

The Role of NACS in Health Systems

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Introduction

The purpose of this technical brief is to help define the role that nutrition assessment, counseling, and support (NACS) plays in health systems and the relationship between NACS and other nutrition approaches and programs. This brief is intended for U.S. President's Emergency Plan for AIDS Relief (PEPFAR) agencies, Implementing Partners, governments, and international agencies, such as the World Food Programme, to facilitate the integration of NACS into health systems and facilitate management of issues that arise during implementation.

Overview of NACS

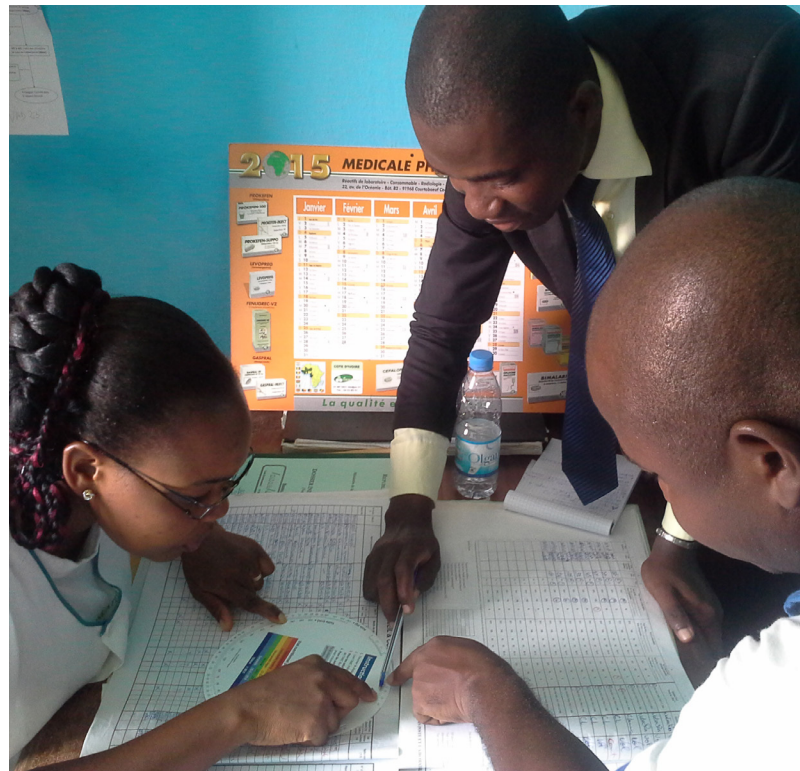
NACS evolved from the Food by Prescription approach, which began in Kenya in 2004 to provide specialized food products to undernourished people living with HIV in clinical settings. NACS has since become a health systems strengthening approach to address the nutritional needs of children, pregnant and lactating women, adolescents, adults, and people with chronic infectious diseases, reflecting the central role of nutrition assessment, counseling, and other types of support in prevention and management of malnutrition. In several countries, NACS has broadened to strengthen the continuum of nutrition care between health facilities and community support services.

Components of NACS

Nutrition assessment, including clinical and anthropometric assessment of all clients at all clinic visits and biochemical, dietary, and/or food security assessment based on needs and capacity.

Nutrition counseling based on assessment results and client preferences and constraints, to prioritize actions to improve nutritional status.

Nutrition support based on client needs and available resources, such as prescription of therapeutic and supplementary foods to treat clinical malnutrition, micronutrient supplements to eliminate or prevent vitamin and mineral deficiencies, and point-of-use water purification products to prevent water-borne disease.



Training on the use of the BMI wheel to assess nutritional status in Côte d'Ivoire.

Referrals to needed medical support and nutrition-sensitive support such as economic strengthening, livelihood, and food security services for clients from food insecure households.

NACS Guiding Principles

The design and implementation of NACS are guided by principles that have evolved along with its scope.

NACS is designed to strengthen nutrition services across the continuum of care that guides and tracks clients over time, including nutrition screening and assessment, prevention and treatment of malnutrition, and community follow-up. Where health facilities lack resources to identify malnourished people outside of health facilities or to track people who have been treated for malnutrition once they return home, NACS

can facilitate health facility-community linkages. This can be done by mobilizing community-based workers to conduct nutrition screening to identify malnourished people who need clinical assessment, follow up with clients being treated for malnutrition and other conditions, and re-engage clients who have been lost to follow-up. This makes NACS a potential platform for improving antiretroviral therapy (ART) engagement, adherence, and retention, contributing to [UNAIDS 90-90-90 goals](#) (by 2020, 90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained ART, and 90% of all people receiving ART will have viral suppression).

Integrating nutrition care and support into routine clinical services contributes to overall health outcomes

as well as specific nutrition outcomes, an important rationale for investment in NACS. Given the relationship among infection, immune response, and nutrition, nutrition support can improve the health of people living with chronic infectious diseases and encourage clinic attendance and uptake of and adherence to treatment.

Nutrition assessment and counseling are the critical foundation that NACS aims to establish for all clients.

A relatively small proportion of people need specialized food products to treat acute malnutrition. Nutrition counseling can encourage and support practices to prevent or recover from malnutrition by helping clients optimize locally available foods and improve water, sanitation, and hygiene practices.

Quality improvement methods play a critical role in improving NACS services. Establishment of minimum service delivery standards, collaborative identification of challenges and solutions, and monitoring progress toward specific benchmarks are quality improvement methods used in NACS.

Quality NACS implementation requires national support for policy, guidelines, training curricula, service provider credentialing, and mentoring and supervision according to performance standards.

NACS is relevant for a broad range of nutrition issues including those related to chronic infectious diseases, overweight and obesity, and nutrition-related consequences of non-communicable diseases and long-term ART.

Application of NACS in Various Countries

In the [Democratic Republic of the Congo](#), NACS has become an integral part of the minimum package of services for children, adolescents, and adults living with HIV, including systematic nutrition assessment for all clients at various entry points, nutrition counseling tailored to individual nutrition needs, and nutrition support consisting of nutrient supplementation and therapeutic food to malnourished clients based on

anthropometric entry and exit criteria. The delivery of NACS services in the country began with the Ministry of Health’s adoption of policies and procedures that outlined how components of the NACS approach fit within the health system in general, especially within comprehensive HIV care programs. Staff who delivered nutrition programs were trained, coached, and mentored to deliver adequate NACS services. The application of quality improvement principles and methods has resulted in steady and significant progress in increasing the rates of people living with HIV who are nutritionally assessed, counseled, and supported. Critical to these achievements is the learning collaborative, a model for quality improvement, that encourages sharing of experience among NACS service providers and the scale-up of NACS best practices.

In [Malawi](#), the government is integrating its form of NACS, called nutrition care, support, and treatment (NCST), into routine HIV, tuberculosis, and prevention of mother-to-child transmission services for adolescents and adults. Achievements include: national NCST guidelines that have been disseminated countrywide; completion of NCST training materials; and a core group of service providers and PEPFAR Implementing Partners that have been trained in nine districts and are routinely benefiting from supervision and coaching using quality improvement principles and methods.

In other countries, NACS has evolved into an approach to integrate nutrition into health care delivery for all clients, including children, women of reproductive age, and people with other chronic infectious diseases, such as tuberculosis, through primary health care services.

In [Mozambique](#), NACS tools, training curricula, and protocols have been developed as part of the national Nutrition Rehabilitation Program (PRN), which targets all acutely malnourished children under 5 years of age, adolescents, and pregnant and lactating women.

In [Namibia](#), the Ministry of Health and Social Services collaborated with UNICEF, the Global Fund to Fight AIDS, Tuberculosis and Malaria, the U.S. Centers for Disease Control and Prevention, and various community-based organizations to develop national guidelines, training materials, job aids, and registers to mainstream NACS into regional and district hospitals and primary health care services. NACS is considered an extension of the national Integrated Management of Acute Malnutrition (IMAM) program to cover older children, adolescents, and adults.

In [Tanzania](#), NACS is seen as a framework to scale up and institutionalize routine nutrition services in the health system. Local government authorities provide technical support and oversight of NACS implementation, and development partners support NACS capacity building of health care providers in reproductive and child health services, outpatient

departments, inpatient wards, and tuberculosis and HIV clinics, as well as in community-based organizations, home-based care programs, and programs for the most vulnerable children.

In **Zambia**, NACS was piloted in 25 health facilities in a district with a large urban population and high prevalence of malnutrition. Health care providers working in outpatient and inpatient departments, antenatal care, clinics for children under 5 years of age, and ART and tuberculosis clinics, as well as community volunteers, have been trained in NACS. The Ministry of Health has included NACS indicators in the national nutrition register.

Given that counseling on practices that lead to better health and nutrition need to be reinforced and reiterated, and because of the importance of household resources and practices in determining nutritional status, NACS training and implementation have been extended in Mozambique, Namibia, Tanzania, Uganda, and Zambia to community service providers. Community health workers and volunteers can provide nutrition outreach, screening and referral, counseling, and home-based follow-up to strengthen the continuum of care and track clients who may not return for follow-up visits and treatment.

Considerations for NACS Implementation

A country's approach to NACS implementation depends on:

- **The structure of the health system.** The structure of services, commodity management systems, health management information systems, community health worker networks, and the roles of nutritionists and dietitians in health services will determine how and at what levels NACS is integrated into service delivery.
- **The design, reach, and effectiveness of existing nutrition programs, services, and platforms.** To avoid duplication, planners should identify gaps, strengthen existing services, and promote coordination among nutrition programs through the use of a NACS framework.
- **Human resource capacity.** NACS should be integrated into health services in such a way as to avoid overburdening health care providers and strengthen competencies for all nutrition service delivery.
- **National nutrition guidelines, strategies, and action plans.** NACS should be integrated into existing protocols rather than imposed as an additional, parallel program.
- **Funding sources and mandates.** Understanding funding mandates for existing nutrition programs can help identify the appropriate role for NACS and

how it can support and strengthen other nutrition initiatives.

- **Linkages between the health system; water, sanitation, and hygiene services; and economic strengthening, livelihood, and food security services.** Nutritional status is affected by economic and social conditions, food availability and access, hygiene and sanitation services, and education, as well as cultural and household practices. Referral of malnourished people to extension services, social welfare programs, environmental hygiene services, support groups, and other support in the community can help prevent malnutrition and relapse after treatment.

The NACS approach has been integrated into health systems through a gradual and organic process as needs have been identified and resources have been made available. The following steps can assist with planning for NACS integration:

- Examine experiences from other countries in applying different models of NACS.
- Identify potential champions of NACS at different levels. Key allies and advocates can help navigate the environment and establish NACS' role in the health system. Each level of the health system, and each health facility, should have a NACS focal point.
- Select target sites and assess their readiness to implement NACS (for example, at each site, assess human resource capacity, accessibility, equipment, job aids and counseling materials, and storage space for specialized food products).
- Organize stakeholder meetings to agree on the scope of NACS and concrete steps to operationalize interventions. Convened by the government, such meetings can include staff from government, local civil society, donors, implementing agencies, international agencies, the private sector, and other interested parties.
- Enable NACS trainers to train health facility and community service providers.
- Procure and manage supplies and equipment.
- Work with the health system and partners to develop NACS indicators and data collection and reporting tools, ideally using existing monitoring and evaluations systems.
- Organize regular mentoring, supervision, and refresher training of service providers.
- Establish or strengthen health facility-community referral linkages to support services to help maintain improved nutritional status.

NACS Issues and Challenges

The following are some issues and challenges that have been identified related to the role of NACS in the health system and its relationship to other nutrition initiatives.

Alignment and Coordination

In some contexts, challenges related to alignment and coordination have stemmed from differing priorities, objectives, programmatic approaches, and outlooks among parties involved in different health and nutrition initiatives. Operational coordination of geographic coverage, sites, and target groups can maximize coverage, avoid duplication, and increase efficiencies in commodity procurement, storage, and distribution.

Nutrition Data Management

Measuring indicators of the progress and outcomes of nutrition services is important to assess need, gauge effectiveness, inform intervention design, and report results. Data collection and analysis require investments of time and funding. Multiple sets of nutrition indicators and onerous reporting requirements discourage health care providers from monitoring and recording nutrition status to track client progress. Harmonizing and consolidating nutrition indicators and data collection tools across the various nutrition platforms and programs in a country can reduce this burden and enhance data analysis and comparison. For example, in Namibia, the Ministry of Health and Social Services has worked with UNICEF, the U.S. Centers for Disease Control and Prevention, FANTA, the Global Fund to Fight AIDS, Tuberculosis and Malaria, and I-TECH to develop harmonized national data collection registers and reporting forms for NACS.

Human Resource Capacity

Limited human resource capacity constrains effective implementation and scale-up of nutrition services. Busy service providers find it difficult to take on significant new responsibilities and tasks. In some countries, facility-based health care providers have turned over NACS tasks to community workers who are based in health facilities and often compensated by donor projects. Streamlining and aligning nutrition services, particularly data collection and reporting, can minimize the additional burden placed on providers.

In Summary

Integration of NACS into other health services has taken place in more than a dozen countries, mostly in sub-Saharan Africa. NACS identifies and addresses the nutritional needs of priority target groups, such as children, pregnant and lactating women, adolescents, and people with chronic infectious diseases who use health facilities, and can provide a platform for the integration of other health services. In several countries, NACS has been broadened to strengthen linkages between health facilities and community support services. NACS also provides a platform for improving ART engagement, adherence, and retention, contributing to UNAIDS' 90-90-90 goals.

Learn More...

For more information on NACS, see our NACS User's Guide at www.fantaproject.org/tools.



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