HMIS) for Nutrition are available to help strengthen the skills of health workers so they are better able to collect, compile, and report timely, complete, and quality nutrition data. In addition, these materials are intended to help health workers understand the benefits of collecting and reporting quality data for evidence-based decision making.

Uganda Health Management Information System for Nutrition: Training Materials

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3 Donor-funded programs may require an annual quality assessment using external reviewers to reduce the potential for bias.

4 Note: it is important that data collectors understand which indicators need to be collected and why, and that they use the correct forms and record the data the same way each time. In addition, data should be kept confidential and under lock and key to ensure that clients names and other personal information are not shared with others. A client's information should not be shared without his or her consent.

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How should facility-level NACS information be collected and reported?

The first step in the NACS M&E process is data collection. It is recommended that the health care provider use existing government-approved national forms or registers to collect NACS data during service delivery, as applicable.

What tools can be used to collect NACS data?

It is recommended that programs use a standardized recording and reporting system. If possible, that system should be integrated into the routine government data collection system (if standard tools cannot be utilized, see Box 6).

Below are examples of three key tools that can be used to collect data for NACS indicators. Note that the name and format of each form can vary from country to country, depending on the country's data collection systems. Therefore, country-specific forms may not correspond exactly with these examples.

1. **Client management form** to document the nutrition care process for individual clients; this should be used during every applicable visit.

2. **Client register or client nutrition register** that consolidates key data from individual client records; this should be used daily as clients are seen and individual client records are updated.

3. **Monthly report form** that summarizes the inputs from client registers each month for reporting to the subnational or national level; completed monthly.

It is essential to use all three of the above tools (or their local equivalents) at health service delivery contact points where nutrition is relevant.

COMMON CHALLENGES AND POTENTIAL SOLUTIONS TO NACS M&E

Lack of standard data collection tools: Health care facilities may not have standard data collection and reporting tools.

Potential solution: Work to align collection and reporting tools with existing government tools, while also encouraging the government to standardize forms across facilities (see Boxes 4 and 6 for more information).

Individual Client Forms (multiple countries)

NACS Monthly Report Form (Zambia)

Registers and Monthly Reports (Portuguese-language from Mozambique)

Forms to Track and Manage Essential Supplies (Uganda)

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BOX 6. FOR PROGRAM MANAGERS: DEVELOPING NACS M&E TOOLS

Additional tools may need to be created and used if:

- National data collection and reporting forms do not include nutrition indicators to monitor NACS services.
- Existing indicators apply only to certain groups (e.g., children under 5 or pregnant women).
- Data collected in standard forms do not provide reasonable proxies for data needs (e.g., different age cutoffs are used for nutrition indicators).
- Nutrition data are not routinely collected or reported.
- Donors require different data.

It is critical to develop these new tools and forms with the government (i.e., Ministry of Health) to guarantee acceptance of the data. It is also recommended that new tools, registers, or indicators be piloted in a few sites and that any challenges be documented, so the system can be refined before it is scaled up. Data should be collected in a way that reflects client flow. For example, when and where a nutrition assessment is conducted during service provision (e.g., before or after the client sees a doctor) affects where nutritional status is recorded on the client card. If a client's nutritional status is assessed before the client sees a doctor, this information should be recorded in a place that is easy for the doctor to locate and utilize, to help inform his/her assessment.

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14

Who should collect the data and how often?

Health care providers should collect and record data daily on client nutritional status and nutrition services provided during health facility visits. Every time a client receives services, those services should be recorded.[5]

Program managers should compile, tabulate, analyze, and report/disseminate data to higher levels (e.g., ministries of health). This is typically done monthly.

COUNTRY MATERIALS

The following links provide examples of M&E sections of training materials from Uganda and Tanzania for facility-based service providers.

- "Module 5. NACS Monitoring and Reporting" of Tanzania's Nutrition Assessment, Counselling and Support (NACS): Participant Workbook for Training Health Facility-Based Service Providers

- "NACS Data Collection Forms" of Tanzania's Nutrition Assessment, Counselling and Support (NACS): Facilitator's Guide for Training Health Facility-Based Service Providers

- Section 4.4 of Uganda's Integrating Nutrition Assessment, Counselling, and Support into Health Service Delivery Training Course for Facility-Based Health Providers Guide

5 Note that in some cases, trained community health volunteers or other staff members assist health care providers with collecting data.

COMMON NACS M&E CHALLENGES AND POTENTIAL SOLUTIONS

Time/workload: Recording data takes a lot of time and increases health care providers' workloads.

Potential solution: Collect information only on critical indicators and make forms as easy to follow as possible. Practicing with the forms can help to ease use, as well.

Gaps in data collection: It may not be clear who is responsible for collecting and reporting nutrition data if there is no nutritionist in the health facility.

Potential solution: Clarify roles and responsibilities, especially when new staff join, and discuss the need to share responsibility for collecting and reporting NACS data.

Poor quality data: Weak data collection systems, which are often paper-based, generate incomplete and inaccurate data (e.g., missing data, double counting) that may be useless for decision-making or reporting.

Potential solution: During training, focus on how to obtain accurate data; during implementation, provide supportive supervision, mentoring, and regular checks to make sure data quality is high.

Why is data quality important?

Extreme care must be taken to obtain complete and accurate data, which will be used to inform decisions affecting client care or program implementation. Obtaining quality data relies on having a clear, well-designed, and logical M&E plan and system, as well as accurately recording information at the time of service provision, such as when anthropometric measurements (e.g., weight, height) are taken and calculated and when data are merged, tabulated, and analyzed. The M&E system must produce data that is valid, reliable, timely, precise, and error-free—the five key attributes of high-quality data (see Box 7).

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BOX 7. FIVE ATTRIBUTES OF HIGH-QUALITY DATA

Validity: Validity refers to the extent to which a measure actually represents what was intended to be measured. To have valid data and limit error, data measurement tools and procedures must be well-designed and clear.

Reliability: Reliability is the extent to which data collection processes are stable and consistent over time.

Timeliness: Data should be available and up-to-date enough to meet management needs, so that effective decision-making can take place. To ensure timeliness, all levels of reporting should have clear responsibilities and timelines.

Precision: Precise data have a sufficient level of detail to present a fair picture of performance and enable management decision-making. (Note: For data to be precise, relevant data, with appropriate disaggregations, must be collected. This means that the program's goals and objectives must be considered when selecting indicators and indicator disaggregrations.)

Integrity: Integrity focuses on whether there is improper manipulation of data. For a dataset to have integrity, the data must be accurate and free of error.

How and why are indicator targets set?

An indicator target is the specific, planned result to be achieved in a specific timeframe. Governments may establish their own targets and goals for service provision in their health facilities (e.g., 90 percent of children under 2 are monitored with growth charts every month). If there are no government targets, facilities should set their own indicator targets. Indicator targets should be ambitious but realistic, based on:

- Standards of care specified in national guidelines or protocols

- Baseline needs of the catchment area served by the facility

- Capacity/resources of the facility, program, or service providers

Indicator targets can be absolute achievements (e.g., nutritional status is recorded for 75 percent of clients, or 150 health care providers are trained in NACS), or they can be changes in level of achievement (e.g., the number of clients receiving nutrition assessment will increase by 10 percent). Indicator targets can help motivate staff, highlight successes, support planning, and be used to hold staff accountable.

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Consider the following when setting indicator targets:

- Establish a "baseline" to provide a reference point to guide targets (and to serve as a comparison for progress). A baseline can help with setting sequential targets for improvement over time.

- Consider the beneficiary population, the needs of the catchment area, existing government goals, and available resources, when setting outcome targets. Targets should reflect what is considered successful implementation of the intervention.

- Consider the available resources, desired level of change, and institutional capacity. In the first year of implementation, staff are being trained in NACS and systems are being established. Therefore, more modest targets may be necessary for the first year than in subsequent years, when operational capacity should increase. However, staff redeployment and attrition may decrease capacity, which can make it more difficult to meet the targets.

- Hold discussion with health care providers and their managers about their own goals (if targets have not already been set by the government or donor). Goals can be posted on a bulletin board in the health facility and updated weekly or monthly to monitor progress.

- Set targets for disaggregated groups (e.g., based on age, gender, pregnancy status), depending on government or donor guidance.

How are NACS data used?

Once the data are collected and compiled, the next step is to analyze and use the data. Indicators at each level—input, process, output, outcome, and impact—can be used to inform program decisions.

Health care providers and their managers should review and analyze NACS data weekly or monthly, depending on the data collection system. Using a quality improvement (QI) approach, health care providers and managers—or QI teams at the facilities—can identify gaps in service delivery that affect quality of care and health outcomes, record and test changes to improve performance, and then address the gaps. For more information on QI, see Box 8.

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BOX 8. QUALITY IMPROVEMENT AND NACS

In the context of NACS, quality improvement (QI) is a process that uses data to improve the effectiveness, efficiency, and safety of processes and systems used in NACS service delivery. QI uses NACS M&E data to identify problems within these processes/systems and apply appropriate solutions that ensure services meet expected quality and performance levels, as defined by standards. Therefore, high-quality NACS M&E data are critical to QI.

The QI approach encourages teams of staff to meet regularly to discuss service needs and to determine how to measure and document service provision. It also helps them identify areas that need improvement and test/monitor improvement efforts using targets/goals that the teams have set. QI should be done continuously to be truly effective.

There are four key steps to QI*:
1. Identify the problem (i.e., the area for improvement)
2. Analyze the problem
3. Develop one or more possible solutions (changes)
4. Test/implement the possible solution(s) and, depending on the results, decide whether to abandon, modify, or implement the solution.

See module 6 for more information on using QI to assess the quality of care processes, integrating QI into NACS services, and improving outcomes for clients.

▶ **NACS User's Guide, Module 6: Integrating Quality Improvement into NACS**

The following links provide additional information on data quality and QI:

▶ **Four Steps of Quality Improvement**

▶ **Data Quality for Monitoring and Evaluation Systems**

*Adapted from Uganda Ministry of Health. 2016. *The Health Management Information System (HMIS) for Nutrition Reference Manual.* Kampala, Uganda: Ministry of Health.

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How are NACS data used? (continued)

Health care providers use data daily (e.g., client age, weight, and height measurements).

For first-time clients, data are used to:

- Inform care decisions, such whether clients need treatment for malnutrition or are eligible for specialized food products.
- Inform clients of their nutritional status.
- Counsel clients on matters such as how to practice better nutrition behaviors.

For returning clients, data are used to:

- Inform care decisions, such as what approach to use, given how a client is or is not progressing.
- Counsel clients, such as motivating them to maintain their improved practices or discussing their barriers to improvement.

Program managers can use NACS indicators to monitor staff performance, assess facility needs, identify effective approaches, understand gaps, and refine services. Measuring specific outcomes and outputs informs program managers about which approaches work under which conditions and which activities need to be refined or strengthened.

COMMON NACS M&E CHALLENGE AND POTENTIAL SOLUTION

Inadequate tracking of client appointments: Clients who miss scheduled visits are not identified and followed up immediately. Without adequate follow-up, clients may be lost to follow-up, or they may default on treatmen

Potential solution: Careful tracking of appointments and services provided each day and periodic monitoring of individual client data will ensure prompt identification of clients who miss their follow-up services. Facility staff should contact clients by phone or in person and work with them to understand and address barriers to their continued use of health services.

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Below are two examples of how NACS data can be analyzed and used.

EXAMPLE 1. While reviewing clinic data, a doctor in a health facility saw that the number of children and adults living with HIV who were losing weight had increased. During the weekly health management meeting, the team assessed what factors contributed to the problem and determined that one factor was the increased number of diarrheal cases, which had risen to more than 30 percent of the clinic's total caseload. To address this issue, the team began intensive counseling of all clients on the importance of good water and sanitation practices (e.g., washing hands after defecation, boiling water to drink) as part of the NACS process. Over the next few weeks, the doctor noticed that the number of cases of diarrheal disease fell to below 10 percent of the caseload, which eventually led to a reduction in the number of clients who were losing weight. This doctor used data to inform the type of care he was providing to improve services and overall client health.

EXAMPLE 2. Health care providers in a clinic recorded daily the number of clients they assessed, counseled, and treated on a bulletin board in the facility. Once a month, the workers at the clinic reviewed the information on the board and discussed what the numbers meant (i.e., if they were reaching their goals) and if they could or should make any changes to maintain or improve their performance. They had set a target of treating 85 percent of all clients assessed as severely malnourished, but during the monthly review meeting, they found that only 60 percent of clients with SAM received treatment. The providers discussed what factors were contributing to the lower levels of treatment and devised a plan on how to address those factors. This discussion included addressing barriers to the provision of appropriate care, such as poor record-keeping (clients were missed due to incomplete records), and the need to improve how clients were referred to receive nutrition products. This discussion and subsequent actions improved the services provided, and the next month, 75 percent of clients identified as having SAM were treated appropriately. These workers used NACS data to assess their service provision, determined barriers to reaching their targets, and devised a plan to address the obstacles, resulting in improved services.

How are NACS data reported and disseminated?

NACS data are typically reported through either paper-based or electronic systems, depending on the HMIS system. For example, Uganda uses hard copies of the primary tools and report forms, as well as a web-based software called District Health Information System, to manage and report its NACS data (see the next section for more information on this software). Most health care facilities report NACS data monthly, quarterly, and annually to the district level, where it is reported further to the provincial or regional level, and then to the national level.

Data should be disseminated at the health facility, subnational, and national levels to provide an overview of service operation in the country. This overview can be used not only to track the efficacy and quality of service provision, but also to advocate for needed actions, such as requests for additional resources or policy changes. Adequate dissemination of NACS data can bolster such requests by raising awareness of the benefits and strengths of the services being provided and the resources necessary to keep the services running.

Dissemination of NACS data should not only consist of reporting aggregate numbers for select indicators (e.g., clients seen, clients treated), but also expand on what the numbers mean. For example, knowing how many people have been treated for SAM is useful for tracking service and supply needs, but it can also inform the government

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COMMON NACS M&E CHALLENGE AND POTENTIAL SOLUTION

No feedback from higher levels: Facilities may not receive any feedback on the information they submit to donors or ministries.

Possible solution: Ask the in-charge to coordinate with the Ministry of Health for feedback on reports.

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on what the malnutrition situation is like in the country and whether the current services are addressing the country's needs. Regular analysis and dissemination of NACS data provide program managers, governments, and donors with vital information about how services are being implemented and, therefore, the opportunity to improve them, when necessary.

NACS data can be disseminated in many ways, including:

- At facility-level meetings and on bulletin boards that can be put on the wall
- In subnational and national meetings and reports
- In advocacy materials

What additional tools are available to support NACS M&E?

In addition to the standard forms used to collect and record NACS data, several other tools have been developed to support NACS M&E.

Rapid Evaluation Tool (for Facility-Level NACS)

This tool is used to assess NACS service delivery at health facilities. It is used to help program managers determine whether the minimum elements needed to implement NACS are in place, identify gaps in service delivery, and prioritize interventions to strengthen programming. This tool can be used before initiation of NACS services—to establish baseline data and help inform the design of interventions—as well as throughout program implementation as a management tool.

Tool for Rapid Evaluation of Facility-Level Nutrition Assessment, Counseling, and Support (REF-NACS): Tool and Users Guide

This is a more extensive rapid evaluation package than the preceding tool. This resource helps gather information on the capacity of health facilities to implement NACS for pregnant women, children, and people living with HIV. Data collected with this tool can be used to assess and routinely monitor the ability of health facilities to provide NACS services.

FANTA NACS Site Quality Checklist (Used During NACS Start-Up and Implementation

This is another tool that can be used before beginning NACS activities to inform intervention design. It can also be used periodically to monitor quality of services. This checklist is used to assess both health facility readiness to implement NACS and the quality of NACS implementation in regular supportive supervision visits.

District Health Information System (Web-Based Dashboard)

This is a free and easily customizable, open-source, web-based tool that is used to help program mangers compile and analyze data. Other web-based dashboards are also available on the Internet, such as iDashboards Health Alliance.

SAMPLE USAID DONOR MONITORING TOOL

PEPFAR Site Improvement through Monitoring System. Site Improvement through Monitoring System (SIMS) tools include core essential elements, or quality standards, for HIV services in the areas of management and planning, training, supervision, client assessment and treatment, client tracking, data collection and reporting, health communication, quality improvement, quality assurance, referrals, and supply chain management. SIMS data support the planning process for NACS integration into health service delivery. The nutrition -related SIMS core essential elements are useful in planning and monitoring NACS integration into health service delivery.

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Resources

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