Integrating Nutrition into HIV/AIDS Care, Treatment, and Support Using a Quality Improvement Approach: Results from Uganda

USAID FROM THE AMERICAN PEOPLE | NuLife FOOD AND NUTRITION INTERVENTIONS FOR UGANDA

USAID FROM THE AMERICAN PEOPLE | HEALTH CARE IMPROVEMENT PROJECT

APRIL 2010
The report was prepared by University Research Co., LLC for review by the United States Agency for International Development (USAID) and was authored by staff of NuLife–Food and Nutrition Interventions for Uganda and USAID Health Care Improvement Project. NuLife and the USAID Health Care Improvement Project are made possible by the support of the American people through USAID.

On the cover:
Nutrition assessment using MUAC for a child at Rubaga Hospital, Kampala District, Uganda. March 2010. Photo by Tamara Nsubuga Nyombi.

Phase I facility-based health providers share data for decision-making at a learning session at Makerere University John Hopkins University (MUJHU), Kampala District, Uganda. December 2009. Photo by Mary Nabisere.

Integrating Nutrition into HIV/AIDS Care, Treatment, and Support Using a Quality Improvement Approach: Results from Uganda

APRIL 2010

NuLife | Food and Nutrition Interventions for Uganda
USAID Health Care Improvement Project

DISCLAIMER

The views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

The activities to integrate nutrition interventions into HIV care in Uganda were carried out by the Ugandan Ministry of Health and University Research Co., LLC (URC) through NuLife–Food and Nutrition Interventions for Uganda and USAID Health Care Improvement Project with funding from the President's Emergency Plan for AIDS Relief (PEPFAR).

Acknowledgements: NuLife and HCI acknowledge the contributions of Ms. Tamara Nsubuga Nyombi, NuLife Nutrition and QI Specialist; Ms. Kim Ethier, URC Senior QI Advisor; Ms. Margaret Kyenkya, NuLife Chief of Party; Dr. Nigel Livesley, Chief of Party for HCI in Uganda; Dr. Tisna Veldhuijzen van Zanten, URC Vice President; and Ms. Tonja Cullen Balogun, URC Senior Program Officer to this paper. NuLife and HCI also wish to acknowledge the quality improvement teams at Kayunga Hospital, Kamuli Mission Hospital, and Kasana/Luwero Health Centre IV.

NuLife - Food and Nutrition Interventions for Uganda, is a technical assistance program to support improved health and nutrition outcomes for people living with HIV/AIDS in Uganda. This program is managed by University Research Co., LLC (URC) in collaboration with Save the Children and ACDI/VOCA. The project is funded by the United States Agency for International Development (USAID), under Cooperative Agreement No. 617-A-00-08-00006-00. For more informaiton on Nulife's work to improve health and nutrition outcomes in Uganda, please contact Margaret Kyenkya at mkyenkya@urc-chs.com.

The USAID Health Care Improvement (HCI) Project is managed by URC under the terms of Contract Number GHN-I-01-07-00003-00. URC's subcontractors for the HCI Project include EnCompass LLC, Family Health International, Initiatives Inc., Johns Hopkins University Center for Communication Programs, and Management Systems International. For more information on HCI's work to apply modern improvement methods to strengthen HIV and AIDS care in Uganda, please contact Dr. Nigel Livesley at nlivesley@urc-chs.com. For more information on the work of the USAID Health Care Improvement Project, please visit www.hciproject.org.

Recommended citation: NuLife–Food and Nutrition Interventions for Uganda and USAID Health Care Improvement Project. 2010. Integrating Nutrition into HIV/AIDS Care, Treatment, and Support Using a Quality Improvement Approach: Results from Uganda. Technical Report. Published by the NuLife–Food and Nutrition Interventions for Uganda and USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC).

TABLE OF CONTENTS

LIST OF FIGURES ii

LIST OF TABLES ii

ABBREVIATIONS ii

INTRODUCTION 1

BACKGROUND 1

KEY ACTIVITIES TO INTEGRATE NUTRITION INTERVENTIONS INTO HIV CARE 2

RESULTS 4

MOVING FORWARD FROM HERE 5

IMPROVEMENT STORIES 6

SUMMARY 7

List of figures

Figure 1: Seven Steps to Good Nutrition Care.....2

Figure 2: Model for Improvement.....2

Figure 3: Percentage of clients in HIV clinics assessed and categorised for malnutrition at HIV clinics using mid-upper arm circumference (MUAC).....4

Figure 4: Percentage of malnourished clients who received counselling on nutrition and use of RUTF (Sep 09–Feb 10).....4

Figure 5: Outcomes of Outpatient Therapeutic Care: Cure, default, death and non-response (NR) rate at NuLife supported facilities Apr 09–Feb 10.....5

Figure 6: Percentage of clients assessed using MUAC in HIV clinic, Kayunga hospital (April 09–Feb 10).....6

Figure 7: Percentage of clients assessed using MUAC at Kamuli Hospital (May 09–Jan 10).....6

Figure 8: Percentage of clients assessed using MUAC at Kasana HC IV (March 2009- Feb 2010).....7

Figure 9: Client Flow Chart in Kasana/Luwero HCIV ART clinic prior to integration of Nutrition Interventions.....7

Figure 10: Client Flow Chart after integration of Nutrition interventions in HIV/ART care services; Kasana/ Luwero HCIV.....7

List of tables

Table 1: Steps of Good Nutrition Care.....3

Abbreviations

AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
HCI	Health Care Improvement Project
HC IV	Health center IV
HIV	Human immunodeficiency virus
HMIS	Health management information system
IMAM	Integrated management of acute malnutrition
MOH	Ministry of Health
MUAC	Mid-upper arm circumference
NR	Non-response
NuLife	NuLife–Food and Nutrition Interventions for Uganda
OTC	Outpatient therapeutic care
PLHIV	People living with HIV/AIDS
QI	Quality improvement
QoC	Quality of Care Initiative (Ugandan MOH)
RUTF	Ready-to-use therapeutic food
URC	University Research Co., LLC
USAID	United States Agency for International Development

INTRODUCTION

The relationship between HIV infection and malnutrition is multilayered and multidirectional leading to an exacerbation of both conditions. HIV infection increases the body's energy requirements while diminishing the body's ability to absorb nutrients. Nutritional status is an important determinant of HIV disease progression, and is associated with mortality even in patients on antiretroviral therapy (ART) (Zachariah, R. et al AIDS 2006; 20:2355-60). Further, malnutrition has been associated with adverse effects of taking antiretrovirals (ARVs). Access to adequate food and nutrition services, including counselling, can break this cycle by helping people to improve and maintain nutritional status; manage symptoms; improve immune response to opportunistic infections; and improve adherence to ART and medical treatment.

One of the challenges in integrating nutrition and HIV care is that in a busy HIV clinic, it can be hard to find time to properly address nutrition issues. Since patients are not likely to die of malnutrition in the short term, health providers tend to prioritize acute conditions and disregard or under-treat chronic problems such as nutrition. In Uganda the USAID NuLife—Food and Nutrition Interventions for People Living with HIV project (NuLife) and the USAID Health Care Improvement Project (HCI) are teaming up to support 54 health facilities to integrate nutrition care into their HIV/AIDS services. The aim is to develop a set of practices to help health care providers routinely provide nutrition care in compliance with Ministry of Health (MOH) standards within the constraints they face daily. Specific goals include ensuring that:

- All patients are assessed for nutritional status in the HIV clinic using mid-upper arm circumference (MUAC) tapes, weight and clinical observation
- Patients with moderate or severe acute malnutrition receive nutrition counselling
- Patients with acute malnutrition and no medical complications receive ready-to-use therapeutic food (RUTF);
- Community-level referrals to and from the clinic increase;
- Patients treated on RUTF are followed up at both community and facility level
- All HIV positive clients receive nutrition and health education.

BACKGROUND

University Research Co., LLC (URC) has been providing technical support to the MOH in Uganda in using quality improvement as a strategy to bring about sustained improvements in health outcomes. HCI has been working with the Uganda Ministry of Health Quality of Care Initiative (QoC) since 2005 to improve the quality of HIV services. NuLife started in 2008 with the goal to improve nutritional status of people living with HIV/AIDS (PLHIV) through integration of nutrition interventions into HIV/AIDS care, treatment and support. These interventions include assessment, counselling, and treatment of malnourished individuals with RUTF at the facility and community levels and supporting local production and distribution of ready-to-use therapeutic food (RUTF).

KEY ACTIVITIES TO INTEGRATE NUTRITION INTERVENTIONS INTO HIV CARE

BREAK NUTRITION CARE INTO DISTINCT STEPS

To make the integration of nutrition care viable and manageable for health care workers and community volunteers, NuLife and HCI—together with MOH—broke the process down into Seven Steps to Nutrition Care based on the Uganda MOH guidelines on Integrated Management of Acute Malnutrition (IMAM). The first five steps (see Figure 1) represent the nutrition care process: ***assessment, categorisation, counselling, food by prescription*** and ***follow-up***. ***Community links*** and ***education*** are cross cutting and may take play at any point within the continuum of the care process. Breaking down the complex process of nutrition care into these seven steps, with key component clinical information and indicators of quality, allows teams to both introduce and improve nutrition care one step at a time.

ENSURE THAT EACH STEP CAN BE MEASURED

So that a health care provider or manager can verify that each step is being implemented, it is important to be able to measure change. Indicators, described in Table 1, were developed for each of the steps. Information is recorded in the patient record and can be retrieved through a medical record review on a weekly or monthly basis.

ENSURE THAT PROVIDERS HAVE THE NECESSARY SKILLS

NuLife worked with the Uganda MOH to develop job aids and training materials and to ensure that three to five staff per site were trained in comprehensive nutrition care for People Living with HIV/AIDS. Imparting knowledge and skills was the first step in integration of nutrition services.

USE QUALITY IMPROVEMENT TO INTEGRATE NUTRITION SERVICES INTO HIV/AIDS CARE

Once providers were trained, the critical next step was to apply their new knowledge in their facilities. Training alone is usually not enough to change provider practice as there are often barriers in how clinics are organised which makes it difficult to change how care is delivered. The care providers must, therefore, create enough time for routine nutrition care, as part of their quality improvement effort. The 34 Phase I facilities in Uganda faced challenges to implementation including limited staff time per patient, patient flow problems (e.g., not all patients saw the providers who were trained), frequent transfers, lack of or inadequate anthropometric equipment, and poor patient record management, among other issues.

Through their work with HCI and NuLife, multidisciplinary teams at each facility use the improvement model to test changes at a small level, measuring the result of that change and determining whether the change leads to an improvement and should be implemented on a larger scale. All sites began with assessment and categorisation of all PLHIV who came to the HIV clinic. Once they developed sustainable changes in assessment and categorisation, the QI teams move on to integrate prescription of RUTF and follow-up of malnourished patients.

Figure 2: Model for Improvement

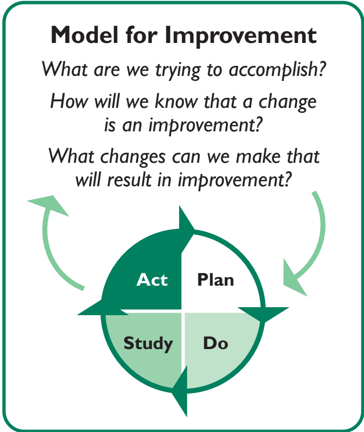
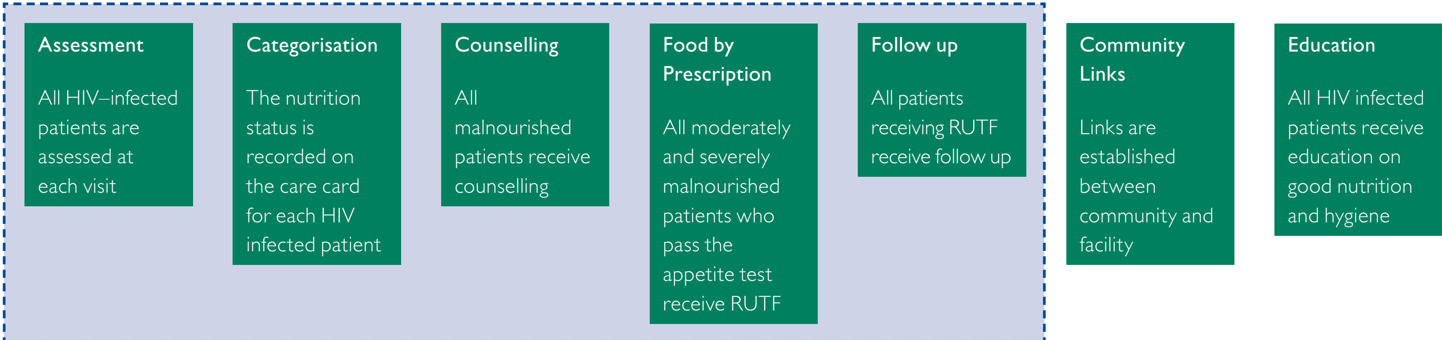


Figure 1: Seven Steps to Good Nutrition Care



USE COACHING TO SUPPORT HEALTH PROVIDERS AND QI EFFORTS

Throughout the improvement process, the sites were supported by a team of regional MOH coaches trained by HCI and Nutritionist/Master Trainers trained by NuLife. Coaching is an important strategy for quality improvement. The sites receive monthly coaching visits from a team of one Regional Coordinator and one Nutritionist/Master Trainer who provide technical support for both QI and nutrition. Coaches bring a combination of technical (i.e., clinical nutrition) skills and expertise in quality improvement. Their visits help the staff at health facilities to analyse their work processes and results of tested changes, and to review of data. They also work to facilitate any team issues.

ENCOURAGE PEER TO PEER LEARNING THROUGH FACE-TO-FACE SESSIONS AND COMMUNICATION

One learning session was held for all 34 sites Phase I sites in December 2009. Learning sessions are attended by the nutrition focal point, the quality improvement team leader, and the community coordinators from each site. MOH staff is also involved in the learning sessions.

The first learning session involved the following elements:

- discussion of using data to track the progress of implementation at each site,
- discussion and agreement on solutions and emerging best, practices for integrating nutrition into routine HIV/AIDS care, and
- site visits to six health facilities to observe implementation in these facilities.

Table 1: Steps of Good Nutrition Care

Steps for Integration	Assessment and Categorisation	Counselling	Food by prescription	Follow up	Community Links	Education
Goal/definition	All HIV infected patients are assessed at each visit. The nutrition status is recorded on the care card for each HIV infected patient	All malnourished patients (mild, moderate or severe) receive nutrition counselling	All moderate and severely malnourished patients receive RUTF	All patients receiving RUTF receive follow up (MUAC measured, weight taken, appetite test done, etc)	Links are established between community and facility through referral and counter referral of clients	All HIV infected patients receive education on good nutrition and hygiene regularly
Guideline	MUAC Result: ■ Green: well nourished ■ Yellow: moderately malnourished ■ Red: severely malnourished	Job aids	Moderate or severe malnutrition–Passed appetite test? ■ Yes: prescribe ■ No: inpatient	Protocol	Job Aids	
Indicators	% of HIV positive clients who have been assessed for malnutrition using MUAC	% of HIV positive clients who receive counselling on nutrition and use of RUTF	--% of people needing RUTF who received it. --% of HIV positive clients assessed to be moderately or severely malnourished receiving treatment --% of people receiving RUTF who need it.	% of clients receiving RUTF who are returning for scheduled follow-up visit	% of clients referred from the community to the facility, enrolled into OTC care	% of HIV positive clients who receive nutrition education each clinic day

RESULTS

ASSESSMENT AND CATEGORISATION USING MUAC

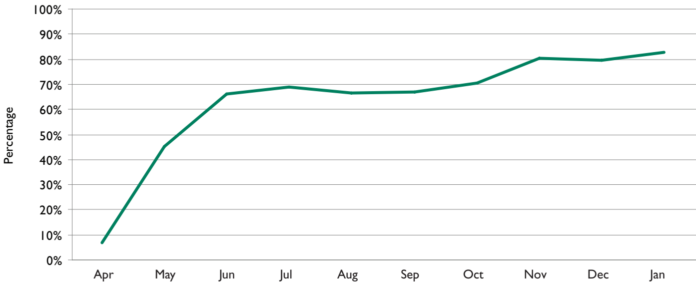
Figure 3 shows that sites have increased the proportion of HIV patients who are assessed for nutritional status. Nutrition assessment using MUAC and categorisation of clients seen in the HIV clinics has improved from 9 % of clients being assessed in April 2009 to assessment of over 80 % of clients coming to the HIV clinics. Of clients assessed, 8,580 have been identified with malnutrition and received RUTF.

Because the data is to be used to make improvements, and is not simply for reporting purposes, sites are encouraged to use it for their own decision making. As such, not all sites report every month, accounting for the variation in site numbers.

COUNSELLING ON APPROPRIATE NUTRITION AND USE OF RUTF

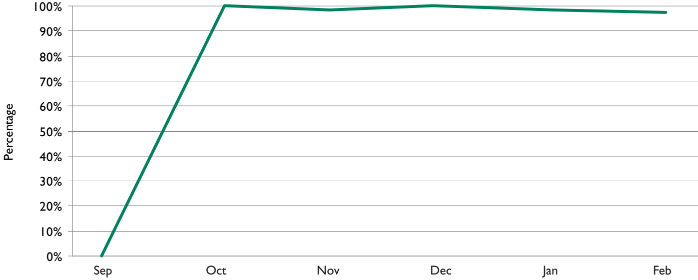
The sites report that they counsel malnourished clients on nutrition and the use of RUTF. This has been observed to be true and a small number of sites record the actual percentages counselled. These have consistently been above 95% (figure 4). Because this indicator has shown consistent success for several months, sites are no longer collecting data on this indicator, but instead to use this time on other improvement activities.

Figure 3: Percentage of clients in HIV clinics assessed and categorised for malnutrition at HIV clinics using mid-upper arm circumference (MUAC)



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Sites	11	21	20	14	13	6	14	14	15	14
Total seen	7,738	4,860	8,726	5,110	3,852	8,677	12178	9522	9826	10550
Assessed	622	6879	12580	10587	9385	5914	8694	7754	7911	8853
% assessed	8%	46%	67%	70%	68%	68%	71%	81%	81%	84%

Figure 4: Percentage of malnourished clients who received counselling on nutrition and use of RUTF (Sep 09–Feb 10)



	Sep	Oct	Nov	Dec	Jan	Feb
# of sites	0	3	4	4	4	5
Total malnourished	0	143	228	154	198	196
Total counselled	0	143	225	154	197	192
% counselled	0%	100%	99%	100%	99%	98%

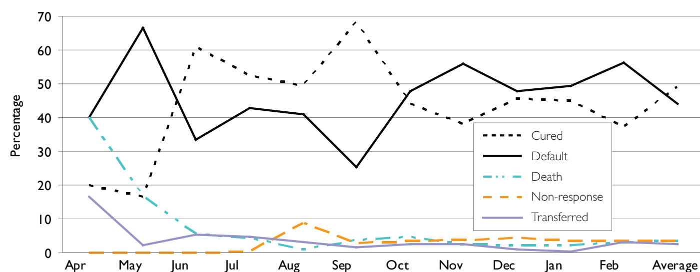
Figure 5 shows that on average 49% of malnourished clients enrolled into outpatient therapeutic care (OTC) and receiving RUTF have cured. Since April 2009, the death rate has dropped from 40% to 3% in February 2010.

This graph also highlights that the default rate of clients enrolled in the programme is high. There are number of reasons for the high default rate. First, some clinics after seeing the remarkable progress in clients on RUTF are reluctant to stop the RUTF. In this case patients who are cured will stop coming for therapy and are mislabelled as defaulters. NuLife is working with the facilities to clarify the definition of cured and default. Second, many clients come a long distance to the clinic and returning every two weeks is not possible. To address the problems of poverty, distance and weak transportation that make it challenging for patients to return, sites have tried various strategies for improvement including giving return dates that coincide with ART refills or other medical appointments; giving a month's supply of RUTF instead of only a two-week supply or providing outreach services to bring care closer to the clients.

WHAT HAVE THE FACILITIES CHANGED TO ACHIEVE THESE RESULTS?

In this short time period, sites have made the following improvements in their system of care to ensure nutrition services for all PLHIV.

Figure 5: Outcomes of Outpatient Therapeutic Care: Cure, default, death and non-response (NR) rate at NuLife supported facilities Apr 09–Feb 10



	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Avg
Sites	14	31	33	34	33	33	34	34	33	32	23	
% cured	20	17	61	52	49	68	44	38	46	45	37	49
% default	40	67	33	43	41	25	48	56	48	49	56	44
% death	40	17	6	4	1	4	5	2	2	2	3	3
% NR	0	0	0	0	9	3	3	4	4	3	3	4
% transferred	17	2	5	5	3	2	3	3	1	0	3	2

ASSESSMENT AND CATEGORISATION

- Use of expert clients to measure MUAC and categorize: 30 out of 34 sites have trained expert clients on using job aids that NuLife provided (i.e., wall chart on how to accurately measure MUAC). Two sites are using volunteers and student nurses and two sites use nurses. The data indicate an improvement or increase in the number of clients in the HIV clinics being assessed as demonstrated in Figure 3 and the 3 case studies below.
- MUAC at registration or triage: All 34 sites are assessing MUAC at registration or triage. Sites decided this was the best place to do MUAC assessment as ALL clients who come to the HIV clinic have to be registered and get their vitals taken. MUAC was incorporated at this stage so that every client is assessed and recorded in the register.
- Record data in one clinic register: All sites have a clinic attendance register where the details of clients coming to the HIV clinic are recorded. When the Seven Steps to Good Nutrition Care were introduced, about 20 sites decided to add a column in the clinic register to record MUAC instead of opening up a new register. Later, through coaching visits and from the learning session, 12 more sites started recording MUAC in one register. Only one site is not recording MUAC in a register. Sites reported that using one register made it easier for staff to transfer this information onto the client ART cards and to aggregate data at the end of the month.
- Use colour (red, green, yellow): 33 of the sites are using the colour codes R, Y, G to record MUAC results. Most sites reported that this method made categorisation easier and faster. This is also recorded in the clinic register and then transferred to the client ART card.

NUTRITION COUNSELLING

- Use of counselling cards by counsellors and clinicians to counsel clients on appropriate nutrition practices and the use of RUTF: All 34 sites are using the national counselling cards to counsel clients. Expert clients who were also trained in nutrition care and support for people living with HIV are also counselling clients to ease the workload in the clinics.
- To document the number of clients counselled, sites introduced a column in their general registers where this would be recorded.

MOVING FORWARD FROM HERE

The learning session held in December 2009 enabled sites to collect, share and document best practices for integrating nutrition interventions into HIV/AIDS services. Most of the 34 sites are implementing these best practices. The best practices are also being spread to Phase II sites through monthly coaching visits. Two more joint learning sessions between Phase I and Phase II sites will be held in June and November.

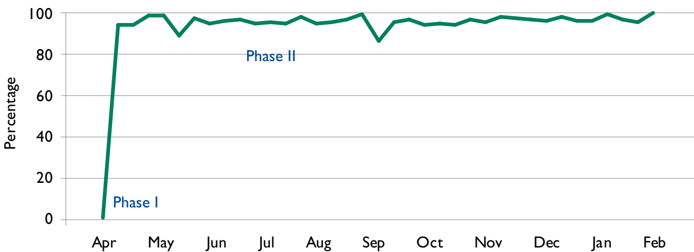
The emerging best practices will be integrated into the training manuals and will be shared with MOH so that these can be used to make policy decisions.

IMPROVEMENT STORIES

After NuLife trained clinic staff on the integration of nutrition interventions into HIV and provided RUTF and other supplies, implementation of this integration varies considerably from site to site. Some sites such as Kayunga Hospital managed to integrate nutrition interventions almost immediately into routine care and have managed to sustain a highly reliable system. Kayunga had a strong QI team prior to the nutrition approach and were able to develop systems that worked to provide nutrition care right away. This pattern, however, is atypical and most sites go through a trial and error phase as they work to design the best system for them. Kasana/ Luwero Health Centre IV and Kamuli Mission Hospital are examples of sites that were slow to start, tried some changes that worked for only a short time due to various challenges and then gradually improved again as a result of coaching and the use of the quality improvement approach.

PROGRESS STORY 1: KAYUNGA HOSPITAL

Figure 6: Percentage of clients assessed using MUAC in HIV clinic, Kayunga hospital (April 09–Feb 10)



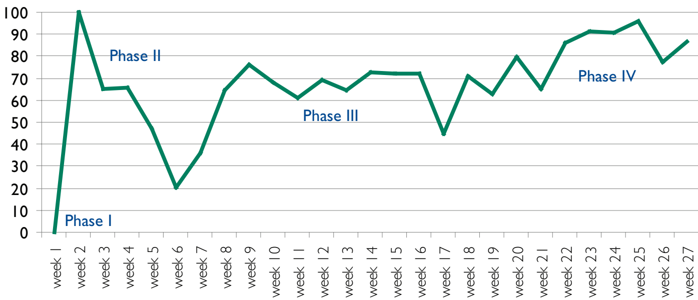
Although a number of staff were trained in comprehensive nutrition care for PLHIV in April 2009, not all of them worked in the HIV clinic. The staff in the HIV clinic used to wait for the trained staff to come from their various units to assess and categorise clients. When this did not happen, the staff in the HIV clinic started doing targeted assessment of clients who 'looked' malnourished.

The quality improvement team was involved in the process of integrating assessment and the trained staff joined the QI team. The group decided to assess all clients at registration and record this in the HMIS register. Initially the nurses were the ones who tried to assess all the clients, but because the HIV clinic is nurse-led, the team agreed that they would train six expert clients on-the-job to use the MUAC tapes and record the measurements and colours in the register.

The team in the HIV clinic has used the quality improvement approach to integrate and maintain their implementation. The team at Kayunga Hospital is functional and every member is aware of their roles and responsibilities.

PROGRESS STORY 2: IMPROVEMENT AT KAMULI MISSION HOSPITAL

Figure 7: Percentage of clients assessed using MUAC at Kamuli Mission Hospital (May 09–Jan 10)



Phase 1: Immediately after receiving training and supplies, the clinic assessed 100% of patients seen the following week.

Phase 2: After reaching 100% of their patients in the first week, the clinic fell steadily for the next 6 weeks.

Phase 3: After steady decline the clinic started consistently assessing 60-70% of the clients who came to the clinic

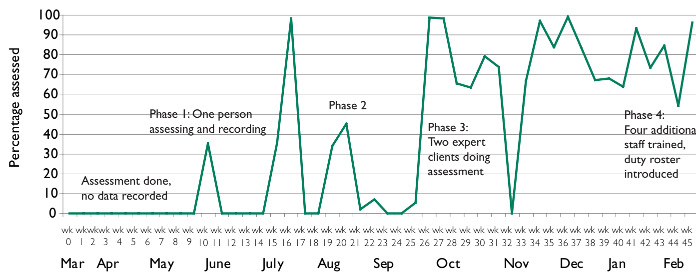
Phase 4: After staying at 60-70% for a while the site moved to consistently assessing 90% of clients for malnutrition.

Kamuli Mission Hospital saw instant results in assessment of all patients using MUAC. The changes, however, were not in the system of care, so not sustainable. The facility simply worked harder for a week to make sure that all clients were assessed. As their initial enthusiasm wore off, the percent of clients assessed dropped as staff were busy and did not have assessment integrated. The QI team realized this approach of working harder did not result in sustained improvement and decided to change the system. They introduced a change in which one person was responsible for doing MUAC. With this approach, they sustained an improvement—60-70% of people were assessed. They realized that they were not reaching 100% because some patients come in the afternoon when the MUAC-assigned staff person leaves the clinic to go to the ward. The clinic was supposed to only be open in the morning, but had a skeleton staff in the afternoon to attend to clients who were unable to reach the clinic in time. The goal for improvement is 100%, though, so after seeing that their change had reached a plateau, they created a new change. The site tried to remind people to come in the morning, but this was unsuccessful. They asked the MUAC-assigned staff person to stay late, but this did not work either. During coaching visits, coaches shared with the team how other sites had improved assessment at their sites,

including training expert clients to take the MUAC at registration. The team decided to implement this change in their facility to see if they would make an improvement. While this change is still being tested, early results show that they may be seeing the improvement in assessment coverage for which they have been striving.

PROGRESS STORY 3: KASANA /LUWERO HEALTH CENTRE IV

Figure 8: Percentage of clients assessed using MUAC at Kasana Health Centre IV (March 2009- Feb 2010)



Phase 1: Nutritional assessment in the HIV clinic started off very slowly because only one person, the nutrition focal point was doing the assessment. The rest of the trained staff did not participate in the assessment, and so when the focal point was busy elsewhere, no assessment was done. Initially, there was a problem with integrating nutrition interventions into the HIV clinic because the HIV clinic is run by an implementing partner and due to a lack of communication between the MOH and staff hired by this partner clients were not assessed.

Phase 2: The nutrition focal point, coaches and head of the HIV clinic met to discuss how to integrate assessment and nutrition interventions in the HIV clinic, and it was agreed that assessment be done at registration. The client flow chart was modified to reflect this. However, assessment was still left to the nutrition focal point.

Phase 3: When the quality improvement team—consisting of nurses, a clinician and the nutrition focal point—met and analysed their data, they realized that they were not meeting the goal of assessing all the clients who came to the HIV clinic. The team then decided to use two expert clients, one of whom had been trained as a community volunteer, to assess clients and record this in a register at registration. This led to an improvement in the numbers assessed and categorised in the HIV clinic.

Phase 4: The nutrition focal point trained four additional nurses to support the expert clients at assessment. A duty roster was also drawn up so that the nurses are aware of when to be at the HIV clinic.

Client flow charts:

Figure 9: Client Flow Chart in Kasana/ Luwero Health Centre IV ART clinic prior to integration of nutrition interventions

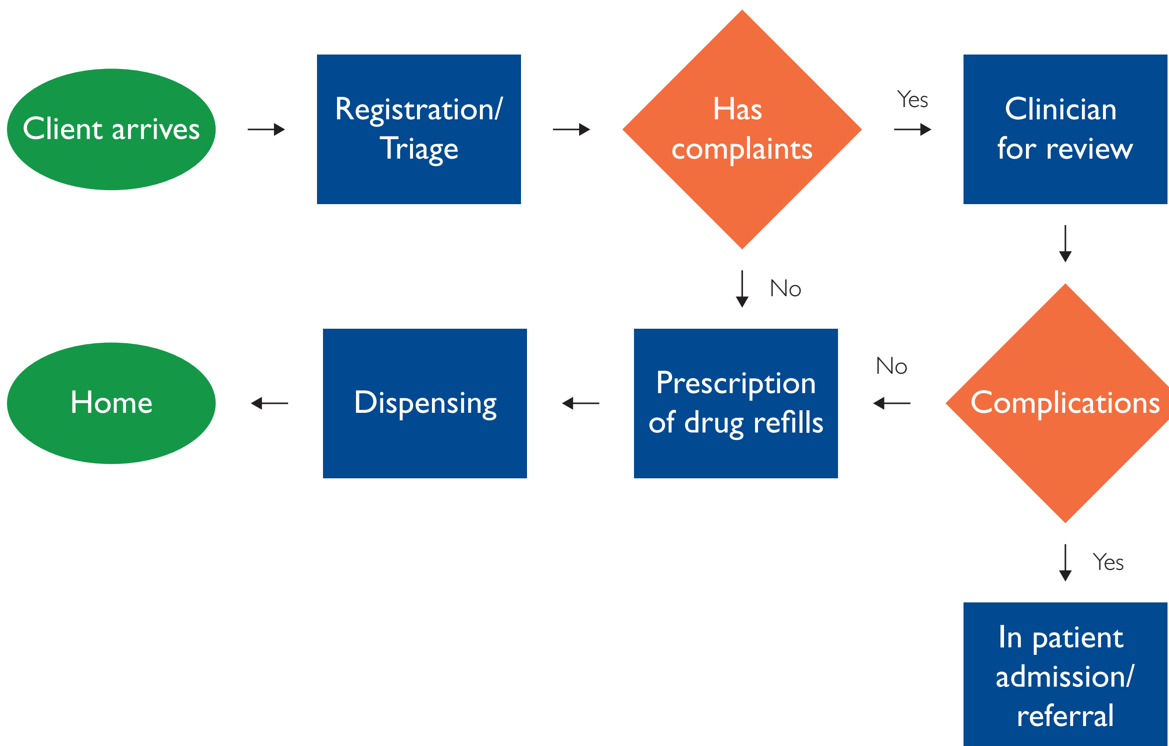
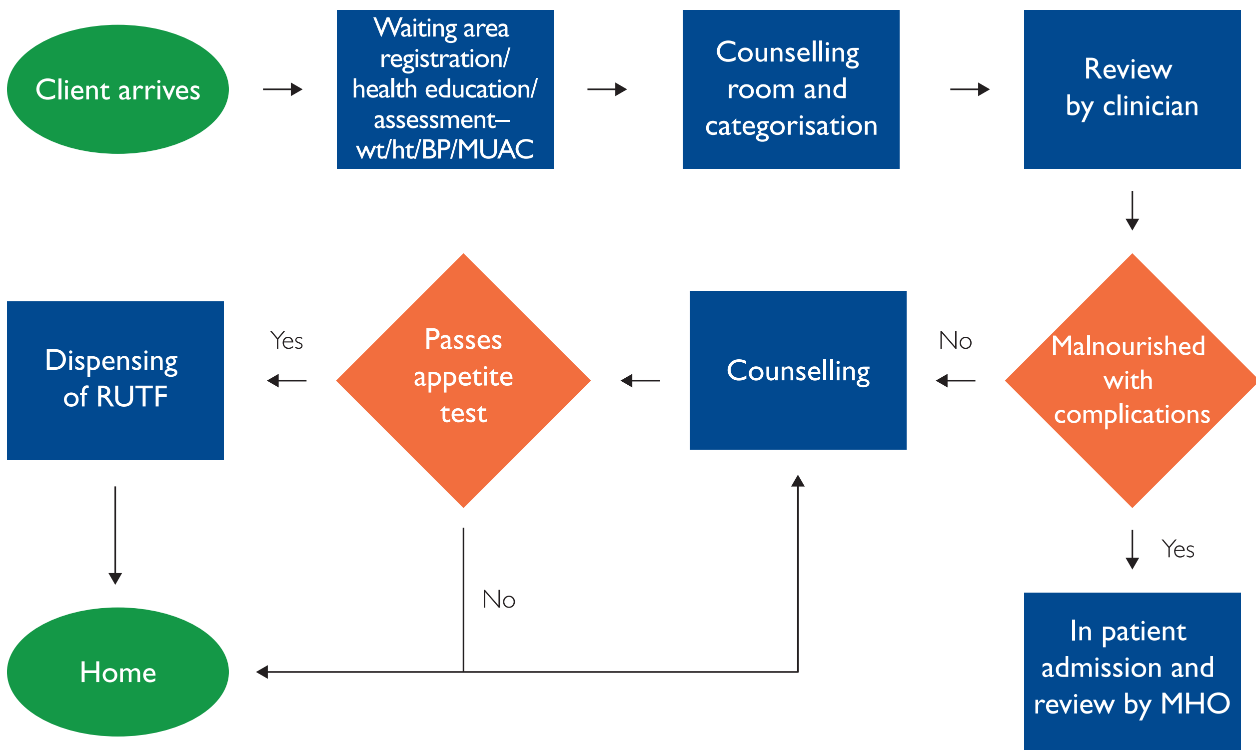


Figure 10: Client Flow Chart after integration of nutrition interventions in HIV/ART care services Kasana/Luwero Health Centre IV



CONCLUSION

This paper illustrates the potential impact of introducing nutritional interventions into HIV/AIDS services using a quality improvement approach. The case examples from Kayunga and Kamuli Mission Hospitals and from Kasana/Luwero Health Centre, confirm the effectiveness of introducing small, doable actions and allowing sites to investigate the best ways to implement these actions within their existing constraints. NuLife has learned that breaking down nutrition into simple steps for staff who are not nutritionists is a simple and effective way to integrate nutrition into HIV care services. Training and equipping sites with RUTF, job aids and anthropometric equipment is not enough, and sites need support to implementing quality improvement to strengthen their processes. Although, hurdles remain for these three and other NuLife sites, they have made significant progress in successfully integrated nutritional assessment, counselling and treatment into HIV services.

NULIFE—FOOD AND NUTRITION INTERVENTIONS FOR UGANDA

USAID HEALTH CARE IMPROVEMENT PROJECT: UGANDA

Plot 40 Ntinda II Road, Naguru
P.O Box 28745, Kampala
Tel 256-414-288-871
Fax 256-414-288-750

University Research Co., LLC
7200 Wisconsin Avenue, Suite 600
Bethesda, MD 20814

Tel: (301) 654-8338
Fax: (301) 941-8427
www.urc-chs.com
www.hciproject.org