The date improvement activities began: April, 2009
Aims/objectives:

The goal of the improvement activity is to improve the nutritional status of PLHIV in the NuLife-supported facilities. The specific objectives for Uganda which contribute to reaching this goal include:

- All patients are assessed for nutritional status in the HIV clinic
- Patients with moderate or severe acute malnutrition receive counseling
- Patients with severe acute malnutrition receive RUTF
- Increase referrals to and from the community level
- Patients treated on RUTF are followed up at both community and facility level
- All HIV positive clients receive nutrition and health education

Implementation package/interventions:

In order to make the integration of nutrition care viable and manageable for health care workers, NuLife and HCI developed a table of Steps to Nutrition Care based on the Uganda MOH guidelines and programmatic needs of QoC.

These seven steps, with key component clinical information and indicators of quality, allow teams to implement nutrition care one area at a time.

Once providers were trained, the critical next step was to get the new training knowledge into practice using the quality improvement model as a means for testing and implementing small changes at the facility level. Training alone is usually not enough to change provider practice. There are often barriers in the inputs, processes and organization of care which mean that the service cannot be implemented easily by the providers.

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. The QI team must, therefore, create enough time for routine nutrition care. The 32 facilities in Uganda faced challenges to
implementation including limited staff time per patient, patient flow problems (not all patients saw the providers who were trained), frequent transfers, lack of or inadequate anthropometric equipment, and poor patient record management, among other problems. HCI-supported facility-based teams were asked to apply their QI skills to implement the good nutrition care the NuLife project had taught them. These sites have been concentrating on improving nutrition assessment and linking severely and moderately malnourished patients with ready-to-use therapeutic food (RUTF).

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 is an improvement to implement on a larger scale. All sites began with assessment and categorization of all PLHIV who came to the HIV clinic. Once they developed sustainable changes in assessment and categorization, the QI teams moved on to integrate prescription of RUTF and follow-up of malnourished patients.

Measurement:

- % of HIV positive clients who have been assessed for malnutrition using MUAC
- % of HIV positive clients whose nutritional status has been correctly categorized according to national standards
- % 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

Spread strategy:

Using Learning Sessions and developing best practices which can be spread in coaching visits

Number of sites/coverage:

The total number of facilities participating in the collaborative is 32 consisting of 5 Regional Referral Hospitals, 18 District Hospitals, 9 Health Center IVs and 0 Health Center IIIs out of a total of 9,136 facilities in Uganda. These facilities cover 29 out of 80 districts and are located in 10 of 12 MOH regions.
Coaching:

At the start of the HCI ART Collaborative, a group of coaches, known as the Core Team, was formed at the national level from Ministry of Health and HCI staff to support sites and develop technical strategy for the project. The Core Team build capacity of MOH regional staff, called Regional Coordinators to conduct trainings and coaching sites in quality improvement and clinical treatment. Regional Coordination Teams were set up in 12 health regions of Uganda with 5 members each. NuLife had trained a group of nutritionists as Master Trainers in nutrition. The sites receive monthly coaching visits from a team of one Regional Coordinator and one Nutrition Master Trainer to provide technical support for both QI and nutrition.

Learning sessions & communication among teams:

One learning session was held for all 32 (plus 2 special sites) in December 2009. The learning session is attended by the Nutrition focal point, Quality Improvement team leader and the community coordinators from each of the sites.

Ministry of Health staff were involved in the learning session.

For learning session 1, the general topics covered were:

- the use of 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.
- The learning session also involved site visits to 6 different health facilities for participants to observe implementation in these facilities.

Facilitation techniques used included small group work and presentations from specific sites.

Results:

Changes Made by sites:

- Integrate assessment with existing registration or triage stations
  - Have expert clients help with the additional work load
  - Train enough expert clients to accommodate for when some are not available
  - Provide supervision/mentorship for expert clients
• Document nutrition status in existing registry rather than creating a new document

Since the April 2009 rollout of the nutrition intervention, over 14,000 people have been assessed for nutrition status (69% of all patients seen in these clinics), and over 3000 have been identified with malnutrition and provided with RUTF. Figure 1 shows that sites have increased the proportion of HIV patients who are assessed for nutritional status. To date, 1,019 patients have been prescribed RUTF.

(See example of results in file below.)

Best practices/conclusions:

- On-job training of expert clients to do MUAC assessments and record these

- Use of a single column in the clinic or HMIS register to record data on assessment and categorisation.