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USAID ASSIST Project

Semi-Annual Performance Monitoring Report

Cooperative Agreement No.:
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Performance Period:
October 1, 2012 – March 31, 2013

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DISCLAIMER

This performance monitoring report was authored by University Research Co., LLC (URC). The views expressed do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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For more information on the work of the USAID ASSIST Project, please visit www.usaidassist.org or write assist-info@urc-chs.com.

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Acronyms

ACP	AIDS Control Program
AIDS	Acquired immunodeficiency syndrome
AIMGAPS	Assuring Infants and Mothers Get All PMTCT Services
AMTSL	Active management of the third stage of labor
ANC	Antenatal care
AOR	Agreement Officer's Representative
ART	Antiretroviral therapy
ARV	Antiretroviral
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
CBO	Community-based organization
CCM	Chronic Care Model
CDC	U.S. Centers for Disease Control and Prevention
CHF	Community Health Funds
CHMT	Council Health Management Team (Tanzania)
CHW	Community health worker
CPT	Cotrimoxazole preventive therapy
CRS	Catholic Relief Services
CSI	Child Status Index
CSO	Civil society organization
CTC	Care and treatment centers (Tanzania)
DHMT	District Health Management Team
DHT	District Health Team (Uganda)
DNA	Deoxyribonucleic acid
DOTS	Directly observed treatment, short

DST	Drug sensitivity testing
DSW	Department of Social Welfare
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EHCP	Essential health care package (Swaziland)
ENC	Essential newborn care
EP	Expert Patient
EPP	Expedited Procedures Package
FANTA	Nutrition Technical Assistance Project
FMWASD	Federal Ministry of Women Affairs and Social Development (Nigeria)
FP	Family planning
FY	Fiscal year
GHWA	Global Health Workforce Alliance
GIS	Geographic information system
GOI	Government of India
HBB	Helping Babies Breathe
HBC	Home-based care
HCI	USAID Health Care Improvement Project
HIV	Human immunodeficiency virus
HRH	Human Resources for Health
HSS	Health System Strengthening
ICAN	Infection Control Africa Network
ICAP	International Center for AIDS Care and Treatment Programs
IP	Implementing partner
IPT	Isoniazid preventive therapy
IPPF	International Planned Parenthood Federation
IRB	Institutional Review Board
ISQua	International Society for Quality in Health Care
IST	In-service training
IUCD	Intrauterine contraceptive device
JHU-CCP	Johns Hopkins University Center for Communication Programs
KM	Knowledge management
KMC	Kangaroo mother care
KQMH	Kenya Quality Model for Health
LTFU	Loss to follow-up
M&E	Monitoring and evaluation
MCHIP	Maternal and Child Health Integrated Program
MDG	Millennium Development Goal
MDR-TB	Multidrug-resistant tuberculosis
MGLSD	Ministry of Gender, Labor and Social Development
MMC	Método Madre Canguro
MMR	Maternal mortality rate
MNCH	Maternal, neonatal, and child health
MNH	Maternal and newborn health
MOGCSD	Ministry of Gender, Children, and Social Development (Kenya)
MOH	Ministry of Health
MOHSW	Ministry of Health and Social Welfare
MOU	Memorandums of Understanding
MSH	Management Sciences for Health
MVC	Most vulnerable children (Tanzania)
NACS	Nutrition assessment, counseling and support
NCPA	National Costed Plan of Action

NGO	Non-governmental organization
NTCP	National Tuberculosis Control Program
OHA	USAID Office of HIV/AIDS
OHS	USAID Office of Health Systems
OVC	Orphans and vulnerable children
PAHO	Pan-American Health Organization
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PHC	Primary health care
PHFS	Partnership for HIV Free Survival
PLWH	Persons living with HIV
PMTCT	Prevention of mother-to-child transmission of HIV
PNLS	National Program against HIV
PPFP	Post-partum family planning
PPH	Post-partum hemorrhage
QA	Quality assurance
QAD	Quality Assurance Division/Department
QAP	Quality Assurance Project
QI	Quality improvement
R&E	Research and evaluation
R&R	Request and Reporting Forms
RCH	Reproductive and child health (Tanzania)
RCQHC	Regional Center for Quality in Health Care
REPSSI	Regional Psychosocial Support Initiative
RFM	Raleigh Fitkin Memorial Hospital (Swaziland)
RH	Reproductive Health
RHMT	Regional Health Management Teams
SCC	Safe childbirth checklist
SMC	Safe Male Circumcision
SMGL	Saving Mothers Giving Life
SOP	Standard operating procedures
TAG	Technical advisory group
TASO	The AIDS Support Organization (Uganda)
TB	Tuberculosis
TBD	To be determined
TWG	Technical working group
UNFPA	United Nations Population Fund
URC	University Research Co., LLC
USAID	United States Agency for International Development
USG	United States Government
VHT	Village health team (Uganda)
VMMC	Voluntary medical male circumcision
VSL	Village savings and loans
WHO	World Health Organization
WI-HER	Women Influencing Health Education and Rule of Law, LLC

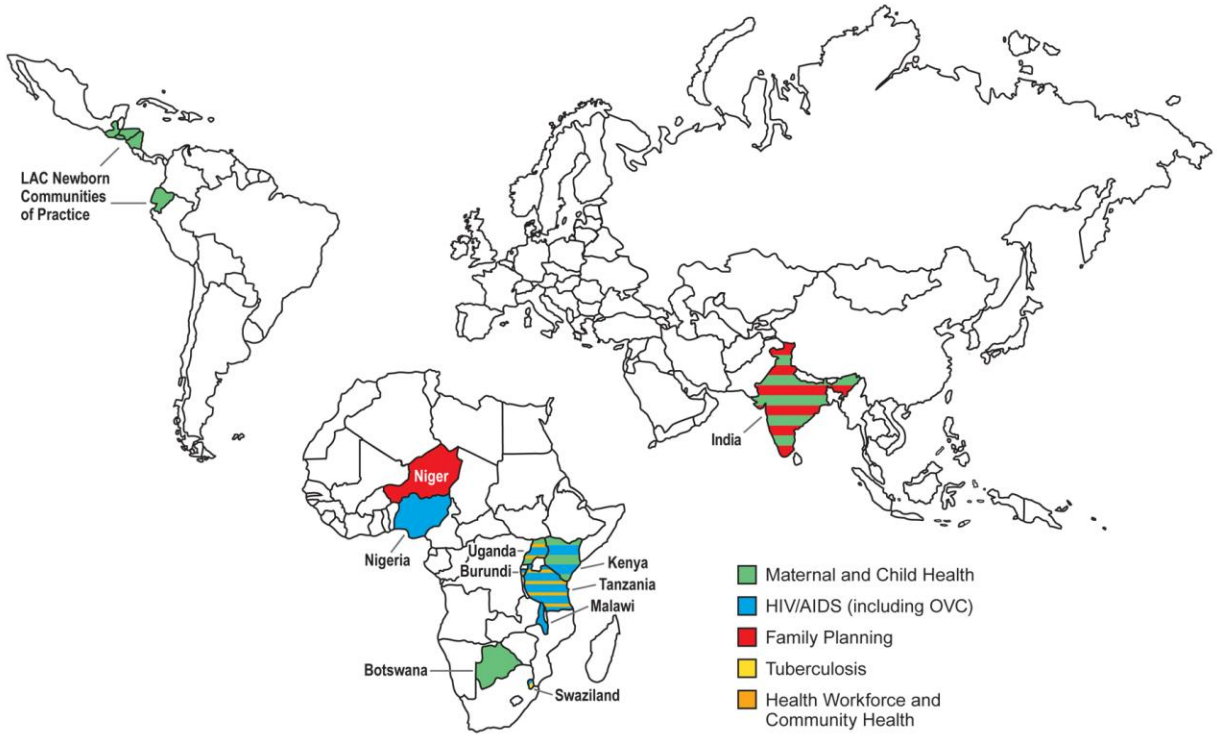
Executive Summary

University Research Co., LLC (URC) and its partners have completed the first six months of implementation of the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project. This report is the first Semi-Annual Performance Monitoring Report for the project and aims to summarize intermediate results and accomplishments toward the program objectives.

The overall objective of the USAID ASSIST Project is to foster improvements in a range of health care processes through the application of modern improvement methods by host country providers and managers in USAID-assisted countries. The project's central purpose is to build the capacity of host country systems to improve the effectiveness, efficiency, client-centeredness, safety, accessibility, and equity of the services they provide. In addition to supporting the implementation of improvement strategies, the project seeks to generate new knowledge to increase the effectiveness and efficiency of applying improvement methods in low- and middle-income countries

The project launch took place on October 17th, 2012 at the Ronald Reagan Building in Washington, DC. Brief remarks were made about the direction of the new project, specifically how the focus of USAID ASSIST is on applying evidence-based improvement approaches and contributing to local and global learning. The event included round table discussions highlighting planned work and was attended by a number of colleagues from USAID as well as partner representatives from Broad Branch Associates, EnCompass LLC, FHI 360, Harvard School of Public Health, HealthQual International, Initiatives Inc., Institute for Healthcare Improvement, Johns Hopkins University Center for Communication Programs, WI-HER, and the World Health Organization Patient Safety Programme.

During the first six months of FY13, USAID ASSIST provided technical assistance with field support funding in nine countries: Botswana, Burundi, India, Kenya, Malawi, Nigeria, Swaziland Tanzania, and Uganda. In addition, core funds supported work in Niger, virtual technical support for an activity in Ethiopia, and regional communities of practice on newborn care in Latin America.



In the new activities being implemented under USAID ASSIST, a deliberate design process has been used to link improvement objectives with larger health systems strengthening initiatives and to intentionally plan for scale-up, sustainability, and institutionalization of the improvement effort. All country improvement plans are being negotiated with, agreed upon, and signed by both USAID and host country government counterparts. This agreement works to build country capacity and ensures country ownership of objectives and strategies. In addition, the country improvement plans emphasize advancing the frontier of the science of improvement, using evidence-based methods, addressing factors that affect human performance, and defining the learning agenda in each country that will be supported through knowledge management (KM) and research and evaluation (R&E) activities.

To support the project's learning agenda, a four-day training on KM concepts and techniques was designed and conducted for field staff in Africa. The training, held March 11-15, 2013 in Durban, South Africa, sought to build staff capacity to incorporate KM into improvement programs, including how to develop KM strategies for their improvement work, how to apply KM principles and techniques to the design and facilitation of learning sessions, and how to design knowledge transfer/handover processes, events and written products to convey key learning about a specific practice area or topic.

Research and evaluation activities are being designed to help show country programs how and why investment in improvement adds value to health care delivery. Another aspect of the USAID ASSIST research and evaluation agenda is to build up the body of evidence of what works and what does not in terms of improvement methods. The project is also testing and evaluating ways to improve the rigor of data and the cost-effectiveness of interventions. The project's R&E team is providing technical support and guidance on country-led research and syntheses of learning across country projects on improvement topics such as validity of improvement-related data, sustainability and institutionalization, spread and cost-effectiveness. Currently there are 13 planned studies and another six under consideration.

During the first six months of FY13, ASSIST staff made 16 oral presentations, led two knowledge cafés, and presented five posters at six international and regional conferences. A major global technical leadership activity was the collaboration with the International Society for Quality in Health Care (ISQua) to host the first ISQua Regional Meeting in Ghana in early February. The theme of the meeting was, "How to make patient care more effective and efficient: Strengthening Health Systems through Quality Improvement," with subthemes on access to quality health care, improving care at the patient level, mechanisms to spread learning and innovation, and the role of government and policy.

While no implementation problems have been encountered in the technical work, start-up has been delayed on many fronts due to delays in obligation of funds. Most African USAID Missions' funding was delayed awaiting approval by the Africa Bureau. As a result, implementation has been impeded. In several cases, USAID Health Care Improvement (HCI) close-out had to be conducted prior to ASSIST start-up, thus incurring unnecessary additional transition costs and delayed start-up of the new scopes of work that were already signed for by Mission personnel in their Country Operational Plans. Core funding for global HIV programs also experienced a significant delay in funding while awaiting approval and is also still only partially funded. Technical directors at USAID are frustrated by the resulting lack of progress, with ASSIST unable to meet expectations due to the ongoing funding delays.

1 Field Support-Funded Activities

AFRICA

1.1 Botswana

1.1.1 Background

USAID and the U.S. Centers for Disease Control and Prevention (CDC) in Botswana invited URC to conduct a rapid analysis on existing quality improvement initiatives being implemented by the Ministry of Health (MOH). URC's mission was to recommend modalities for integration and enhancement of existing initiatives in order to yield tangible results that are in line with the ministry strategy. Secondly, URC was asked to outline ways to empower and enhance participation of senior management in quality improvement activities.

Botswana has invested heavily in the health care sector. Multiple improvement frameworks under various names have been developed. However, despite these efforts, the country is not seeing an improvement in key health indicators. In fact, the most recent 2011 national maternal mortality rate (MMR) statistics indicate that the national MMR *increased* from 163 per 100,000 live births to 189 per 100,000 live births in 2011, roughly equivalent to the MMR rate in 2009. The top three causes of maternal death were eclampsia (12 cases unspecified as to time period), post-partum hemorrhage (11 cases), and post-abortion complications.

During the interviews and visits with key staff in the Ministry of Health and site visits to Princess Marina Hospital and Nkoyaphiri Clinic in August 2012 under HCI funding, the URC team found that there is a gap between planning and implementation. There are several reasons for this. The goals of the MOH are not clear to many health service providers throughout the system. Through interviews, it became apparent that there is a lack of coordination between different departments in the MOH and a breakdown in communication between the central level hospitals and peripheral facilities. Additionally, there is a confusion of language and different methods around the terms quality and performance. There is a lack of clarity between how inputs are used to improve care and changing how health care service providers work to improve care. There is an overemphasis on measurement and reporting but these data often do not align with national level goals, resulting in measurements that are not acted upon.

Despite these issues with execution, the building blocks for success are present. The initial visits and interviews found that Botswana has a competent and committed health workforce. They have a strong desire to identify and fix problems. The staff is forthcoming about problems and weaknesses in a constructive way, looking for ways to improve. The visits also found the presence of positive deviants in the Bamalete Lutheran Hospital and in activities for preventing mother-to-child transmission of HIV (PMTCT).

1.1.2 Botswana Program Overview

Activity	What are we trying to accomplish?	How will we know?	At what scale?
Activity 1: Collaborate with Botswana Ministry of Health to implement high impact interventions to reduce maternal mortality	Reduce maternal mortality rate by half *Current maternal mortality rate: 160 deaths/100,000 live births*	MDG five target maternal mortality rate is 81 deaths/100,000 live births	Countrywide Population: 2,098,018 Births per year: 46,000

1.1.3 Progress, Results, and Accomplishments

Activity 1: Collaborate with Botswana Ministry of Health to implement high impact interventions to reduce maternal mortality

URC is working in collaboration with the Botswana Ministry of Health to create and implement high impact interventions to reduce maternal mortality in order to reach Millennium Development Goal (MDG) 5.

- Communicate a clear national level goal
- Reduce maternal mortality from 160 to 80 per 1000 live births (MDG 5)
- Set a clear implementation schedule with clear delegation of responsibilities
- Align all activities at all levels to meet the national level goal (including providers and patients)
- Stop non-vital activities to free up staff time to achieve the national level goal
- Use this experience to instill a strong culture focused on execution and build the capabilities to execute other improvements

Dr. Kathleen Hill visited in January 2013 to work with an expert group to determine the primary reasons for this recent rise in maternal mortality and develop high-impact interventions. The prioritized high-impact interventions will focus on the following areas of care: antenatal care (ANC); intra- and post-partum interventions; prevention, early detection and management of anemia and post-partum hemorrhage; early detection and management of pre-eclampsia, eclampsia, and hypertensive disorders of pregnancy; and prevention, early detection and management of post-abortion complications (to be addressed at a later date).

1.1.4 Planned Activities in the Next Quarter

- URC in conjunction with the Ministry of Health is recruiting a national coordinator to lead a two-year initiative to reduce maternal mortality by ensuring that women receive high-impact interventions to prevent and manage the most prevalent causes of maternal mortality in Botswana. The initiative will be launched in April and will be country-wide.
- Dr. Nigel Livesley will travel to Botswana to assist the MOH in informing District Management Health Teams about the new National Maternal Health Initiative.

1.2 Burundi

1.2.1 Background

As many other sub-Saharan African countries, the HIV and AIDS pandemic in Burundi continues to be a growing priority public health threat, with an adult HIV prevalence of 3.6%, but a higher prevalence in urban and peri-urban areas (4.6% and 4.4%) than in rural areas (2.8%), where 90% of the population lives. In an effort to improve the national response to HIV and AIDS, Burundi has drafted national HIV strategic plans with the objective of defining clear priorities to guide the interventions of various donors.

The most recent plan, 2012-2016, was prepared with technical assistance from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and sets realistic objectives for prevention, treatment, care and support. Recognizing that Burundi is a Global Health Initiative (GHI) focus country, the U.S. Government intends to build on the successes achieved and lessons learned thus far in Burundi and globally to support the Government of Burundi's health priorities. To do so, PEPFAR requested technical assistance from the USAID Health Care Improvement Project (HCI) to ensure that PMTCT, antiretroviral therapy (ART), and orphans and vulnerable children (OVC) services offered in Burundi respond to quality requirements.

Under HCI funding, a baseline assessment was conducted in the first quarter of FY13 with the goal of identifying strengths and weaknesses of HIV and AIDS services in Burundi to inform the design of an improvement program. Key results of this assessment were:

- Documentation is poor for ART adherence and counseling as well as for key PTMCT and HIV care and treatment indicators
- While initial CD4 count were available for 75% of patients whose records were review, only 35% of patients had a follow-up CD4 count available
- Integration of PMTCT services with ANC is low for timely enrolment; the proportion of women whose partner is tested is also very low (below 6%).
- The frequency of HIV testing for pregnant women needs to be standardized across sites and in line with national guidelines. Few sites are conducting serologic testing for exposed infants. Voluntary testing and counseling can be done at facilities during antenatal care; referring women to lab risks patient loss.
- Patient flow for clinical care is more complicated than necessary and should be simplified to minimize loss to follow-up. Referring pregnant women for prophylaxis risks patient loss. Few sites are initiating ART for pregnant women and exposed infants according to guidelines. Although lab work prior to treatment initiation is beneficial, making it a requirement means excluding those who can't afford it. TB screening and TB treatment are not prevalent.
- Documentation is cited as the only means to ensure HIV-positive women and their infants are enrolled in PTMCT. Additional measures should be implemented, as documentation alone does not ensure follow-up. Data are not used for quality improvement or to ensure that HIV-positive women and their infants are enrolled in PTMCT.
- Lack of ART for women and newborns at facilities should be addressed. Lack of TB medications at ART sites constitutes a serious barrier to treatment.

1.2.2 Burundi Program Overview

<table>
<tr><th>Activity</th><th>What are we trying to accomplish</th><th>How will we know</th><th>At what scale</th></tr>
<tr><td rowspan="3"><u>Activity 1:</u> Implement a PMTCT improvement intervention in four provinces in the Northern Region: Kayanza, Kirundo, Muyinga and Karuzi (4 out of 17 provinces in Burundi)</td><td>Improve uptake of PMTCT services (by mothers, infants, and partners)</td><td rowspan="3">• Proportion of pregnant women attending ANC visits
• Proportion of pregnant women covered by PMTCT services
• Proportion of HIV positive women receiving care and treatment
• Proportion of newborn of positive women tested at adequate periods
• Proportion of positive children receiving care and treatment
• Proportion of partners tested (husbands or partners of enrolled women in PMTCT services)</td><td>70 sites (of 115 PMTCT sites);
1,765,431 inhabitants (of 10,557,259 population of Burundi)</td></tr>
<tr><td>Improve retention of mothers and infants along the PMTCT cascade</td><td>70 sites (of 115 PMTCT sites);
1,765,431 inhabitants</td></tr>
<tr><td>Improve quality of PMTCT services</td><td>70 sites (of 115 PMTCT sites);
1,765,431 inhabitants</td></tr>
</table>

As part of support to Burundi's HIV strategy, ASSIST partners URC and FHI 360 will support the government to improve the PMTCT clinical practices, to address performance factors in HRH, and to help the country to improve its documentation and management of information. Refining clinical protocols to match the 'gold standard' of PMTCT care is expected to increase the number of pregnant women who are enrolled in PMTCT therapy, to raise the level of adherence

to treatment, and to expand access beyond the women alone to reach also their husbands and children. But clinical protocols alone will not sustain quality care and expanded access. To support Burundi in the strengthening of its health system to delivery HIV and primary care services throughout the country, the project will address systems challenges and human resources performance as key elements to maintaining quality of care. Clear job expectations, performance feedback, work environment, incentives, and appropriate competencies are all performance factors that are critical to the success of any clinical improvement effort; and a strengthened workforce is a cornerstone to sustainable health systems.

With this understanding, ASSIST is applying improvement science initially in four provinces in Burundi through an integrated approach to improve PMTCT service quality, health worker performance, and information systems. To help close the gaps identified in the baseline assessment, ASSIST will provide technical assistance at the national, provincial, and district levels to service providers and managers to implement improvement activities relating to PMTCT service integration with existing maternal, newborn and child health and HIV services. Initially this work will take place in all PMTCT sites in all 13 districts in the four target provinces. Later, ASSIST will support Burundi to spread the best-practice interventions to four more USAID-supported provinces. ASSIST will also work with other USAID implementing partners (e.g., FHI 360, MEASURE Evaluation, EngenderHealth) and local non-governmental organizations (NGOs) to address these concerns.

1.2.3 Progress, Results, and Accomplishments

Activity 1: Implement a PMTCT improvement intervention in four provinces in the Northern Region of Burundi

ASSIST is now providing technical assistance to the MOH at the national, provincial, and district levels to service providers and managers to implement improvement activities relating to PMTCT services. As a strategy to address health system gaps and linkages, ASSIST is working closely with all levels of the health system, from peripheral level in sites through health districts and province level to the central level. This collaboration will also keep a close link between the different levels to promote sustainability of the work.

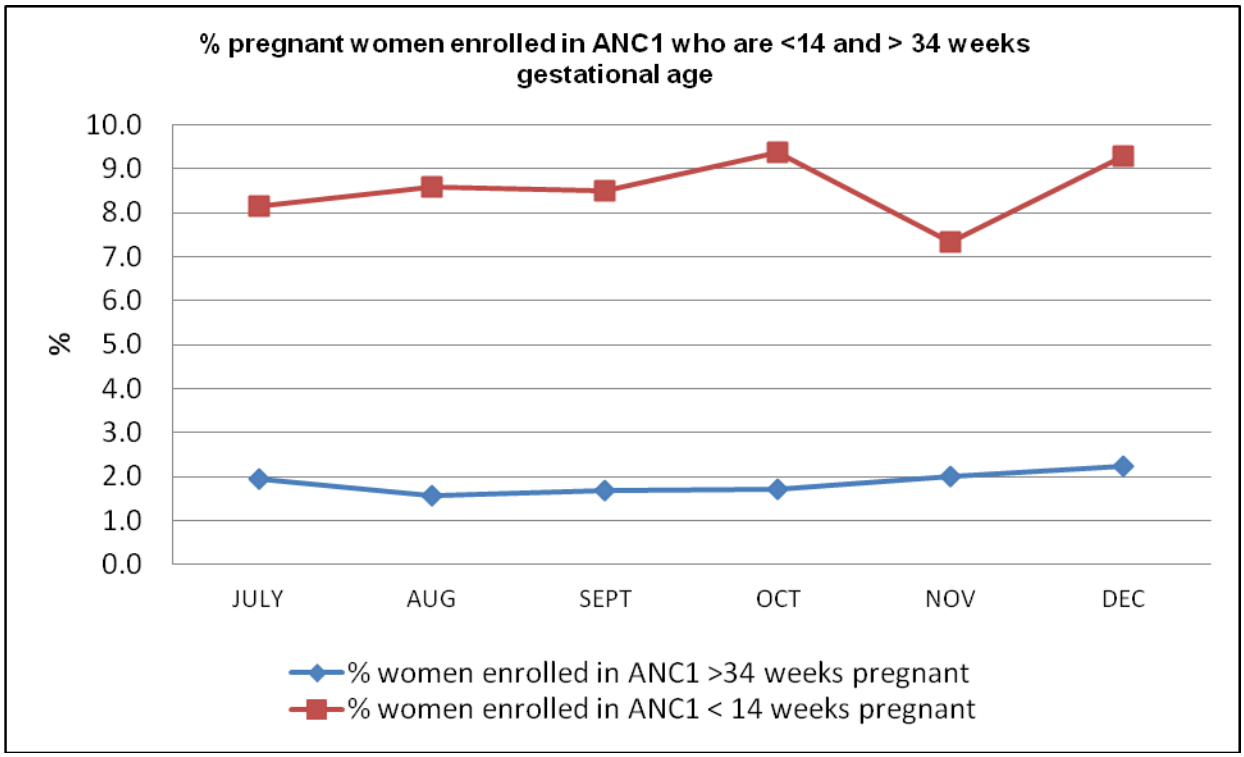
Based on the quality gaps identified in the baseline assessment, a change package was developed with expert stakeholders, and the demonstration phase of the improvement work began in February with 70 sites. After this phase, the requirement is to extend to all sites in these four provinces. All 70 target sites have begun to implement the phase one change package content on PMTCT, specifically on counseling and testing, documentation, and human resources interventions. ASSIST is supporting the MOH to address human performance factors in order to enhance providers' productivity, motivation and performance. In March, job descriptions for all staff involved in PMTCT were clarified in all 70 target sites.

Baseline data were collected in all 70 sites for a retrospective period of seven months (from July 2012 to January 2013). The collection was carried out during the month of February 2013 and confirmed and strengthened the results of the baseline assessment that the proportion of pregnant women enrolled in first ANC visit and who are tested for HIV is increasing, specifically those tested between 14 and 34 weeks (see Figure 1).

1.2.4 What Are We Learning?

- Having coaches/supervisors at different levels of the system (coaching visits, facilitating meetings, training and responsibility in communication) has created enthusiasm for ownership of activities
- The first responsible in charge (Provincial and district level) are more hesitant as the intervention package is not explicit about their role in the collaborative

Figure 1. Burundi: Percentage of pregnant women enrolled in first ANC visit who are < 14 and > 34 weeks gestational age, July–December 2012



- While working with the HIV program, the inclusion of other programs such as the SNIS, HRH and National Council against AIDS showed absolute necessity cooperation and collaboration at the strategic level

1.2.5 Planned Activities in the Next Quarter

- Continue coaching visits to all sites
- Introduce testing of standards using the model for improvement
- Conduct coaches' meeting
- Conduct a training workshop for MOH officials on QI and discuss central MOH change package
- Organize the second learning session
- Identify a pilot district for a community health worker intervention

1.3 East Africa Region

1.3.1 Background

Competency-based health worker education and training on quality improvement at the pre-service and in-service levels was found in a recent assessment conducted by the Regional Center for Quality in Health Care (RCQHC) to be largely absent in many African countries, with the exception of a few case examples limited to particular localities or institutions. Almost all newly trained health workers enter the health system without the requisite set of knowledge, skills, attitudes, and behaviors (or competencies) for improvement practice. Many existing in-service training programs have focused on "things you need to learn" (or topic-driven training) rather than "things you need to learn in order to perform a task" (or competency-based approach). Competency-based education and training goes beyond training on specific

improvement methods and tools to integrate broader competencies required for health worker teams to improve health care.

Stakeholders from 13 African countries took formative steps towards the development of a quality improvement competency framework at the Regional Consultative Workshop for Health Care Improvement in Kampala, Uganda, October 17-21, 2011. This forum was convened by the RCQHC with the support of USAID/East Africa, USAID Washington, CDC, and the USAID Health Care Improvement Project (HCI). The forum reached consensus on the core elements of the competency framework through rounds of brainstorming, development, peer review, and revision. Before this can be utilized as a tool in regional and national approaches that build capability for health care improvement in Africa, there is a need to further develop, refine, and validate the competency framework through a structured methodology. This is to assure the publication of a tool that is not only technically robust, but also relevant, understandable and user-friendly so that it can offer the strongest foundation for the development of competency-based education and training for health workers.

Stakeholders at the 2011 conference, including representatives of medical schools and nursing schools, Ministries of Health, teaching hospitals and development partners, also reached consensus on the need to integrate core improvement competencies into the pre-service curricula and in-service training programs. To date there is limited experience in this area, and stakeholders expressed an interest and a need for assistance to support them to achieve these goals.

1.3.2 East Africa Program Overview

Activities	What are we trying to accomplish?	How will we know?	At what scale?
Activity 1: skills transfer and capacity building for RCQHC staff	Build RCQHC capacity in methodologies to develop, validate and apply competency frameworks	• "Learning by doing" three-day program for RCQHC conducted to initiate the development and validation process • Key RCQHC staff mentored to facilitate the development and validation process	East Africa Region
	Technical guidance provided at each stage of the development and validation process	• Technical assistance provided on how each step should be carried out and how challenges and problems can be prevented/managed • Technical guidance provided on literature search/case study documentation as well as framework structure • Technical review and revision completed of the framework at each stage of development • Advising on the design of strategies for review, publication, dissemination and utilization, including publication of relevant manuscripts for peer reviewed journals	East Africa Region
	Provide technical assistance for revision of pre-service curriculum to integrate QI competencies, and development/ revision of in-service training programs to build QI competencies	QI competencies integrated and revision of training programs complete	East Africa Region

1.3.3 Progress, Results, and Accomplishments

Activity 1: Skills transfer and capacity building for RCQHC staff

ASSIST designed and facilitated a workshop which was held 4-7 March 2013 at URC Uganda office for all RCQHC technical staff. The workshop was designed to achieve the following eight objectives:

1) To define principles and rationale for competency-based education and training
2) To be able to explain the purpose and content of the competency framework and its applications
3) To develop a theory of change to guide planning
4) To define competency statements in the competency framework
5) To further develop, review, discuss and revise the competency framework
6) To further develop literature review and case studies
7) To develop plans for competency framework finalization and validation
8) To develop a plan for integrating core competencies into pre-service and in-service

All workshop objectives were met with the exception of objective eight, which will be developed after the competency framework is in a near-final stage of development and stakeholders have been engaged in the development and validation process so that their suggestions can inform the plan. The theory of change process was found to be instrumental in facilitating a shared understanding of the goals and activities required to achieve them.

A plenary presentation was given at the fourth East Africa Community Health and Scientific Conference held in Kigali, Rwanda March 27-29, by Dr. Tana Wuliji to advocate for the integration of core competencies for improvement into pre-service and in-service education and training. The presentation was well received, with significant interest amongst stakeholders to define core competencies and to integrate them into health worker education and training:

1.3.4 What Are We Learning

- The theory of change process can support activity planning processes and facilitate a shared understanding of what to achieve and what it takes to get there
- There is still significant interest amongst stakeholders to define core competencies for improvement and integrate them into health worker education and training

1.3.5 Planned Activities in the Next Quarter

- Support RCQHC to further develop and validate the draft competency framework through technical peer review and input
- Support RCQHC to organize and facilitate a regional stakeholder technical meeting as part of the framework development and validation process in May 2013

1.4 Kenya

1.4.1 Background

The USAID ASSIST Project aims to support the Ministries of Health (MOH), and the Ministry of Gender, Children and Social Development (MOGCSD) and other relevant partners to design, develop and implement strategies that will enhance the quality of service delivery in the health sector and the care of orphans and vulnerable children (OVC) in the country. Our approach is guided by the National Health Sector Strategic Plan II and MOGCSD-outlined priorities for improving quality of services. In particular we will focus on first operationalizing the Kenya Quality Model of Health (KQMH), which includes developing or revising standards of care,

supporting a national quality management program, and improving the voice of the client in health care. ASSIST will also support the government to establish a framework to develop an accreditation mechanism for health facilities. ASSIST will also help the government put in place systems to address problems identified in quality of care and define a policy to support these systems. Finally, ASSIST will work with the MOGCSD to review and develop standards of care for vulnerable children and facilitate their roll-out to service delivery points nationwide.

1.4.2 Kenya Program Overview

Activity	What are we trying to accomplish?	How will we know?	At what scale?
Activity 1: National Systems Strengthening for Quality Improvement	Operationalize the Kenya Quality Model for Health which includes developing or revising standards of care, supporting a national quality management program and improving the voice of the client in health care	• Robust national quality management systems actively setting and coordinating the improvement agenda • Robust quality improvement teams at county and sub-county levels actively identifying and prioritizing opportunities for improvement for their facilities • Robust work improvement teams actively developing and testing change ideas to improve integrated services	• National • Six counties increasing to all the 35 effectively supported by APHIA Plus partners
	Establish a framework for, and put into place a national accreditation mechanism for the health sector	• A mechanism exists to certify healthcare professionals and assure they maximize their training and skills through life-long learning. • A process exists to accredit health provider institutions that comply with standards for safe and reliable care	National
	Ensure government has systems in place to address problems identified in quality of care and a policy to support it	• National, county and local efforts to improve healthcare quality based on common national aims, priorities, targets and evidence-based interventions	• National • Six counties increasing to all the 35 effectively supported by USAID APHIA Plus partners
	Review and develop OVC standards of care with the MOGCSD and facilitate their roll-out to service delivery points.	• National PSS guidelines in place • National Directory of service providers in place • National referral tool in place • National training manual for QI • Seven counties demonstrating QI through centers of excellence	• National • Seven counties and seven sub-counties

1.4.3 Progress, Results, and Accomplishments

Activity 1: National Systems Strengthening for Quality Improvement

The USAID ASSIST Project has been mandated to support the government health departments and MOGCSD to update and review standards of care. In the second quarter of FY13, ASSIST supported the MOGCSD in developing the psychosocial guidelines for OVC care. A consultant has been recruited and is currently collecting data on the situation.

To implement this work, ASSIST is using a team-based collaborative improvement approach. ASSIST has so far engaged both the county health teams and the implementing partners (APHIA) in the selection of sub-counties to be developed as centers of excellence. At these sub-counties, ASSIST will work jointly with the service delivery partners and government to demonstrate how improvement work is implemented, in order to help the other stakeholders learn and apply the same in other sites. So far, five sub-counties have been identified out of six for health. An additional sub-country has been identified for the OVC work such that the OVC assistance will focus on seven centers of excellence. Among those identified, two sub-counties have started collecting baseline data on the indicators agree upon by each site. In total there are 66 health facilities in the two sub-counties where baseline data collection has begun.

At the regional level, county quality improvement teams been set up in each of the centers of excellence counties. Sub-county (district) quality improvement teams have been set up by respective District Health Management Teams (DHMTs) to oversee district level quality improvement activities, and facility level work improvement teams have been set up under leadership of the facility heads.

ASSIST has also engaged and built clear national ownership and coordination through the MOH Department of Standards and Regulatory Services and the national technical working group on quality improvement. ASSIST's work is mainly to support the Department to implement QI work planned for in their annual operational plans. In addition, at the Department of Children's Services, ASSIST has established a Technical Working Group chaired by the government to guide implementation. To ensure this support, QI work has been included in their annual work plans.

In February, ASSIST supported the organization of the first National Policy Seminar to bring together international and national experts to share experiences and best practices on quality improvement policy, infrastructure, and accreditation. In this process, stakeholder mapping, analysis, and engagement will be ongoing to identify who should be involved in developing policy and accreditation.

The dissemination of the national quality improvement framework, the Kenya Quality Model for Health (KQMH), has been completed in the eastern, central, and north Rift counties. Overall, 32 out of the total 47 counties in the country are now covered. During dissemination, officers from the Ministry of Health and Department of Standards and Regulatory Services worked together with ASSIST staff to take the county health teams through the KQMH.

1.4.4 What Are We Learning

- System perspective: There must be an integrated effort to build structures that support improvement work on the ground.
- Priority setting: Plans must focus national, county and local efforts to improve health care quality on common aims, priorities, targets and interventions.
- Continuity: Plans must build on work in progress by showcasing current initiatives addressing similar priorities.
- Support action to address priorities: Strategic frameworks should link domains for quality

interventions (leadership, information, organizational capacity, models of care, patient and population engagement, regulation and standards) to national decision-making processes.
- Define guiding principles: Plans must be guided by core principles of quality.

1.4.5 Planned Activities in the Next Quarter

- In the area of policy there will be a follow-up on the recommendations and issues raised at the policy seminar by convening a meeting of stakeholders to identify the next steps. Stakeholders will be engaged in accreditation and begin discussions on the mechanism for accreditation in Kenya.
- Complete dissemination of the Kenya Quality Model for Health in the remaining 15 counties
- Establish county and sub-county QI teams in all the six model districts in six counties
- Establish teams in at least 30 points of service delivery in each of the six model sub-counties (model districts), targeting establishment of 150-180 improvement teams
- Finalize the national quality improvement training manual
- Train the DHMT as quality improvement coaches in each of the six districts
- Begin coaching of facility-based teams and improvement work at service delivery points
- Training of community coaches jointly with the Ministry of Health and MOGCSD
- Formation and training of community-based organization QI teams
- Roll out of activities in QI for the communities of excellence sites
- Hold a consultative meeting with MOGCSD on national strategy for improving the OVC standards

1.5 Malawi

1.5.1 Background

The Government of Malawi, supported by USAID, has started a process to standardize the provision of services for orphans and vulnerable children. It has completed the development of draft standards and is now leading the process of piloting these standards, supporting communities to use quality improvement (QI) techniques to implement the standards, and setting up a transparent monitoring and evaluation (M&E) system. This system will provide information on how well children are doing (using the Child Status Index) and how well the standards are being adhered to. The OVC Technical Working Group mandated the QI core group to facilitate the review and finalization of the draft OVC standards.

1.5.2 Malawi Program Overview

Activity	What are we trying to accomplish?	How will we know?	At what scale?
Activity 1: Standardize the provision of services to improve care for orphans and vulnerable children	Pilot and finalize the OVC standards to see if they are feasible and effective in improving outcomes	Final set of standards developed and tested	National level *1,000,000 single and double orphans (UNICEF, HIV and AIDS Stock taking reports, 2009)*
	Improve care for vulnerable children	Using Child Status Index (CSI) measurements on children's wellbeing	Four pilot districts

1.5.3 Progress, Results, and Accomplishments

Activity 1: Standardize the provision of services for orphans and vulnerable children

ASSIST is supporting QI teams and government staff (specifically from the Ministry of Gender Children and Social Welfare) to use quality improvement approaches to identify and solve complex problems. These approaches include: focusing on the child as a person with multiple needs, working in a multi-sectoral team to improve services, and using the Child Status Index (CSI) to identify priority areas for improvement. Teams will use the OVC standards to decide what actions to take to improve services, test changes to learn what works in their context, use data when making decisions (such as choosing which problems to address and also to learn whether a change is working and should be adopted on a larger scale or whether to try something else), and continuously strive to do better. The key focus in our approach includes encouraging teams to compile and use data to make decisions about what services to provide and how to provide these services.

The CBOs that ASSIST is supporting and the service standards they are piloting are listed in Table 1.

Table 1. Malawi: CBOs and OVC service areas being piloted

District	Service area	Traditional Authority	Group Village Head	No of Villages
Blantyre	1. Early Childhood Development (ECD) 2. Child protection 3. Education	Somba	Masanjala	14
Karonga	1. Household economic strengthening 2. Food and nutrition 3. Psychosocial Support	Kyungu and Mwirang'ombe	Babalikuni and Kawela	14
Lilongwe	1. Early Childhood Development (ECD) 2. Child protection 3. Psychosocial support	Chitukula	Chiweza	31
Mangochi	1. Early Childhood Development (ECD) 2. Child protection 3. Education	Bwananyambi and Jalasi	Nkata, Namwera and Masuku	78

After CSI assessments in two pilot sites in Karonga District, a priority was identified to strengthen OVC household economic well-being. The QI teams have established 37 village savings and loans (VSL) groups with membership of 736 community members (see Figure 2).

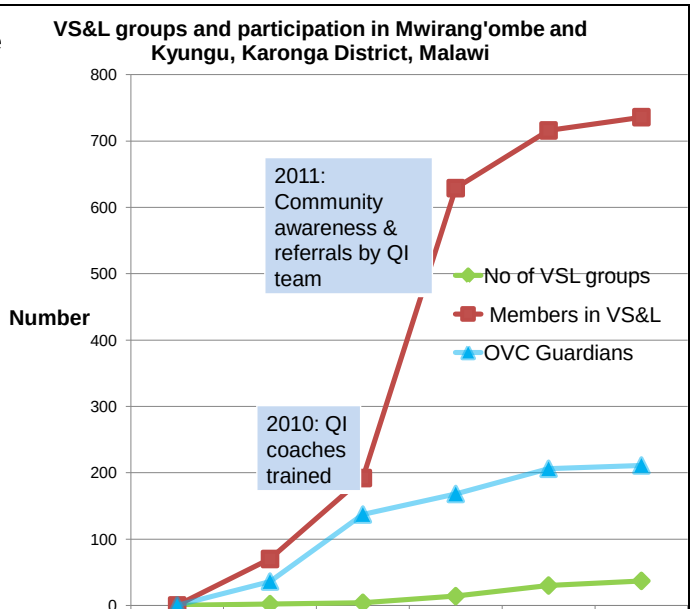
Out of these VSL members, 211 are OVC guardians who have benefited in various ways with proceeds from the VSL groups: seven OVC guardians have bought cows; nine OVC guardians procured farm inputs such as fertilizer; five bought iron sheets for roofing; four bought households mattresses in their houses; and 30 guardians started small business ventures.

The QI teams in the pilot communities tested the following changes to improve OVC household economic well-being:

- Identified households that could benefit from the VSL mechanism and referred them to appropriate groups within their communities
- Facilitated the establishment and management of VSL groups in the pilot communities
- Supported VSL groups with training on starting and managing small-scale business ventures

Figure 2. Malawi: Karonga village savings and loans schemes

- In 2009, there were 2 VS&L in Traditional Authorities (TAs) Mwirang'ombe and Kyungu
- QI teams have facilitated the establishment and management of 37 village savings and loans
- As of March 2013, 736 community members are participating in village savings and loans schemes
- Out of these members, 211 are OVC guardians (supporting roughly 1,000 children)



	2008	2009	2010	2011	2012	2013
No of VSL groups	0	2	4	14	30	37
Members in VS&L	0	70	192	629	716	736
OVC Guardians	0	36	137	168	206	211

- Monitored the performance of the VSL groups in the communities by collecting various information about the groups, such as, membership, loans, performance of the groups, and balance on hand.

To address health system gaps and linkages, USAID ASSIST supported the MOGCSW to facilitate the review and finalization of the OVC draft standards through QI core group meetings. The QI core group was mandated by the OVC Technical Working Group to spearhead the finalization of the OVC standards. The project has also supported the MOGCSW to conduct QI coaching visits and organize learning sessions for piloting districts to share knowledge in successes and practices across the pilot sites.

To move the work to scale, ASSIST is working closely with Catholic Relief Services (CRS) and Save the Children as well as with two districts currently piloting the standards to help them develop into centers of excellence for providing high-quality services to vulnerable children. We will help them develop plans to spread this approach to communities not currently involved in piloting the standards.

1.5.4 What Are We Learning?

- Collaborative efforts to review and finalize the standards have generated some interest from the various stakeholders, particularly the Ministry of Gender, Children and Social Welfare. The bottom-up approach in using piloting sites experiences to finalize the OVC standards at the national level is preferred by stakeholders at national level.
- The CSI assessments are assisting communities to focus and prioritize areas to work on as teams. Communities identify locally available resources and allocate the limited resources to appropriate services and beneficiaries within their communities.
- Sharing of information and data among QI team members has assisted some identified vulnerable households to be linked to support from the available limited resources within the community. For example, in Karonga District, some of the identified OVC guardians

were linked to VSL groups and farm input subsidy programs in the area after some QI team members shared the results of CSI assessments.

- Inclusion of local leaders and government personnel in QI teams helps to get community level buy-in of the interventions that are implemented because the local leadership is involved from the beginning. For example in Mangochi, Lilongwe, Blantyre and Karonga districts, some of the local village heads are part of the QI teams. This involvement has facilitated the teams ability to address some of the identified problems influenced by culture of the area.

1.5.5 Planned Activities in the Next Quarter

- Three meetings will be convened by the Ministry of Gender Children and Social Welfare to finalize the draft OVC standards with various government ministries and OVC stakeholders
- Conduct a learning session for the piloting districts to share some of the knowledge and experiences from the piloting communities
- Conduct QI coaching visits to all the four piloting districts to intensify documentation of lessons learned

1.6 Nigeria

1.6.1 Background

The Nigerian Federal Ministry of Women Affairs and Social Development (FMWASD) in coordination with PEPFAR Nigeria, has been engaged in improving quality of vulnerable children services by developing the national vulnerable children service standards.

Building on work funded under HCI, ASSIST is supporting institutional strengthening of FMWASD at the federal, state, and local government levels to develop and pilot standards for vulnerable children services using quality improvement methodologies.

In FY12, the draft vulnerable children standards were reviewed by various stakeholders who came up with a final draft. HCI facilitated the “training of coaches” to support piloting in 12 states. The pilot is being implemented to gather evidence from the application of services standards and to ascertain whether the proposed vulnerable children standards are doable, relevant, effective, and appropriate and if using the standards makes a difference in the well-being of the child.

1.6.2 Nigeria Program Overview

Activity	What are we trying to accomplish	How will we know	At what scale
Activity 1: Improve quality of vulnerable children services by developing the national vulnerable children service standards	Build the capacity of Federal and State Ministry of Women Affairs and Social Development in piloting draft service standard for vulnerable children in Nigeria	Federal and State Ministry of Women Affairs and Social Development (FMWASD) takes the lead in piloting draft service standards for vulnerable children	National 11 states ministry of women Affairs and social development Lagos, Ekiti, Cross River, Akwa Ibom, Enugu, Ebonyi, Kaduna, Kano, Taraba, Bauchi, Benue, and Federal Capital Territory 27 local government areas

Activity	What are we trying to accomplish	How will we know	At what scale
	Gather evidence on the pilot by using improvement science	Draft service standard document revised with evidence gathered and feedback incorporated	31 Community Quality Improvement Teams (in 31 CBOs) 9 Implementing partners
	Integrate draft vulnerable children service standards into National Priority Agenda and M&E Plan	Statement of declaration /commitment to use standards and quality improvement approach integrated into registration of CBOs with the FMWASD	National
	Institutionalize quality improvement through piloting and creating communities of learning across state holders	Establishment of Quality Improvement Teams/Units in the office of Federal and State MWASD and incorporation of quality improvement activities to the official duties of OVC desk officers	National, state, local government and Community level
	Communicate standards to partners and other vulnerable children stakeholders	Service standard for vulnerable children documented , finalized and launched	National, state, local government and Community level

The CBOs and the service standards they are piloting are listed in Table 2.

Table 2. Nigeria: CBOs and service standards being piloted

State	CBO	Community CBO is working in	Service Area
Akwa Ibom	Women United for Economic Empowerment (WUEE)	Ikot Unya	Food and Nutrition
			Protection
			Education
			Household Economic Strengthening
	Women and Community Livelihood Foundation	Ikot Abasi Nsit	Food and Nutrition
			Protection
			Psychosocial Support
			Education
			Health
			Household Economic Strengthening
Ekiti	Kids and Teens Resource Centre (KTC)	Agbado Ekiti	Psychosocial Support
			Food and Nutrition
	Centre for better health community development (BHEOCOD)	Otun Ekiti	Food and Nutrition
			Education
Ebonyi	Methodist Care Ministry (MCM)	Ikwuator Idembia	Education
			Protection
			Health
	Succor for Children and Development Initiative(SUCCDEV)	Ugwulangwu	Education
			Food and Nutrition
			Household Economic Strengthening
			Health

State	CBO	Community CBO is working in	Service Area
Lagos	Lucina Hope Foundation	Ilaje	Psychosocial support
	Gabasawa women and children empowerment initiative	Ogudu	Food and Nutrition
	Community of women living with HIV (NCW+)	Agboju	Health
Bauchi	Christian Association of Nigeria (CAN)	Agwan Ngaas Yelwan Tudu	Psychosocial support
	Federation Of Muslim Women Association of Nigeria (FOMWAN)	Felfelu	Health
	Associate of OVC NGOs in Nigeria (AONN)	Bayara	Education
	Civil Society Education Coalition for All (CSECAFA)	BADEL	Education
	Forward in Action for Education, Poverty and malnutrition	Sabon Kaura	Education
Taraba	Taraba Youth progressive Association (TYPA)	Turaki	Food and Nutrition
	Gashaka Charity Foundation	Serti	Household Economic Strengthen
Kano	Kola and Funke CARE (KAFCARE) Foundation	Imawa	Education
	Wazobia Support Group	Wudil	Household Economic Strengthening
	Community Support and Development Initiative	Wailari	Health
	Society for Youth and Health Awareness Development (SYHAD	Taurani/Daurawa	Education
	Nasarawa Orphanage Home	Nasarawa	Psychosocial Support
			Shelter and Care
	Society for Women Against Aids in Nigeria (SWAAN) Kano branch	Gama	Education
	Voice of the Hopefuls (VOH) Rano Community	Rano	Food and Nutrition
Kaduna	Network of People Living with HIV & AIDS (NEPHWAN)	Television	Household Economic Strengthening
	Red Cross	Anguwar Sarki	Health and Education
FCT	Women and Children Economy Development	Jikwoyi	Child Protection
	Total Child Care Initiative (TCCI)	Kabusa	Education
	Ageibo Cecilia Care Foundation	Kobin Madaki	Education
	Elohim Foundation	Kubwa	Food and Nutrition
Cross River	HIFA Nigeria Foundation	Ifako	Education
	SHED Africa	Ofumbongha	Food and Nutrition Health

1.6.3 Progress, Results, and Accomplishments

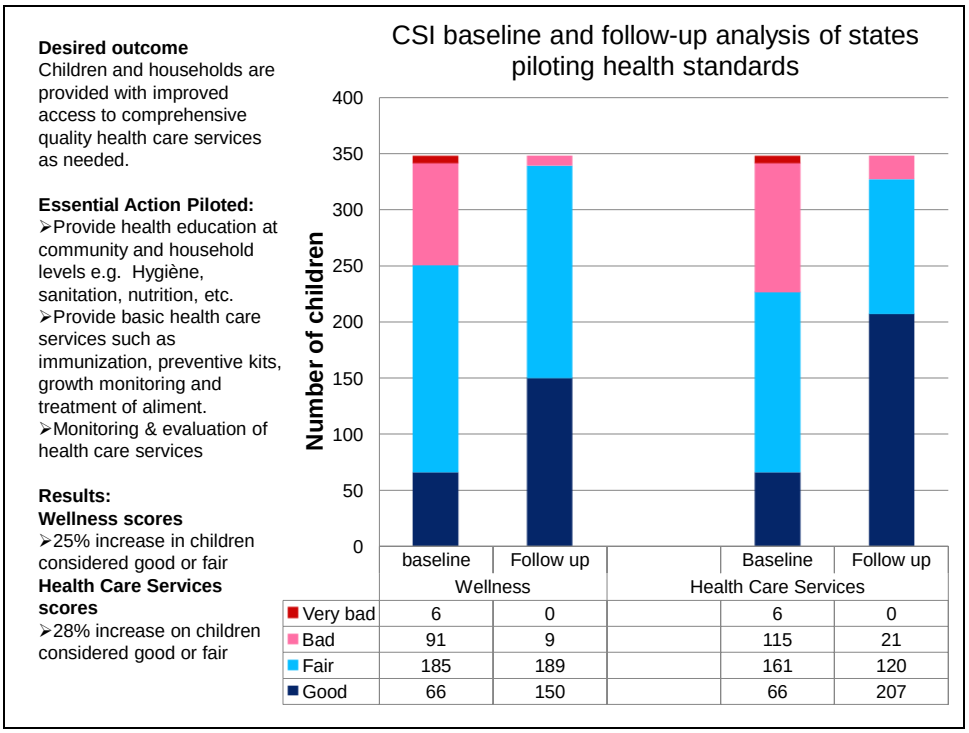
Activity 1: Improve quality of vulnerable children services by developing the national vulnerable children service standards

Three main service areas (health service, food and nutrition, and psychosocial support) are being focused on to improve quatlity of services provided to vulnerable children and households.

Health service area

The desired outcome on health is to see that children and households are provided with improved access to comprehensive quality health care services as needed. The essential actions are to: provide health education at community and household levels (e.g., hygiene, sanitation, nutrition, etc.); provide basic health care services such as immunization, preventive kits, growth monitoring and treatment of ailments; and monitoring & evaluation of health care services provided. Figure 3 shows results from the CSI anaysis of vulnerable children in three states (Bauchi, Lagos and Ebonyi), where at follow-up there was a 25 percentage point increase in the proportion of children rated as good and fair for wellness and 28 point increase in the proportion of children rated as good and fair for health care services.

Figure 3. Nigeria: Increase in children whose health well being is rated good or fair



Data source: CSI collected by the four partnering CBOs; the sample size is total number of children receiving services in five communities in Bauchi, Lagos and Ebonyi states in Nigeria

Food and nutrition service area

The desired outcome on the service area is for children and members of the household to have sufficient food on a regular and sustainable basis to meet their nutritional needs for growth and development**.** The essential actions are to: conduct households' needs assessment on food availability, storage utilization and nutritional status; engage communities and households on nutritional education, food production, preparation, storage and utilization; and build technical capacity of direct service providers in food and nutrition. CSI results in the four states piloting food security and nutrition and growth standards show a 38 percentage point increase in the proportion of children rated as good or fair for this service area.

Psychosocial support service area

Most of the children provided this service were abandoned children, lost children, and children of prisoners. The problems identified were emotional instability, stealing, withdrawal, mood swings, sexual active, and poor hygiene. The desired outcome for psychosocial support is for a

child to grow up and be emotionally stable, happy, content, interact freely with peers and adults, and demonstrate improved performance that enhances positive and meaningful living. The essential actions piloted were: Advocacy and community sensitization to reduce stigma and discrimination towards vulnerable children and their households; build capacity of CBOs, support groups, volunteers, teachers, caregivers, and spiritual leaders to provide psychosocial support to children and their caregivers; and provide psychosocial support services for vulnerable children and care givers/households. The CSI analysis thus far shows good progress in increasing the proportion of children considered good or fair on emotional health and social behavior, as shown in Figure 4, where there was an almost 50% increase in the proportion of children rated as good or fair under emotional health and social behavior.

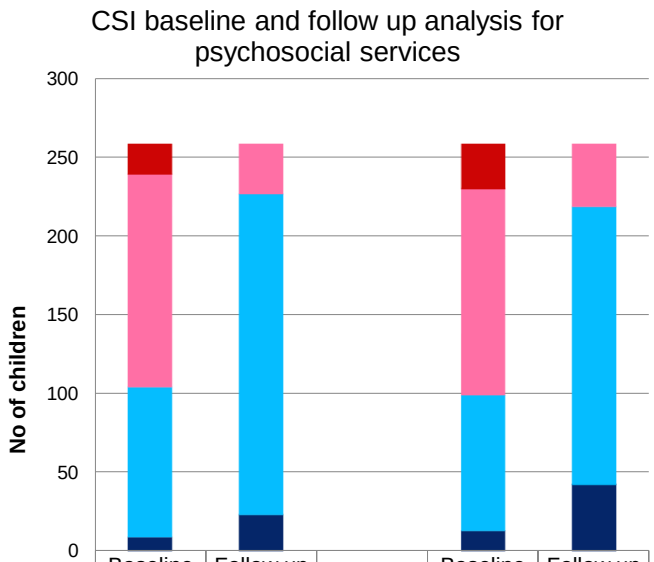
Figure 4. Nigeria: Increase in children whose emotional health is rated good or fair

Desired outcome: A child grows up to be emotionally stable, happy, contented and interacts freely with peers and adults and demonstrates improved performance that enhances positive and meaningful living.

Essential Action Piloted
- Advocacy and community sensitization to reduce stigma and discrimination towards vulnerable children and their households.
- Build capacity of CBOs, support groups, volunteers, teachers, caregivers and spiritual leaders to provide psychosocial support to children and their caregivers.
- Provide psychosocial support services for vulnerable children, care givers/households

Results:
Emotional Health scores
- 46% increase in children considered good or fair

Social Behaviors scores
- 47% increase in children considered good or fair



	Emotional Health		Social Behaviour	
	Baseline	Follow up	Baseline	Follow up
Very Bad	19	0	28	0
Bad	135	32	131	40
Fair	95	203	86	176
Good	9	23	13	42

Data source: CSI collected by the four partnering CBOs; sample size of 258 is total number of children receiving services in four communities in Akwa Ibom, Bauchi, Kano and Lagos states

In February and March, harvest meetings were conducted in the South and East zones to collect information from the Enugu, Ebonyi, Cross River and Akwa Ibom States. In addition, to promote this work, ASSIST staff made a presentation on quality improvement service standards during the PEPFAR OVC guideline review meeting. ASSIST also support state-level authorities to hold quality improvement review meetings.

1.6.4 What Are We Learning?

- What are the key challenges implementers faces in implementing these standards? URC has to work indirectly with CBOs who are sub-grantees of other implementers– which do not have allocated funds for piloting. Community quality improvement teams complained the work was time consuming.
- What do the CBOs and quality improvement teams do to facilitate the ability to implement these standard and best practices? They documented improvement changes

of the pilot by using empirical data and run charts; they collaborated with other line ministries, e.g., Education and Agriculture; and they conducted bi-weekly community quality improvement review meetings.

- Does implementing the standards improve the quality of programs for vulnerable children? Yes, it increases community ownership and participation, it leverages additional resources from the community for vulnerable children, it increases monitoring of vulnerable children activities by the state, local government and community, and it orients community quality improvement teams to take independent actions that lead to improvements across the vulnerable children service areas.

1.6.5 Planned Activities Next Quarter

- Hold the third learning sessions at the state level
- Hold national OVC standards validation meeting in June
- Dr. Nigel Livesley will visit to Nigeria to attend the validation meeting
- Mr. Wondwossen Hailu will visit from Ethiopia to attend validation meeting and work on the revised final standard document
- Document and share findings, best practices and lessons learnt from pilot
- Facilitate endorsement and launch of the vulnerable children service standards
- Disseminate service standards across all 36 states
- Start development of job aids
- Start translation of service standards in the four major Nigerian languages

1.7 Swaziland

1.7.1 Background

Tuberculosis is one of the major public health problems currently confronting the Kingdom of Swaziland. Current MOH statistics show that tuberculosis accounts for about 10% of in-patient morbidity in the country and is responsible for 20% of in-patient deaths. To compound this, an estimated 80% of TB-infected patients are co-infected with HIV. The high TB/HIV co-infection rates adversely affect both case detection as well as treatment outcomes.

The USAID ASSIST Project seeks to use the modern quality improvement approaches expand the coverage of integrated TB/HIV diagnostic and treatment services, improve TB treatment outcomes as well as quality of TB, TB/HIV and multidrug-resistant TB (MDR-TB) services in Swaziland; strengthen health systems to better meet the needs of the underserved populations, especially women and children and the most at-risk populations; institutionalize modern quality improvement approaches in the health care system in order to improve efficiency and reduce costs of poor quality service delivery; and improve health worker capacity and motivation.

ASSIST works with the MOH through the National Tuberculosis Control Program (NTCP), the Swaziland National AIDS Program, and the National Clinical Laboratory Services to apply lessons learned from established HIV and TB quality improvement activities to adapt integrated service delivery models and algorithms for health facilities and providers in Swaziland.

1.7.2 Swaziland Program Overview

Activities	What are we trying to accomplish?	How will we know?	At what Scale?
Activity 1: Support MOH and implementing	• Improve capacity of the national QA program and other MOH public health programs to plan, lead and manage roll out of quality assurance/quality	• National QA/QI strategic plan and standards available • Number (%) of	National Regional Facility

Activities	What are we trying to accomplish?	How will we know?	At what Scale?
partners to institutionalize modern quality improvement approaches	improvement (QA/QI) interventions • Build the capacity of health care workers and mentors at all levels to improve the effectiveness, patient centeredness, safety, accessibility and equity of health service delivery through use of quality improvement approaches • Improve performance measurement, documentation and use of data for Improvement at national, regional and health facility	health facilities with functional QI teams; • Number (%) of health care workers trained on quality improvement and quality management	
<u>Activity 2:</u> Contribute to health systems strengthening through building capacity of model TB/HIV clinics and two Centers of Excellence for TB care and treatment	• Increase universal access and availability of comprehensive, quality TB/HIV, MDR-TB, and infection control services at regional and primary health care (PHC) clinics in line with the Swaziland Essential Health Care Package (EHCP) • Enhance the institutional capacity of Regional Health Management Teams (RHMTs) to ensure efficient performance of service delivery at the region. • Strengthen TB/HIV, MDR-TB referral systems and bridge the continuum of care between community and primary, secondary and tertiary level care • Strengthen knowledge management, monitoring and evaluation, and research at the supported facilities	• Number of facilities receiving at least 80% of the planned joint clinical mentoring and support supervision visits. • Number of facilities with standards of care and algorithms for referrals and linkages in place.	Two regions of four 3 primary health facilities out of 37 PHCs and four hospital and health centers out of four in Hhohho 2/26 facilities in Manzini sub-region *(Target population is 309,184 for Hhohho and 352,568 for Manzini sub-region)*
<u>Activity 3:</u> Strengthen TB DOTS: Pursue high-quality DOTS expansion including MDR-TB	• Scale up TB and MDR-TB case finding in health facilities • Scale up access to bacteriology-microscopy / rapid molecular diagnosis (GeneXpert) in health facilities • Improve case holding and treatment outcomes for TB and MDR-TB • Implement surveillance and monitoring systems for TB and MDR-TB patients' case findings • Increase community awareness of TB, MDR-TB and infection control	• Case finding for TB • TB treatment success rate • Case detection and enrollment on MDR-TB treatment regimen • Six months treatment interim outcomes for MDR-TB • Treatment success rate for MDR-TB	National: support provided to the MOH-NTCP Regional: two regions out of four

Activities	What are we trying to accomplish?	How will we know?	At what Scale?
Activity 4: Strengthen MOH capacity and its partners to implement Infection control	• Strengthen MOH response for TB Infection prevention and control; • Strengthen Infection prevention and control practices in model clinics in areas of high risk for TB transmission; • Implement advocacy, communication and social mobilization in interventions for TB, MDR-TB and infection control; • To develop surveillance systems to monitor TB incidence and outcomes in health care workers and to provide feedback to MOH/NTCP	• # Facilities implementing the National Standards for infection control practice. • # of facilities with IPC plans • # of HCW contracting TB	National Regional: three regions out of four. Facility: 17 TB diagnostic facilities in Hhohho, 12 TB diagnostic facilities in Manzini sub region and one diagnostic facility in Lubombo – Good Shepherd Hospital. Vulnerable populations: Health care workers, prisoners, PLWH
Activity 5: Implement integrated TB/HIV prevention, Care and treatment activities	• To support the MOH TB and AIDS programs to coordinate and oversee implementation of the TB/HIV collaborative activities • To increase HTC and CPT uptake among adult and pediatric populations in TB clinical settings • To increase ART uptake among the TB/HIV co-infected adults and children in accordance with the National treatment guidelines. • To improve implementation of the 3 I's in HIV care settings and for vulnerable populations at risk (miners, diabetics, incarcerated). • Improve advocacy, communication and social mobilization	• Proportion of HIV+ patients who have been screened for TB disaggregated by gender and age • Proportion of TB/HIV co-infected patients receiving CPT • Proportion of TB/HIV co-infected patients receiving ART	National Regional *Facility*
Activity 6: Enable and promote research to improve pediatric TB diagnosis	• To sensitize the RHMTs and health care workers on research within their activities • To build capacity of both URC staff and health facility stakeholders on protocol development and research methods • To conduct priority operational research studies for TB including MDR-TB, TB/HIV and laboratory	# of health care workers trained on research methodology # of research reports	National *0.16/1000 = 160 doctors* *6.3/1000 nurses = 6300 nurses and midwives*

1.7.3 Progress, Results, and Accomplishments

Activity 1: Institutionalize quality improvement approaches in the health sector through support to the Ministry of Health and implementing partners

The ASSIST project team conducted joint supportive supervision visits to the TB clinics in Manzini and Hhohho regions and carried out joint clinical mentoring (together with MOH programs, RHMTs, and PEPFAR partners) to 22 facilities in Hhohho Region, which is the pilot region.

The ASSIST project team also participated in the meetings of the national QA/QI Technical Working Group (TWG) to plan for 2013 QI/QA activities and develop a QI/QA training manual. The TWG is comprised of Ministry of Health QA/QI officers; the RHMTs; key QI stakeholder; USG implementing partners; the Swaziland Standard Authority; and health facility QI focal persons.

Capacity building initiatives with health facility managers are ongoing. These initiatives address issues of adequate staffing, skill mix, performance appraisal, scope of work, planning, supportive supervision, and compliance with guidelines and standards. ASSIST is also working with facility managers to ensure that the health care workers have adequate tools to perform their duties (e.g. registers, request forms) and an appropriate work environment is provided (e.g. proper patient flow, infection control). In the period 30 mentors from three regions were also trained on mentoring skills and the clinical mentoring approach.

The Hhohho joint clinical mentoring team has visited 22 of the 71 health facilities in the region. In order to ensure that the clinical mentor is competent to mentor or coach, each mentor was assessed using a tool developed by the PEPFAR partners (URC, EGPAF, ICAP, MSH) that outlined the basic competencies required by each mentor for each thematic area.

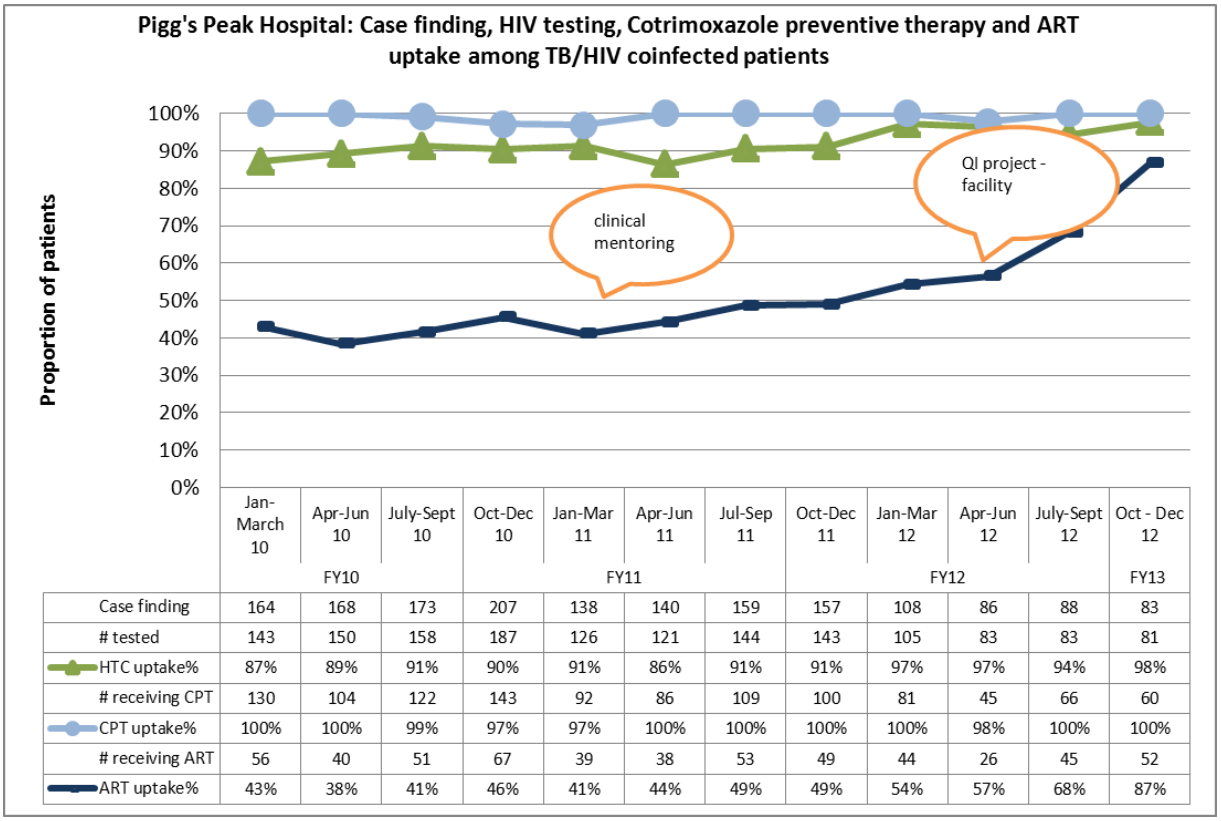
During the mentoring visits, the training needs of the health care workers are assessed and the mentors are responsible for ensuring the relevant training is provided either on-site or off-site. Two on-site trainings on TB, TB/HIV and MDR-TB were conducted to Pigg's Peak Hospital and TB center. Figure 5 shows gains made in coverage of TB-HIV co-infected patients with ART. Two on-site trainings on TB screening and MDR-TB case finding were conducted for Ngwoane and Herefords primary health clinics.

ASSIST staff also participated in the national QA/QI and thematic technical working groups to strengthen tracking of QI activities and impact through the existing health information systems. The ASSIST project health systems strengthening advisor worked with QI teams in Hhohho Region to address medicines and supplies stock management. The project also worked with the MOH Human Resource Department to develop staffing norms, which define the different cadres, types of interventions conducted, work load at all levels of health care delivery.

Through collaborative learning sessions, improvement gains and lessons learned are shared. These sessions have enabled the other facilities emulate and initiate QI projects. These include early initiation of ART for TB/HIV co-infection patients, bacteriological coverage, and reduction of the number of sputum samples not processed.

The ASSIST implementation plan for the reporting period addressed issues of institutionalization and built the capacity of the MOH QA/QI officers and implemented partners to lead the improvement effort. Capacity building efforts included providing technical and resources for the development and dissemination of the national QA/QI strategic plans and standards; and supporting two QA/QI Technical Working Group (TWG) meetings and five stakeholder meetings. Technical assistance and additional resources were provided for the development of QI training curriculum and adaptation of documentation tools for QI activities.

Figure 5. Swaziland: HIV testing, Cotrimoxazole preventive therapy and ART uptake among TB/HIV co-infected patients, Pigg's Peak Hospital



	Jan-March 10	Apr-Jun 10	July-Sept 10	Oct-Dec 10	Jan-Mar 11	Apr-Jun 11	Jul-Sep 11	Oct-Dec 11	Jan-Mar 12	Apr-Jun 12	July-Sept 12	Oct - Dec 12
	FY10			FY11				FY12				FY13
Case finding	164	168	173	207	138	140	159	157	108	86	88	83
# tested	143	150	158	187	126	121	144	143	105	83	83	81
HTC uptake%	87%	89%	91%	90%	91%	86%	91%	91%	97%	97%	94%	98%
# receiving CPT	130	104	122	143	92	86	109	100	81	45	66	60
CPT uptake%	100%	100%	99%	97%	97%	100%	100%	100%	100%	98%	100%	100%
# receiving ART	56	40	51	67	39	38	53	49	44	26	45	52
ART uptake%	43%	38%	41%	46%	41%	44%	49%	49%	54%	57%	68%	87%

Activity 2: Contribute to health systems strengthening through building capacity of three model TB clinics and two centers of excellence for TB care and treatment

Following infrastructure refurbishment at the TB center, patient flow was revised to ensure infection control and improve space utilization. The facility staff was provided with technical support to develop standard operating procedures for service delivery, TB drug management, TB data management, outreach visits and contact tracing in the community. These are meant to improve quality of health care delivery systems such as TB case detection and treatment outcomes and minimize the time spent at the facility by both presumed and diagnosed TB patients. In collaboration with Management Sciences for Health (MSH), an effective drug management system is being set up, and a focal point for drug management has been identified at the facility. Supportive supervision, clinical mentoring and onsite coaching for nurses has been provided. Onsite training on QI has been conducted and the facilities have implemented their QI projects.

ASSIST also provided technical assistance and onsite refresher training on TB, TB/HIV and MDR-TB for 13 new nurses from the TB unit, TB ward, ART department and medical wards at Piggs Peak Government Hospital and on-site trainings for six health care workers at Nyonyane clinic on TB screening and MDR-TB case finding and referrals.

Patient appointment and follow-up registers were introduced in six TB facilities (Pigg's Peak Hospital, Emkhuzweni, Bhalekane, Ndvabangeni, RFM, and TB center) to ensure TB patients are actively followed up from suspicion to treatment completion, reducing loss to follow-up during treatment. Documentation tools were introduced to each facility implementing QI projects. The tools will track and document progress and synthesize key findings.

A concept note, strategic approach and implementation plan were developed by the ASSIST team, Hhohho RHMT and the EHCP coordinator. These documents will act as a road map to roll out the EHCP in a stepwise manner through testing changes on a small scale and learning. The selected primary health clinics will serve as pilot sites for the delivery of the EHCP, demonstrate the feasibility of implementing the EHCP, and provide evidence for scale-up to other clinics.

To support capacity building and health workforce development, the international standards of care for TB were adapted to assist health care workers to implement services in the three model clinics and the two centers of excellence. Standardized on-site training programs for the service providers were developed to ensure all providers have the appropriate knowledge and skills to deliver quality services. ASSIST staff also conducted a continuous quality improvement activity at the regional and facility levels to ensure all service providers are engaged in quality service delivery. ASSIST also supported the regional M&E unit to provide continuous support to the facilities and enable them to use their data to improve service delivery.

Seven community health committees (Ezulwini, Horo, Mahwalala, Ntfongeni, Motshane, Nkhaba and Ngowane) and 15 community leaders in the Hhohho region were also mobilized and engaged in the delivery of TB, TB/HIV and MDR-TB treatment and care. The community health committees were assigned the responsibility of conducting community sensitization and the follow up of treatment defaulters. A TB information guide in SiSwati was developed to be used during the community sensitization talks; all seven communities have received sensitization at least once.

Collaboration with MSH is ongoing to address issues facing the drug supply management in the Hhohho region. A new system has been set up to reduce inefficiencies during the ordering of drugs from facilities, stock management at both facility and central level and in the forecasting and quantification of anti-tuberculosis drugs.

ASSIST in collaboration with the EHCP coordinator and RHMT developed a concept note and implementation approach document to define the EHC package for the model clinic and its prerequisites and document the implementation processes. The document will be used as a reference by the RHMT for scale-up.

Activity 3: Strengthen TB DOTS and pursue high-quality DOTS expansion, including MDR-TB

ASSIST continued to improve the diagnostic and treatment pathway for patients and address the points at which patients are lost to care. This included early and timely diagnosis, improved case holding strategies including strengthening defaulter tracking and adherence monitoring through support for mHealth technology and geographic information system patient and treatment supporter mapping.

ASSIST has incorporated a number of human performance factors in order to motivate and improve productivity of health care workers; these included feedback during collaborative learning sessions, facility meetings, facility managers' feedback meetings and consultations, and use of simple cause analysis tools (e.g., fishbone diagrams and story boards). In-service and on-ite trainings were conducted to improve competencies. Job aids were also developed and distributed to improve drug side effects management, both in the facilities and the community.

Data are disaggregated for all the indicators to identify the gender disparities in patient management and treatment outcomes. The data show more males (52%) are diagnosed with TB although more females are HIV-positive (76% vs 72% in men). Only 51% of TB/HIV co-infected men are on ART, compared with 61% of TB/HIV co-infected women. Couples testing to

increase male testing for HIV is supported as well as implementation of a family-centered approach to encourage spouses to test and treat, if necessary, at the same facility and opportunity with the spouse who is TB/HIV co-infected. Informational materials are given to female patients and children to give to their family members, targeting the head of family.

ASSIST, in collaboration with the National Clinical Laboratory services, has supported the introduction of rapid diagnostics like the GeneXpert MTB and Line Probe Assay. There are now five facilities in the Manzini Region installed with Gene Xpert: TB hospital, Phocweni clinic, RFM hospital, Mankayane hospital, and Matsapha comprehensive health care clinic. Installation is pending in Matsapha correctional service. In Hhohho Region, there are two machines at Mbabane Government Hospital and Pigg's Peak Hospital. At the TB centre, all presumed TB cases are required to submit an on-the-spot sputum sample which is then examined with the GeneXpert.

The project supported TB contact tracing in Manzini sub-region through the TB/HIV community team based at the TB center. Through the current 14 index patients receiving Community DOT services; 75 TB contacts were provided with TB screening, HIV care and support, and health education on TB/HIV; 55 were screened for TB and 35 screened positive for TB symptoms; 28 sputum samples were submitted and none diagnosed with tuberculosis. Six children under five were referred to TB center for further investigations since they could not produce sputum.

ASSIST collaborated with the Luke Commission to integrate TB screening into their community health care delivery operations by providing TB screening in communities they serve. The project trained 16 cough monitors on TB symptoms, TB/HIV co-infection, and drug resistant TB and on how to conduct TB screening in order to improve case finding. In the second quarter of FY13, 436 people were screened; 40 people were referred for further investigation; and eight eventually initiated on anti-TB treatment.

ASSIST supported mapping of miners and ex-miners as a response to TB in the mining sector. In conjunction with ex-miners and miners association, a register and health assessment tool was developed. The miners in one of the chiefdoms in Shiselweni region were registered and follow up mapping and health assessments were conducted.

Activity 4: Strengthen MOH capacity and its partners to implement Infection control

TB infection control facility assessments were conducted; analysis and synthesis is ongoing. The findings from the assessments will serve as a basis for facility improvement on infection control and prevention. A number of strategies have been implemented, including trainings and development of IEC materials and job aids on TB infection prevention and control practices. A surveillance system to monitor TB incidence and outcomes among health care workers has been developed in collaboration with the NTCP and the MOH's wellness program.

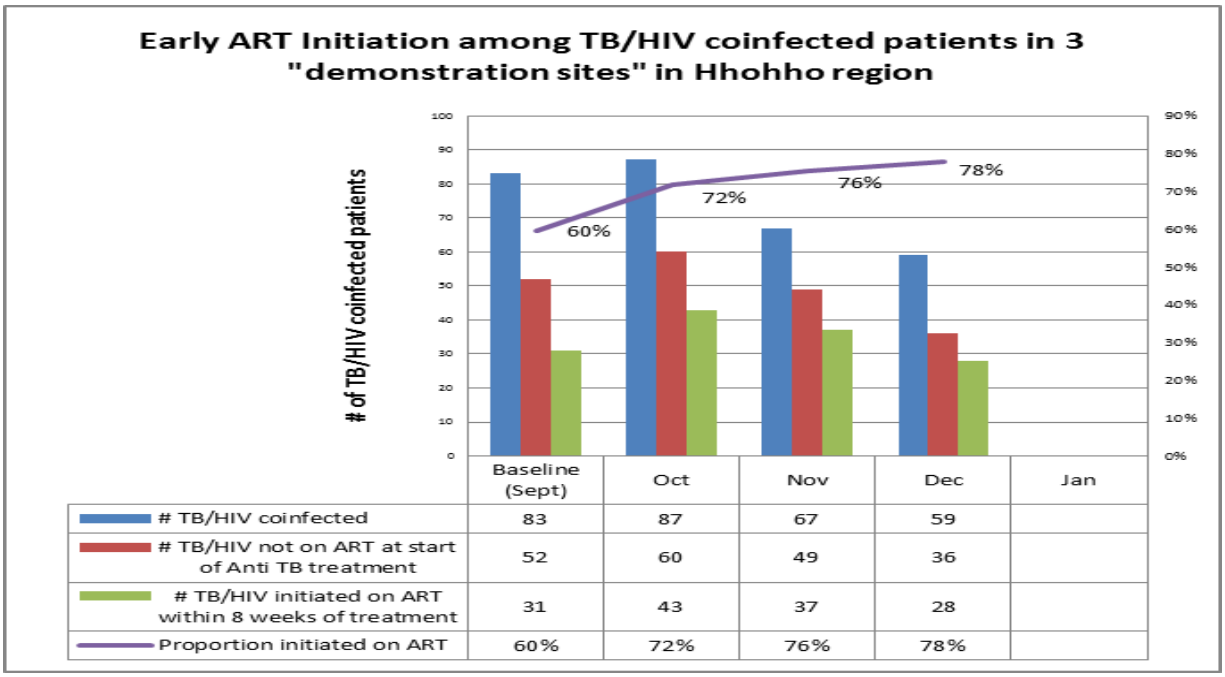
Activity 5: TB/HIV Integration: Improve coordination, decrease burden of TB in HIV patients, and decrease burden of HIV in TB patients

Onsite trainings on three I's, TB screening, and MDR-TB case finding and referrals for non-TB diagnostic facilities was conducted for 25 health care workers at Mankayane hospital and eight health care workers at the TB hospital clinic. The project provided technical support to the TB/HIV task team to improve isoniazid preventive therapy (IPT) implementation and address issues related to challenges and availability of isoniazid, ongoing assessment to review the supply chain management at all levels, and monitoring and evaluation of IPT roll-out, including recording and reporting tools.

The project provided technical support to strengthen TB screening among HIV-positive patients at all entry points. TB patients are initiated on treatment promptly and DR-TB patients are

referred early for treatment initiation at TB Hospital (Figure 6).

Figure 6. Swaziland: Early ART uptake among TB/HIV co-infected patients, Hhohho Region, Sept.-Dec. 2012



	Baseline (Sept)	Oct	Nov	Dec	Jan
# TB/HIV coinfected	83	87	67	59	
# TB/HIV not on ART at start of Anti TB treatment	52	60	49	36	
# TB/HIV initiated on ART within 8 weeks of treatment	31	43	37	28	
Proportion initiated on ART	60%	72%	76%	78%	

The ASSIST team also provided clinical mentoring and supportive supervision to 17 facilities in Hhohho region and 12 in Manzini region to develop strategies for early ART initiation and compliance guidelines. The project developed job aids for Drug Susceptible TB and Drug Resistant TB and distributed them to health care workers.

Activity 6: Enable and promote research to improve pediatric TB diagnosis

The proposed study aims to determine the utility of various specimen collection and diagnostic methods. The feasibility of non-invasive sputum collection techniques will be investigated. Use of newer rapid diagnostic point of care tests will also be validated. A situational analysis of TB and MDR-TB in children will be conducted, and results used to inform policy and interventions.

In the reporting period, a situational analysis and testing of various sample collection and diagnostic methods among children in Swaziland were conducted. This work included consultations with the clinicians, the pediatric care and treatment technical working group, and the NTCP.

1.7.4 What Are We Learning?

- Does documentation and sharing of best practices improve sustainability and scale-up of interventions? A national quarterly review meeting was held with the NTCP and health workers from 40 facilities. As a follow-up, facilities developed action plans to implement best practices, particularly related to TB screening and TB/ART integration. Pigg's Peak TB clinic implemented their action plan: improving documentation and revised patient flow to accommodate adherence counseling for co-infected patients. Their ART uptake among TB/HIV co-infected patients is 87% within 8–10 weeks of initial treatment and 95% by end of treatment. Best practice to share: adding a visit at two weeks after TB treatment initiation to accommodate ART adherence counseling increases the early uptake of ART among TB/HIV co-infected patients.

- Does collaboration with community-based organizations and other relevant bodies improve referrals and linkages to care? Following a four-day workshop on TB held for community leaders in Hhohho Region, community sensitization meetings on TB were conducted in seven communities by the community leaders. In these seven communities, no defaulters from treatment have been recorded. Engaging community leaders may help improve retention in care as they are able to follow up patients in the communities and link them back to care.
- Routine health screening among health care workers allows TB to be diagnosed earlier than it would have. A local NGO that provides wellness services for nurses was supported to conducted health assessments and disease screening including TB at 13 health facilities; 3214 nurses were seen during the wellness days, 776 were screened for TB, 272 had TB symptoms and 12 were diagnosed with TB. Engagement of a different organization to do the screening ensures there is greater turn up of the nurses than if the health facility had conducted the activity. (It may be too early to make this conclusion but the nurses were diagnosed earlier than they would have been had only routine screening procedures been followed.)
- Does the availability and use of national standards improve service delivery? The EHCP and national standards of care adapted for Hhohho support the RHMT and implementing partners to provide standardized supportive supervision and clinical mentoring.

1.7.5 Planned Activities for Next Quarter

Activity 1: Institutionalization of QI approaches in the health sector

- Operationalization of QI training curriculum and materials
- Training of health care workers in QI
- Conduct mentoring and feedback
- Conduct collaborative feedback sessions at facilities, regions and national levels
- Scale up the use of standard documentation tools for QI activities
- Print and disseminate job aids

Activity 2: Health Systems Strengthening

- Conduct training of health care workers at the model clinics to improve TB diagnosis and management, supply chain management for drugs and consumables, and TB/HIV integrated management
- Conduct semi-annual performance audits and feedback sessions
- Improve patient flow and provide minor renovations as necessary
- Conduct clinical mentoring and support supervision in conjunction with the RHMTs
- Strengthen TB/HIV and MDR-TB referral systems and bridge the continuum of care between community, primary, secondary, and tertiary levels of health care
- Engage community health committees and communities to participate in treatment supporter mechanisms.
- Strengthen knowledge management, monitoring, evaluation and research
- Conduct quarterly review meetings for the Hhohho clinics

Activity 3: TB DOTS and MDR-TB

- Technical working groups meetings
- Continue to expand the availability of diagnostic equipment (microscopy, GeneXpert, culture and DST)
- Conduct community health education, advocacy, and mobilization sessions
- Put in place standard operating procedures for DOTS

- Continue training health workers on TB, MDR-TB, and infection control and provide with guidelines and job aids.
- Implement mHealth strategies to address TB treatment outcomes: provision of mobile phones to facilities to track patients, GIS mapping of MDR-TB patients.
- Support the proper quantification, storage, and supply of first line and second line drugs.
- Monitoring and evaluation system and impact measurement
- Conduct advocacy and social mobilization campaigns

Activity 4: TB infection control

- Support the TB Infection Prevention Committee to improve its monitoring and evaluation plan
- Support health facilities in complying with infection prevention standards by establishing infection control plans, committees and focal persons
- Strengthen infection prevention and control practices in model clinics in areas of high risk for TB transmission
- Conduct ongoing risk assessments for high-volume facilities and support the minimization of risk for TB
- Implement TB advocacy, communication and social mobilization in interventions for TB MDR-TB and infection control
- Institute interventions to monitor health care worker infections and protect their health: TB screening, isoniazid prophylaxis, provision of masks, and compliance with guidelines

Activity 5: TB/HIV integration

- Revision of national TB/HIV policy guidelines
- Continued mapping of miners
- Provide technical support to increase the uptake of ART among adult and pediatric populations in TB clinical settings
- Train health care workers on TB/HIV management, 3 I's and pediatric TB case management
- Support the supply chain management for ART and anti-TB drug provision in TB clinics
- Advocacy and social mobilization for pediatric and adult TB/HIV

Activity 6: Pediatric TB diagnosis

- Train health care workers on research methodology
- Finalize and present protocol to the ethics committee
- Data collection and analysis for pediatric TB situational analysis
- Report writing for situational analysis

1.8 Tanzania

1.8.1 Background

In FY13, ASSIST plans to build on the gains from the USAID HCI Project and scale up activities to additional regions. The focus will include analysis of and finding solutions to identified implementation gaps. For PMTCT, the target is to support national efforts to the reduce mother-to-child transmission from the estimated 26% in 2011 to 4% in 2015. The strategic focus of ASSIST's work will be on strengthening supply chain management; developing institutional and human capacity in PMTCT; improving pediatric HIV care, treatment, and support; and integrating PMTCT and pediatric HIV care, treatment and support services at all levels. As the Ministry of Health and Social Welfare (MOHSW) is in the process of adopting a new PMTCT

strategy—Option B+, whereby HIV-positive pregnant women will receive lifelong treatment, regardless of their CD4 levels—the project will support prototyping the new approach once the MOHSW position is confirmed.

In prior years, URC through the USAID HCI Project also supported the MOHSW and implementing partners (IPs) in designing and managing a national quality improvement program for antiretroviral therapy (ART). For over four years, QI programs in demonstration regions (Tanga, Morogoro, Lindi and Mtwara) have produced evidence-based strategies and best practices on how to improve several aspects of ART service delivery. Regional Health Management Teams (RHMTs) and Council Health Management Team (CHMTs) in these regions can facilitate QI training, coaching and mentorship in reducing loss to follow-up, increasing TB screening, and improving adherence to anti-retrovirals (ARVs). Nationally, the ART program still faces several quality problems. About 57% of the estimated 1,300,000 country cumulative clients were enrolled in HIV care by December 2010, and only 20% of these were on ART while about 63% of adults with HIV are retained on treatment 36 months after initiation of ART (NACP National database). Furthermore, only 27% to 45% of PLWH honor all clinic appointments for HIV care and treatment services. Under the USAID ASSIST Project, URC will work with stakeholders to strengthen the MOHSW managerial capacity and adoption of integrated QI approaches and best practices at all levels to address prevailing system gaps contributing to low coverage, retention and well-being of patients on ART.

Also under HCI, URC has provided technical support to the Department of Social Welfare (DSW) and implementing partners serving most vulnerable children (MVC) to improve the quality of MVC services by implementing the MVC guidelines at the point of service delivery to improve the lives of children and their households. HCI worked with DSW and MVC IPs in developing MVC QI communication tools to facilitate the roll-out and implementation of MVC QI guidelines across all levels of service delivery. A recent program evaluation revealed improved access to basic services by MVC: over 80% of beneficiaries have access to basic services, e.g., two meals a day, use of insecticide-treated bednets, access to health services, enrolled and attend school regularly. In FY13, ASSIST will continue to support the DSW and MVC IPs to build on the existing systems and structures for the care, support, and protection of most vulnerable children through addressing implementation barriers.

HCI also supported the MOHSW and IPs to develop national Standard Operating Procedures (SOP) for the home-based care (HBC) program and field test their applicability in Tanga and Dodoma regions. A program review in these regions demonstrated improved referrals as well as improved documentation and reporting. In FY12, HCI started to pilot an integration of HBC and MVC services in Muheza District, Tanga Region. In FY13, ASSIST will support the MOHSW and HBC IPs to disseminate and roll out the HBC SOP across all levels of care and in all regions and strengthen the collection, recording and reporting system and use of the HBC database.

1.8.2 Tanzania Program Overview

Activity	What are we trying to accomplish?	How will we know?	At what scale?
Activity 1: Support MOHSW and PMTCT implementing partners to scale up programs providing women and their families improved access to quality	Improve access to HIV prevention, testing, care, treatment and support for pregnant women and their families	% of pregnant women who book ANC at 14th week of pregnancy % of HIV-positive pregnant women who receive ARVs % of HIV-positive screened for TB at Reproductive and Child Health (RHC) clinics % on non-pregnant women	10/26 regions; 67/67 districts of the focus regions and 202 facilities/ 1717 PMTCT sites in these districts

care along the PMTCT cascade		accessing FP who are tested for HIV	
Activity 2: To support MOHSW and IPs to scale up sustainable improvements in coverage, retention and outcomes for patients on ART.	Improve ART program integration with essential services To strengthen follow up of ART patients for better retention and clinical outcomes To build the capacity of RHMT and CHMT to oversee QI activities for ART and scale up ART QI to other sites.	% of eligible PLWH attending care and treatment centers (CTC) receiving FP methods % of PLWH (pre ART or ART) diagnosed with TB who are treated with anti TB drugs % of patients with follow-up CD4 at six months % of patients alive and on treatment 12 months after ART treatment initiation % of ART patients keeping appointment	145 Health facilities in 8/26 regions with 374 facilities offering CTC services
Activity 3: To support MOHSW, MVC IPs and local structures to strengthen Quality of care, support and protection to Most Vulnerable Children.	Improve capacity of service providers to provide quality MVC services through QI approaches	# of MVC referred and linked with different community, health and other services	All 22 wards in Bagamoyo districts have been covered with 125 QITs
Activity 4: Work with MOHSW and stakeholders to improve the quality of community-level HBC.	Support MOHSW and Implementing partners to apply HBC SOP in HBC programming using QI platforms Support RHMT, CHMT and implementing partners to integrate HBC, MVC services and clinical services across a continuum of care	# of clients accessing a broader range of HBC services as guided by the SOP # of regions and implementing partners applying SOP	16 out of 24 wards in Tanga city 13 out of 26 regions

1.8.3 Progress, Results, and Accomplishments

Activity 1: Support MOHSW and PMTCT implementing partners to scale up programs providing women and their families improved access to HIV prevention, testing, care, treatment and support along the PMTCT cascade through quality improvement approaches

This work is being implemented using the improvement collaborative approach including learning sessions and mentoring and coaching visits to facility teams. Government officials from MOHSW, RHMTs, and CHMTs are fully involved in carrying out these QI activities to build their competencies. In each region, ASSIST works with the RHMT, CHMTs and regionalized implementing partners (e.g., EGPAF in Mtwara, Lindi, Kilimanjaro, Arusha and Tabora and EngenderHealth in Manyara) to use assessment tools that capture gaps in health systems and linkages. Periodic review of health systems gaps is also done through learning sessions and coaching visits, when processes of service delivery are redesigned for improved systems and linkages. For example, in Morogoro and Shinyanga, the ASSIST team, in collaboration with CHMTs and the RHMTs, advised QI teams on addressing stock-out problems by ensuring proper reporting and request of the PMTCT program commodities using MOHSW forms.

In the second quarter of FY13, ASSIST conducted a situational analysis in the new regions of Tabora and Arusha in partnership with the RHMTs and EGPAF. Planning meetings were

conducted with members of the RHMT by introducing them to the activities supported by URC and to quality improvement methodologies. Joint site visits by URC, EGPAF and RHMT-CHMT staff were made to carry out the assessment in seven hospitals, four health centers and three dispensaries in the six districts of Tabora Region and in nine hospitals and six health centers in Arusha Region. Baseline data from November 2012 to January 2013 was collected for twelve PMTCT and four ART indicators, to identify implementation gaps.

Most of the sites visited during this assessment did not have QI teams or activities. Some health facilities did not have any data on family planning for HIV-positive clients, care takers receiving DNA PCR results for HIV-exposed infants, and six-month follow-up for CD4 tests. The plan to initiate collaborative improvement activities is being implemented jointly with EGPAF so as to streamline quality improvement activities and strengthen services for ART and PMTCT in these regions. The first learning session for health care workers, district and regional supervisors has been planned to be conducted in May 2013.

During learning sessions done in Morogoro and Shinyanga, the ASSIST team in collaboration with the RHMT and implementing partners, supported QI teams to develop change ideas for improving comprehensive follow-up of HIV-exposed children, PCR testing, and HIV testing and counseling for male partners. Teams were supported to develop local processes to facilitate linking PLWH enrolled in HIV care and treatment and PMTCT clients with the home-based care program where they will be supported in dealing with issues of stigma and needs for legal, income-generation, and other support.

To better support retention of HIV-positive pregnant women in the PMTCT cascade, ASSIST promoted couple counseling and sensitization of partners of pregnant women receiving reproductive and child health (RCH) services. In Shinyanga and Morogoro regions, participants involved in QI training and coaching were sensitized on social, cultural and economic determinants for male partners to participate in RCH services. Teams are testing approaches for educating men and the community at large on the importance of being involved in RCH services was a key strategy, including targeting community social groups and influential leaders as well as facility-level providers, to convey the importance of testing both male and women.

To promote sustainability of the efforts, ASSIST staff is working to ensure QI activities are incorporated into 2013/2014 Comprehensive Council Health Plans. In addition, QI teams were advised to incorporate QI and apply best practices as part of their daily PMTCT work. Sharing of learning during their clinical meetings was emphasized.

Activity 2: To support MOHSW and IPs to scale up QI activities for ART services to achieve sustainable improvements in patients coverage, retention and outcomes

During the reporting period, ASSIST supported ART implementing partners, the RHMT and CHMTs from four districts of Shinyanga Region to lead the first learning session, where 24 facility health care workers and four staff from the regional implementing partners in Shinyanga participated. Following this, coaching and mentoring was conducted to 10 sites in the region. Similarly, in Morogoro region, ASSIST, Tunajali, and the RHMT supported CHMTs from four districts to conduct the first learning session for scaling up QI in the region under full management by CHMT. A total of 30 new sites were reached, and each developed an action plan. In Shinyanga, where QI teams are implementing changes to address ART quality gaps, preliminary results indicates improvement in PLWH who are keeping appointment for CTC services and adherence counseling done to ART patients, as shown in Tables 3 and 4.

Table 3. Tanzania: Percentage of HIV patients keeping appointments at Masumbwe Health Center, Bukombe District, Shinyanga, Oct. 2012-Jan. 2013

	October	November	December	January
Numerator	204	212	290	268
Denominator	478	508	598	493
%	**43**	41	48	**54**

Table 4. Tanzania: Percentage of ART patients who received adherence counseling at Masumbwe Health Center, Bukombe District, Shinyanga, Oct. 2012-Jan. 2013

	October	November	December	January
Numerator	33	246	372	386
Denominator	50	508	598	493
%	**66**	48	62	**78**

During learning and coaching sessions, the ASSIST team, in collaboration with RHMTs, CHMTs, and implementing partners, supported QI teams to develop change ideas for improving: comprehensive follow up of HIV exposed children, PCR testing, HIV testing and counseling for male partners and retention in care of ART and non-ART patients as well as monitoring of CD4 count by following up patients on cohort bases and ensuring proper documentation in the CTC card, ART register, and National AIDS Control Program database. RHMTs are supporting CHMTs to lead the process while URC will provide technical support during learning and coaching and mentoring sessions.

ASSIST team strongly advised quality improvement teams in sharing what they learned during learning sessions and coaching visit so that more personnel can participate in carrying out ART quality improvement activities at their workplace .The concept of QI team members to be change agents for improvement QI activities was clearly explained to participants who attended learning sessions and coaching visits. Encouraging feedback by praising good work and corrections of mistakes by co-workers and supervisors were also emphasized. Also seeking support from the management to enable provision of onsite training as part of providing feedback to other staff was emphasized. In order to sustain the results, QI teams were advised to incorporate QI and apply best practices as part of their daily work. Sharing of learning during their clinical meetings was emphasized

In this aspect, ASSIST team in collaboration with CHMT/RHMT advised QI teams to ensure proper reporting and request of the ART commodities using R&R forms in addressing stock out problems. Teams were supported and came out with a system to facilitate linking PLWH enrolled into HIV Care and treatment and PMTCT clients into HBC program where they will be supported in issues like dealing with stigma, legal/ spiritual and IGA support.

QI experience from demonstration sites in Shinyanga and Morogoro was spread to 44 new sites in these regions through a process led by the CHMTs. QI best practices from the demonstration sites (including ideas to improve retention, TB screening and CD4 count checking among PLWH six months after starting ART) will be replicated, and progress of improving quality will be monitored. Supporting CHMTs to take lead in QI in their district is expected to increase their commitment to following up the implementation of QI during their quarterly supervision.

Activity 3: To support MOHSW, MVC IPs and local structures to strengthen quality of care, support and protection to Most Vulnerable Children through quality improvement approaches

ASSIST and the Department of Social Welfare, in collaboration with Bagamoyo District Council, has conducted coaching session in 19 wards of Bagamoyo District, whereby a total of 508 QI teams members participated. The overall purpose of these coaching sessions were: to assess the functionality of MVC committees and provide a hands-on support on the identified quality gaps, review collected data on desired outcomes and essential actions implemented by MVC committees/QI teams, assess quality of data collected for each priority essential action, review the ability of QI teams to analyze processes, and strengthen the capacity of district and ward coaches in providing regular technical assistance to the teams. ASSIST staff play a technical support role vis-à-vis Bagamoyo District Council and other implementing partners like FHI 360's Pamoja Tuwalee Program in order to build their capacity to be able to provide regular supportive supervision and mentorship to MVC committees/QI teams.

During the coaching sessions, QI team members were able to present successes and challenges identified. The successes identified included QI teams able to update MVC registers and provide different social services such as: insecticide-treated bednets, Community Health Funds (CHF), birth certificates, renovating MVC houses, support for income-generating activities, school services (fees, scholastic materials and uniforms), establishing children clubs, sensitizing community members on children's rights, school follow-up to assess MVC school performance, etc. Community members have started contributing/donating funds for opening MVC bank accounts and for purchasing or providing social services. Coaches were able to identify the "QI Champions" among the villages and encourage those teams that are not doing well to learn from those champions in order to improve the welfare of MVC in their respective villages. Despite successes, QI teams continue to face challenges, such as competing priorities among volunteers, leadership conflicts in the villages, and lack of transport facilities.

ASSIST continued to support MVC committees/QI teams and implementing partners to continue encouraging parents and caregivers to support both boys and girls to attend school on a regular basis so as to improve their performance. MVC committee/QI teams identified most vulnerable children who are not attending school regularly, involved parents and school teachers to promote school attendance, and reviewed exercise books to see what children have learned.

ASSIST also participated in the launch of the National Costed Plan of Action (NCPA) II 2013 – 2017. This plan aims to ensure that most vulnerable children in Tanzania receive the care, protection and support required for them to reach their full potential as productive members of society, and households and communities receive the support required to prevent violations of children's rights. During this event, various line ministers presented their commitments in the implementation of the NCPA II. ASSIST will leverage these commitments as advocacy tools for allocation of resources to ensure that gaps in supporting most vulnerable children are identified and addressed

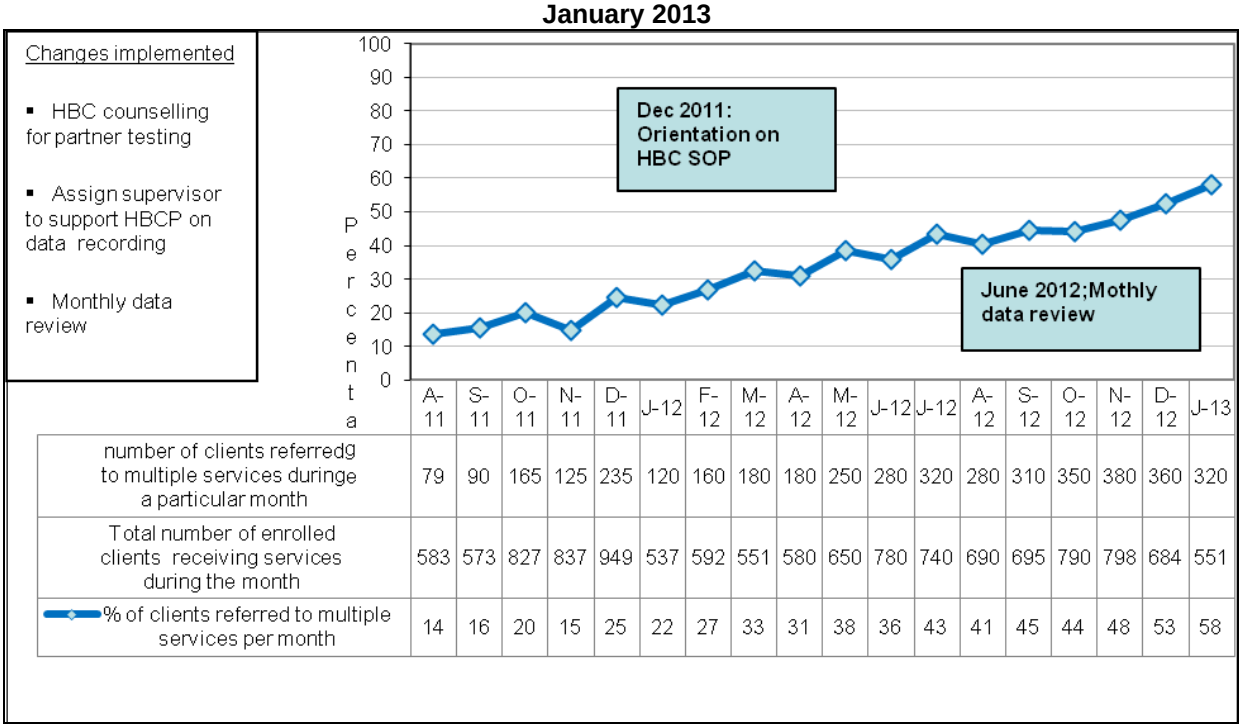
Activity 4: Work with MOHSW and stakeholders to develop community home-based care (CHBC) quality improvement program and monitoring framework and support country wide scaling up

The project technically supported the RHMT, CHMT, home-based care (HBC) supervisors and providers in Tanga City on how to properly apply standard operating procedures (SOP) for HBC in routine service delivery and proactively link clients to various community-based services available in the city. Furthermore, capacity building to RHMT and CHMT on monitoring and evaluation (M&E) and QI functions included compilation of providers' reports, abstraction of indicator data as well as equipping teams with QI concepts and to overcome implementation

bottlenecks. In these sessions, two RHMT, three CHMT, three Red Cross staff, 19 HBC supervisors, and 98 HBC providers were involved. In Muheza District, the project launched a new activity to integrate HBC and MVC services through orienting HBC/MVC stakeholders and service providers on QI and linkage concepts, formulation of the district HBC/MVC Steering Committee, and introduction of documentation and analysis tools. In addition, ASSIST supported the district Steering Committee in developing proactive joint supervision plans and take the lead in linking clients to various community-based health and social programs. A total of two RHMT, ten CHMT, four Representatives from the District Hospital, seven representatives from Muheza NGO network, and 127 HBC/MVC providers participated in the sessions.

In both programs it has been noted that application of SOP and QI techniques have demonstrated improved linkages among community-based service providers, increased frequency of clients referrals, and improved access to care (see Figure 7).

Figure 7: Tanzania: Percent of HBC clients referred to multiple services, Tanga City, August 2011-January 2013



	A-11	S-11	O-11	N-11	D-11	J-12	F-12	M-12	A-12	M-12	J-12	J-12	A-12	S-12	O-12	N-12	D-12	J-13
number of clients referredg to multiple services duringe a particular month	79	90	165	125	235	120	160	180	180	250	280	320	280	310	350	380	360	320
Total number of enrolled clients receiving services during the month	583	573	827	837	949	537	592	551	580	650	780	740	690	695	790	798	684	551
% of clients referred to multiple services per month	14	16	20	15	25	22	27	33	31	38	36	43	41	45	44	48	53	58

ASSIST has supported the MOHSW and implementing partners to develop training materials, performances monitoring tools, documentation journals, job aids, SOP, and guidelines. ASSIST is using learning sessions and coaching to build the capacity of country actors to apply improvement approaches. To ensure efficiency and optimal use of resources ASSIST is working with multi-level stakeholders to promote integration and synergy of programs as well as development of functional linkage among providers. To foster sustainability, ASSIST advocated for inclusion of QI budget in both regional and district plans and the inclusion of quality improvement in scheduled supervision visits. In addition we supported the MOHSW to disseminate HBC SOP to RHMT and CHMT and HBC Coordinators from all districts of Dodoma Region.

1.8.4 What Are We Learning?

Supporting MOHSW and PMTCT implementing partners

- Engagement of local community and influential leaders promote service uptake as

observed in increased male partner testing for HIV in Kilimanjaro QI efforts. Service integration improves uptake and addresses long-standing missed opportunities during service delivery, as in the case of improved family planning uptake among CTC clients in Manyara.

- Conducting individual need assessment among HBC clients improves referral to various HBC linked services
- Focused counseling for men during home visits by HBC providers improved number of referrals for male clients to other services
- Following scaling up trainings to lower level facilities, we learned that council level quality improvement teams can facilitate QI trainings with minimal support from ASSIST and RHMT staff.

Observed barriers to scaling up quality improvement agenda

- As we implement changes, management of the efforts (change management) is imperative for achieving sustained results.
- Engagement of local community and influential leaders can promote service uptake as observed in increased male partner testing for HIV

Listening to the clients' voice in quality improvement

- Conducting individual need assessment among HBC clients improves referral to various HBC-linked services
- Focused counseling for men during home visits by HBC providers improved number of referrals for male clients to other services

1.8.5 Planned Activities in the Next Quarter

- Convene PMTCT learning sessions in Iringa, Tabora, Arusha, and Dodoma regions
- Conduct PMTCT coaching in Njombe, Kilimanjaro, Tabora, Morogoro, Mtwara, Manyara and Lindi regions
- Conduct PMTCT performance assessment in Iringa, Tabora and Mbeya regions
- Convene ART learning sessions in Iringa, Tabora, Arusha, and Dodoma regions
- Conduct ART coaching in Njombe, Kilimanjaro, Tabora, Morogoro, Mtwara, Manyara and Lindi regions
- Training of trainers on QI for MVC in Dar es Salaam, Tanga, Pwani and Kigoma regions
- Conducting data validation exercise in Bagamoyo
- Scale up QI in Kigoma
- Support implementing partners in rolling out HBC SOP and training

1.9 Uganda

1.9.1 Background

The USAID ASSIST Project is providing technical assistance in quality improvement to the Ministry of Health and Ministry of Gender, Labor and Social Development as well as to implementing partners funded by USAID, Department of Defense, Walter Reed, and CDC. The overall goal of this work is to provide quality health and OVC services to patients/clients and to build a system through which these services can be delivered in a sustainable way. Working with the responsible ministries and the established government structures will ensure government ownership, and working with the leaders at the district and facility level will ensure that there is coordination of the services provided and resources are used in the most optimal way. We will document what we learn and share with the ministries and other partners.

1.9.2 Uganda Program Overview

Activity	What are we trying to accomplish?	How will we know?	Scale
Activity 1: Build capacity of USG partners improve quality of HIV/AIDS, TB, MNCH, RH/FP, nutrition and OVC services in Uganda, focusing on the following:			
a) The continuum of HIV care, treatment and support	Improve HIV care through • HIV counseling and testing • Prevention messages for the HIV-negative • ART initiation for the eligible HIV-positive • Improved retention in care and clinical outcomes • Early infant diagnosis and treatment • Engage facility leaders to participate in quality improvement activities	• Proportion counseled and tested who get their results • The percentage of eligible ART clients started on ART • The percentage of ART clients retained on ART • Percentage of clients on ART adherent to care • Percentage of infants initiated into care • The percentage of ART clients clinically well	67 sites in 38 districts
	Improve management of patients with TB/HIV co-infection	• Percentage of HIV patients screened for TB • Percentage of HIV-TB co-infected patients started on TB treatment • TB completion rate • TB cure rate	
b) Safe Male Circumcision	Work with MOH and partners to follow the MOH standard operating procedures to guide clinical practice in line with WHO recommended guidelines. Improve quality of SMC services	• Proportion of sites adhering to standards • Proportion of clients counseled before the operation • Proportion of adverse events following SMC services • Proportion of clients that are followed up after SMC	30 sites in 26 districts
c) Partnership for Free HIV Survival (PHFS)	Increased coverage, retention and outcomes of mothers and infants accessing PMTCT and NACS services.	• Percentage of infants born to HIV-positive women in PMTCT programs that are alive at 12 months of age and HIV negative • Number and proportion of infants and mothers who are found to be malnourished at any point during the reporting period	22 sites in 6 PHFS supported districts
d) Maternal and Newborn Health	• Contribute to the collective efforts of partners to reduce maternal and perinatal mortality in the four Saving Mothers Giving Life (SMGL) districts • Integration of family planning into HIV and	• Proportion of mother in which the pregnancy is monitored using a partogram • Proportion of mothers in labor who receive AMSTL • Percent of newborn babies receiving essential newborn care • Proportion of maternal deaths	20 facilities in four districts

Activity	What are we trying to accomplish?	How will we know?	Scale
	maternal health	• Proportion of perinatal deaths	
e) Family Planning	Integration of family planning into HIV and maternal health	• Proportion of clients attending HIV and MNCH clinics that are counseled on FP services • % HIV + ve clients of reproductive age and legible leaving with a modern FP method of their choice	Nine sites in two districts
Activity 2: Build capacity of Ministry of Health (MOH) and Ministry of Gender, Labor and Social Development (MGLSD) to coordinate and oversee implementation of national Quality Improvement plans and strategies by:			
a) Orphans and vulnerable children	• Support the Ministry of Gender, Labor and Social Development (MGLSD), SCORE and other OVC partners to incorporate QI into OVC assessment, care, referral, follow up, and measurement of social status outcomes. • Improve access to essential services for orphans and other vulnerable children and their caregivers	• Proportion of civil society organizations (CSOs) correctly and consistently using national standard tools for identification, selection, care and follow up of OVC • Proportion of CSOs continuously testing changes to improve service delivery to OVC • Proportion of CSOs improving in adherence to OVC standards • Proportion of CSOs with appropriate referral and linkages to ensure provision of at least three core program areas (CPAs) plus psychosocial support to OVCs	10 CSOs in four districts
b) Institutionalization of QI in the health sector	Number of districts and facilities with QI committees formed in accordance with the ministry of health national QI framework and strategy	• Number of partners supporting the QI framework and site/districts with functional QI teams will serve as a measure towards institutionalization • Number of IPs supported and joint plans made will be an indicator of the support we are providing to the other USG partners.	National (112 districts)
Activity 3: Generate new knowledge and evidence-base practices in quality improvement as part of a continuous learning and adapting agenda			
Knowledge management	Contribute to knowledge and evidence base	Documents produced and distributed	Global

The geographical coverage of ASSIST has also increased over that of HCI, as we are now working with partners in all the regions of the country. The implementation strategy being applied in this partner-focused approach is to provide intensive support to a smaller number of sites in each of the four regions of the country, and ongoing capacity building and mentoring of implementing partners in each region. The project is using a combination of evidence-based modern improvement approaches to reach program objectives, including collaborative

improvement, audit and feedback, policy, use of standards and guidelines, and process design and redesign.

1.9.3 Progress, Results, and Accomplishments

Activity 1: Build capacity of USG partners improve quality of HIV/AIDS, TB, MNCH, RH/FP, Nutrition and OVC services in Uganda

HIV care, treatment and support

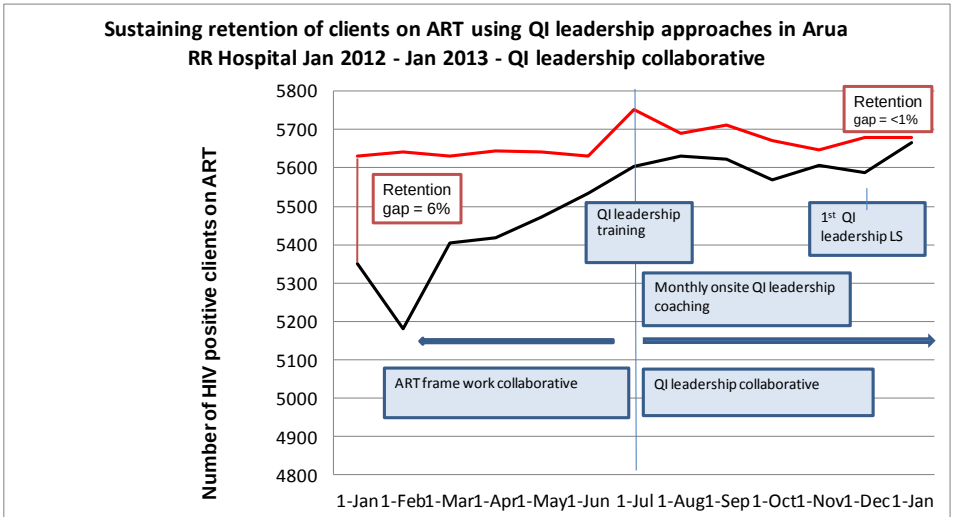
Joint work plans were developed with nine partners namely, STAR-EC, STAR-E, NUHITES, MILDMAY, PREFA, IRCU, MUWRP, HIPS and SPEAR, and 38 sites for intensive support were identified and agreed upon (roughly 10 sites in each of the four regions of Uganda). The selection of the sites was done in collaboration with the USAID partner working in that region; the criteria for selection included high patient load, existing gaps in coverage, retention and clinical wellness. Memoranda of Understanding were developed for review by the partners and are awaiting signature. QI teams were established in all the 38 intensive support sites, and action plans developed to work on the performance gaps identified during the baseline assessment of these sites.

The objectives of this activity are to improve HIV care and treatment through improved coverage, retention and clinical outcomes. QI teams were formed where they did not already exist, and in line with the Ministry of Health quality improvement framework, are being trained and mentored to carry out changes to improve the way they deliver health services. This activity also provides an opportunity for a hands-on capacity building for the partners. In addition to the intensive support being provided to 38 sites, every quarter, ASSIST and the MOH will join a partner and carry out a joint coaching visit to support other sites beyond those receiving intensive support.

Technical areas being supported include ART follow-up, TB screening and care, HIV counseling and testing, care for people with HIV attending private for-profit clinics, and integration of QI into community health activities to improve linkages to facility health services, adherence and long-term retention. Another area of focus for this work is to increase leadership involvement in QI. In our earlier work under HCI, we saw that there was an association between having leaders involved in quality improvement work and improved care. Under HCI, we worked with leaders in 13 health facilities in three districts in Uganda and developed eight core functions for leaders to focus on: coordination, results-oriented accountability, prioritization, capacity building, patient-centered care, motivation, participation in improvement work, and leveraging available resources. Under ASSIST, we continue to work with these facilities and districts to learn more about the role of leaders in supporting improvement work through a leadership collaborative involving 10 facilities in three districts (Masaka, Lwengo, and Arua). This collaborative focuses on ensuring that all leaders perform their core functions. Peer-to-peer learning will be facilitated to create an environment of testing and spreading successes rapidly. The ART framework indicators will be used to measure the effects of leadership involvement. We are also developing process indicators related to leadership which the leaders are using to monitor their own progress in learning how to lead improvement activities.

Figure 8 shows some of the results in Arua District, where support to the Arua DHMT and Arua Referral Hospital leadership has been associated with a reduction in the retention gap from 6% to less than 1%.

Figure 8. Uganda: Sustaining retention of clients on ART using QI leadership approaches in Arua Hospital, Jan. 2012 – Jan. 2013



	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun	1-Jul	1-Aug	1-Sep	1-Oct	1-Nov	1-Dec	1-Jan
Number of HIV positive clients who received ARVs for the month	5350	5181	5404	5419	5472	5535	5605	5630	5624	5568	5606	5587	5667
Number of HIV poisitive clients expected on ART for the month	5632	5642	5630	5645	5642	5632	5752	5690	5711	5671	5646	5680	5679

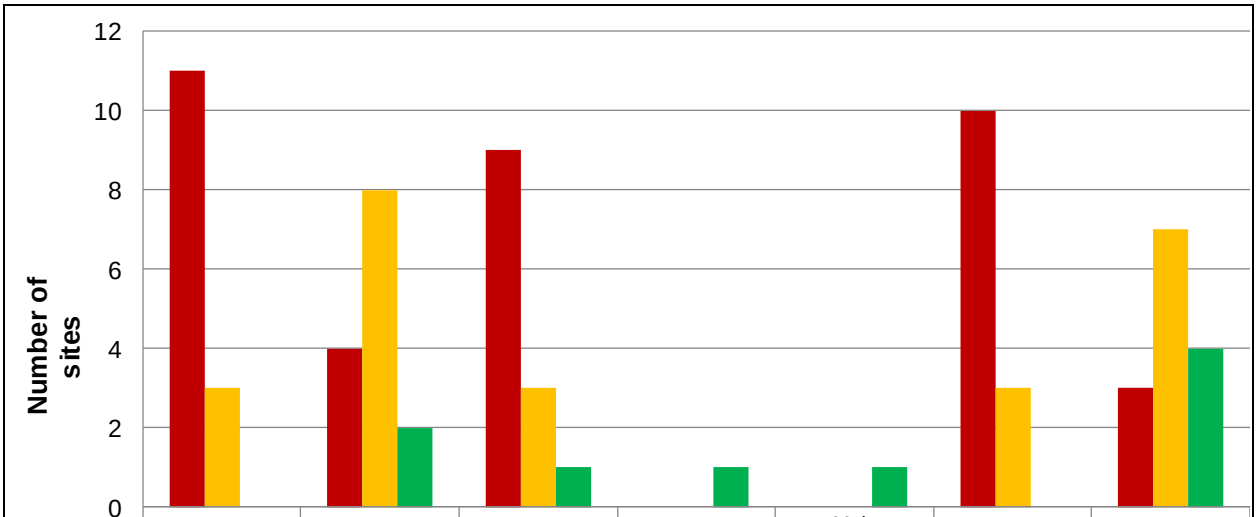
Safe Male Circumcision

ASSIST has conducted a series of meetings with the MOH and stakeholders to build consensus on how QI can enhance the national Safe Male Circumcision (SMC) strategy. ASSIST will directly support partners and facility-based QI team in 30 sites in 26 districts to apply QI methods to expand and improve the quality of SMC services. We adapted a self-assessment tool for SMC that had been developed by WHO and PEPFAR to align with the Ministry of Health's SMC policy, minimum standards of procedure, and SMC strategic plan. ASSIST then worked with implementing partners and district health office staff to conduct site self-assessments aimed at identifying gaps that impede implementation of SMC services according to the MOH/WHO standards.

Based on findings from using the self-assessment tool, facility teams have been supported to analyze and redesign patient flow within the facilities to ensure smooth and unidirectional flow of clients. In addition, HIV counseling activities have been reorganized to ensure privacy and confidentiality, and emergency drug kits assembled where they did not exist

During the second quarter of FY13, 20 health facilities providing SMC were assessed to determine their baseline status (see Figure 9). The majority of the sites scored less than 80% in most of the areas assessed. During the assessment, 16 sites were not carrying out circumcision on the day of the assessment, and therefore, individual HIV counseling and the male surgical procedure could not be observed/assessed. Monitoring and evaluation (M&E) was the most problematic area, and infection prevention was the best managed. The four sites which were found carrying out the procedure during the visit were assessed on the individual HIV counseling and testing and the surgical procedure. They scored highly in these two areas. Three of these sites are supported by one of the two accredited SMC training institutions in Uganda.

Figure 9. Uganda: Baseline performance of safe male circumcision sites against WHO/MOH-Uganda standards



	Management systems	Supplies equipment & Enviroment	Registration & group edn	Individual counseling & HIV testing	Male circumcsion surgical procedure	M&E	Infection prevention
<50%	11	4	9			10	3
50-80%	3	8	3			3	7
>80%	0	2	1	1	1	0	4

Partnership for HIV Free Survival

In the second quarter of FY13, ASSIST staff developed a set of indicators for monitoring the Partnership for HIV Free Survival (PHFS) in Uganda and conducted a baseline assessment in seven out of the 22 selected health facilities which ASSIST will support in the initiative. The role of ASSIST in the PHFS in Uganda was defined through a series of consultative meetings with the other partners – FANTA, SPRING, The AIDS Support Organization (TASO), and the Ministry of Health. A joint work plan between ASSIST and TASO was developed and agreed upon.

The PHFS initiative was officially launched in March 2013 in a partners meeting in Pretoria, South Africa. ASSIST participated in this launch and shared our experience using QI to integrate services and in the measurement of improvement work. A comprehensive work plan for the acceleration of integration of nutrition assessment, counseling and support (NACS) into PMTCT was developed through a consultative process led by the Ministry of Health and supported by implementing partners.

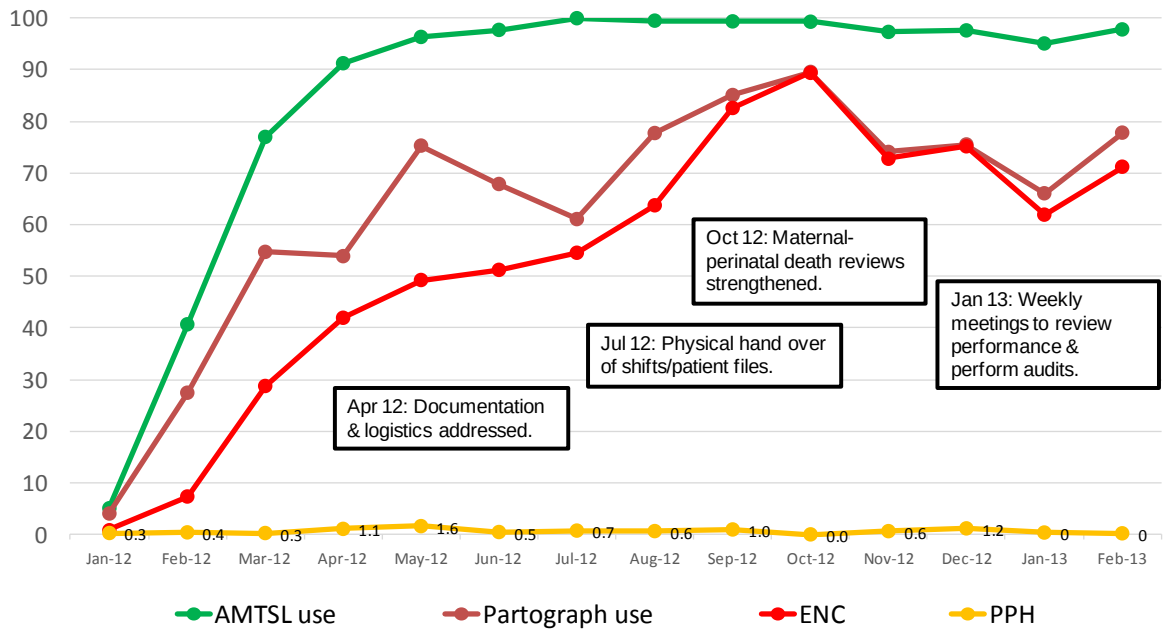
The scale up of the improvement work will be mainly facilitated by the implementing partners – TASO and SPRING. ASSIST will build the capacity of these implementing partners to improve the nutrition and PMTCT services through implementation of known strategies and development of their QI competencies. ASSIST will work closely with these partners in the initial 22 sites so that they are able to scale up what they learned to more sites and districts.

Improve Maternal and Newborn Health

Building on the Saving Mothers Giving Life (SMGL) initiative work with 10 high-volume delivery facilities in Kyenjojo and Kamwenge districts begun in FY11 under HCI, ASSIST conducted jointly with the STRIDES Project a peer learning session in January with the 10 sites. Sites reported no maternal deaths during the second quarter of FY13 and maintained a high level of

compliance (98-100%) with active management of the third stage of labor (AMTSL) quarter, low rates of post-partum hemorrhage (PPH) below 1%, and good adherence to the use of the partograph and the provision of the essential newborn care (ENC) package, both ranging between 75-80% (see Figure 10).

Figure 10. Uganda: AMTSL, partograph use, ENC delivery, and PPH cases, 10 SMGL sites, Jan. 2012-Feb. 2013



Also during the second quarter of FY13, ASSIST contributed to finalizing the Helping Babies Breathe-plus (HBBplus) Mentoring Guide and the Manual of Newborn Health Indicators for Monitoring Newborn Health programs for the Ministry of Health. HBBplus tools have been developed and will guide national programming and implementation across the MOH structure, as a means to institutionalize and ensure sustainability of newborn health interventions.

Activity 2: Build capacity of Ministry of Health and Ministry of Gender, Labor and Social Development to coordinate and oversee implementation of national Quality Improvement plans and strategies for OVC services

Develop an OVC National QI Framework

Four key staff from the OVC secretariat at the Ministry of Gender, Labor and Social Development (MGLSD) were trained in QI together with the two newly recruited ASSIST staff to support OVC programming improvement initiatives at national level. A series of meetings were held with MGLSD and selected OVC partners – SUNRISE, SCORE, and IRCU – to discuss how QI approaches could be applied to improve the delivery of services to vulnerable children. All partners agreed that a framework to guide the QI efforts was needed, and four districts for operation were selected: Amuru, Ntungamo, Mukono, and Busia. A QI framework was then developed to guide the implementation and institutionalization of QI in the national OVC services structure with a goal of promoting the provision of quality comprehensive services for vulnerable children and households. The framework has three key objectives:

1) To provide coordinated approach to improve quality of OVC service delivery,

2) To improve delivery of quality comprehensive and responsive services to orphans and vulnerable children by standardizing OVC care and ensuring adherence to standards, and
3) To strengthen the QI capacity of service delivery structures at all levels.

Together with MGLSD and the OVC partners, ASSIST developed indicators to measure the OVC QI framework. These include the following:

- Proportion of civil society organizations (CSOs) with appropriate referral and linkages to ensure provision of at least three core program areas plus psychosocial support to orphans and vulnerable children,
- Proportion of CSO improving in adherence to OVC standards, and
- Proportion of CSOs continuously testing changes to improve OVC service delivery

In each of the four selected districts, the demonstration work will be carried out in two sub-counties for at least six months to build the QI capacity of the different structures. In addition, ASSIST will provide quarterly support to partners, district OVC committees, and subcounty OVC committees to support extra sub-counties in the districts. The lessons learned from the demonstration districts shall be spread to other sub counties in the four districts before spreading to the rest of the districts, depending on the availability of resources.

Institutionalize QI in the health sector

ASSIST continues to support the Ministry of Health and its Quality Assurance Department to roll out the national quality improvement framework and strategic plan. In 2012, under HCI, we supported the MOH to form regional, district, and facility QI committees in the districts of the Rwenzori Region as stipulated under the national strategy. One regional QI committee and seven district QI committees were formed and are functional. This collaborative was set up to learn, understand and document successes and challenges in setting up QI structures at the regional, district and facility levels as described in the quality improvement framework and strategic plan. During 2013, ASSIST will continue to directly support the MOH to learn more about how to operationalize the framework and strategy in these seven districts and in 19 health facilities with at least one facility from every health sub-district in the region.

Activity 3: To generate new knowledge and evidence-based best practices in quality improvement as part of a continuous learning and adapting agenda

In March, the chronic care change package, developed over the past two years following the implementation of chronic care work in Buikwe, was finalized. This document will be used to guide interventional sites in Mityana to test changes developed in Buikwe.

A pre-baseline assessment of proposed districts of Mityana and Nakaseke was conducted to establish the number of health facilities in the district, their location and numbers of patients on ART. This helped establish a comparison between sites and led to the selection of three interventional and three control sites to participate in the study. The study protocol was finalized and submitted to URC and Mildmay Uganda Institutional Review Board IRB) for approval. URC's IRB has approved the protocol, while the Mildmay IRB reviewed the protocol but is yet to officially communicate about the approval of the protocol. Baseline assessment questionnaires, data collection tools, and consent forms, both English and local language (Luganda) versions, were developed and pre-tested.

1.9.4 What Are We Learning?

Safe Male Circumcision

- What are the gaps that impede sites from meeting the MOH/WHO quality standards?

- What causes poor follow-up of clients post-surgery, and what interventions can be put in place to address the poor follow-up?

The first question is being answered by the findings of the baseline assessment. The results will be consolidated into one document and disseminated. A research study, "Returning for follow-up after male circumcision: A qualitative exploration into why men do or do not return for care," is being designed to answer the second question.

OVC Improvement Strategy

Implementation of the OVC QI improvement strategy seeks to answer the following questions over the next two years:

- Is there gender equity in provision of OVC services in Uganda?
- How valid are the data collected by partner organizations providing OVC services with respect to gender equity?
- What is the quality of services provided to OVC by partner organizations?
- If a gender gap exists, what is the impact of quality improvement on closing that gender gap?

1.9.5 Planned Activities in the Next Quarter

Continuum of HIV care, treatment and support

- Continue with onsite support to the facility teams and their leaders
- Continue supporting the DHMT with quarterly coaching and joint onsite support visits
- Conduct a learning session to harvest innovations that the district/facility leaders have tried out in the eight core functions
- Conduct QI training in the NU-HITES supported sites.
- Carry out on-site coaching and mentorship of the NU-HITES, STAR SW, STAR E and STAR EC supported health facilities addressing specific improvement made to HIV/TB care services.
- Carry out on-site quality improvement training for Ishaka hospital (IRCU supported site)

Safe Male Circumcision

- Follow up with MOH SMC taskforce committee to ensure that the draft SMC QI tool and M&E tools are approved
- Complete the baseline assessment for the remaining 10 sites
- Conduct QI training for site teams
- Conduct monthly onsite coaching
- Conduct the first learning session
- Conduct an SMC stakeholders' meeting

Partnership for HIV Free Survival

- Finalize the baseline assessment in the rest of the health facilities
- Train site QI teams in core QI competencies at baseline and coaching visits using a modular approach
- Train TASO support staff and district QI teams in QI core competencies
- Do joint coaching visits with implementing partners once this quarter

Improve Maternal and Newborn Health

- Baseline assessment of the quality of care in 10 facilities of Kibale and Kabarole districts to be supported with QI interventions.

- QI training of staff and DHT members in the assessed 10 facilities of the two phase II districts.
- Follow up of the 20 phase I & II facilities in the four districts through on site coaching.
- A peer-to-peer learning session at the end of the quarter to spread best practices and lessons learnt across the 20 facilities of the four SMGL districts.
- Monthly QI cluster meetings to harmonize work plans and QI indicators monitored across board.
- Bi-weekly follow up of the facilities still experiencing high prenatal deaths

Orphans and Vulnerable Children

- Baseline data collection in the four selected districts
- Form and functionalize QI teams at all levels
- Support development of a self-assessment tool for adherence to standards and train QI teams to conduct self-assessments
- Identify and train coaches at national, regional , district and sub-county levels
- QI orientation of the service providers
- Joint coaching and mentoring
- Support teams to collect, compile and use data
- Set up a database a) to monitor indicators and b) to monitor adherence to quality service standards
- Develop materials for training
- Organize a partners meeting to share progress

Chronic Care

- Conduct baseline data collection
- Analyze baseline assessment findings
- Conduct QI orientation training
- Conduct on site coaching

ASIA

1.10 India

1.10.1 Background

USAID India has invited the USAID ASSIST Project to work on enhancing the improvement capability in the Indian health system at the national, state, district and facility levels through engaging national and state structures to conduct improvements in maternal, neonatal and child health along the continuum of care, including through public and private entities. ASSIST has established communication with the Government of India (GOI) to broadly identify technical areas, partners, and an improvement strategy. The GOI National Rural Health Mission would like ASSIST to focus its work at the national level. After reviewing the first proposed scope of work, GOI expressed that ASSIST may work at the state level, but not at the district and facility levels. ASSIST may follow national and state personnel as they work with district and facility level staff in order to provide mentorship and ensure the quality of the work. USAID India has determined the following organizations are stakeholders for ASSIST to work with: Ministry of Health and Family Welfare, National Institute of Health and Family Welfare, National Health System Resource Centre, Federation of Obstetrics & Gynecological Societies of India, Indian Academy of Pediatrics, and Health Care NGO.

1.10.2 India Program Overview

What are we trying to accomplish?	How will we know?	At what scale?
To enhance knowledge and commitment of health system leaders at the national level for improving health care	More than 80% compliance by health care providers with standard guidelines	TBD
To develop a cadre of skilled technical health workers at the state and district levels	More than 90% newborns receiving newborn care according to national standards	
To build the capacity of health care workers at the facility level (to include both public and private sectors) to improve the effectiveness, patient centeredness, safety, accessibility and equity of the services that they provide	More than 90% women receiving antenatal care in the first trimester	
	More than 90% deliveries conducted follow active management of the third stage of labor (AMTSL) guidelines	
	More than 90% women received post-partum care according to standards	

1.10.3 Progress, Results, and Accomplishments

The following technical areas were identified by USAID India but are subject to final agreement and confirmation with the GOI:

- Family planning and access to quality reproductive health services
- Skilled care during pregnancy and delivery
- Emergency obstetrics care for maternal and newborn complications
- Post natal care for mother and baby
- Routine immunization for children
- Management of childhood illnesses

ASSIST will work with counterparts in the GOI to conduct an analysis of the existing processes and systems of care delivery in the technical areas of the improvement (enumerated above), to identify gaps in their implementation. As part of the improvement, ASSIST will work with counterparts in the GOI to understand the gaps in clinical practice and develop a change package to be used by improvement teams in the facilities. Consistent with the request of USAID India, ASSIST will work to enhance the improvement capabilities of the Indian health system and multiple levels with different functions at each level.

- At the national level, emphasis will be placed on developing commitment, improvement priority setting, the capability to lead improvement, national policy making and how to develop a culture conducive to continually improving.
- At the state and district levels, the emphasis will be on developing a cadre of improvement experts capable of coaching and facilitating improvement teams in the facilities. Based on the experience of ASSIST, these competencies are best developed by undertaking improvement activities and learning from them. Therefore, competency development will be developed around the real improvement experiences taking place in the facilities and communities.
- USAID ASSIST will work through state and district GOI counterparts to form improvement teams to work on projects in a number of facilities. Teams in facilities (to include both public and private sectors) will be set up to tackle improvements within the technical areas described above. These will be selected to cover the continuum of care model and be able to address the technical areas of this activity. Teams will embark on

understanding their current processes and systems and developing specific improvements which will be conducted jointly with the GOI.

- Teams at the facility level will test and develop changes in their processes of care delivery to enable the reliable implementation of the evidence-based, high-impact interventions for every patient, every time needed. ASSIST expects that teams working on common aims for improvement will engage in joint learning and sharing as they are improving. This process is otherwise known as collaborative improvement. The improvement experience will form the basis for all the other improvement activities taking place under ASSIST work in India.

1.10.4 Planned Activities in the Next Quarter

- M. Rashad Massoud's trip that was planned last quarter was postponed per the request of GOI. Trip is now planned for the week of April 29, 2013.
- Finalize country improvement plan during the trip.

2 Global Health Core-Funded Activities

2.1 Family Planning/Reproductive Health

2.1.1 Background

In the last quarter ASSIST technical staff held several meetings with the USAID Population and Reproductive Health team to agree on overall directions for ASSIST core-funded family planning (FP) activities. It was agreed that ASSIST core-funded FP activities in FY13 and FY14 would focus on the application of improvement approaches to promote integration of FP services into maternal, newborn, and child health and HIV services to help solve the many operational challenges to integration in different settings. At the request of USAID, ASSIST core-funded FP activities will be combined to the extent possible with field funding and other sources of partner funding to maximize the reach of modest core FP funds. In particular, ASSIST will apply improvement approaches to support balanced counseling for and delivery of a comprehensive package of FP methods, including long-acting methods (e.g., implants, IUCD), injectables, Lactation Amenorrhea Method, oral contraceptives, and barrier methods. There are many quality challenges around delivery of long-acting FP methods in particular, and ASSIST will highlight specific quality challenges and illustrative improvement approaches, including simple quality measures that can be used by governments and partners to track quality of integrated FP and MNCH and HIV services.

2.1.2 Family Planning Program Overview

Activity	What are we trying to accomplish	How will we know	At what scale
Activity 1: (Uganda) Integration of FP into post-partum services as part of the Saving Mothers Giving Life initiative (USG-supported)	Integrate post-partum family planning (PPFP) services as part of SMGL	Routine PPFP counseling offered to all post-partum women Increasing # of post-partum women discharged home with a preferred modern FP method	Four SMGL districts in northern Uganda (two with established ASSIST activities and two new districts) approx. 10 maternities in four SMGL districts and will also support SMGL partner efforts to integrate post-partum FP services through ASSIST leadership of the SMGL QI duster.

Activity	What are we trying to accomplish	How will we know	At what scale
Activity 2: (Niger) Integration of post-partum FP services (PPFP) into an ongoing WHO-supported maternal health implementation research study.	Integrate PPFP sevrices into an ongoing WHO-supported maternal health implementation research study	*Same as above*	A select number of secondary and tertiary maternities in one of Niger's seven regions participating in the maternal health implementation study (concept paper in progress).
Activity 3: (Francophone) Country TBD (possibly Senegal): Integration of PPFP into a WHO Safe Childbirth Checklist intervention in selected maternities	Integrate PPFP into a WHO Safe Childbirth Checklist intervention in selected maternities	*Same as above*	TBD (country visit to be scheduled once Mission approves)

2.1.3 Progress, Results, and Accomplishments

Activity 1: Integration of FP into ASSIST-supported Uganda SMGL maternities and adoption of PPFP quality measures by SMGL partners

ASSIST planning for the Uganda SMGL PPFP intervention has just begun. ASSIST core FP funds will leverage modest field support for ASSIST to support FP efforts in SMGL, working closely with Marie Stopes International, a strong FP implementing partner in Uganda. Improvement aims and quality measures are being defined for integration into ongoing ASSIST maternal activities in two SMGL veteran districts and two new SMGL districts. Technical content is expected to focus on the full range of modern FP methods, including long-acting methods, such as implants and IUCDs.

Activity 2: Integration of post-partum FP services into an ongoing WHO-supported maternal health implementation research study in Niger

This activity has been agreed with USAID Washington and has been discussed with the Niger MOH with a favorable response. Dr. Maina Boucar and the Niger team have completed a first draft of a concept note that describes objectives and an overall work plan for this activity. A work plan is currently being finalized and will include selection of specific maternities participating in WHO-supported maternal health implementation study that will be targeted for the integrated PPFP intervention.

Activity 3: Francophone Country TBD (possibly Senegal): Integration of PPFP into a WHO Safe Childbirth Checklist intervention in selected maternities

This activity is in the early planning stages after recent agreement on the activity in discussion with USAID representatives. A letter of inquiry is being prepared by the ASSIST AOR to explore interest of the Senegal Mission in a potential core-funded project that would test implementation of the WHO Safe Childbirth Checklist (SCC) in selected maternities and include routine delivery of PPFP as part of checklist-supported activities (FP is one core element of the WHO Safe Childbirth Checklist). This activity would be conducted in partnership with WHO Patient Safety (an ASSIST partner) and would test the use of a WHO-endorsed SCC to help promote routine, high quality PPFP.

2.1.4 What Are We Learning

ASSIST core-funded FP activities in Uganda will place a high priority on developing operational models and change packages that can optimize integration of FP services into post-partum care, including balanced counseling and delivery of modern FP methods in compliance with the highest standards.

2.1.5 Planned Activities in the Next Quarter

- In April, Dr. Jorge Hermida and Ms. Annie Clark will travel to Uganda to collaborate with the ASSIST Uganda team to finalize the work plan for core-funded PPFP intervention as part of the SMGL initiative
- Dr. Kathleen Hill and Ms. Evelyn Kamgang will travel to a francophone Sub-Saharan Africa country with Dr. Boucar (or his designee) to explore options and a work plan pending Mission approval to explore FP core-funded improvement work in Senegal
- Finalize objectives and work plan for Niger PPFP core-funded activity
- Dr. Hill, ASSIST FP technical unit lead, will participate as a technical expert in the upcoming Technical Advisory Group (TAG) on High Impact Practices in family planning to be hosted at the UNFPA offices in New York City in June. The 2013 High Impact Practices TAG is being co-sponsored by USAID, UNFPA, and IPPF.
- Explore engagement of ASSIST in the Ouagadougou West Africa FP regional initiative

2.2 Health Workforce Development

2.2.1 Background

Work for ASSIST in the area of health workforce spans several countries and activities. Discussion of progress and results for each activity below includes relevant background information.

2.2.2 Health Workforce Development Program Overview

Activity	What are we trying to accomplish	How will we know	At what scale
Activity 1: Tanzania District Management Collaborative	Enhance the performance of Regional and Council Health Management Teams in their functional domains (supplies and logistics, information flows, regional planning, HRH support, QI support to health centers)	• % of facilities that submitted supply orders on time to DHMT • % of supply orders which were processed by DHMT within two weeks of receipt • % of management team members with clear and rationalized job descriptions • % of newly recruited staff that are retained at six months • % of health facilities applying improvement approaches to improve health services • % of vacant posts that were followed up and submitted to the higher level within deadlines	All six districts of Lindi Region: # of health facilities at the Region – 192 # of Health facilities per District: • Kilwa-41 • Lindi DC-41 • Lindi Municipal-15 • Nachingwea -36 • Ruangwa-29 • Liwale-30
Activity 2: Virtual follow-up support for	Improve the performance of health extension workers to	• % of pregnant women who received ANC services from the health post	Two districts 18 villages

Activity	What are we trying to accomplish	How will we know	At what scale
community-level QI collaborative in Oromia, Ethiopia	provide ANC services and spread the performance improvement approach to other districts		
Activity 3: Community support for VHT Performance, Uganda	Improve the engagement and performance of VHT to provide quality chronic care services to PLWH for self management at the community level	• Demonstrated increased engagement as measured by an adapted engagement tool. • % of VHTs who recount that they have received monthly feedback from their supervisors • % of VHTs who recount that they have received feedback from the community representatives every month • % of PLWHs located by VHTs • % of PLWH on ART identified by VHTs • % of PLWH on ARV adhere to ART • % of PLWH who have developed self management plan • % of PLWH who have improved clinical outcomes • % of PLWH visited by VHTS • Improved score on engagement assessment tool	One district - Buikwe • 1 out of 112 districts (Buikwe) • 10 out of 475 villages • 1 out of 16 Health Facilities • 10 Village Health Teams (VHTs) • 20 out of 950 members of VHT
Activity 4: Pharmaceutical HR/QI Collaborative, Uganda	– Strengthen pharmaceutical human resources and develop core competencies to apply improvement approaches – Improve the availability of HIV, TB and medicines for opportunistic infections – Improve client retention, medicines use, adherence and outcomes	• % of improvement team members with core improvement competencies • % of pharmaceutical human resources with clear and rationalized job descriptions • % of sites that submitted medicines requisition orders within National Medicines Stores deadlines • % of sites with ART stock cards that are fully compliant to the ART stock card completion checklist • Number of days between stock-outs of selected HIV care and TB medicines • % of clients that can correctly explain how to use their medicines • % of ART clients collecting their medicines as scheduled • % of ART clients with good adherence (as defined by national standards) • % of ART clients demonstrating clinical improvement (as defined by national standards)	14 HIV care health facilities in 3/112 districts in Uganda: Jinja, Tororo, Bukedea Average HIV prevalence in the three districts is 5.0%, with an estimated population of 1,143,800 in the three intervention districts
Activity 5: In-service Training	– Provide guidance for the improvement of in-service training effectiveness, efficiency and sustainability	• Publication and launch of the in-service training improvement framework and guidance • Publication of national in-service training situational assessment findings	Global National assessment in one country (to be

Activity	What are we trying to accomplish	How will we know	At what scale
	– Support the national assessment of the in-service training situation in one country		determined)
Activity 6: Global Health Workforce Alliance	Provide technical assistance to USAID and OHA to contribute to agenda of the Forum so that the learning gained from HCI and ASSIST may be disseminated to key audiences	• ASSIST will participate and contribute, along with USAID counterparts and in collaboration with USAID objectives, to the planning meetings, sessions, and papers for the Forum • ASSIST will contribute to conversation among GHWA stakeholders and international dialogue on HRH performance and quality improvement	Global
Activity 7: M-Health support for CHW performance	Stimulate the development and deployment of mobile electronic tools to improve the performance of low-literacy community health workers.	• # of conversations between the health center supervisor and VHT / # of weeks in the month. • # Of conversations that included feedback and/or supervision / # of conversations • Increased communications, feedback and supervision will lead to improved performance and increased engagement	Country TBD

2.2.3 Progress, Results, and Accomplishments

Core funding between HCI and ASSIST was interrupted, between October 2012 and March 2013, as such there are limited results for this period under ASSIST. Health workforce activities under ASSIST began in March 2013.

Activity 1: Tanzania District Management Collaborative

This activity was initiated under HCI in collaboration with the Tanzania MOHSW, the Regional Health Management Team, and all six Council Health Management Teams in the Lindi Region. District quality management systems are comprised of structures and processes that enable and support health workers and community health workers (CHWs) to undertake continuous improvement at the health facility and community levels across districts. The institutionalization of quality management systems at district and regional levels has been an area of weakness in countries that are applying QI. This weakness often leads to improvement that is contained or isolated within supported sites. Addressing a multi-factor approach to QI, including human resources for health (HRH) improvements, this activity will provide knowledge on the best approaches to effect improvements at the management level so as to support local level improvements consistently and sustain the resulting improved health outcomes.

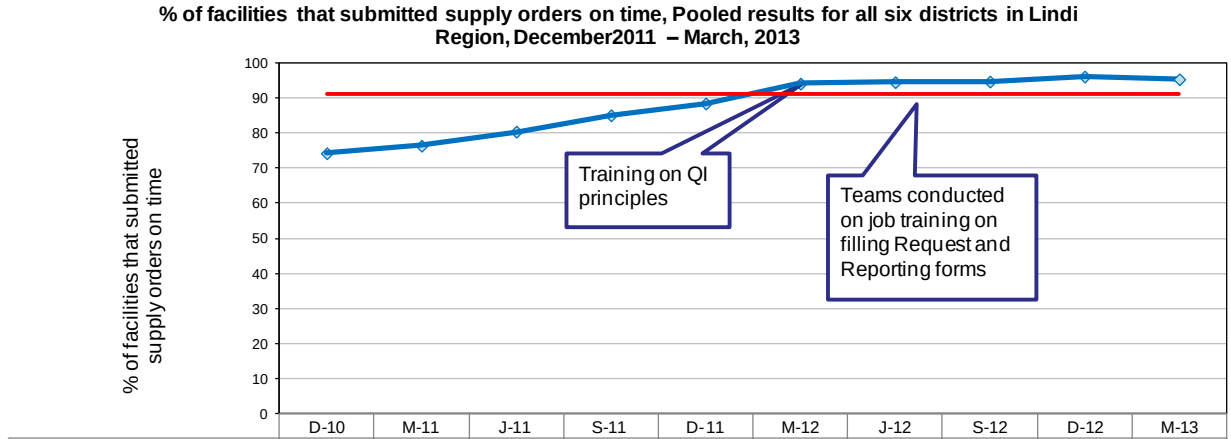
Funding for this activity was interrupted between October 2012 and March 2013. When additional funding was approved, a coaching visit immediately followed to determine how the CHMTs could continue to make progress in their management responsibilities during their second year, while maintaining the progress already made.

Districts in the Lindi region had been facing problems in receiving supply orders, as well as reports, on time. Although most facilities submitted their orders on time, there were several facilities that would consistently submit their requests late. These late submissions continued to

slow the supply flow and to lead to those health centers' experiencing shortages and sometimes stock-outs in medicines. When explored further, the CHMTs found that most of the late submissions of supply orders resulted from insufficient knowledge regarding how to correctly complete Request and Reporting forms. Once the orders were received at the district from health facilities, those problem orders had to be sent back to the facilities for correction. The back and forth movement of the requests resulted in late submissions from those health centers to the CHMTs, and thus late submissions from CHMTs to the RMHT. To address this problem, the CHMTs conducted on-the-job-training on how to fill out the forms. As a result, the number of errors has been minimized, which in turn, increased the on-time submissions.

Figure 11 illustrates the tracking of the timeliness of supply order submissions across all six districts in the Lindi Region. Baseline data were collected in all six districts of the Lindi Region for December 2010 through December 2011. In December 2011, the situational analysis was carried out, and the actual activity was introduced in March 2012, during which time the first learning session was conducted and teams received orientation on the concepts of quality improvement. By March 2012, improvements had already taken place in terms of the number of facilities submitting their requested supply orders on time (94%). Through March of 2013, there was a slight increase in the performance, which remained consistent over four quarters. It should be noted that in all six districts the improvements began to improve after the initial situational analysis, which suggests that with the initial inquiries and conversations with district managers and health center staff, the gaps were identified, and with the awareness and defining of the problem areas, health centers and district managers began to focus on improving their performance even before the first learning session.

Figure 11. Tanzania: Percentage of facilities that submitted supply orders on time, Lindi Region, December 2011-March 2013



	D-10	M-11	J-11	S-11	D-11	M-12	J-12	S-12	D-12	M-13
# of facilities that submitted supply orders to the district on time	104	107	111	120	161	176	173	179	174	144
Total number of facilities submitted supply orders	140	140	138	141	182	187	183	189	181	151
% of facilities that submitted supply orders on time	74	76	80	85	88	94	95	95	96	95
Median	91	91	91	91	91	91	91	91	91	91

To address human performance factors, teams have developed draft job descriptions for CHMT members, to clarify roles and responsibilities for each CHMT member. Supervision is also a significant challenge for CHMTs. With limited access to a vehicle for transportation to the health centers and dispensaries, no budget for fuel, and with shortage of time due to their roles' being added in addition to their technical professional responsibilities, supervision visits do not always take place each month, and when they do take place, the time that the CHMTs have at the

facilities is short. In addition, there is not time to visit all of the health facilities. Under ASSIST, QI coaches will explore how QI teams at the challenged health centers might provide ongoing improvement efforts between supervisory visits and how supervisory visits would provide coaching support with focus on the challenged health centers.

Both the Lindi Region authorities and the CHMTs have been involved in the learning sessions and discussions of the activities for improving the CHMT management performance. In addition, the CHMTs are sharing these improvement activities with the health centers and dispensaries. The vision is that as the practice of using QI coaching as a management approach is implemented on a monthly basis, and learning sessions are used to discuss and exchange the results among three service levels, then the probability for sustainability will be increased. In addition, the CHMTs have identified as one of their aims the incorporation of QI activities into their annual plans. This inclusion will also facilitate the sustainability of continued improvement and QI in the Lindi Region.

Activity 2: Virtual Support for Health Extension Worker Quality Improvement Teams in Ethiopia

In FY12, HCI implemented a demonstration CHW collaborative project in 18 health posts in two districts of Oromia Region. Through the development and strengthening of community QI support teams, health extension workers' performance in providing ANC and HIV services was shown to improve. The Illu QI team in increased the percentage of pregnant women attending health posts for ANC services from 33% to 88% in three months. The changes that led to improvement were house-to house visits and mobilization of Idir (community funeral cooperative) to promote seeking ANC at the health post. Similarly, the Golotel Health Post Community QI team increased the number of households with latrines from 30% to 60%. The change ideas that led to this increase were utilizing community leaders, Idir, savings and credit groups, and religious groups to reach out to the community. Finally, the number of pregnant women tested for HIV increased from 44 to 240 per month across all 18 communities.

Activity 3: Community Support for Village Health Team Performance, Uganda

Over one million people are living with HIV in Uganda with a prevalence of 6.4%. Since the scale up of ART in 2004, people with HIV are living longer and need long-term care. However, long-term retention of patients in HIV care challenges most health facilities in Uganda. Strengthening community linkages may help improve tracking and follow-up of patients in the community leading to better health outcomes. However patient tracking can only be successful if HIV patients in the community are identified and supported to continue in care.

The community support activity in Uganda began in FY12 under HCI. Out of five health facilities providing ART to HIV patients in Buikwe District, one (Buikwe Hospital) was targeted due to its poor retention caused by high patient loss to follow up (LTFU). Poor linkages between the health facility and community were also reported. Consultative meetings were held with health workers to identify communities with the highest LTFU rate, which patients were lost as well as their locations. Out of nine parishes in the hospital's catchment, four were selected in which 10 villages were targeted – where active community groups, VHTs, and strong leadership existed.

Community QI teams made up of VHTs and other community representatives were organized and are active in all the 10 villages. The community QI teams are supported by coaches from the district and health facilities. Under ASSIST, the activity experienced an initial lag in coaching visits due to the delay of FY13 funding. Funding was approved in March, so project plans were immediately put in place and a learning session was scheduled. A district coordinator was hired who will be stationed at the district health office and equipped with a motorcycle so that he can provide coaching support to the QI teams in the 10 villages.

A learning session was held during the last week in March. Members of village health teams (VHTs) from the 10 villages shared what about their job motivated them and what about their job helped them to perform well. Performance factors that seemed to contribute to engaged VHTs and a commitment to improved performance included:

- *Recognition*: VHT members reported that their position gave them status in their communities. Some shared that they were seen as the village doctor. Others shared that they felt that the patients they helped very much appreciated and needed their assistance. Others recounted that their positions on the VHT established them as the confidante of the village, so that many villagers shared private information with them.
- *Clear roles:* The discussion at the learning session also revealed that VHTs were clear and confident in their roles and understood well how those roles contributed to the health of their patients and to the work of the health center.

Second, the VHTs discussed with coaches and ASSIST advisors the obstacles that made their work difficult. The three performance factors that seemed to be most common were:

- *Incentives:* The VHTs had initially received lunch when they attended meetings at the health center and also received transportation money. Due to budget cut-backs, the VHTs expressed frustration that they no longer receive this support.
- *Work Environment:* Due to the location of their villages, the VHT members are not able to walk to the health center to make reports, and so they need to find transportation and/or pay for fuel to travel to the health center. This requirement presents some hardship to the VHTs.
- *Supervision and Feedback*: The health workers commonly reported that due to the few times that the health workers come to the villages, the VHTs lack supervision and feedback.

The lack of interaction with VHTs for feedback, information gathering, and supervision were gaps that the district hospital staff also reported. These findings were significant because it will inform the next change package elements that will be pursued to address human factors in VHT performance improvement.

The community intervention will continue to be implemented in Buikwe District, and progress will be shared with partners for spread to other locations.

Activity 4: Strengthening Pharmaceutical Human Resources and Improving Medicines Use and Availability in Uganda

This activity was initiated under HCI in collaboration with the Ministry of Health (MOH) Quality Assurance Department and the Pharmaceutical Division, the District Health Offices of Jinja, Tororo and Bukedea, and the Faculty of Pharmacy, Makerere University. A rapid situational analysis conducted in 2012 identified gaps such as stock-outs of HIV testing kits and HIV care medicines, 40% of clients not being able to explain how to take their medicines upon leaving the pharmacy window, delays in ordering, ordering not based on actual needs, lack of communication between clinical and pharmacy staff, and lack of adherence to dispensing standards. These gaps potentially compromise client outcomes by affecting adherence and clinical outcomes.

Addressing these gaps through the application of improvement approaches also supported the implementation of the National Quality Improvement Framework, which in its plan sought to extend the application of such approaches to non-clinical processes like drug dispensing.

This activity was on hold until March 2013 due to the delay of FY13 funds. A coaches meeting was held in the first week of April with district coaches to analyze the medicines dispensing

process for HIV clients by health workers. Coaching visits are planned for April to help sites to re-establish the improvement teams in each site (due to large staff turnover and many new staff that have joined) and build the basic competencies of the improvement teams on improvement. The coaching guide used under HCI in FY12 was reviewed and revised by the district coaches together with the ASSIST team into a more focused format that will allow coaches to more easily and clearly document tested changes, successes and challenges that sites face. The new coaching guide will be tested in the April coaching visits.

In this second year of this improvement activity, ASSIST is placing greater emphasis on building the capacity of district coaches in the public sector to provide guidance and technical assistance to facility level improvement teams. The coaches meeting held in April focused on building the competencies of coaches and identifying mechanisms to support their efforts (e.g., shared folder on drop box, installation of skype on the laptops of district coaches to facilitate regular interaction, revision of coaching guides, and joint revision of assessment tools).

Activity 5: In-Service Training Framework

This activity was initiated under HCI with the support of PEPFAR to develop guidance in the form of a global in-service training improvement framework. In-service training (IST) has been a major strategy for the rapid scale-up of HIV services, with over 3.7 million training encounters supported by PEPFAR alone between 2003 and 2008. IST programs are rarely evaluated, and there is growing demand for more sustainable, effective and efficient health worker training to strengthen health workforce and health systems. Recognizing the absence of consolidated guidance and the need to bring together expertise, experience, and evidence globally, HCI facilitated a modified Delphi process to define practices to improve IST effectiveness, efficiency and sustainability. This led to the development of the first global improvement framework for IST which was used to facilitate assessments of the national IST situation in Ethiopia, Nigeria and Afghanistan in FY12. ASSIST will further develop the IST improvement framework by finalizing accompanying guidance and disseminating the framework via health workforce communities and networks.

HCI worked with the Federal Ministry of Health, key stakeholders and the USAID Mission in Ethiopia to design and undertake a national in-service training assessment. HCI also facilitated 35 representatives of key stakeholders to develop the basis of a national in-service training strategy. Building on this experience, ASSIST will provide support to another country (to be determined) to analyze their in-service training situation and to use this information to inform the development of an in-service training strategy.

Activity 6: Global Health Workforce Alliance

The Global Health Workforce Alliance (GHWA) has been mandated to convene partnerships around the global HRH agenda. Core funds from PEPFAR will enable ASSIST to gather learning from HRH improvement activities to inform discussions and to steer agenda topics for the third Global Forum that GHWA will convene in Recife, Brazil, in November 2013. The theme of the Global Forum is the health workforce dimension of universal health coverage.

The primary objective for the participation of ASSIST in the Global Forum is to provide technical assistance to USAID to contribute to agenda of the Forum so that learning gained from the health workforce improvement activities under HCI and ASSIST may be disseminated to key audiences and contribute to the global body of knowledge on health workforce development. ASSIST contributed to the Forum planning meeting in March 2013, hosted by PAHO in Washington, DC. ASSIST proposed two sessions for the Forum agenda: one highlighting the use of improvement science to improve health worker performance, expand access to services, and raise quality of care. The second submission was a session outline for a knowledge café to

be jointly hosted by ASSIST, USAID, CapacityPlus, Jhpiego and I-TECH to launch and disseminate the in-service training improvement framework.

ASSIST also participated in the GHWA e-platform as a featured member in January and February. ASSIST presented two topics on the GHWA e-platform. The first topic advocated for expanded attention to performance of health workers as a means of improving care and expanding access. The second topic highlighted the value of engaging informal community support systems with formal Ministry of Health care systems to improve the quality of care delivered by CHWs. For this presentation a video story board was shown with a commentary by Ram Shrestha.

Activity 7: mHealth Cross-Bureau Activity with OHA Office and Office of Health Systems

Community health workers remain in short supply and are increasingly required to shoulder a larger burden of health care services. But while CHWs are critical for ensuring the continuum of care from community to frontline facility to referral facility, they are often not given the tools necessary to do their jobs efficiently or effectively. Illiterate and low-literacy CHWs face special challenges, and are often ineligible for certain tasks due to the challenges associated with ensuring quality.

Despite the efforts of a few organizations to apply mhealth technologies to support CHW activities (e.g., Johns Hopkins University, InSTEDD, Dimagi, Hesperian Foundation),the potential for mobile phones and, increasingly, tablets to support CHWs has not been tapped. It would be useful to examine whether CHWs will use mhealth technologies to support the delivery of health services, and if the use of those technologies might improve their performance.

In January 2013, the USAID ASSIST project received core funding from the USAID Office of Health Systems to be invested in the area of mHealth. Part of the core-funded mHealth activity falls under a partnership between the cross-bureau activities of the Office of Health Systems and the Office of HIV and AIDS human resources team. This part of the activity will focus on how the use of mHealth may contribute to improved performance of CHWs in providing HIV care. During this reporting period, a concept paper for the mHealth activity was developed and is currently in review with USAID.

2.2.4 What Are We Learning?

Tanzania District Management Collaborative

- CHMTs have difficulty supervising all of the health centers due to limited time and resources. Aggregating the data across all of the health centers masks differences in performance. How can data be presented so that CHMT may focus on those health centers that need the most support to improve their performance?
- The changes tested under ASSIST will explore how using QI coaching as a management process might support more effective management performance. What steps can be taken by CHMTs to best strengthen the QI practices at the health centers? How can those health teams who have QI experience be engaged to support other teams who need training in QI?

Community Support for VHT Performance, Uganda

- Community health systems promote sharing, exchange of ideas, and transfer of knowledge to the wider community.
- Participants in community teams can work independently with their target audiences to identify HIV patients and raise awareness.

Strengthening Pharmaceutical Human Resources

Key questions this improvement activity seeks to answer:

- Does the application of improvement and approaches to address human performance factors improve medicines availability and use?
- What are the interventions demonstrated to improve medicines availability and use?
- What is the relationship between medicines availability, medicines use, and clinical outcomes?
- Is onsite training effective in building core competencies in improvement?
- Does onsite training build capability of health facilities to continuously improve in areas outside the focus of this collaborative?
- What is the cost-effectiveness of the approach applied in this collaborative to improve medicines availability and use?

In-Service Training Framework

- What is the most effective, efficient, collaborative, readily updated and low-maintenance format that guidance can be published in?
- What are the strengths, weaknesses and needs for IST systems improvement in one country? (Country to be determined).

2.2.5 Planned Activities Next Quarter

Tanzania district management collaborative

- Coaching and mentoring
- Learning session
- Testing of changes that will facilitate CHMT supervision and support strengthened quality improvement teams

Community support for VHT performance, Uganda

- Independent coaching visits
- Learning session
- Baseline VHT Engagement Assessment and assessment of community groups
- Monthly community QI team meetings

Strengthening pharmaceutical human resources, Uganda

- Monthly coaching visits to all sites by district coaches to support dispensing process analysis and analysis of performance factors
- Midline assessment and validation of indicators

In-service training

- Finalization of guidance for reach recommendation in the in-service training improvement framework
- Finalization of technical report for in-service training situational assessment in Ethiopia
- Finalization and submission of two remaining papers for in-service training journal series

Global Health Workforce Alliance

- Submit draft of background discussion paper on CHW Monitoring and Accountability for Forum Global Core Group
- Continue planning discussions and collaborations on Forum planning with USAID and GHWA

mHealth

- Finalize plan with USAID Mission

2.3 HIV and AIDS: Prevention, Chronic Care, and Treatment

2.3.1 Background

The overall objective of ASSIST's core HIV portfolio is to improve and strengthen the capacity of health systems to provide and sustain high quality prevention, care, and treatment services for people living with HIV (PLWH). ASSIST's HIV portfolio builds upon the evidence generated and lessons learned from HCI. ASSIST will work with local governments and stakeholders to identify gaps in the delivery of quality HIV services, apply improvement science to address health system gaps, and quantitatively and qualitatively study the impact of these interventions and how best they can be scaled globally.

Under the USAID ASSIST Project in FY13, the HIV portfolio will include three HIV prevention activities: Assuring Infants and Mothers Get All PMTCT Services (AIMGAPS), improving the delivery of Voluntary Medical Male Circumcision (VMMC), and improving safe injection and waste management practices. With respect to adult treatment, care, and support, the HIV portfolio includes improving chronic care management and strengthening community linkages to health facilities for PLWH.

An emphasis will be placed on documenting and sharing knowledge generated during improvement activities through knowledge sharing meetings and the development of case studies that describe the process of change and improvement. Additionally, research will be carried out linked to the activities in the HIV portfolio which will provide more robust measures to demonstrate the impact of these interventions. Greater use of qualitative methods will further aid our understanding of *'how'* the improvements occurred. In this way, ASSIST will contribute to the global evidence base for effective, efficient, and sustainable means to achieve high quality prevention, care and treatment for HIV and AIDS.

2.3.2 HIV and AIDS Program Overview

Activity	What are we trying to accomplish?	How will we know?	Geographic scale
Activity 1: AIMGAPS – Tanzania *(USAID TWG:PMTCT)*	Improve uptake and retention of PMTCT services	• Increased early booking at ANC • Increased HIV testing of women presenting at ANC • Increased male partner involvement in ANC (including HIV testing) • Increased exclusive breastfeeding among HIV-positive women 0-6 months postpartum • Improved follow-up of HIV exposed infants	Iringa region (1 of 30 regions in the country). Implemented by 11 of 176 PMTCT programs in four of 129 districts

Activity	What are we trying to accomplish?	How will we know?	Geographic scale
Activity 2: Strengthening Community Linkages of PMTCT Services – Tanzania *(USAID TWG: C / HBHC)*	Strengthening Community Linkages of PMTCT Services	TBD	TBD
Activity 3: Improving Injection Safety and Waste Management *(USAID TWG: P / HMIN)*	Apply QI principles to improve safe injection practices and reduce unnecessary medical injections to reduce the transmission of HIV, Hepatitis B & C and other blood-borne pathogens	• Increased understanding and implementation of safe injection practices among health care providers • Decrease in unnecessary medical injections	Swaziland # of Sites / Districts is TBD
Activity 4: Voluntary Medical Male Circumcision (VMMC) *(USAID TWG: P / CIRC)*	Improve the safety and quality of Voluntary Medical Male Circumcision(VMMC)	• Decreased proportion of clients circumcised who experienced one or more moderate or severe adverse event(s) (AE) within the reporting period • Increased proportion of circumcised men receiving counseling on risk reduction and safer sex • Increased proportion of circumcised males assessed for sexually transmitted infections (STIs) • Increased proportion of males circumcised within the reporting period who return at least once for postoperative follow-up care (routine or emergent) within 7-14 days of surgery	Uganda: Over 80 districts *Intense support to be provided to 30 sites (Facilities and Districts TBD) Light technical support to implementing partners at three sites per partner per quarter (at total of 30) Support to the MOH*
Activity 5: HIV Chronic Care and Treatement *(USAID TWG: T / HTXS)*	To improve continuity and effectiveness of HIV/AIDS chronic care through implementation of an adapted Chronic care Model (Uganda & Tanzania) To evaluate the impact of an adapted CCM model on quality of HIV/Chronic Care services and measurable patient outcomes.	• Increased percentage of patients retained in care • Increased percentage of patients adherent to ARVs • Increased percentage of patients who show clinical improvement • Increased percentage of patients with complete and correctly filled medical records • Reduced clinic wait times • Increased percentage of providers who have access to and are using clinical guidelines	Uganda: six facilities in two districts – Mityana (three intervention sites) and Nakaseke (three control sites) Out of a total of ten accredited ART health facilities in both districts

Activity	What are we trying to accomplish?	How will we know?	Geographic scale
	To further develop guidance for Expert Patient (EP) selection, introduction, capacity building, management, and retention.	N/A	Tanzania: 1 district (Morogoro) Uganda: 1 district (Buikwe)
Activity 6: Global Technical Leadership	Provide technical assistance to ASSIST country programs; disseminate information on learning from country programs and research	N/A	All ASSIST HIV/AIDS programs

2.3.3 Progress, Results, and Accomplishments

Activity 1: AIMGAPS (Tanzania)

In March, ASSIST headquarters had a call with the USAID AIMGAPS counterparts and discussed the work plan and implementation schedule of AIMGAPS for FY13-FY14. The work plan is being finalized and will be submitted to USAID for approval in April 2013.

Activity 2: Strengthening Community Linkages of PMTCT Services (Tanzania)

The work plan for this activity is still being finalized and has been submitted to USAID for final review.

Activity 3: Injection Safety (Swaziland)

Discussions outlining the main activities for injection safety and waste management in Swaziland are ongoing with USAID. The ASSIST work plan is still in the process of being drafted.

Activity 4: Voluntary Medical Male Circumcision – VMMC (Uganda)

The ASSIST Voluntary Medical Male Circumcision (VMMC) activity in Uganda is a jointly funded USAID core and USAID Uganda mission activity. Lessons learned and best practices gained from this activity will inform the global community and provide further evidence concerning mechanisms for VMMC programs in achieving quality VMMC service delivery as outlined by WHO and PEPFAR.

During the second quarter of FY13, the ASSIST team finalized the VMMC/SMC work plan for Uganda. In addition, the ASSIST Bethesda based team traveled to Uganda to participate in a work planning meeting with the ASSIST Uganda team and the 10 SMC implementing partners in order to map out a way forward for ASSIST to provide QI support to the partners. Memoranda of understanding were created; 30 sites were selected for intense support; and joint work plans were established with each partner. Additionally, the ASSIST team also attended a SMC TWG meeting at the USAID Mission in Kampala to brief the USAID Activity Manager and SMC TWG on planned activities and next steps.

To date, ASSIST has supported implementing partners in Uganda to conduct 20 baseline site assessments. The improvement strategy involves providing intense support to 30 sites, and light support to the remaining IP-supported sites. In addition, ASSIST will provide QI technical assistance to 10 implementing partners and others designated by USAID, as well as the central and local health governmental authorities. ASSIST will support the implementing partners in

developing both programmatic and site level QI plans.

ASSIST will also address human performance factors in SMC services through working with the AIDS Control Program (ACP) and the Quality Assurance Department (QAD) to build capacity at various levels of the health system: facility level, district level, and at the level of the implementing partners. This will be done through a series of coaching visits and learning sessions on QI. In addition, ASSIST will work with SMC training partners Rakai and Walter Reed to integrate a QI component into the SMC training so that all caregivers not only learn about the technical skills related to SMC but also how to change processes to ensure good care is delivered.

Activity 5: HIV Chronic Care and Treatment

Chronic Care Model Implementation and Research (Uganda)

USAID is keenly interested in the effectiveness and efficiency of using the Chronic Care Model (CCM) to improve retention, adherence and outcomes in persons living with HIV in low- and middle-income countries. The USAID ASSIST Project offers an opportunity to examine the chronic care model's effects on clients seeking HIV services in Uganda. The chronic care improvement intervention was first piloted by HCI in Buikwe District, from October 2010 to October 2012, and resulted in the development of a CCM change package that serves as a compilation of best practices and lessons learned from this two-year quality improvement collaborative.

In order to refine and distill learning for future dissemination to country and international stakeholders, the change package will be used as a guide for new districts in Uganda and will be strategically implemented in conjunction with a research study to quantify the model's impact in comparison with control sites. This ASSIST activity will support the impact evaluation at health facilities, ranging from Health Care Center IIIs to District Hospitals in Mityana (the intervention district) and Nakaseke (the control district), to assess the impact of the adapted CCM on measurable HIV services and clinical outcomes.

During the first two quarters of FY13, the following progress was made:

- The change package drafted from the Buikwe collaborative was presented to key stakeholders at a dissemination meeting in October 2012. In the second quarter, the document was finalized and will serve as a guide for intervention sites to implement CCM for adult HIV care and treatment.
- A pre-baseline assessment of the proposed districts (Mityana and Nakaseke) was conducted in February to determine the feasibility of implementing the CCM and conducting a research study given the number and type of health facilities in the districts, their locations, and volume of patients on ART. This assessment helped to establish whether the selected intervention and control sites are comparable and whether other factors would influence the outcome of research study indicators. Working in collaboration with a local NGO, Mildmay, and the district health offices, six sites (all of which were accredited to provide ART services) were selected to participate in the study. Three intervention and three control sites (i.e. a district hospital, a health centre IV, and a health centre III in each group) have agreed to work with ASSIST to implement the CCM and participate in the impact evaluation. The research includes both quantitative (medical chart record review) and qualitative (patient and provider interviews) components. A cohort of 370 patients, along with sub-samples, will be followed throughout the duration of the study in each district (see Table 5).
- Baseline assessment questionnaires, data collection tools and consent forms, both English and local language (Luganda) versions were developed and pre tested.

Table 5. Uganda chronic care study: Sample sizes for impact evaluation by data collection methods

Facility	Total Available ART Clients	Chart Review	CD4 Sample	Patient Interview	Provider Interview
Hospital (Mityana)	3445	280	29	28	9
HCIV (Mwera)	292	50	15	12	7
HCIII (St. Padre Pio)	100	40	12	10	5
TOTAL	**3837**	**370**	**56**	**50**	**ALL in HIV Clinic**

Facility	Total Available ART Clients	Chart Review	CD4 Sample	Patient Interview	Provider Interview
Hospital (Nakaseke)	683	280	29	28	16
HCIV(Ngoma)	86	50	15	12	4
HCIII (Kapeeka)	80	40	12	10	8
TOTAL	**849**	**370**	**56**	**50**	**ALL in HIV Clinic**

Note: 370 patients in each district serve as the larger cohort. Within that cohort, data will be collected on a sub-sample of patients for CD4 counts (56 in each district) and patient interviews (50 in each district). All providers that work in the HIV clinic, pending their consent, will participate in the provider interviews.

- A list of research study indicators were developed and organized around each of the facility-level components of the CCM (see Table 6). The study protocol was finalized and submitted to URC and Mildmay Uganda IRB for approval. A URC IRB approval letter was received, however, is contingent on receiving the official local IRB approval.
- Prior to implementation of QI activities, baseline data will be collected at sites in both the control and intervention districts in order to determine gaps in the various components of CCM including: self-management support, delivery system design, decision support, and clinical information systems. A few indicators, as listed below in Table 6, will be monitored at sites that implement the CCM change package.

ASSIST will also emphasize shared learning to engage and bring together facilities to work on common aims and indicators for improvement. During the next quarter, new sites will be oriented to the CCM change package, QI methodologies, and quality improvement indicators.

Human performance interventions will focus on strengthening provider and auxiliary staff performance and engagement at facility level to: 1) deliver high quality care that is adherent with clinical guidelines; 2) re-organize services for continuous, efficient high-quality care; and 3) support patients to optimally manage their chronic conditions in the context of the everyday constraints they face.

In Uganda, health workers, district coaches, and other stakeholders from the intervention sites will be oriented to the change package in Buikwe, which will highlight successful changes implemented from HCI to address the above mentioned human performance factors.

Table 6. Uganda Chronic Care study: Sample of major research indicators

Improvement Aim	Chronic Care Model Component	Indicators	Data Source
Increase in proportion of clients with better clinical outcomes (such as CD4 count), adherence to ARV, and retention in care.	**Patient Self Management**	% of ART clients that adhere to their appointment schedule	Chart Reviews / Patient Interviews
		% of ART clients who are at least 95% adherent to prescribed ARVs	
		% of ART clients who show clinical improvement (i.e. functional status, opportunistic infections, weight gain)	
		% of ART clients whose CD4 count has remained stable or has improved in the last six months	Lab work
Increase provider access to and knowledge of clinical guidelines for HIV care	**Decision Support**	% of national treatment guideline questions answered correctly	Provider Interviews
Increase clinic efficiency to reduce patient wait times	**Delivery System Design**	% of clients on ART who have an average waiting time of less than 30 minutes between each service point in the facility within the past month	Time Tracker
Increase the proportion of individual clients with complete and correctly filled medical records	**Clinical information Systems**	% of completely and correctly filled medical records (columns within each patient record)	Chart Reviews

CCM toolkit and expert patient guidance (Uganda and Tanzania)

Based on the lessons learned from implementing the HCI chronic care collaborative "change package" at new sites, ASSIST will aim to create a comprehensive CCM toolkit to be used as guidance for other facilities. Drawing on experiences from Tanzania and Uganda, the role of expert patients in chronic HIV management will be further defined by including it in the CCM toolkit, concrete guidance for expert patient (EP) selection, introduction, capacity building, management, and retention, as well as engagement of MOH structures in supporting them. This EP guidance will compose one of the critical components of the CCM toolkit and will serve to assist facilities and ART programs globally in developing and strengthening patient self-management support. Coupled with evidence yielded from the impact evaluation, the toolkit will serve as an important resource for health systems in other country settings.

Expert patient guidance development (Tanzania)

In February, Dr. Suzanne Gaudreault traveled to Tanzania to work with the ASSIST Tanzania team in gathering learning from the Tanzania patient self-management support activity. The information gathered will be incorporated into a guide for implementing programs to strengthen support for patient self-management and improve other aspects of patient care and facility operations with the assistance of expert patients. Site visits were conducted in order to collect preliminary information at Tawa Health Center (rural) and Morogoro Regional Hospital. Tailored questionnaires were then developed for use at three targeted focus group meetings. The focus group meetings, each targeting a different group of patient self-management activity participants, were held on separate days. The groups consisted of, on Day 1, health care providers; on Day 2, regional and district health officers and local NGO and CBO partners; and

on Day 3, peer mentors (expert patients). Feedback gathered from these meetings, held primarily in Swahili, are being compiled and translated into English and will be used to inform the development of the guide. A detailed outline for the guide was also developed by the team.

The team also visited Lugono Center, the site of a unique improvement initiative led by the Regional AIDS Coordinator to provide clean water and drastically improve sanitation at a food vendor stop for buses and trucks just outside the city of Morogoro. The Masai leaders at this site requested assistance in providing community HIV/AIDS education. In addition, the team visited a soap-making initiative being carried out by peer mentors to generate income in order to facilitate their volunteer work as peer mentors.

At the end of the visit, the ASSIST patient self-management team met with a PEPFAR Interagency Care and Support team (including representatives from PEPFAR, CDC, and USAID) who were visiting Morogoro District to learn about community health linkage and continuity of care efforts. Meetings included participants from Morogoro Regional Hospital, Sabasaba Health Center and Tunajali. The ASSIST team accompanied the visiting PEPFAR team on visits to Morogoro Regional Hospital and Sabasaba Health Center.

To date, information from the site visits, meetings and focus group discussions has been translated from Swahili to English, and a draft outline has been developed.

Activity 6: Global Technical Leadership

In March 2013, Dr. Pamela Marks attended the 20th Conference on Retroviruses and Opportunistic Infections.

2.3.4 Planned Activities in the Next Quarter

Activity 1: AIMGAPS (Tanzania)

- ASSIST will finalize data collection tools for the endline assessment of AIMGAPS. Those tools and the endline assessment protocol will be submitted to the URC Institutional Review Board and a local Tanzania IRB.
- Staff from ASSIST HQ will travel to Tanzania to provide technical assistance to ASSIST Tanzania on the facility and community components of AIMGAPS and begin drafting an AIMGAPS case study. The team will meet with partners to continue work on patient and provider materials to be included in the AIMGAPS implementation package. ASSIST Tanzania will continue to provide light support to the RHMT and CHMT during facility and community coaching visits.

Activity 2: Strengthening Community Linkages of PMTCT Services (Tanzania)

- During the third quarter, ASSIST staff will finalize the ASSIST work plan, conduct a situational analysis, and hire a district coordinator.

Activity 3: Improving Injection Safety (Swaziland)

- This activity will be launched through the HCI project and will eventually transition to ASSIST.

Activity 4: Voluntary Medical Male Circumcision (Uganda)

- The ASSIST Uganda team will meet with the MOH to finalize and approve the SMC QI tool and M&E assessment tools. In addition, the ASSIST team will support implementing partners to complete 10 more baseline self-assessments. In the upcoming quarter, an SMC stakeholder's meeting and the first learning session will be held, and the following will be started: QI training for site teams, and monthly onsite coaching visits.

Activity 5: Chronic Care and Treatment

- The ASSIST Uganda team will conduct the baseline assessment and analyze findings, conduct QI orientation training, and conduct on-site coaching
- The ASSIST Tanzania team will complete translation of the patient self-management findings
- Hold a knowledge exchange between Tanzania and Uganda to share lessons learned and best practices concerning the role of expert patients/peer mentors.
- Begin drafting the expert patient guidance

2.4 Maternal, Newborn, and Child Health

2.4.1 Background

ASSIST supports governments and partners to adapt improvement approaches to continuously improve, scale up, and sustain high-impact, evidence-based health care for leading causes of maternal, newborn, and child mortality and morbidity. ASSIST core- and field-funded activities focus on improving integrated, reliable and accessible delivery of maternal, newborn, child health (MNCH) best practices along all points of the ANC, intra- and post-partum, postnatal, and early childhood continuum and household-to-hospital continuum.

ASSIST works strategically with governments, local and international partners within country, regional and global initiatives that are well positioned to achieve widespread adoption and adaptation of improvement approaches to overcome critical MNCH quality gaps to achieve routine delivery of best practices for better outcomes for mothers, newborns, and children.

In addition to ongoing maternal newborn health improvement efforts, ASSIST is actively exploring a country and partnership venue for engaging in post-neonatal child health improvement activities, building on the Quality Assurance Project and HCI's many years of supporting child health improvement work (e.g., as part of Global Action Plan for Pneumonia and Diarrhea, integrated community case management, community management of acute childhood malnutrition, etc.)

2.4.2 Maternal, Newborn, and Child Health Program Overview

What are we trying to accomplish?	How will we know?	At what scale
Reduce maternal, newborn and child mortality/morbidity by strengthening capacity of governments and partners to apply improvement approaches to strengthen, scale up and sustain high-impact MNCH services at facility and community levels in USAID priority countries	LAC Region KMC Initiative: Regional spread of newborn care best practices for leading causes of newborn mortality: resuscitation services (HBB) for adverse intra-partum events/asphyxia; Kangaroo Mother Care (KMC) for premature infants; neonatal sepsis prevention & management.	LAC region (5 countries)
	Uganda: Saving Mothers Giving Life (SMGL) • Decreased incidence maternal complications • Decreased case-fatality (eclampsia, PPH, sepsis, obstructed labor) National Newborn Programming • MOH-led spread of newborn care best practices by leveraging improvement approaches	Uganda (4 SMGL districts) **Jointly core- and field-funded Core-funded National Newborn Coordinator position

What are we trying to accomplish?	How will we know?	At what scale
	Francophone country (TBD): Demonstrated implementation strategies for using WHO Safe Childbirth Checklist tool to improve quality of maternal and newborn facility services	Francophone country (TBD)
	Global Technical Leadership: ASSIST contribution to MNCH global partnerships, initiatives, and communication forums to increase awareness of and active use of improvement approaches to achieve better outcomes for mothers, newborns and children (including: A Partnership Renewed; HBB Global Development Alliance; Survive and Thrive; Global Action Pneumonia and Diarrhea Action Plans; Latin American Neonatal Alliance; East Africa Survive & Thrive Neonatal Alliance; and global/regional technical conferences.	Global Technical Leadership

2.4.3 Progress, Results, and Accomplishments

Uganda

ASSIST core MNCH funds support three maternal and newborn health (MNH) activities in Uganda:

- Phase two of Saving Mothers Giving Life (SMGL) (joint core and field funding)
- National Newborn Program led by the MOH to apply improvement approaches to scale up newborn care best practices
- Sustaining gains in Masaka and Luwero MNH collaborative sites

Phase two of Saving Mothers Giving Life (SMGL)

In FY11, HCI initiated improvement activities in 10 high-volume maternities in two SMGL districts (Kyenjojo and Kamwenge) focused on two main maternal care areas:

- Early detection and management of obstructed labor (using partogram and other interventions)
- Immediate and early post-partum care for the mother with a strong emphasis on AMTSL for prevention of post-partum hemorrhage

In FY13, ASSIST core funds will augment field funds to incorporate a strong improvement leadership role for ASSIST as part of the multi-partner USG-funded SMGL initiative. The SMGL initiative in Uganda has expanded its geographic coverage from two districts in the first year to two additional districts (Kabarole and Kibaale) for a total of four districts, all located in northern Uganda.

As the established lead of the SMGL QI cluster, ASSIST will use core funding to expand government and partner use of improvement to scale up MNH best practices. Key areas of ASSIST's QI cluster leadership will include, among others:

- Defining common process quality measures that all SMGL partners will collectively track to drive continuous improvement and accountability
- Regular partner capacity-building to support continuous improvement at local service delivery and district-level, applying core improvement principles (team work; focus on processes and systems; regular analysis of results for action; client-centeredness)
- Knowledge management within SMGL to promote shared learning around solutions to

common implementation challenges for reliable delivery of high impact maternal and newborn interventions.

In addition, ASSIST core funds will supplement field funds to generate and disseminate global knowledge related to several areas of ongoing challenge for scale-up of maternal and newborn care practices across all settings:

- Integration of maternal newborn and FP high-impact interventions at all points in the ANC, intra- and post-partum and postnatal care continuum of essential services at community, primary, and hospital levels. For example, ASSIST will actively integrate essential newborn care (including resuscitation) into its post-partum and post-natal care improvement activities.
- Test and demonstrate effective QI approaches to improve surveillance, early detection, and case management of pre-eclampsia and eclampsia at all points in the antenatal, intra- and post-partum, and post-natal continuum.

MOH National Newborn Program

ASSIST supports a full-time newborn technical expert seconded to the MOH to support the National Newborn Program. The national newborn program focuses on scaling up ENC, including resuscitation, and increasingly the scale-up of improved care for the premature infant and the infant with sepsis. The core-funded newborn expert seconded to the MOH works in close collaboration with the MOH and partners to promote:

- Evidence-based policy, continuous capacity building of front-line providers (e.g., HBB cascade training), and regular monitoring of quality of care of high-impact interventions
- Regional MOH and partner capacity to support local teams to apply improvement approaches to achieve reliable delivery of high-impact MNH interventions for every woman and child in Uganda.
- Regular monitoring (national, regional and local) of sentinel quality of care indicators to assess coverage of effective interventions and to drive action at all levels to continuously improve for high effective coverage of best practices and improved patient outcomes.

Masaka and Luwero MNH collaborative sites: Sustaining and spreading the gains

In FY11 and FY12, HCI supported a maternal newborn collaborative in the Masaka and Luwero districts in 34 maternities with linked community activities (e.g., home-based post-natal care). The collaborative included a strong emphasis on essential newborn care, including neonatal resuscitation, leveraging HBB training and supply resources. Results to date have been very promising, and ASSIST will continue to provide modest support to the DHMTs and maternities in these two districts to help sustain gains to date. In addition, ASSIST will actively spread the learning and best practices that have emerged in the Masaka and Luwero MNH collaborative as part of the SMGL and National Newborn Program activities.

LAC Regional Newborn Initiative

HCI implemented KMC and HBB activities in five countries in the LAC region: Nicaragua, El Salvador, Honduras, Guatemala and Ecuador. Success in these countries has helped fuel collaboration within the region to improve newborn care services. This collaboration along with our work with PAHO and the Latin American Newborn Health Alliance initiated the demand for a Communities of Practice for KMC and HBB. Activities supported by ASSIST core funds include:

- Design of a web platform to support Spanish-language communities of practice on KMC and HBB platform, which can be seen at http://www.maternoinfantil.org/comunidades_practica/ . This web-based Community of

Practice will be a tool to interconnect hospitals in the Latin American Region that are working on Kangaroo Mother Care, starting but not limited to the countries where HCI had supported KMC. The website allows for registration of members and sharing of experiences and materials, participation in chat rooms and forums.

- Support for the creation and start-up of a KMC service in the hospital of Latacunga, Ecuador, in conjunction with the USAID Child Survival Grants Project and the Ministry of Health of Ecuador.
- Coordination with MCHIP and the USAID LAC Bureau for preliminary plans towards holding a LAC Technical Meeting on Advances in Kangaroo Mother Care, Helping Babies Breathe and Newborn Infection Control, to be held in El Salvador in June 2013.

WHO Safe Childbirth Checklist

URC staff have participated since the earliest 2009 technical meetings in the development of the WHO Safe Childbirth Checklist, including participation in an initial international consultation convened by WHO and the Harvard School of Public Health and field testing of the SCC by HCI staff in Mali as part of a multi-region field testing exercise. While a Gates-funded research study is currently evaluating impact of the SCC on patient outcomes in India, to date, there has been little implementation experience with using the SCC outside of India or outside of a controlled research setting in the “messy” real world. As results of the impact study are awaited, WHO Patient Safety (a partner on ASSIST) has organized a “SCC Collaboration” to expand implementation and geographical experience with implementation of the SCC to improve quality of care and outcomes for patients.

Although a checklist alone is unlikely to produce sustainable impact on patient outcomes, the anchoring of a clinical care checklist within a strong improvement program is a powerful strategy for accelerating improved health care and outcomes. The simplicity of a user-friendly checklist that standardizes, prioritizes, and aligns critical actions (content of care) with predictable phases of a health care process (e.g., childbirth care) makes checklists an appealing tool for organizing the work of front-line improvement teams. In particular the close integration of maternal and newborn care best practices as part of key childbirth phases (admission/labor, pushing, immediate post-partum and post-partum) is a strength of the WHO SCC.

In FY 13, ASSIST will use core MNCH and FP funds in collaboration with its partner, WHO Patient Safety and a host-country MOH, to test introduction of the SCC in a sub-Saharan African country as part of the WHO Safe Childbirth Checklist Collaboration in a USAID MNH priority sub-Saharan African country.

In March, ASSIST approached USAID Senegal to explore interest in using the SCC as a tool to improve quality of maternal newborn care. Pending interest and approval by the Mission, ASSIST will share an adapted concept paper with the USAID Mission and prepare for an exploratory trip to Senegal.

Global Technical Leadership

ASSIST will emphasize core-funded global technical leadership activities to influence the broadest range of stakeholders possible to leverage improvement approaches at scale to achieve effective coverage of MNCH best practices. In particular, ASSIST will anchor its MNCH activities and country-level work to the extent possible within country (e.g. SMGL), regional (e.g. LAC KMC regional collaborative and East Africa regional MNH initiative) and/or international partnerships/initiatives (e.g. WHO Safe Childbirth Checklist program/collaboration) in order to maximally influence stakeholder understanding of and use of improvement to drive effective scale-up of MNCH best practices.

2.4.4 Planned Activities in the Next Quarter

- Launch WHO Safe Childbirth Checklist improvement activity in partnership with WHO Patient Safety in a Francophone country in Sub-Saharan Africa
- Finalize work plan for Uganda SMGL and National Newborn activities (country visit by Dr. Jorge Hermida and Ms. Annie Clark in April 2013)
- Engage with and support newly forming East Africa regional MNH Global Development Alliance partnership with the RCQHC, ECSA, the American Academy of Pediatrics, Laerdal, American College of Obstetrics and Gynecology, and MCHIP
- Present at the 2013 Global Newborn Conference (Dr. Zakari Saley, Niger; Ms. Rose Kesande, Uganda; Dr. Jorge Hermida, Ecuador; Dr. Kathleen Hill, MNCH lead).
- Work on publications of successful MNCH improvement experiences
- At the invitation of the Gates-funded Saving Newborn Lives project, participate in Newborn Indicators Working Group led by Saving Newborn Lives (Save The Children)
- Engage with Antenatal Corticosteroid working group (led by Gates)
- Participate in TAG meeting of Gates-funded Maternal Health Task Force (June 2013)

2.1 Office of Health Systems: mHealth

2.4.1 Background

In May 2005, the Fifty-eighth World Health Assembly adopted the first ever eHealth resolution. Since then, information and communication technologies have become increasingly central to health services delivery and the transformation of health systems worldwide. The WHO-appointed Commission on Information and Accountability for Women's and Children's Health recently issued six recommendations for consideration by the World Health Assembly in 2013, including a recommendation to accelerate uptake and evaluation of eHealth and mHealth technologies with the goal of integrating the use of MNCH information and communication technologies into all country health information systems and health infrastructure.

The use of eHealth and mHealth technologies has far-reaching implications for the quality of health care services, information systems, and cross-cutting health system functions in low, middle and high-income settings. Today health care professionals (frontline providers and managers) have to manage an ever-increasing amount and complexity of clinical-related health information. To do so effectively and efficiently is crucial to the provision of high-impact, evidence-based, cost-effective health care. An essential feature of information management is to ensure that information is accessible at the times of decision making. In low-resource settings, the limited provider ability to access evidence-based guidelines and information at the point of care continues to compromise the quality of health care services. In addition to supporting improved quality of clinical care and health information functions, ASSIST-supported eHealth technologies will include a strong focus on promoting effective coordination and linkages between facility- and community-based services.

If strategically integrated into health systems strengthening and improvement initiatives (rather than implemented as stand-alone interventions), mHealth and eHealth technologies hold promise to improve efficacy, efficiency, and reliability of high-quality health care services for leading causes of morbidity and mortality in all resource settings.

2.4.2 mHealth Program Overview

The USAID Office of Health Systems (OHS) has invested core funds to support integration of appropriate mHealth and eHealth technologies into ASSIST-supported improvement and systems strengthening activities.

Activities	What are we trying to accomplish	How will we know	At what scale
Leverage mHealth as a complementary technology to strengthen essential health system functions for provision of high quality chronic care for PLWHA	Promote eHealth HMIS technologies Promote point-of-care eHealth information technologies to enhance health worker engagement Promote eHealth technologies for improved coordination and continuity of high-impact interventions Promote eHealth applications for continuous provider learning and skill building	• Adapt, develop & test mHealth applications to improve quality of chronic care services provided to PLWHA. Examples of mHealth activities under consideration include: • Clinical decision support (skilled providers, "expert patients") • Patient tracking, HIS functions • Better coordination of provider to provider and distinct health system level services, including referral and primary health centers, laboratory and clinical care services, and health center and community HIV/AIDS services • Strengthening "expert patient" support of PLWHA to improve patient adherence with ARVs, nutritional best practices, and retention/follow-up in health center HIV services	One district, country TBD
Leverage mHealth technologies to strengthen VHT supervision and performance and to improve linkages with Health Centers providing services for PLWHA		• Strengthen retention & outcomes for PLWHA through improved coordination of care across community and health center levels • Improve VHT performance to support better outcomes for PLWHA. • Improve supervision of VHTs by Health Center staff • Strengthen communication between VHTs and health centers providing services to PLWHA	One district, country TBD ***partially funded by OHA*

2.4.3 Progress, Results, and Accomplishments

In the last quarter the ASSIST team held multiple discussions with Adam Slote, Office of Health Systems counterpart for mHealth funding, USAID technical counterparts (HIV/AIDS, HRH, MNCH & FP) and ASSIST country counterparts to define priority activity areas for investment of ASSIST mHealth funding in 2013.

Several options for investment of mHealth funds to strengthen ASSIST country-level HSS and improvement efforts were considered USAID/Washington will contact potential country missions and the final country selection will be made pending USAID and MOH approval.

All mHealth activities will be deliberately designed to be integrated into and hopefully leverage ongoing HSS and improvement activities for better patient outcomes in line with ASSIST project-wide objectives. No stand-alone mHealth interventions will be supported or evaluated.

2.4.4 Planned Activities in the Next Quarter

- Finalize the country and districts in which this activity will take place.
- Finalize a complete first draft of a concept paper and work plan for mHealth-funded activities as an integrated component of current improvement work.
- Review and revise concept paper and work plan with all stakeholders including Adam Slote, OHS; James Heiby, AOR ASSIST; M. Rashad Massoud, Director ASSIST; in-country counterparts at USAID and MOH; and other stakeholders as relevant.
- Begin to implement activities according to agreed work plan.

3 Common Agenda Activities

3.1 Global Technical Leadership

3.1.1 Global Technical Leadership Program Overview

The USAID ASSIST Project's global technical leadership activities on behalf of USAID seek to further advance and inform the field of improvement globally by engaging and building capacity of USAID implementing partners and global health organizations to expand the application of improvement approaches in global health programs and serve as a conduit and catalyst for sharing, learning, and advancement in the field of improvement, including but not limited to: district management, human resources management, chronic care, gender equality, provider productivity, community-level services, local supply systems, knowledge management, and evaluation and economic analysis of improvement methods.

Activity	What are we trying to accomplish?	How will we know?	At what scale?
Activity 1:Spread of modern improvement	Expand the use of modern improvement approaches in USAID-assisted health care systems and by USAID cooperating agencies through global technical leadership for USAID's worldwide efforts to improve health care in developing countries	• Number of partnerships with global health organizations to expand the use of improvement science • Number of countries with national health care policies and strategies supporting the application of modern improvement methods in the health sector • Number of ASSIST-supported countries where cooperating agencies/implementing partners are applying modern improvement methods	Global
Activity 2: Disseminate findings around health care quality improvement	Demonstrate the results of USAID's investment in health care quality improvement	• Number of articles published in peer-reviewed journals that describe improvement interventions and measure their impact • Number of technical reports published by the project that describe improvement interventions and measure their impact • Number of presentations made by ASSIST staff at global technical conferences and briefings	Global

Activity	What are we trying to accomplish?	How will we know?	At what scale?
Activity 3: Build Capacity in Improvement Competencies	Support the development of improvement competencies in ASSIST staff and counterparts	• Improvement competencies framework published • Materials and eLearning developed to build improvement competencies and support applications of modern improvement methods	Global

3.1.2 Progress, Results, and Accomplishments

Activity 1: Spread of modern improvement

A key technical leadership activity during the quarter was ASSIST support the delivery of a "Thoughtful Conversation on National Improvement Strategies and Infrastructure for Improving Health Care" in Kenya, February 19-21, 2013. The meeting was facilitated by Dr. Lucy Musyoka, Deputy Director of Medical Services and Head, Department of Standards and Regulatory Services, Ministry of Medical Services of Kenya, and Dr. M. Rashad Massoud, ASSIST Director, who also designed the meeting with Ms. Dorcas Amolo, ASSIST Chief of Party in Kenya. Ms. Roselyn Were, Dr. Mwaniki Kivwanga, Dr. Subiri Obwogo, Dr. Nigel Livesley, Dr. Donna Jacobs, and Ms. Kate Fatta of ASSIST also participated, and the project also supported the participation in the seminar of Mr. Sven-Olaf Karlsson, former CEO of Jonkoping county council, Sweden, and Dr. Bruce Agins, Director of HEALTHQUAL International. This three-day policy seminar brought together leading stakeholders to share experiences and ideas from different countries on successful models for leading and providing support for improving health care at the national level, including developing policies and plans for improvement; to exchange ideas on appropriate infrastructures that enable Ministries of Health to lead and support health care improvement; and to stimulate a thoughtful conversation around this topic area.

Activity 2: Disseminate findings around health care quality improvement

Briefings

In February, ASSIST partner Dr. Taroub Faramand of WI-HER, LLC, and Mr. Ram Shrestha of URC presented a briefing at USAID/Washington for USAID staff on how the project integrates gender concerns in improvement, giving examples of community-level work supported by Mr. Shrestha. Ms. Kate Fatta and Ms. Feza Kikaya also staffed an information table on ASSIST's knowledge management activities at the USAID KM Expo held at the Ronald Reagan Building.

Conferences

ASSIST staff made 16 oral presentations, led two knowledge cafés, and presented five posters six international and regional conferences during the first half of FY13, as listed in Table 7.

Table 7. USAID ASSIST Conference Presentations, Oct. 2012-March 2013

Conference	ASSIST Staff Participation
CORE Group Fall Meeting October 11-12, 2012 Washington, DC	• Lani Marquez, together with Lenette Golding, CARE, led the interactive session, "InKnowvation: Simple Techniques for Tapping into All the Knowledge in the Room"
International Society for Quality in Health Care (ISQua) Conference	• M. Rashad Massoud led the 45-minute panel, "Making Health Care Better in Low and Middle Economies" (panelists included: Ed Kelley, Sir Liam Donaldson, Jean Nguessan, Sylvia Sax, Bruce Agins, and Ezequiel García-Elorrio)

Conference	ASSIST Staff Participation
October 21-24, 2012 Geneva, Switzerland	• Maina Boucar made the oral presentation, “Spread of better care practices and quality improvement for maternal and newborn services from Niger to Mali” • Donna Jacobs made the oral presentation, “Sustaining the Gains : Quality Improvement of HIV and AIDS programs in South Africa (2007 – 2011)” • Edward Broughton made the oral presentation, “Maternal health service improvements in Kunduz Province, Afghanistan” • M. Rashad Massoud led the oral presentation, “Managing knowledge for improvement: Why knowledge management approaches are new and essential tools for improving health systems” together with Tim Shaw of U. Sydney • Mabel Namwabira made the short oral presentation, “Engaging Clients in Quality Improvement (QI): A pre and post assessment of a client engagement intervention at 12 HIV facilities in Western Uganda” • Edward Broughton presented the poster, “Applying Modern QI Concepts to Improve Maternal Care in Low Resource Setting” on behalf of Youssef Tawfik
Global Symposium on Health Systems Research October 31- November 3, 2012 Beijing, China	• Edward Broughton led the satellite session, “How do we learn in order to strengthen health systems?” as a 45-minute interactive talk followed by two small-group discussions. The presentation was divided into three sections: 1) using real-time data for learning; 2) cost-effectiveness analysis and 3) the use of qualitative research in improving health systems. It was attended by about 30 people, including Tim Evans, the chair of the conference organizing committee. (Planned participation of Rashad Massoud, Sarah Smith, Ram Shrestha, and Tana Wuliji in the session was not possible due to hurricane-related flight cancellations.)
Infection Control Africa Network (ICAN) November 27-29, 2012, Cape Town, South Africa	• M. Rashad Massoud and Donna Jacobs facilitated a Knowledge Café at the ICAN conference to engage participants in brainstorming about next steps for operationalizing the Salzburg Global Seminar statement, “Better Care for All, Every Time: A Call to Action”
ISQua Regional Africa Meeting Feb.4-5, 2013 Accra, Ghana	• M. Rashad Massoud served as one of the opening keynote speakers addressing, “What is ‘quality’ health care?”. He also led the plenary session on “Options for large-scale spread of high impact interventions” and chaired the “Open Agenda” session. • Maina Boucar served as one of two keynote speakers addressing, “The Science of Improvement: How do we improve care?” • Elizabeth Hizza made the oral presentation, “Improving PMTCT service uptake across the continuum and spread of best practices in Tanzania” at the panel session, Access to quality health care • Dorcas Amolo made the oral presentation, “The Role of Government and Policy in mainstreaming QI in OVC programmes in Kenya” in the session, Case studies/Role of government • Roselyn Were made the oral presentation “To facilitate improvement of Vitamin A supplement uptake in Njiru District Nairobi Kenya” • Samson Haumba made the oral presentation, “Utilisation of QI approaches to improve TB/HIV treatment outcomes in Swaziland” in the panel, Options for large-scale spread of high impact interventions • Joseph Kundy presented the poster, “Leveraging patient self-management to address chronic care among PLWH in Tanzania” • Obwogo Subiri presented the poster, “Partnership Model for Incorporating

Conference	ASSIST Staff Participation
	QI into National Systems” • Jean Nguessan presented the posters, “Improving the quality of HIV care in facilities in Côte d’Ivoire: Comparing sites that did and did not participate in collaborative improvement” and “Implementation of a Laboratory Quality Improvement Process Towards Accreditation in Cote d’Ivoire: Lesson learned and way forward” • Nana Mensah-Abrampah led the Knowledge Café on “Salzburg Seminar Recommendations” with assistance from Feza Kikaya, Donna Jacobs, Nigel Livesley, and Maina Boucar • ASSIST also sponsored the participation of Mr. Stephen Okiror of Bukedea Health Center in Uganda, to present his poster, “Improving Patient Safety during ‘Safe’ Medical Male Circumcision by Use of a Locally Designed Checklist in Bukedea Health Centre IV in Eastern Uganda” • The project also sponsored the participation in the conference as invited speakers, Dr. Francis Omaswa and Ms. Robinah Kaitiritimba from Uganda. Dr. Omaswa was the Opening Keynote Speaker discussing, “What is ‘quality’ health care?” Ms. Kaitiritimba served as Session Chair of the 45-minute plenary on patient-centered care. She also served as a facilitator during the Salzburg Global Seminar Knowledge Café.
4th Annual East African Health and Scientific conference March 27-20, 2013 Kigali, Rwanda	• Tana Wuliji made a plenary presentation on the core competency framework for improvement and moving towards integration of these core competencies into health worker education and training at the session organized by the Regional Center for Quality in Health Care (RCQHC) on “Quality Improvement Movement in Africa.” Her presentation, entitled “Needed: health workers with core competencies in healthcare improvement. Why? How?”, is available at: http://prezi.com/fpxxkcrlgwpz/needed-health-workers-with-core-competencies-in-healthcare-improvement-why-how/

Abstracts were prepared and submitted for presentation at the International Society for Quality in Health Care (ISQua) conference in Edinburgh, Scotland (October 2013) and the American Public Health Association annual meeting in Boston (October 2013).

Publications

The project published three flyers during the first six months of FY13 as listed in Table 8.

Table 8. USAID ASSIST Publications, Oct. 2012-March 2013

Flyers and short reports (date published)
Applying Science to Strengthen and Improve Systems (2-page flyer) (October 2012)
USAID Applying Science to Strengthen and Improve Systems (4-page flyer) (February 2013)
Integrating Gender in Improvement: Approach of the USAID ASSIST Project (2-page flyer) (February 2013)

Reporting to USAID

During the period, URC submitted three required deliverables to USAID:

1) USAID Applying Science to Strengthen and Improve Systems Project FY13 Work Plan (Performance Period: October 1, 2012—September 30, 2013), submitted on November 27, 2012.
2) USAID Applying Science to Strengthen and Improve Systems Project Gender Integration Strategy, submitted on December 27, 2012.

3) USAID Applying Science to Strengthen and Improve Systems Project Knowledge Management Plan, submitted on December 27, 2012.

Activity 3: Build Capacity in Improvement Competencies

In the first quarter of FY13, a competency framework defining competencies for tasks relevant to the design and application of improvement approaches in ASSIST was finalized for initial review. Efforts built upon those initiated under HCI in FY12 to develop the initial framework and specifically sought the input of the research and evaluation team and knowledge management team to ensure that these areas of work were effectively covered in this framework. The framework will be used to inform the development of competency-based learning modules targeted to priority needs initially of ASSIST staff, and then eventually of country counterparts.

During March, Dr. Tana Wuliji further revised the improvement competency framework. She adapted it to create a self-assessment instrument on improvement competencies that was used by newly recruited improvement advisors in the ASSIST Uganda office before they undertook a basic training course in March. Sections of the framework relevant to identifying, analyzing and addressing factors affecting human performance were also used to inform the design of a one-day competency-based training program for ASSIST Uganda staff. This training program, along with training conducted by ASSIST staff on qualitative research, were video recorded in preparation for editing into short instructional videos on a learning platform organized around the competency framework.

3.1.3 Planned Activities in the Next Quarter

- Present at the International Forum on Quality and Safety in Health Care in London, UK
- Present at the Global Newborn Health Conference in Johannesburg, South Africa in April
- Prepare abstracts for the Global Implementation Science Conference (Washington, DC, August), District Health Regional Meeting (Saly, Senegal, October), ECSA Best Practices Meeting (Arusha, Tanzania, August), and speaker proposals for the 2014 International Forum, subject to AOR approval

3.2 Knowledge Management

3.2.1 Knowledge Management Program Overview

Building on HCI's experience and the continuing technology innovations of partner Johns Hopkins University Center for Communication Programs (JHU-CCP), ASSIST is applying knowledge management (KM) concepts and techniques to support the generation and harvesting of learning from improvement efforts, evaluation, and research at the country level and the integration of insights across countries to contribute to the global evidence base. The project will make such learning available through web portals and communities of practice, in a wide variety of formats, including documents, tools, e-Learning, podcasts, videos, directories of improvement expertise, and virtual mentoring.

Activity	What are we trying to accomplish	How will we know	At what scale
Activity 1: Develop and continuously refine the KM strategy for ASSIST	Support a proactive strategy to promote knowledge management throughout the ASSIST project	▪ Global KM plan/strategy developed for project and submitted to USAID ▪ Annual documentation and KM reports submitted to USAID	Global

Activity	What are we trying to accomplish	How will we know	At what scale
		▪ Staff routinely apply KM concepts and approaches to synthesize, harvest, and spread learning from project-supported improvement efforts ▪ Evaluations demonstrate added value of KM ▪ Case studies document results and added value of gender focus in improvement	
Activity 2: Develop a knowledge portal for improvement evidence and information and incorporate content from HCI, ASSIST-supported activities, and other implementers	To promote a culture of learning and sharing through the ASSIST project	▪ ASSIST knowledge portal is acknowledged as go-to source on learning and experience on improvement ▪ ASSIST technical teams regularly contribute content to the site through blogs and case studies ▪ Other implementers contribute and link to content on ASSIST knowledge portal	Global
Activity 3: Document improvement knowledge and learning from activities supported by the USAID ASSIST Project	To harvest learning from improvement efforts, evaluation, and research at the country level and the integration of insights across countries to contribute to the global evidence base	▪ Number and variety of case studies posted on the ASSIST knowledge portal ▪ ASSIST country and technical teams have defined key learning questions for their improvement activities and apply KM concepts to gather and synthesize that learning ▪ Blogs and resources posted on the ASSIST knowledge portal convey key learning from improvement efforts supported by the project ▪ Proportion of ASSIST country teams that are establishing local knowledge repositories of key learning from improvement efforts	In each country supported by ASSIST
Activity 4: Promote the use of improvement knowledge through the ASSIST KM	Distribute widely knowledge collected from ASSIST-supported activities and research findings	▪ ASSIST social media sites connect improvement knowledge with other implementers ▪ ASSIST supports several	Global

Activity	What are we trying to accomplish	How will we know	At what scale
system		vibrant Communities of Practice ▪ ASSIST-supported country programs will actively use content on the ASSIST knowledge portal	
Activity 5: Integrate gender in improvement activities	To make gender a priority in ASSIT-supported activities	▪ ASSIST-supported country teams integrate gender considerations in the planning and implementation of improvement activities ▪ Training materials, technical briefs, and tools are available to help implementers ▪ Case studies document applications of gender integration	Global

3.2.2 Progress, Results, and Accomplishments

Activity 1: Develop and Continuously Refine the KM Strategy for ASSIST

The ASSIST cooperative agreement called for the development of a detailed knowledge management (KM) strategy for the project in the first 90 days of implementation. While the basis for the ASSIST KM strategy was outlined in our technical application, we gathered inputs for this strategy through a virtual consultation with the USAID AOR, ASSIST partners, and an expert consultant, Dr. Nancy Dixon. The consultation was held on Tuesday, November 27, as a two-hour virtual meeting using Adobe Connect. The meeting was facilitated by Ms. Kathy Callahan of ASSIST partner EnCompass LLC, with production support from Ms. Nina Talley of EnCompass. Participants were: Dr. James R. Heiby of USAID; Ms. Kate Fatta, Ms. Allison Annette Foster, Dr. Jorge Hermida, Dr. Kathleen Hill, Ms. Feza Kikaya, Ms. Lani Marquez, and Ms. Kim Stover of URC; Dr. Nancy M. Dixon of Common Knowledge Associates; Ms. Tessie Catsambas of EnCompass LLC; Ms. Cassie Mickish and Dr. Tara Sullivan of JHU-CCP; and Ms. Cait Lutfy of WI-HER LLC.

Key questions addressed during the meeting included:

- What is your vision for the ASSIST web portal?
- How will we know we've succeeded in achieving this vision?
- What are our recommendations about ASSIST case studies—intended audience, who should develop them?
- How can we engage users in the ASSIST web portal?
- What are other ideas we haven't covered that the KM strategy should be sure to address?

Regarding vision for the ASSIST web portal, ideas mentioned by participants included: The portal should have a collection of improvement stories on a range of quality issues that are detailed and organized so that they can provide models for other teams; the portal should serve as an umbrella mechanism to support local/regional KM initiatives adapted to local needs; the portal should be interactive and dynamic, content updated regularly; users will see the content

as useful and relevant to their work; the portal will facilitate an active exchange between practitioners of improvement on how to best support and lead teams and share knowledge; and the portal should offer focused learning resources that people can take online to build their skills in improvement.

Suggested measures of our success in achieving this vision included: Developing country partners use the site as much as cooperating agency partners; lots of different kinds of people are using the portal, including program implementers and providers; the portal features examples of improving health care at multiple levels (from high level changes to very low level); people are proud to share experiences on the portal; implementers use the portal as a place to consult on how to adapt to their local situation; coaches, team leads and technical advisors find ideas on the portal and then pick up the phone and have a conversation with the person that initiated that idea; there are in-depth discussion between people in communities of practice hosted on the portal to puzzle out issues; there are lots of videos and links to partners' work; implementers who are not part of ASSIST feel welcome; and donors also use the portal to inform their ideas and programs.

With respect to case studies, there was some convergence among participants regarding desired length (56% felt they should be 1-2 pages and 44% 3-5 pages), the fact that case studies should be distributed as short leaflets and as text on web pages, and the value of concretely describing specific approaches and showing impact. There was also recognition that different case studies should be developed for different audiences and that the ASSIST KM team should deliberately develop audience/user profiles for key target groups to enable us to tailor the language and focus of case studies for different user groups (e.g., have some case studies aimed at high level decisions about whether to do improvement, training case studies to help our counterparts and country staff share and explain improvement work).

Engaging users in the ASSIST web portal was an important part of the meeting's conversation. Some of the priorities identified include: getting other implementing partners involved and included, specifically those who are working on improvement but not part of the ASSIST team; and engaging Ministries of Health and professional associations in the portal (including sister sites like www.maternoinfantil.org). Featuring other implementers' work--praising it and disseminating insights from it—and developing joint content with other projects are both strong strategies for engaging key groups outside the project. We also need to initiate specific collaboration with other partners that gets featured and engage thought leaders that people want to hear and know about their thoughts.

A major focus of the ASSIST knowledge management (KM) team during the second quarter of FY13 was to design and conduct training for field staff in Africa on KM concepts and techniques. The four-day training, held March 11-15, 2013 in Durban, South Africa, sought to build staff capacity to incorporate KM into improvement programs, including how to develop KM strategies for their improvement work, how to apply KM principles and techniques to the design and facilitation of learning sessions, and how to design knowledge transfer/handover processes, events and written products to convey key learning about a specific practice area or topic. The training was led by consultant Dr. Nancy Dixon will support from Ms. Lani Marquez and Ms. Kate Fatta of URC and Ms. Cassie Mickish of JHU-CCP.

During the training, participants were introduced to and discussed the key KM principles. These principles were referred to throughout the workshop by both facilitators and participants, reinforcing their meaning and use. Participants were introduced to and practiced a number of KM techniques – including storytelling, interviewing, and after action reviews – to foster knowledge sharing and exchange in learning sessions and other meetings. Through exercises and small group discussions, participants also worked through the development of a KM

strategy to support a specific improvement objective. The strategy is designed to help them integrate KM approaches into their improvement activities. The strategy covers looking at what they need to know before beginning an activity; what their learning questions are; how knowledge will flow and be synthesized; where the learning will go next and what form it will take; and roles and responsibilities for KM.

Additionally, participants practiced creating knowledge nuggets – turning learning into actionable information – and learned how to organize knowledge harvest (to define key learning from an activity) and knowledge handover (to connect those who have knowledge to transmit with those who want to apply that knowledge in new settings) meetings. Participants were also introduced to the concept of creating a knowledge asset – a compilation of knowledge nuggets and supplemental information (case studies, videos, etc.) to provide new implementers (i.e., Ministry or other local partner) with the essential learning from an activity that can be used to continue to implement this or another activity.

Activity 2: Develop a Knowledge Portal for ASSIST

In October, a temporary page was launched at www.usaidassist.org to provide basic information on the project and the implementing team. In November, ASSIST KM Director Ms. Lani Marquez met with the web design and support team at JHU-CCP in Baltimore to talk through the specifications for the ASSIST web portal using JHU-CCP's Sites4Dev platform, which is based on the Drupal content management system and offers web features that JHU-CCP has found to be the most popular in websites aimed at global health and development. These features include:

- Marquee: Dominant scrolling image on home page that uses images and captions to communicate key messages about the site
- Site Statement: A description of what the site is about near the top of the home page, to orient users immediately to what the website is for and who are its intended audiences.
- Blog: Features timely, non-static content that draws in users to topics of interest. The site's main blog can serve as the "voice" of the project but the site also can feature blogs by individual staff members and guest contributors (e.g., recognized experts, opinion leaders, country counterparts, etc.).
- Social media block: Keeps social media linkages manageable and easy for users to find
- Resources: Simple way to manage reports, press releases, worksheets, and other files and links provided for users.
- Projects: Descriptions of activities by country or topic. Can be combined with a map.

The ASSIST web portal will use taxonomy terms to describe its content and resources to facilitate the identification of desired content through filtering rather than having lots of static pages with pre-determined content, as was the strategy used on the HCI Portal, which had a large number of static pages for specific improvement methods. Filtering content by choosing taxonomy terms of interest helps site users to quickly identify the specific content they are interested in, rather than assuming we know what content the user wants to see. Taxonomies will be used to describe the topic, resource type, and associated countries or regions of resources. Main topic taxonomies, (e.g., HIV, Reproductive Health, etc.) will use free text tags for sub-topics within the main topic area (e.g., Counseling and testing, treatment, prevention, etc. for the HIV main taxonomy term). There will also be taxonomies for improvement methods, research and evaluation topics, and gender integration. The HCI Portal currently uses taxonomies, but the number of terms has grown beyond a useful number, some terms are only used for one or two resources, and the nesting does not work properly; these issues will be addressed in the ASSIST web portal.

Blogs from individual contributors/experts, each identified with short biographical profile and photograph, will be a central feature of the web site. A general project blog will be used to convey general information about project activities and improvement methods, but most blogs will be authored by individual staff and outside experts.

The meeting also addressed how to manage the HCI Communities on Sites4Dev, which does not currently offer a group or community feature. JHU-CCP has proposed using a different web platform for ASSIST's communities of practice: Open Atrium (http://openatrium.com). Open Atrium was designed to provide Intranet features within a Drupal 7 platform by allowing users to join and associate in self-selected groups. Within groups, users can post blogs, elect to receive email notifications when others post content, collaborate on documents, create and manage projects, manage a calendar of group events, share messages and links with others in the group, and see a snapshot of all the activity in the group. The look and feel of each group can be customized to give each group its own unique identity.

Open Atrium will be installed as a subdomain of the ASSIST web portal, with communities of practice using a subaddress such as www.communities.usaidassist.org. Each community will also have its own unique URL to facilitate direct access to the community, redirecting the user to the specific community's page within the web portal, much in the same way that the URL www.chwcentral.org currently redirects the user to the page http://www.hciproject.org/chw-central.

Google Translator will be used to provide a simply means for site users to translate content to any one of the large number of languages available using Google's machine translation function. This strategy will facilitate the integration of original content on the site in each user's native language.

A final issue addressed in discussions with JHU-CCP during the quarter concerned the user logins. The HCI Portal allows users to register and submit content (e.g., improvement reports). Content is moderated, but once approved the original author still owns the content and can make edits. In practice, content authors rarely if ever return to the site to make edits, so this ability will not be a priority moving forward. The current thinking is that users will be asked to submit content using a webform with Captcha verification, and an ASSIST portal administrator will edit and post the content. User logins will be used for the communities section of the ASSIST web portal, but it was decided, based on the experience of the HCI Portal and JHU-CCP's experience under K4Health, that user profiles and membership will not be necessary on the main ASSIST Portal.

URC and JHU-CCP staff have begun building the USAID ASSIST Project Knowledge Portal on a development server, defining taxonomies of key words and resource types. The site will use blogs to highlight key learning coming out of ASSIST-supported activities and research and will feature topical pages for the key areas of focus of the project, including community health; family planning and reproductive health; gender; health workforce development; HIV; maternal, newborn, and child health; non-communicable diseases; nutrition; research and evaluation; and vulnerable children and families. The research and evaluation page will feature a database of all current and completed studies under ASSIST and HCI. All resources currently posted on the HCI Portal will be moved over to the ASSIST web site.

Activity 3: Document Improvement Knowledge and Learning from Activities Supported by the USAID ASSIST Project

In February, following the ISQua Regional Conference in neighboring Ghana, Ms. Kikaya traveled to Cote d'Ivoire to provide training to the team there, including the KM intern, on the development of knowledge and communications products. She worked with the Chief of Party to

develop the ASSIST Cote d'Ivoire learning agenda for FY13, including determining how best to incorporate KM approaches to promote learning and how best to build upon existing approaches of synthesizing learning. They also set priorities for the preparation of flyers (English and French versions), conference materials, and case studies.

She worked with the KM intern to establish a routine system for producing bimonthly newsletters for external distribution, including providing layout and formatting support. She also met with national HIV care program and USAID officers to understand their priorities for case studies and to explain ASSIST's knowledge management initiatives. These officials expressed interest in the content that will be featured on the ASSIST Portal and in participating in the planned ASSIST KM training in French and advocated for it to be held in Cote d'Ivoire. At the training in Durban, Ms. Marquez, Ms. Fatta, and Ms. Mickish worked with staff from Cote d'Ivoire, Malawi, Mozambique, South Africa, Swaziland, Tanzania, and Uganda to plan their documentation efforts around key learning questions and to plan for how they will synthesize knowledge across improvement activities to convey key learning to others so that they can apply it in their context.

Activity 4: Promote the Use of Improvement Knowledge through the ASSIST KM System

LAC Communities of Practice: During the quarter, 15 new members joined the www.maternoinfantil.org website, which received 1331 total visits during the period and featured 29 new postings of content on the site. Email invitations to join the two virtual communities of practice (CoPs) housed on the site were sent out in January to some 100 individuals. There are currently 12 members of the Helping Babies Breathe (*Ayudando a los Bebés a Respirar* or ABR) virtual community of practice housed on the site, and 13 members of the Kangaroo Mother Care (Método Madre Canguro or MMC) community.

Kipukuna, URC's local IT partner in Ecuador, where the site is managed, made further enhancements to the CoP platform during the quarter.

CHW Central: USAID, through its Office of HIV and AIDS Health Workforce team, has signaled that no further PEPFAR funding will be provided for operation of the CHW Central virtual community of practice beyond the funds given to HCI in previous years. Funds remaining in the HCI contract will fund the maintenance costs of Initiatives Inc. only through May 2013, and no funding has been provided through the USAID ASSIST Project. After exploring several alternatives, Initiatives Inc. has proposed to take over operation of the site as a private activity, outside the mechanism of the HCI Project. This proposal was discussed with the HCI COR Dr. James Heiby, and he has approved the devolution of the site to Initiatives Inc.

In the next quarter, JHU CCP will transfer the ownership of the domain www.chwcentral.org to Initatives Inc. and assist in the migration of all content on CHW Central to a new Drupal-based site being developed privately by Initiatives Inc. CHW Central will continue to operate under the aegis of the HCI Project, as a community on www.hciproject.org, only through the end of June 2013, by which time Initiatives' new independent site is expected to be in operation. Initiatives will seek other funding and in kind support to help finance the management of the CHW Central community. Initiatives has agreed to acknowledge on its new site that USAID and the HCI Project supported the development of the CHW Central site and community.

Under the USAID ASSIST Project, the health workforce team will continue to participate in the CHW Central community of practice, but the site itself will not be affiliated with ASSIST.

Activity 5: Integrate Gender in Improvement Activities

Dr. Taroub Faramand of ASSIST partner Women Influencing Health Education and Rule of Law, LLC (WI-HER) presented on gender integration at the planning workshop for all ASSIST staff in October. During the planning workshops, Dr. Faramand and ASSIST's Specialist for KM and

Gender Integration, Ms. Cait Lutfy of WI-HER, discussed proposed gender integration activities with chiefs of party and headquarter staff from different technical areas. Opportunities for gender integration were identified. These discussions began at the planning workshop to solicit input related to the development of the ASSIST gender strategy.

In November, a planning meeting was held with HQ technical and field team leads and the knowledge management team to collect information on how gender integration in ASSIST will best serve different aspects of the project. A gender integration strategy was developed for ASSIST which complements modern QI methods and outlines how to integrate gender considerations in all ASSIST activities through the following steps:

- Build local capacity and foster local partnerships
- Integrate gender in improvement activities
- Document and share learning through knowledge management strategies and research
- Scale up and institutionalize

The gender integration strategy was submitted to the AOR in December. An action plan was also developed to operationalize the strategy. The plan includes the development of fact sheets, job aids and tools, identifying partners to support gender integration in each country and also identifying best practices in gender integration in support of integration efforts.

Following the January Quarterly Review Meeting, ASSIST followed up with field staff on gender-related issues and data gaps identified in reports to generate awareness and elicit gender considerations. In February, Taroub Faramand presented the ASSIST gender integration strategy to key gender experts at USAID in collaboration with Ram Shrestha to introduce a community-systems approach to identifying and addressing gender-based gaps and leverage opportunities culminating from gender roles. Technical briefs to assist technical and field staff on gender integration were developed for work in PMTCT and in HIV and ART care.

3.2.3 What Are We Learning

Framing the learning questions within country improvement programs is challenging and represents a new way of thinking about the learning agenda of an improvement activity. It is also not always clear how to differentiate between research and evaluation questions (e.g., did standards improve the well-being of vulnerable children) and experiential learning questions (e.g., how were community-based organizations and local governments able to successfully re-organize their work to implement the critical elements of the standards). ASSIST's KM team needs to work with each country and core technical team to further develop the learning agenda in each improvement activity and help them define roles and responsibilities for gathering and synthesizing learning and developing knowledge products that convey key insights from experiential learning as explicit knowledge.

Working with facility-based teams of health workers to learn how to improve specific areas of health care, we have come to recognize the importance of using conversational, small group techniques to draw out tacit – "how to" – knowledge and provide opportunities for meaningful sharing between people. As our understanding and use of KM techniques have grown, we have come to see the importance of designing meetings so that people share in small groups and integrate new knowledge in the large group.

Giving people the opportunity to share in small groups and ask questions of each other allows for greater exchange of tacit knowledge than do formal presentations. By using techniques such as storytelling, field trips, and even poster presentations in small groups, the person sharing learns more about their work by explaining it and answering questions, while the person listening gets to ask questions and probe deeper. It sets the stage that everyone has something

to share and everyone has something to learn, eliminating the expert/student feeling that can happen with formal presentations.

After working in the small groups, we have found that to integrate new knowledge back into the large group, instead of asking “what did you hear?” it is more useful to ask the group “what resonated with you?” and give people a minute to think about their response. While the difference between the wordings of these questions might seem minor, people’s responses to them are vastly different. When asked to share what they heard, people tend to give a laundry list of things that were said. When asked to say what resonated with them – and given a minute of silence to think about their response – people connect what they heard with what they already know and create new knowledge and understanding that is meaningful for themselves.

At the KM training in Durban, we discussed at length how to apply KM principles to the design of learning sessions in order to improve the efficiency of generating new learning and its spread among teams. We intend to create a knowledge asset about techniques for better learning sessions as part of a KM community on the ASSIST web portal.

3.2.4 Planned Activities in the Next Quarter

- Design and prepare materials for KM training in French; arrange and conduct training June 24-28
- JHU-CCP will conduct usability review of the ASSIST portal with specialized vendor Sonjara
- Launch the ASSIST web portal and migrate all content from HCI Portal to the new ASSIST web portal
- Launch a USAID ASSIST Facebook page and rename the HCI Twitter account as USAID ASSIST Twitter
- Hold launch event to promote the Spanish language communities of practice on Helping Babies Breathe and Kangaroo Mother Care as part of Regional Newborn Alliance regional meeting in San Salvador (June)
- Issue guidance on the website and to all staff on development of case studies
- Conduct trainings for field staff in Uganda, Tanzania and Georgia to enable them to identify gender gaps and integrate gender consideration in improvement aims, activities and indicators
- Finalize and disseminate technical briefs on gender integration in PMTCT, ART, OVC services, maternal and child health, voluntary safe male circumcision and other technical areas with recognized needs

3.3 Research and Evaluation

3.3.1 Background

The research and evaluation (R&E) unit provides technical support and guidance on country-led research and syntheses of learning across country projects on improvement topics such as validity of improvement-related data, sustainability and institutionalization, spread, and cost-effectiveness for most ASSIST activities. The R&E unit works to disseminate knowledge from these studies to encourage wider adoption of improvements methods used in projects.

3.3.2 Research and Evaluation Program Overview

Research Activities	What are we trying to accomplish?	How will we know?	Scale of intervention
Validation of at least 25% of improvement indicators	Demonstrate that data reported by the ASSIST project are accurate, reliable and relevant	Completed reports on validity studies on 25% of indicators. Plans implemented to address deficits in validity when detected	No less than 25% of total number of country reported indicators with completed validity assessment
Evaluation of improvement interventions using comparisons with control groups for at least 10% of improvement indicators	Demonstrate the positive impact of the ASSIST intervention on improvement indicators	Completed evaluation reports for 10% of indicators	Comparison reports on no less than 10% of country-reported indicators
Economic analysis of improvement approaches and strategies	Advance global learning on comparative advantage and economic efficiency of QI activities	Completed cost-effectiveness studies of improvement approaches and strategies	At least one economic analysis for every ASSIST country with an improvement program
Conduct rigorous research into mechanisms for improving the quality of care	Advance learning on the science of improvement as applied in lower and middle income countries	Completed studies evaluating the design of improvement activities	Every ASSIST country program
Evaluating design of improvement activities for lower and middle income countries	Advance learning on the science of improvement as applied in lower and middle income countries	Completed studies evaluating the design of improvement activities	Every ASSIST country program
Evaluation of methods and approaches for effective design and implementation of scale up	Advance global knowledge on scale up of improvement interventions	Completed studies evaluating methods and approaches for effective design and implementation of scale up	Selected ASSIST country programs with scale up activities
Generate and disseminate learning from multi-country research	Contribute to the quality improvement and global health fields	Grey literature, peer-reviewed publications, conference presentations, other meetings or presentations	Globally available publications on learning from implementing improvement programs
Capacity building for research and support to country programs	Build research and data management capacity of HCI staff	Provided guidance and training to HCI staff for research and data management	Every ASSIST country program

Table 9 lists studies that have been approved for implementation and are currently being planned under the USAID ASSIST Project.

Table 9: List of planned ASSIST studies, March 2013

	Country	Study	Research Area	Status	Area
1	Burundi	Factors associated with not returning to health centers among pregnant women who tested positive for HIV	Improving Care	Planning	HIV
2	Burundi	Factors associated with HIV testing among male partners of pregnant women	Improving Care	Planning	HIV
3	Mali	Impact of anemia community collaborative intervention in Mali	Design of Improvement Activities	Planning	MNCH
4	Nigeria	Validation of OVC data at the community level	Validation	Planning	OVC
5	Swaziland	Validation of new diagnostic technologies for pediatric TB cases	Improving Care	Planning	TB
6	Tanzania	Factors associated with missed appointments among ART clients in Mtwara Region	Improving Care	Planning	HIV
7	Tanzania	PMTCT AIMGAPS program evaluation	Design of Improvement Activities	Planning	HIV
8	Uganda	The effectiveness and efficiency of applying the chronic care model to clients with HIV in Uganda: A non-randomized controlled evaluation	Design of Improvement Activities	Planning	HIV
9	Uganda	Uganda Safe Male Circumcision	Barriers	Planning	HIV
10	Uganda	Impact of Community-based Quality Improvement on Retention and Adherence	Design of Improvement Activities	Planning	HIV
11	Uganda	Integration of Family Planning into HIV Care: A Cost-Effectiveness Analysis	Design of Improvement Activities	Planning	HIV
12	Uganda	Uganda NACS and PMTCT	Design of Improvement Activities	Planning	HIV
13	Uganda	Uganda OVC	Barriers	Planning	OVC

**Delays in funding obligations to the project have delayed finalization of study plans. As of late February, funding was received for Burundi, Lesotho, Malawi and Ukraine, and substantive plans will be discussed in the next semi-annual report. Funding for Kenya ASSIST activities has not been finalized.*

Table 10 lists studies that are currently in development or under consideration.

Table 10: List of ASSIST studies under consideration, March 2013

	Country	Study	Research Area	Status	Area
1	Burundi	Assessment of the impact of a health worker performance intervention on PMTCT quality of care and patient outcomes in Burundi	Design of Improvement Activities	Under Consideration	HIV
2	Kenya	Validation of psychosocial support	Validity	Under consideration	OVC
3	Kenya	Central-level strategy study	Scale Up	Under consideration	OVC
4	Swaziland	Evaluation of injection safety care for caregivers program	Design of Improvement	Under consideration	HIV

	Country	Study	Research Area	Status	Area
			Activities		
5	Malawi	Data validation	Design of Improvement Activities	Under consideration	OVC
6	Ukraine	Program evaluation of counseling for pregnant women	Design of Improvement Activities	Under consideration	MNCH

3.3.3 Progress in the Reporting Period

Activity 1: Validation of 25% of improvement indicators

ASSIST seeks to build validation of improvement indicators into broader evaluations when that validation of data fits into and strengthens the study design. The protocol for one such study was finalized in the second quarter: "The effectiveness and efficiency of applying the chronic care model to clients with HIV in Uganda: A non-randomized controlled evaluation" (see Activity 2 below for more details). Quantitative data for this study and for the chronic care improvement activity will primarily be collected from client medical records. A test for the validity of the data will be conducted using client interviews to verify the accuracy of the information appearing in the medical record.

ASSIST R&E team held conference calls with ASSIST country directors to discuss questions about and plans for the data validation requirement. These discussions were summarized in a frequently-asked-questions document after the call.

During her trip to Tanzania, Dr. Astou Coly provided technical support for validation to the Tanzania ASSIST team and in Burundi to the ASSIST team and to coaches during the training. She worked with the teams to choose indicators for validation and the validation methods for these indicators. Validation in Tanzania is planned for Q4, FY13 and for Burundi, Q1, FY14.

Activity 2: Evaluation of improvement interventions using comparisons with control groups for at least 10% of improvement indicators

ASSIST is planning a follow-on to the chronic care improvement intervention implemented by HCI in Buikwe District of Uganda. Under ASSIST, the chronic care model will be spread to two neighboring districts, Mityana and Nakaseke in Central Uganda. This will be a controlled (pre/post-intervention or interrupted time-series) study using quantitative and qualitative data from a random sample of clients receiving HIV services at any one of the sites participating in the study. The study seeks to answer the following research questions:

- Are clients exposed to the chronic care model more likely to remain on treatment and maintained in the continuum of care than clients treated with standard care?
- Are clients exposed to the chronic care model more likely to remain adherent with their treatment regimen than clients treated with standard care?
- Are providers exposed to the improvement intervention more likely to have access and knowledge of the national treatment guidelines than clinicians not exposed to the intervention?
- Are client charts more likely to be completed in clinics participating in the improvement intervention than client charts from clinics not exposed to the improvement intervention?
- Do clients exposed to the chronic care model demonstrate better outcomes than clients treated with standard care?
- Are clients who receive care in intervention clinics more likely to receive care in a timely

manner than those receiving care in clinics in which there is no chronic care intervention?

- If outcomes are better among clients exposed to the chronic care model compared to those treated with standard care, what is the cost-effectiveness of the chronic care model in this setting?

Quantitative data will primarily be collected from client medical records. The estimated sample size is 370 in each of the control and intervention groups for a total of 740. A test for the validity of the data will be conducted using client interviews to verify the accuracy of the information appearing in the medical record. CD4 counts will be used as a measure of clinical status. Baseline CD4 tests will be conducted for clients who do not have a documented CD4 taken 30 days before of baseline data collection. As CD4 tests every six months is part of standard care, follow-up CD4 counts will be taken from medical records. Data on wait times will also be collected. Qualitative data will be collected from client and provider interviews.

This study will also include a smaller component focusing on the activation or engagement of clients in the management of their condition. We will follow a cohort of clients to assess and document any changes in their ability to self-manage. A smaller cohort of 50 clients from the intervention and control districts (for a total of 100) will be randomly selected to participate.

Baseline data for this study is planned for the third quarter of FY13 and end line data collection for the second quarter of FY14. Verbal consent from the Institutional Review Boards from URC and Mildmay (Uganda) was secured late March 2013, and the study is expected to proceed on course in the next quarter.

Activity 3: Economic analysis of improvement approaches and strategies

During the quarter, ASSIST finalized a protocol for a study of “The effectiveness and efficiency of applying the chronic care model to clients with HIV in Uganda: A non-randomized controlled evaluation.” This study, described above, includes a cost-effectiveness component.

Activity 4: Conduct rigorous research into mechanisms for improving the quality of care across clinical areas

During the second quarter of FY13, Dr. Coly traveled to Tanzania to work with the ASSIST team to assess the feasibility of a study to investigate factors associated with loss to follow-up among ART clients in the Mtwara Region. Site visits and input from stakeholders revealed that tracing clients who are lost to follow-up in Mtwara is not feasible due to inaccurate or incomplete addresses and lack of personnel to trace patients lost to follow-up. The study was therefore redesigned to assess factors associated with missed appointments among ART clients in Mtwara.

During the quarter, Dr. Coly traveled to Burundi to work with the Burundi and Niger ASSIST teams assess the feasibility of two studies: one on factors influencing loss to follow-up among PMTCT clients; and another on factors influencing HIV testing among male partners of PMTCT clients. Following discussions with officials from the Burundi National Program against HIV and coaches, the two studies were reformulated as follow:

- Factors associated with not returning to health centers among pregnant women who have tested positive for HIV
- Factors associated with HIV testing among male partners of pregnant women

Findings from these studies will enhance the intervention package by addressing local determinants of barriers to care.

Activity 5: Evaluating design of improvement activities for lower- and middle-income countries

A concept paper was drafted to assess the impact of a health worker performance intervention on PMTCT quality of care and patient outcomes in Burundi. This study seeks to determine whether the implementation of an health worker performance intervention alone is associated with improved quality of care and patient outcomes and determine whether the integration of an health workforce intervention with a QI collaborative enhances quality of care and patient outcomes. The concept paper will be submitted to the Burundi USAID Mission for consideration for funding in FY14.

Activity 6: Generate and disseminate learning from multi-country research

Studies examining retention in care of HIV-positive clients are planned in Burundi and Tanzania this fiscal year. It is expected that findings from these two studies will generate multi-country learning.

Activity 7: Capacity building for research and support to country programs

In February, Dr. Sarah Smith traveled to Uganda to provide support to the ASSIST-Uganda team in formulating and refining their research questions for qualitative studies and to work with the research and evaluation staff to refine outcome indicators and draft a plan for validation. Plans were developed for five studies, one for each programmatic area in the ASSIST Uganda work plan:

1) Impact of Community-based Quality Improvement on Retention and Adherence
2) Chronic Care Evaluation
3) OVC Gender Equity Study
4) Safe Male Circumcision
5) NACS and PMTCT

Dr. Astou Coly traveled to Burundi and Tanzania to work with ASSIST teams to finalize research questions for three studies as described above, draft protocols and plan study activities. She also provided support for the validation of indicators as mandated by ASSIST.

Activity 8: Gender

ASSIST is planning a study on gender equity in OVC services in Uganda. This study is planned as a pre/post study that seeks to validate partner organization data, collect additional data on quality of services, and identify areas for improvement. The draft research questions for this study are:

- Is there gender equity in provision of OVC services in Uganda?
- How valid are the data collected by partner organizations providing OVC services with respect to gender equity?
- What is the quality of services provided to orphans and vulnerable children by partner organizations?
- What is the impact of quality improvement on closing that gender gap?

3.3.4 Planned Activities for Next Quarter

- Dr. Broughton will travel to Nigeria to determine the monitoring and evaluation strategy for the piloting of the new standards of OVC care that is scheduled to be completed in the coming quarter.
- Obtain final written IRB approval and registration with the Uganda National Council for Science and Technology to allow for the collection of baseline data for the study on the

effectiveness and efficiency of applying the chronic care model to clients with HIV in Uganda

- Develop protocols for two studies in Burundi: 1) Factors associated with not returning to health centers among pregnant women who have tested positive for HIV, and 2) Factors associated with HIV testing among male partners of pregnant women.
- Develop protocol for a study on factors associated with missed appointments among ART clients in Mtwara Region, Tanzania
- Dr. Coly will travel to Mali in June or July to plan the evaluation of the impact of anemia community collaborative intervention in Mali and provide technical support for data validation
- Develop protocol for AIMGAPS evaluation in Tanzania
- Develop protocol for Uganda safe male circumcision study, family planning/HIV integration study, and OVC study
- Dr. Broughton will travel to Kenya to complete work planning for a monitoring and evaluation strategy that is fully integrated into the ASSIST activities. This will also involve training the new M&E QI advisor who has been hired by the ASSIST Kenya team.

4 Obstacles and Remedies

Obstacle: The ASSIST project start-up has been delayed on many fronts due to delays in funding obligations. Most African Missions' funding was delayed awaiting approval by the Africa Bureau. As a result, HCI close-out had to be conducted prior to ASSIST start-up in multiple countries, thus incurring unnecessary additional transition costs and delayed start-up of the new scopes of work that were already signed for by Mission personnel in their Country Operational Plans and Integrated Country Improvement plans. Partial funding for Kenya and Uganda has been received, so activities have started up, however they will soon be stalled mid-stream because of the ongoing delays in obligating the remainder of this fiscal year's funding. Technical progress will be greatly impeded by this bureaucratic delay. Core funding for global HIV programs also experienced a significant delay in funding while awaiting approval and is also still only partially funded. Technical directors at USAID are frustrated by the resulting lack of progress, with ASSIST unable to meet expectations due to the ongoing funding delays.

Remedy: Please expedite the obligation of funding actions that have been pending since September 2012. Also please adjust funding timelines so as to prevent ASSIST from continuing to have to repeatedly stop and start ongoing activities, as this damages technical progress of work as well as relationships with Ministries of Health.

Obstacle: The ASSIST branding and marking plan is still awaiting approval by USAID. This causes multiple delays in the work, primarily by stalling awards to ASSIST subawardees who are awaiting the branding and marking plan before signing their award documents. All work to be performed by these approved subawardees is thus delayed. In addition, the production of key job aids, including publications and materials to be used by Ministries of Health in their quality improvement work, has been complicated by lack of clear branding guidance. The production of these materials is critical to the implementation of QI and the conduct of improved health care processes in each ASSIST-supported country.

Remedy: Please expedite the approval process for the branding and marking plan.

Obstacle: The geographic code for procurement under PEPFAR funding has not yet been applied to the PEPFAR-funded activities under ASSIST. In September 2012, the following request for correction was sent to USAID, and ASSIST is still awaiting a response:

In order to conduct certain project activities, particularly regional activities in East and Southern Africa which are part of the scope of work for our South Africa-based subrecipient REPSSI, it is critical that the agreement be modified to allow the use of Geographic Code 935 for HIV-related work, as authorized by the attached HIV/AIDS Expedited Procedures Package (HIV/AIDS EPP) Action Memorandum approved by former USAID Administrator Henrietta Fore on February 14, 2008. Accordingly, we request that this section be modified to read as follows:

8 AUTHORIZED GEOGRAPHIC CODE

The authorized geographic code for procurement of goods and services (other than HIV/AIDS) under this Task Order is 937. The authorized geographic code for procurement of goods and services for HIV/AIDS activities is 935.

Remedy: Please apply the PEPFAR geographic code for procurement of goods and services under PEPFAR-funded ASSIST activities as directed by the former USAID Administrator.

5 Analysis and Explanation Costs

Costs-to-date have not exceeded anticipated spending levels or unit costs as proposed to USAID. As a result of the delays in funding obligations, spending has lagged behind the proposed burn rates for the first six months of the project. Global spending levels reflect the actual balance of currently obligated field-support and core-funded initiatives as all costs incurred are allocable to the activities underway.

6 Performance Monitoring Plan

Table 11 summarizes progress through March 31, 2013 on key indicators in the ASSIST performance monitoring plan.

Table 11: Progress on USAID ASSIST Project performance monitoring indicators, March 2013

Project Management					
#	**Indicator**	**Baseline**	**End of Project Target**	**Progress**	**Data Source/ Collection methods**
1	# of Annual Work Plans submitted on-time to the AOR	0	5	1	Transmission of deliverable to the AOR
2	# of Annual Project Reports submitted on-time to the AOR	0	5		Transmission of deliverable to the AOR
3	Gender Framework submitted within 90 calendar days of the cooperative agreement effective date	0	1	1	Transmission of deliverable to the AOR
4	# of Annual Research and Evaluation Reports submitted on-time to the AOR	0	5		Transmission of deliverable to the AOR
5	# of quarterly financial reports submitted on-time to the AOR	0	20	2	Transmission of deliverable to the AOR
6	# of Semi-annual Performance Monitoring Reports submitted on-	0	10	1	Transmission of deliverable to the AOR

	time to the AOR				
7	Final Report of the cooperative agreement submitted on-time to the AOR	0	1		Transmission of deliverable to the AOR
Documentation and Knowledge Management					
#	**Indicator**	**Baseline**	**End of Project Target**	**Progress**	**Data Source [Benchmark]**
1	Knowledge Management Plan submitted within 90 calendar days of the cooperative agreement effective date	0	1	1	Transmission of deliverable to the AOR
2	# of Documentation and Knowledge Management Reports submitted to AOR	0	5		Transmission of deliverable to the AOR
3	Design of ASSIST Knowledge Portal submitted to AOR for approval	-	1		Written approval by AOR [Benchmark: completed in year 1]
4	# of country case studies	0	30		[Benchmark: 20 completed by the end of year 3]
5	# of research and evaluation studies examining the KM system as a whole or components	0	4		[Benchmark: four completed by the end of year three]
6	% of ASSIST country teams with at least one team member with basic competencies in KM and documentation	TBD	100%		Country program quarterly and annual reporting; special surveys
7	% of assisted countries that apply KM approaches to conduct synthesis and knowledge harvesting exercise each year	TBD	100%		Country program quarterly and annual reporting; special surveys
8	Average # of knowledge products developed per country	TBD	3		Country program quarterly and annual reporting
9	% of assisted countries with local repository of improvement knowledge	TBD	Baseline + 25%		Country program quarterly and annual reporting
10	# of communities of practice supported on the ASSIST knowledge portal	1	3		HQ quarterly and annual reporting
11	# of virtual learning events supported by the ASSIST KM system	0	3		HQ quarterly and annual reporting
Global Technical Leadership					
#	**Indicator**	**Baseline**	**Target**	**Progress**	**Data Source/ Collection methods**
1	# of articles on improvement	0	10		Publication of

	methods and results published in peer-reviewed journals; possible topics to be addressed include application of improvement approaches to new areas, major technical issues in the field of improvement, gender integration as an improvement strategy, results of KM activities				acceptance for publication
2	# of assisted countries with national health care improvement policies and strategies	TBD	Baseline + 5		Country program quarterly and annual reporting
3	# presentations given by ASSIST staff at global health technical conferences	0	25	16	HQ and country quarterly and annual reporting
Field Operations					
#	**Indicator**	**Baseline**	**Target**	**Progress**	**Data Source/ Collection methods**
1	% of integrated country design plans signed by country and USAID stakeholders	0	100%		Country Improvement Plan signed
2	% of annual country reports submitted on-time	NA	100%		Dates of submission of annual country reports to AOR
3	% of annual country reports that examine magnitude and spread rate of improvement	NA	100%		Review of annual country reports
4	% of country-reported indicators externally validated	NA	25% of reported indicators		Country quarterly and annual reporting
5	% of improvement indicators tracked with a QI and non-QI intervention comparison groups	NA	10% of reported indicators		Country quarterly and annual reporting
6	% of countries collecting and analyzing sex-disaggregated data for improvement when relevant	TBD	100%		Country quarterly and annual reporting
7	% of country programs tracking expenditures for the purpose of economic evaluation (integrated into the country plan)	0	80%		Accounting records
8	% of integrated country design plans that address relevant gender-related barriers	NA	30%		Review of integrated country design plans

USAID APPLYING SCIENCE TO STRENGTHEN AND IMPROVE SYSTEMS PROJECT

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