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HEALTH CARE
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PROJECT



USAID HEALTH CARE IMPROVEMENT PROJECT TASK ORDER 3

FY12 ANNUAL PROJECT REPORT



Contract Number GHN-I-03-07-00003-00

Performance Period:

October 1, 2011 – September 30, 2012

DECEMBER 24, 2012

This annual project report was prepared by University Research Co., LLC for review by the United States Agency for International Development (USAID). The USAID Health Care Improvement Project is made possible by the American people through USAID's Bureau for Global Health.

Front cover (from top):

Participants in a Children's Workshop in Haiti organized by HCI give input about what they consider to be quality services for children and families. The expressed needs of vulnerable children provide an important perspective to inform the development of national quality standards for care for vulnerable children. *Photo by URC.*

Family planning counselor in a Kabul maternity hospital in a private counseling session with a wife and husband. Providing a private space for family planning counseling of couples following delivery is one change introduced by quality improvement teams supported by HCI in Afghanistan to increase acceptance of modern family planning methods among women who had just delivered. *Photo by Malalah Ahmadzai, URC*

A provider from a health center in Uganda coaches members of a Village Health Team (VHT) in identifying and providing home follow-up care to newborns. HCI and MOH staff trained and supported VHTs in 24 villages of Masaka District to provide essential newborn care and refer newborns with danger signs to the health facility, resulting in increased follow-up of newborns within three days of birth. *Photo by Annie Clark, URC.*

Nurse at the TB dispensary in Saratov, Russia conducts a "patient's school" to educate TB patients about how to manage their illness and the importance of treatment adherence. The patient's school was one change tested by teams in an HCI-supported TB improvement program to improve TB cure rates and case management in ambulatory care settings. *Photo by URC.*

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Table of Contents

LIST OF TABLES AND FIGURES.....	ii
ABBREVIATIONS	iv
EXECUTIVE SUMMARY.....	ix
I INTRODUCTION.....	I
2 COUNTRY AND REGIONAL TECHNICAL ASSISTANCE.....	4
AFRICA.....	4
2.1 BURUNDI.....	4
2.2 COTE D’IVOIRE.....	7
2.3 KENYA.....	10
2.4 MADAGASCAR.....	16
2.5 MALAWI.....	17
2.6 MALI.....	19
2.7 MOZAMBIQUE.....	22
2.8 NAMIBIA.....	24
2.9 NIGERIA.....	26
2.10 SOUTH AFRICA.....	29
2.11 SWAZILAND.....	32
2.12 TANZANIA.....	40
2.13 UGANDA.....	48
2.14 ZAMBIA.....	55
ASIA.....	57
2.15 AFGHANISTAN.....	57
2.16 INDONESIA.....	63
EUROPE AND EURASIA.....	64
2.17 GEORGIA.....	64
2.18 RUSSIA.....	67
LATIN AMERICA AND THE CARIBBEAN.....	72
2.19 BOLIVIA.....	72
2.20 GUATEMALA.....	75
2.21 HAITI.....	78
2.22 HONDURAS.....	79
2.23 NICARAGUA.....	81
3 USAID GLOBAL HEALTH ELEMENT AND CORE-FUNDED ACTIVITIES.....	86
3.1 CARE THAT COUNTS INITIATIVE TO IMPROVE QUALITY OF PROGRAMMING FOR ORPHANS AND VULNERABLE CHILDREN.....	86
3.2 COMMUNITY HEALTH.....	88
3.3 FAMILY PLANNING.....	91
3.4 HEALTH WORKFORCE DEVELOPMENT.....	93
3.5 HIV/AIDS.....	99
3.6 MATERNAL, NEWBORN, AND CHILD HEALTH.....	107
4 COMMON AGENDA ACTIVITIES.....	113
4.2 KNOWLEDGE MANAGEMENT.....	115
4.3 RESEARCH AND EVALUATION.....	120

4.4	TECHNICAL LEADERSHIP AND COMMUNICATION.....	139
5	PERFORMANCE TRACKING PLAN.....	151

List of Tables and Figures

Table 1.	Contribution of HCI TO3 field activities to the MDGs in FY12	1
Table 2.	Burundi: Baseline assessment of PMTCT care, August 2012.....	6
Table 3.	Malawi: Status of piloting standards in four districts, September 2012.....	18
Table 4:	Malawi: Feedback on OVC standards from government and NGO staff in four districts, May 2012	18
Table 5.	Mali: Baseline values, Maternal and child anemia demonstration collaborative, Sikasso Region (Bougouni and Kadiolo districts), December 2011	22
Table 6.	South Africa: Improvement in targeted program indicators in FY12.....	31
Table 7.	Georgia: Improvement in cardiovascular disease prevention, acute coronary syndrome management, and pediatric respiratory tract infection ambulatory management in FY12.....	66
Table 8.	Pakistan: Improvements in injection safety, May 2012 vs. October 2012.....	103
Table 9.	Research and evaluation studies carried out under HCI TO3 in FY12.....	121
Table 10.	Institutionalization studies completed or in-process under HCI TO3 in FY12	123
Table 11.	Studies about collaborative improvement either completed or in-process under HCI TO3 in FY12	125
Table 12.	Spread studies completed or in-process under HCI TO3 in FY12.....	128
Table 13.	Cost-effectiveness studies completed or in-process under HCI TO3 in FY12	131
Table 14.	Comparative studies completed or in-process under HCI TO3 in FY12	134
Table 15.	Studies on other QI methods completed or in-process under HCI TO3 in FY12.....	135
Table 16.	HCI participation in national, regional and international conferences in FY12.....	141
Table 17.	HCI briefings and presentations for USAID, international donor, and cooperating agency staff in FY12.....	144
Table 18.	HCI journal articles, reports and informational materials submitted or published in FY12	146
Table 19.	Performance Tracking Plan: HCI TO3 cumulative achievements and activities planned through FY12.....	151
Figure 1.	Cote d'Ivoire: Percentage of patients with all items filled in the medical record.....	8
Figure 2.	Cote d'Ivoire: Improvement in HIV counseling and testing of pregnant women in health centers, March 2011-August 2012.....	8
Figure 3.	Cote d'Ivoire: Average score attained by assessed labs, May 2010, September 2011, and August 2012	9
Figure 4.	Kenya: Dago Dala Hera CBO results for school enrollment and retention, February-June 2012....	13
Figure 5.	Kenya: Kapsoya CBO results for social protection, March – August 2012	15
Figure 6.	Mali: Baseline findings about maternal knowledge of anemia prevention, 12 communes of Bougouni and Kadiolo districts, Sikasso Region, December 2011	21
Figure 7.	Namibia: Waste management practices, 2005-Q3 FY12	25
Figure 8.	Nigeria: Increase in birth registration of vulnerable children in piloting, Akwa Ibom State, January – September 2012.....	28
Figure 9.	Swaziland: ART and CPT update among TB-HIV co-infected patients, FY08-FY12.....	37
Figure 10.	Tanzania: Increase in home-based care clients referred to PMTCT, February-August 2012.....	42

Figure 11. Tanzania: Percent of children born to HIV positive mothers tested for HIV within two Months of age in 10 facilities in Lindi region, Tanzania. May 2009 – Sept 2012	45
Figure 12. Tanzania: Percent of HIV-positive pregnant women at RCH screened for TB in six facilities in Manyara region and Dareda hospital, January 2012 – August 2012.....	46
Figure 13. Tanzania: Assessment of MVC QI program results in five regions that that received MVC QI training, June 2012.....	47
Figure 14. Tanzania: Follow-up assessment of the MVC QI Program in Bagamoyo, May 2011 versus April 2012	48
Figure 15. Uganda: Percentage of clients who were retained on ART, June, 2011 – September, 2012.....	50
Figure 16. Uganda: Percentage of HIV clients with good clinical outcomes, June 2011 – September 2012.....	50
Figure 17. Uganda: Percentage of HIV clients with good clinical outcomes on ART at Rakai Hospital	51
Figure 18. Uganda: Results of Saving Mothers, Giving Life, Jan.-Sept. 2012.....	52
Figure 19. Afghanistan: Spread of newborn care best practices in Bamiyan Province.....	60
Figure 20. Afghanistan: Spread of newborn care best practices in Wardak Province	60
Figure 21. Afghanistan: Increasing coverage of pregnant women with ANC visit by CHWs, Community MNH collaborative, Balkh Province	60
Figure 22. Afghanistan: Increasing referral of pregnant women by CHWs for delivery in health facility, 85 health posts in Herat Province, May 2011-Sept 2012.....	61
Figure 23. Afghanistan: Increasing adherence with pre-eclampsia/eclampsia case management standards, Isteqlal Hospital, Kabul Province, July 2011-September 2012	62
Figure 24. Georgia: Increasing application of CVD screening and treatment best practices in sites participating in the Imereti Region improvement collaborative.....	66
Figure 25. Russia: Increase in number of patients examined with sputum smear microscopy in Polyclinic No. 4, Bryansk Oblast, January 2011-May 2012.....	71
Figure 26. Bolivia: TB cure rates achieved in the 47 health facilities in El Alto, 2009-2012	73
Figure 27. Bolivia: TB cure rates achieved in the 39 health facilities in Cochabamba, 2010-2012.....	74
Figure 28. Guatemala: Compliance with selected criteria of antenatal care in 12 priority municipalities (60 health posts), March-April 2010 through March-April 2012.....	76
Figure 29. Guatemala: Increase in percentage of children from 0 to 24 months who are fed appropriately according to their age.....	77
Figure 30. Honduras: Declining case fatality from newborn asphyxia in 20 maternal clinics supported by HCI to implement Helping Babies Breathe	80
Figure 31. Nicaragua: Increasing coverage of post-partum women with desired contraceptive method, Eight private medical clinics, January 2011-July 2012	83
Figure 32. Nicaragua: Reduction in neonatal sepsis in four hospitals, January 2009-July 2012.....	84
Figure 33. Nicaragua: Reducing gaps in retention in care and clinical outcomes for people on ART in four health facilities in three SILAIS, October 2011-July 2012	85
Figure 34. Ethiopia: Number of pregnant women identified by QI team and received ANC services at Health Post, Illu District	89
Figure 35. Uganda: Increasing the identification of ART patients in the community through mobilization of the community health system.....	90
Figure 36. Afghanistan: Proportion of post partum women leaving hospitals with preferred FP method, Five hospitals in Kabul, January-September 2012	92
Figure 37. Uganda: Proportion of HIV-positive clients who received a modern family planning methods, 4 sites, Masaka District, November 2011-August 2012.....	92

Figure 38. Tanzania: Applying WHO guidelines to increase ART eligibility assessment of HIV-positive pregnant women attending ANC.....	101
Figure 39. Tanzania, AIMGAPS: Increasing coverage of HIV-exposed infants with a definitive HIV test, Iringa Region, January 2011- August 2012	101
Figure 40. Uganda: Applying Chronic Care model to improve coverage, retention, and clinical outcomes in Buikwe District.....	104
Figure 41. Uganda: Increasing patient self-management in eight sites in Buikwe District, May 2011-August 2012	104
Figure 42. Tanzania: Increased ART adherence among patients engaged in self-management.....	106
Figure 43. Kenya: Increased nutritional assessment of HIV patients, Eight sites, September 5, 2011-October 22, 2012	107
Figure 44. Uganda: Improving compliance with essential newborn care in facility collaborative in Luwero and Masaka districts.....	109
Figure 45. Uganda: Coverage and effectiveness of newborn resuscitation in 34 facilities in Luwero and Masaka districts, January 2012-August 2012	110
Figure 46. Uganda: Community newborn examination at 2-3 and 4-7 days in 24 villages, Luwero and Masaka districts, September 2011-August 2012	111
Figure 47. Kenya: Improved quality of ANC in 21 facilities, Kwale district, Jan. 2011- Aug. 2012.....	111
Figure 48. Kenya: Increasing ANC coverage and institutional deliveries in 21 facilities, Kwale District, 2009-2012	112
Figure 49. Senegal: Proportion of children seen within 24 hours of illness onset in 29 sites, Mbour and Tivaouane districts, October 2010-July 2012	113
Figure 50. Key findings from the CHW Central user survey, November 2011.....	118
Figure 51. Spanish-language virtual community of practice for KMC on www.maternoinfantil.org	119
Figure 52. Most popular content on HCI Portal, June 2011-May 2012.....	119

Abbreviations

AAU SSW	Addis Ababa University School of Social Work
AFGA	Afghanistan Family Guidance Association
AIDS	Acquired immunodeficiency syndrome
AIM	Assessment and improvement matrix
AIMGAPS	Assuring infants and mothers get all PMTCT services
AMPATH	Academic Model Providing Access to Healthcare
AMTSL	Active management of the third stage of labor
ANC	Antenatal care
ANPPCAN	African Network for Protection and Prevention of Child Abuse & Neglect
APHIA	AIDS, Population and Health Integrated Assistance (Kenya)
ARI	Acute respiratory infection
ART	Antiretroviral therapy
ARV	Antiretroviral
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
AUROC	areas under the receiver operator characteristics
AZT	Zidovudine
BCT	Basic clinical training
CAIMI	Centro de Atención Permanente (Guatemala)
CAP	Permanent Health Care Centers (Guatemala)
CBO	Community-based organization

CBTO	Community Based TB/HIV/AIDS Organization
CCM	Chronic care model
CCP	Center for Communication Programs
CD4	Human T helper cells expressing CD4 antigen (T helper cell)
CDC	U.S. Centers for Disease Control and Prevention
CEA	Cost effectiveness analysis
CFW, UI	Center for Family Welfare, Universitas Indonesia
CHMT	Council Health Management Team (Tanzania)
CHAI	Clinton HIV and AIDS Initiative
CHV	Community health volunteer
CHW	Community health worker
CHW AIM	Community health worker assessment and improvement matrix
CoE	Communities of excellence
COP	Chief of Party
COR	Contracting Officer's Representative
COTR	Contracting Officer's Technical Representative
CP	Child protection
CPT	Cotrimoxazole prophylactic treatment
CQI	Continuous quality improvement
CRESAC	Regional Center for Health Assessment and Accreditation (Cote d'Ivoire)
CSI	Child status index
CT	Counseling and testing
CTC	Care and Treatment Center
CTX	Cotrimoxazole
CVD	Cardio vascular disease
DCS	Department of Children Services (Kenya)
DOTS	Directly observed therapy, short course
DQA	Division of Quality Assurance (Mozambique)
EBF	Exclusive breastfeeding
ECD	Early childhood development
ECSA	East, Central, and Southern Africa
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EID	Early infant diagnosis
EKG	Electrocardiogram
EMEP	Eurasian Medical Education Program
ENA	Essential nutrition action
ENC	Essential newborn care
EONC	Essential obstetric and newborn care
FANTA	Food and nutrition technical assistance
FCT	Federal capital area
FHI	Family Health International
FMOH	Federal Ministry of Health (Ethiopia)
FMWSD	Federal and state Ministry of Women and social Affairs (Nigeria)
F&N	Food and nutrition
FP	Family planning
FY	Fiscal year
GHI	Global Health Initiative
HAPIE	Hospital accredited process impact evaluation (Indonesia)
HBB	Helping Babies Breathe
HBC	Home based care

HCI	USAID Health Care Improvement Project
HCT	HIV counseling and testing
HES	Household economic strengthening
HIV	Human immunodeficiency virus
HMIS	Health and management information system
HPT	Human Performance Technology
HQ	Headquarters
HR	Human resources
HRAA	Human Resources Alliance for Africa (implemented by Jhpiego)
HRH	Human resources for health
HSSP	USAID Health Service Support Project (implemented by Jhpiego)
ICAP	International Center for AIDS Care and Treatment (Columbia University)
IC	Infection control
IC	Improvement Collaborative
ICC	Infection control committee
ICCM	Integrated community case management
ICONTEC	Colombian Technical Norms and Certification Institute
IEC	Information, education and communication
IGA	Income generating activity
IHI	Institute for Healthcare Improvement
IHVN	Institute of Human Virology, Nigeria
IPC	Infection prevention and control
IPCAN	the Infection Prevention and Control African Network
IPTp	Intermittent preventive treatment in pregnancy
IQC	Indefinite Quantity Contract
IQHC	Improving Quality in Health Care
IRB	Institutional Review Board
ISO	International Organization for Standardization
ISQua	International Society for Quality in Health Care
IST	In-service training
ITNs	Insecticide-treated bednets
JICA	Japan International Cooperating Agency
JSI	John Snow, Inc.
KARS	<i>Komisi Akreditasi Rumah Sakit</i> or Commission for the Accreditation of Hospitals
KM	Knowledge management
KMC	Kangaroo mother care
KQMH	Kenya Quality Model for Health
LGA	Local government area
LMIC	Low- and middle-income country
LOE	Level of effort
LTFU	Loss to follow up
MDG	United Nations Millennium Development Goals
MDR-TB	Multidrug-resistant tuberculosis
M&E	Monitoring and evaluation
MCH	Maternal and child health
MCHIP	USAID Maternal and Child Health Integrated Program
MDR-TB	Multidrug-resistant TB (MDR-TB)
MINSAL	<i>Ministerio de Salud</i> (Ministry of Health) (Nicaragua)
MISAU	Ministry of Health (Mozambique)
MMAS	Ministry of Women and Social Affairs (Kenya)

MNCH	Maternal, newborn, and child health
MNH	Maternal and newborn health
MOGC&SD	Ministry of Gender, Children and Social Development (Kenya)
MOH	Ministry of Health
MOHSD	Ministry of Health and Social Development (Russia)
MOHSS	Ministry of Health and Social Services (Namibia)
MOHSW	Ministry of Health and Social Welfare
MOLHSA	Ministry of Labor, Health and Social Affairs (Georgia)
MOPH	Ministry of Public Health
MOWCA	Ministry of Women and Children Affairs (Ethiopia)
MSH	Management Sciences for Health
MSPAS	Ministry of Public Health and Social Assistance (Guatemala)
MSU	Marie Stopes, Uganda
MVC	Most vulnerable children
NACP	National AIDS Control Program
NACS	Nutrition assessment, counseling and support
NARTIS	Nurse-led ART Initiation in Swaziland
NASCOP	National AIDS and STI Control Program (Kenya)
NCD	Non-communicable disease
NDOH	National Department of Health (South Africa)
NGO	Non-governmental organization
NICU	Newborn intensive care unit
NTCP	National Program for TB Control
OVC	Orphans and vulnerable children
PD	Pharmacy division (Ethiopia)
PEE	Pre-eclampsia and eclampsia
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PHC	Primary health care
PLWHA	Persons living with HIV/AIDS
PMC	Private medical clinic
PMTCT	Prevention of mother-to-child transmission of HIV
PNC	Postnatal care
PN-OEV	National OVC Program (Cote d'Ivoire)
PNPEC	Ministry of Health's National HIV Care Program (Cote d'Ivoire)
PPH	Post-partum hemorrhage
PPP	Public-private sector partnership
ProCONE	Promotion of essential obstetric and neonatal care (Guatemala)
PSI	Population Services International
PSM	Patient self-management
PSS	Psychosocial support
QA	Quality Assurance
QAD	Quality Assurance Department (Honduras)
QAP	Quality Assurance Project
QI	Quality improvement
QIC	Quality improvement collaborative
QMS	Quality management system (Guatemala)
RCH	Reproductive and Child Health (Tanzania)
RCQHC	Regional Centre for Quality of Health Care (Uganda)
REPPSI	Regional Psychosocial Support Initiative
RFP	Request for proposals

RHMT	Regional Health Management Team (Tanzania)
RTI	Research Triangle International
RUTF	Ready-to-use therapeutic food
SADC	South African Development Committee
SCMS	Supply Chain Management Systems
SES	Standard Evaluation System
SIGN	Safe Injection Global Network
SILAIS	Local Integrated Health Care System (Nicaragua)
SMGL	Saving Mothers Giving Life
SN2	USAID/SantéNet2
SOP	Standard Operating Procedures
SOTA	State of the art
SSSI	Strategic Security Services International
STD	Sexually transmitted disease
STG	Standard training guidelines
STI	Sexually transmitted infection
SUSTAIN	USAID Strengthening Uganda's Systems for Treating AIDS Nationally
TA	Technical assistance
TAG	Technical assistance group
TB	Tuberculosis
TC	Therapeutic Committee
TO1	Task Order 1
TO3	Task Order 3
TT2	Tetanus toxoid vaccine
TWG	Technical working group
UNICEF	United Nations Children's Emergency Fund
URC	University Research Co., LLC
USAID	United States Agency for International Development
USG	United States Government
VCT	Voluntary counseling and testing
VHT	Village health teams
WI-HER, LLC	Women Influencing Health, Education and Rule of Law, LLC
WHO	World Health Organization
ZOVSS	Zambia/USAID Orphans and Vulnerable Children Systems Strengthening

Executive Summary

University Research Co., LLC (URC) and its subcontractor team completed the third year of implementation of the USAID Health Care Improvement (HCI) Project Task Order 3 on September 30, 2012. The HCI Task Order 3 (TO3) contract was the only active global task order under the HCI Indefinite Quantity Contract implemented by URC during FY12.

During FY12, HCI provided technical assistance with field support funding through Task Order 3 in 23 countries: Afghanistan, Bolivia, Burundi, Cote d'Ivoire, Georgia, Guatemala, Haiti, Honduras, Indonesia, Kenya, Madagascar, Mali, Malawi, Mozambique, Namibia, Nicaragua, Nigeria, Russia, South Africa, Swaziland, Tanzania, Uganda, and Zambia. HCI assistance in Ethiopia, Niger, Pakistan, and Senegal during FY12 was supported through core funds from USAID, and technical assistance in Botswana and research activities in Ecuador were supported through the project's common agenda funds. In all, HCI worked in 29 countries in FY12.

Most of the country assistance programs implemented by HCI represented a continuation of work carried out under TO3 in FY11. However, new Mission-funded activities were started in Burundi and Indonesia, new core-funded work in Pakistan, and technical assistance was provided in Botswana with the expectation of later field support. HCI also provided technical assistance to the Regional Center for Quality in Health Care (RCQHC), USAID/East Africa, and the Office of HIV/AIDS to design, prepare, and facilitate the Africa Regional Consultative Workshop for Health Care Improvement, held in October 2011 in Kampala. All HCI work in Guatemala closed out in June 2012, and HCI activities in Bolivia, Honduras, and Namibia closed in September 2012. At the direction of the U.S. Government, HCI terminated technical assistance in Russia on October 1, 2012 and began close-out of project activities.

In addition to technical assistance to country institutions, we made important progress in the implementation of several key areas in the HCI statement of work. The Africa Alliance for Child Protection held its first meeting in September 2012 in Uganda and included three regional organizations involved in quality improvement and child protection issues. HCI completed the development of an in-service training (IST) improvement framework. A modified Delphi approach was used to identify, define, review and refine recommended practices and strategies to improve IST with a panel of experts. All five rounds of the Delphi process were completed in December 2011, with Round 4 held as an online open consultation and Round 5 held with the consensus group. New core-funded activities were launched in Tanzania to improve the performance of district health management teams, in Uganda to strengthen pharmaceutical human resources to improve access to HIV care, and also in Uganda, to integrate family planning services in HIV care.

A major activity for HCI this past year was organization of the Salzburg Global Seminar, "Making Health Care Better in Low and Middle Income Economies: What are the next steps and how do we get there?" held April 22-27, 2012 in Salzburg, Austria. This high-level meeting brought together 58 health leaders from 35 countries for an intensive dialogue about how to improve the performance of health systems in even the most resource-constrained settings. The event was hosted by URC through the USAID Health Care Improvement Project together with the Salzburg Global Seminar and partners from USAID, the World Health Organization (WHO), the Institute for Healthcare Improvement, HEALTHQUAL International, and Heidelberg University. The product of the seminar was The Salzburg Statement, "Better Care for All, Every Time: A Call to Action," which focuses on what strategies and policies can be implemented now and with available resources to make care better for all patients. Outcomes from the seminar and its Call to Action were presented at the World Health Assembly in May 2012, and others in the global health community were invited to endorse the Call to Action by adding their signature on the webpage, <http://www.hciproject.org/salzburg-call-to-action>. As of the end of September 2012, the Call to Action had been endorsed by 737 individuals from 70 countries.

HCI continued to expand its research program and strengthen the evidence base about health care improvement in peer-reviewed health literature and HCI publications. In FY12, HCI conducted 51 studies,

completing 20, including a study of institutionalization of improvement methods in 15 countries. Eleven studies were dropped during the year; the remaining 20 studies will be completed in FY13. Articles were published in peer-reviewed journals on improving health care quality and safety in low- and middle- income countries (*BMJ Quality and Safety*, February 2012), the scale-up of the use of oxytocin for prevention of post-partum hemorrhage in Ecuador (*International Journal of Obstetrics and Gynecology*, June 2012), recommendations from the Salzburg Global Seminar on making health care better in low- and middle-income economies (*International Journal for Quality in Health Care*, October 2012).

In FY12, HCI added social media to promote wider use of improvement knowledge, creating a presence for the project on Vimeo (Improving Health Care), Facebook (<http://www.facebook.com/HCIProject>) and Twitter (@usaidhcuproject). In February 2012, HCI concluded a second contest for “Best Improvement Report” submitted to the HCI Portal Improvement Database. The contest was promoted on several listservs as well as HCI’s new Facebook page and received 57 entries from implementers in 20 countries, including Jordan, India, Nepal, Pakistan, Peru, South Africa, Tajikistan, Tanzania, Uganda, and Zimbabwe.

During FY12, HCI published two case studies, 27 technical and research reports, and 33 short reports and flyers. Twelve articles were submitted for publication in peer-reviewed journals. HCI staff and partners made 67 presentations in various formats at five national and 14 international and regional conferences to inform professional audiences of the effectiveness of QI approaches and advocate for their broader adoption. Staff also delivered 26 briefings and presentations to promote awareness of QI approaches and results. Two HCI country offices organized training for staff in gender awareness and integration, and we began a new collaboration with the People’s Open Access Education Initiative to create a health care improvement module in their online Masters of Public Health course.

1 Introduction

This FY12 Annual Project Report for Task Order 3 of the USAID Health Care Improvement Project summarizes the project’s key activities and results during the third year of implementation: October 1, 2011 through September 30, 2012.

The report narrative has four sections: 1) reports on field support-funded country or regional technical assistance (TA) to improve health care; 2) project results that supported USAID’s Global Health Elements; 3) activities carried out under the project’s common agenda functions that benefit multiple countries; and 4) achievements against the project’s Performance Tracking Plan, showing progress made toward the fulfillment of TO3 objectives and performance targets by the end of the contract’s third year.

As part of our country work planning and reporting, we consider how improvement activities contribute directly and indirectly to reaching the Millennium Development Goals (MDGs), particularly Goals 4–6. Our contributions to MDGs 1, 2, 4, 5, and 6 were highlighted in our annual work plan and quarterly reporting to the Contracting Officer’s Representative (COR). Table 1 summarizes how our field activities in FY12 contributed to attainment of each relevant MDG by country.

Table 1. Contribution of HCI TO3 field activities to the MDGs in FY12

MDG	How HCI country activities contributed to MDG attainment in FY12
MDG 1: Eradicate Extreme Poverty and Hunger	Cote d’Ivoire: Improve quality of programs targeting orphans and vulnerable children (OVC), including food and nutrition services, shelter and care, and economic strengthening Ethiopia: Identify characteristics of sustainable community support to meet the food and nutrition needs of vulnerable children Guatemala: Reduce child malnutrition in children under two years by expanding access to and improving the quality of growth monitoring and promotion services and promote pregnant women’s nutrition and micronutrient supplementation Haiti: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening Kenya: Improve quality of services targeting OVCs in the areas of food and nutrition, shelter and care, and economic strengthening Malawi: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening Mozambique: Improve the quality of OVC services in the areas of food and nutrition, shelter and care, and economic strengthening Nigeria: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, physical and mental health, education and economic strengthening for vulnerable households Uganda: Increase frequency of nutritional status assessments in HIV patients Zambia: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening
MDG 2: Achieve Universal Primary Education	Cote d’Ivoire: Improve quality of programs targeting OVCs, including access to primary education Ethiopia: Identify characteristics of sustainable community support to meet the primary education needs of vulnerable children Haiti: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening Kenya: Increase school enrollment for vulnerable children affected by HIV through improved quality of coordinated care Malawi: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening Mozambique: Increase school enrollment for vulnerable children affected by HIV through introduction of evidence-based education standards

MDG	How HCI country activities contributed to MDG attainment in FY12
	<p>Nigeria: Improve standards for OVC services in education</p> <p>Zambia: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening</p>
<p>MDG 3 – Promote gender equality and empower women</p>	<p>Burundi: Increase the number of partners tested (husbands or partners of enrolled women) in PMTCT services</p> <p>Georgia: Support development of evidence-based gender-sensitive interventions through generating, collecting and analyzing the project specific and improvement collaborative (IC) data, stratified by gender; Develop recommendations to decision makers to incorporate quality of medical care indicators, stratified by gender, in National Surveillance and Routine Reporting Systems</p> <p>Haiti: Collect age and sex specific data on improvement outcomes to monitor progress as well as include gender related components in the Standards.</p> <p>Malawi: Train staff on gender mainstreaming in OVC QI and include gender related components in specific standards</p> <p>Zambia: Train staff on gender mainstreaming in OVC QI; Include gender related components in the Standards; Facilitate community conversations on the importance of girls in school; and discourage early marriages of underage girls.</p>
<p>MDG 4: Reduce Child Mortality</p>	<p>Afghanistan: Reduce neonatal deaths by improving quality of care at public and private health facilities, as well as community-based health services</p> <p>Cote d'Ivoire: Improve quality of programs targeting orphans and vulnerable children, including health care and improving service standards as well as improving the testing of children born from HIV positive women</p> <p>Georgia: Strengthen the evidence, cost-effectiveness and identify set of “best-buy” high impact pediatric services; ensure access to and use of evidence-based clinical guidelines, protocols and pathways, related to priority best-buy” high impact pediatric services</p> <p>Guatemala: Reduce neonatal and child health mortality by improving integrated preventive health care for children under five; promote the adoption of Helping Babies Breathe and Kangaroo Mother Care in selected facilities</p> <p>Haiti: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening</p> <p>Honduras: Improve essential newborn care services through institutionalization of continuous QI; reduce newborn mortality from asphyxia through promotion of Helping Babies Breathe; promote adoption of Kangaroo Mother Care to improve outcomes for low birth weight infants</p> <p>Kenya: Apply improvement collaborative model to improve antenatal care and prevention of mother-to-child transmission (PMTCT) of HIV</p> <p>Madagascar: Assess the functionality of community health worker (CHW) programs in the provision of infant services</p> <p>Mozambique: Improve the quality of programs providing health and psychosocial support services for orphans and vulnerable children</p> <p>Malawi: Improve standards for OVC services in the following areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening</p> <p>Mali: Increase under five survival by improving the quality of case management at facility and community level; improving referral from household to health facility; improving community awareness and care seeking; and increasing use of modern family planning methods</p> <p>Nicaragua: Reduce neonatal mortality from sepsis, asphyxia, and respiratory distress; reduce case fatality from severe pneumonia and diarrhea cases among children seen in hospitals; improve infection prevention practice to reduce newborn ventilator-associated pneumonia; promote the adoption of Kangaroo Mother Care practices in the national children’s hospital</p> <p>Niger: Improve health worker productivity, engagement and quality of essential newborn care</p> <p>Nigeria: Improve standards for OVC services to promote physical and mental health</p> <p>Senegal: improve the quality of community case management of childhood illness</p> <p>Swaziland: Improve the quality of pediatric tuberculosis (TB) and HIV services</p> <p>Tanzania: Apply QI methods to improve the quality of infant feeding and maximize HIV-free</p>

MDG	How HCI country activities contributed to MDG attainment in FY12
	<p>survival of children born to HIV-positive mothers through improving the quality of PMTCT</p> <p>Uganda: Improve evidence-based maternal and newborn care at the health facility and community levels; reduce infant mortality rate by improving early infant diagnosis of HIV</p> <p>Zambia: Improve standards for OVC services in all areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening; Raise awareness amongst community members on child health, importance of immunization, antenatal / postnatal care, hygiene, water and sanitation.</p>
<p>MDG 5: Improve Maternal Health</p>	<p>Afghanistan: Improve the delivery of obstetric care and postpartum family planning at public and private health facilities, as well as community-based health services and birth preparedness</p> <p>Burundi: Increase the number of pregnant women attending antenatal care (ANC) visits</p> <p>Georgia: Advocate for integration of priority high-impact “best-buy” medical services into antenatal care.</p> <p>Guatemala: Reduce maternal mortality by scaling up best practices in essential obstetric care at the primary, secondary, tertiary, and community levels</p> <p>Honduras: Ensure quality of essential obstetric and newborn care (EONC) services by institutionalizing continuous QI and improve obstetric and neonatal emergency referrals</p> <p>Madagascar: Assess the functionality of CHW programs in the provision of maternal care and family planning services</p> <p>Mali: Increase the percentage of skilled deliveries, reduce postpartum hemorrhage, and improve the quality of obstetric care at the facility and community levels and access to family planning</p> <p>Nicaragua: Increase early detection of complications by enabling providers to complete registration and partograph forms; improve diagnosis and management of essential obstetric and neonatal complications, including gestational and postpartum hemorrhage, puerperal and neonatal sepsis, birth asphyxia, and hyaline membrane disease; support programs’ organization and capacity for offering contraceptive methods in public sector and Social Security clinics</p> <p>Niger: Increase institutional deliveries, reduce postpartum hemorrhage for vaginal delivery, improve quality of maternal hemorrhage case management, improve management of family planning services</p> <p>Nigeria: Apply QI to OVC programs to improve effectiveness of programs to mitigate the impact of HIV/AIDS on children and families</p> <p>Tanzania: Apply QI for increased screening of TB in pregnant HIV positive women; improve retention in care and outcomes for HIV positive pregnant women</p> <p>Uganda: Reduce maternal mortality from post-partum hemorrhage through promotion of active management of the third stage of labor and essential obstetric care at the health facility and community levels</p>
<p>MDG 6: Combat HIV/AIDS, Malaria and Other Diseases</p>	<p>Bolivia: Increase detection of new TB cases and TB cure rates by improving the quality and coverage of TB control activities, including sputum sampling and lab services as well as to ensure the availability of TB drugs and supplies</p> <p>Burundi: Increase the number of pregnant women covered by PMTCT services, increase the number of HIV positive women receiving care and treatment, increase the number of newborns of positive women tested, and increase the number of positive children receiving care and treatment</p> <p>Cote d’Ivoire: Develop standards and indicators for peer education programs addressing HIV prevention and harmonize the courses for training peer educators; improve quality of HIV care and treatment services as well as PMTCT; improve quality of programs targeting orphans and vulnerable children; Project for lab accreditation to improve the accuracy of testing of HIV/AIDS, malaria and other diseases.</p> <p>Haiti: Apply QI methods to improve effectiveness of programs to mitigate the impact of HIV/AIDS on children and families.</p> <p>Kenya: Improve OVC program effectiveness to mitigate the impact of HIV/AIDS on children and families</p> <p>Mozambique: Improve OVC program effectiveness to mitigate the impact of HIV/AIDS on children and families</p>

MDG	How HCI country activities contributed to MDG attainment in FY12
	<p>Malawi: Improve standards for OVC services in the following areas: food and nutrition, shelter and care, protection, health, psychosocial well-being, education and household economic strengthening</p> <p>Namibia: Increase provider knowledge of HIV/AIDS; improve medical waste management practices; strengthen procurement and logistics; improve health worker knowledge of infection control and occupational safety.</p> <p>Nicaragua: Increase promotion of HIV counseling and voluntary testing to pregnant patients and people with TB; improve retention in care and outcomes of patients on ART; expand best practices in infection prevention and control; strengthen knowledge and advising multidisciplinary teams and develop teaching capacities for HIV in vulnerable and at-risk populations</p> <p>Pakistan: Reduce transmission of HIV and other blood-borne pathogens through improved injection safety</p> <p>Russia: Improve system of detection, referrals, and medical follow-up of HIV-positive patients to improve retention and increase enrollment in antiretroviral therapy (ART); increase ART enrollment by improving counseling and testing for HIV and integrating these services with other services; and improve detection, prevention, and treatment of HIV and HIV-TB co-infection; expand quality TB services at the primary care level</p> <p>South Africa: Improve HIV prevention, care, and treatment services; improve PMTCT, counseling and testing, TB/HIV, and ART services</p> <p>Swaziland: Scale up and strengthen provision of integrated TB/HIV including multidrug-resistant TB (MDR-TB) care and treatment services to primary health care (PHC) clinics and communities</p> <p>Tanzania: Strengthen the capacity of the Ministry of Health and implementing partners to deliver quality ART/PMTCT services</p> <p>Uganda: Increase the number of people receiving ART by improving clinic efficiency and strengthening links to other services (PMTCT clinic, HIV counseling and testing services, TB services); improve quality of HIV care services with a focus on retention and clinical outcomes of patients</p> <p>Zambia: Apply QI methods to improve effectiveness of programs to mitigate the impact of HIV/AIDS on children and families; raise awareness amongst community members on use of insecticide treated nets to prevent malaria; and provide space for dialogue on abstinence, condom use, voluntary counselling and testing (VCT), adherence to treatment for youth</p>

2 Country and Regional Technical Assistance

AFRICA

2.1 Burundi

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
HIV/AIDS services improvement	Contribute to the achievement of improvement targets by implementing a PMTCT improvement collaborative approach in 4 provinces in the Northern Region of Burundi	The HCI intervention will cover four provinces (Kayanza, Kirundo, Muyinga, and Bujumbura Mairie) out of 17 provinces in the country The target coverage for these 4 provinces is 1,765,431 inhabitants (out of 10,557,259 in Burundi)

Main Activities and Results

With USAID Burundi support, HCI made a first field visit to the country in May 2012. The main goal was to discuss with the Ministry of Health (MOH) and other key partners on HIV/AIDS activities supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), areas that need improvement, target districts, and other expectations. The visit helped understand the national context of public health in general and specifically the activities and concerns about quality in HIV/AIDS, and finally to better clarify what HCI can contribute. The health context in Burundi is similar to other sub-Saharan Africa countries with high rates of mortality and a worrying HIV/AIDS pandemic with a prevalence of 3.6% in the population above 15 years of age, and higher with the rates of 5.97%, 6.46% and 3.30% in respectively semi-urban, urban, and rural zones.

The visit also helped to better understand the context and HIV/AIDS activities taking place, to meet with supporting and implementing partners and to learn from their achievements and concerns. Several issues were raised but the priority seems to be a focus on PMTCT coverage, completeness of antenatal care (ANC), patient monitoring and continuity of care, documentation, and lack of involvement at decentralized management level.

The main recommendation of the visit was to carry out a baseline assessment to objectively determine improvement priorities within PMTCT. In particular, the assessment would focus on the quality for PMTCT services through the continuum of care, the links between programs, and the ability to maintain services and track patients through the care they need. The assessment was carried out in August 2012 and covered 21 sites in the four target provinces. We used two data collection methods (interviews with health providers and registers / medical chart reviews) and seven different tools. The goal of this assessment was to identify strengths and weaknesses of HIV/AIDS services to inform the design of a quality improvement program. Key findings of the assessment are summarized below and shown in Table 2.

- Documentation has poor written records for ARV adherence and counseling, lacking for key PMTCT indicators or for key HIV care and treatment indicators;
- Integration of PMTCT services with ANC is low for timely enrollment;
- HIV testing: its frequency for pregnant women needs to be standardized across sites and correspond with national guidelines. The proportion of women whose partner is also tested is low. Few sites are conducting serologic testing for exposed infants. Voluntary testing and counseling can be done at facility during ANC-referring women to lab is an opportunity for loss
- Clinical care: Patient flow is more complicated than necessary and should be simplified to minimize loss-to-follow-up. Referring pregnant women for prophylaxis constitutes an opportunity for loss. Few sites are initiating ARV for pregnant women and exposed infants in accordance with the 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
- Retention: The proportion of pregnant women on ARV care or prophylaxis is low. Documentation is cited as the only mean to ensure HIV+ women and their infants are enrolled in PMTCT. Additional measures should be implemented as documentation alone does not ensure follow up. No evidence of data use for quality improvement and to ensure HIV+ and their infants are enrolled in PMTCT is low
- Pharmaceutical supplies: Lack of ARV for women and newborns at facilities should be addressed. Lack of TB medication at ART sites constitutes a serious barrier to treatment.

To help close the above gaps, HCI 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 (MNCH) and HIV services.

Table 2. Burundi: Baseline assessment of PMTCT care, August 2012

Indicator	Baseline values (August 2012)	Number of sites reporting
1. % women enrolling in ANC who are < 14 weeks gestational age	10%	14
2. % women enrolling in ANC who are between 15 and 20 weeks gestational age	25%	13
3. % women tested for HIV at first ANC visit	60%	14
4. % women from ANC whose partners are tested for HIV	5%	11
5. % of HIV exposed infants receiving ARVs prophylaxis within 72 hours of birth	70%	10
6. % of HIV exposed infants tested for HIV	50%	7
7. % HIV+ mothers enrolled in care for persons living with HIV/AIDs (PLWHA) care	50%	11

With the goal to apply the improvement science to the management of health workers and link improvements in performance management with impact on the quality of care for PMTCT services, HCI plans to apply a performance improvement approach to support health worker and team performance. In September 2012, an HPT (human performance technology) assessment tool was tested in two facilities. We found that health workers lacked written job descriptions and had very little understanding of what specific tasks they were being asked to perform. In addition, they stated that rarely, if ever, are they recognized when they perform well, with only two of eight providers claiming they had received words of recognition during the last six months. Most did not agree that their jobs were doable during their shifts because they had had minimal training in PMTCT, and had no job aides or manuals to help them complete their tasks. A more in-depth assessment is planned to help tailor these interventions into a package of changes that will combine international best practices in clinical interventions as well as those in human resources management.

An office was identified and leased. The newly hired administrator was trained in URC policies (Finance, human resources, procurement, etc), and adapted a standard operating procedures handbook for localized implementation of policies. We implemented and trained staff in URC financial practices and document filing system. We also recruited, interviewed and hired a Chief of Party, Dr. Claude François Niyomwungere.

Directions for FY13

The baseline assessment results will guide our intervention in Burundi. Key challenges ahead are on documentation for ARV adherence and counseling, on voluntary testing and counseling, reference, loss to follow-up, ARV initiation, timely ARV treatment, and retention of mothers and infants enrolled in PMTCT. To address these challenges, HCI will conduct a human resources rapid assessment in selected sites in the four targeted provinces, elaborate an initial integrated human performance factors/PMTCT change package, and organize an experts meeting to consolidate the initial change package (strategies, improvement objectives, indicators, and initial ideas to be tested for PMTCT services in Burundi). The implementation of the PMTCT improvement collaborative in four provinces in the Northern Region of Burundi will be funded through the USAID ASSIST Project as of January 2013.

2.2 Cote d'Ivoire

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
HIV Care and Treatment (ART and PMTCT Collaborative)	<ul style="list-style-type: none"> ▪ Continue the quality improvement project in 80 spread sites ▪ Regionalize the quality improvement project into 10 regions ▪ Improve the community link with sites ▪ Institutionalize the improvement process in PNPEC 	<p>The 80 spread sites (62 PMTCT sites and 79 ART sites) are located in 40 districts out of 79 districts in the country and 17 out of the 20 regions. The population in these 40 districts is 17 million</p> <p>In the country, there are 633 PMTCT and 477 ART sites</p>
Pharmacy improvement	<ul style="list-style-type: none"> ▪ Improving the quality of drug dispensation services in a sample of pharmacies in Abidjan (The capital of Cote d'Ivoire) 	<p>13 pharmacies involved in ART drugs dispensation in Abidjan (out of 95 pharmacies in the city)</p>
OVC Care	<ul style="list-style-type: none"> ▪ Improve quality of programs targeting orphans and vulnerable children ▪ Implement the standards in 12 new platforms ▪ Building capacity of five social centers by integrating QI activities in their work 	<p>The 12 platforms out of 30, and in 07 out of 20 regions.</p> <p>Approximately 140 non-governmental organizations (NGOs) are involved in the QI process in the 12 platforms, serving an estimated beneficiary population of 40,000 vulnerable children</p> <p>The 5 social centers are in three cities: Abidjan, Bouaké and Bouafé</p>
HIV Prevention: Abstinence, Other	<ul style="list-style-type: none"> ▪ Build capacity of MOH in QI implementation for prevention activities ▪ Develop QI tools to support the implementation of peer education standards ▪ Provide technical assistance to PEPFAR implementing partners in QI. 	<p>The standards will be implemented in 10 sites representing 10 cities.</p> <p>About 95 NGOs are engaged in peer education standards implementation</p>
Laboratory Accreditation	<ul style="list-style-type: none"> ▪ Improve quality of laboratory services in 21 pilot sites ▪ Develop tools for implementation of WHO-CDC accreditation process 	<p>The 21 laboratories (out of 101 in the country involved in HIV care) are spread in 10 regions out of 20 and include the country's regional and central laboratories</p>

Main Activities and Results

ART and PMTCT Collaborative

HCI assistance in Cote d'Ivoire started in 2008 and initially focused on improving antiretroviral therapy (ART) and prevention of mother-to-child transmission (PMTCT) services. In 2009, this assistance expanded to include the development of standards of care for orphans and vulnerable children (OVC), HIV prevention, and laboratory services improvement activities. In the ART/PMTCT and pharmacy improvement activities, HCI works closely with the Ministry of Health's National HIV Care Program (PNPEC) and implementing partners, including Aconda, Health Alliance International, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), and International Center for AIDS Care and Treatment (ICAP).

Results from the ART and PMTCT improvement work show that gains in the demonstration sites have also been achieved in the spread sites, as seen in Figure 1, which shows improvements in the proper documentation of care in patient medical records, an important task to assure continuity of care. Figure 2 shows progress in the spread sites to increase coverage of pregnant women with HIV counseling and testing.

Figure 1. Cote d'Ivoire: Completion of medical records of HIV patients. Percentage of patients with all items filled in the medical record (pilot site and spread site)

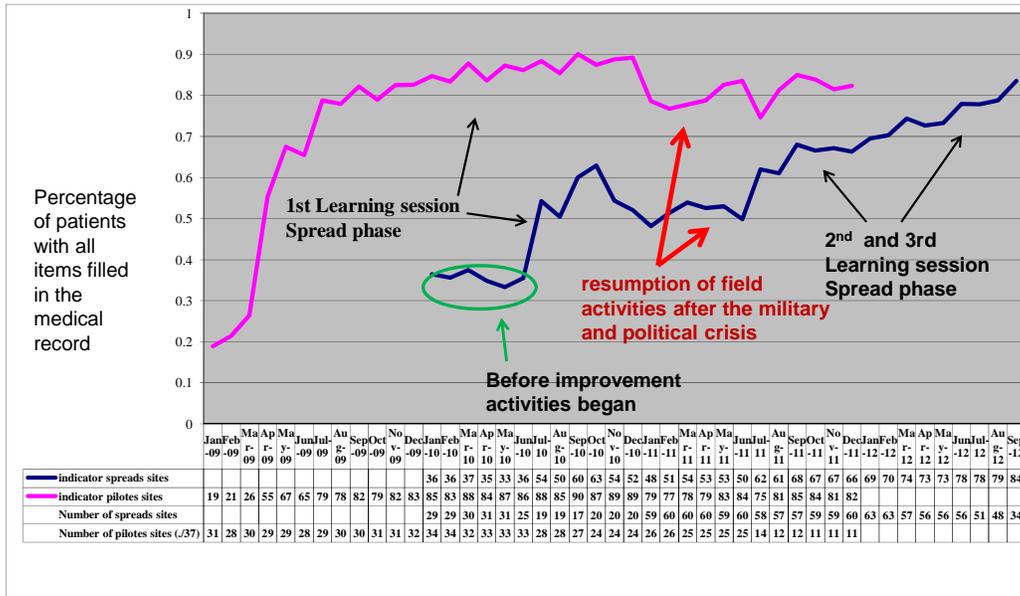
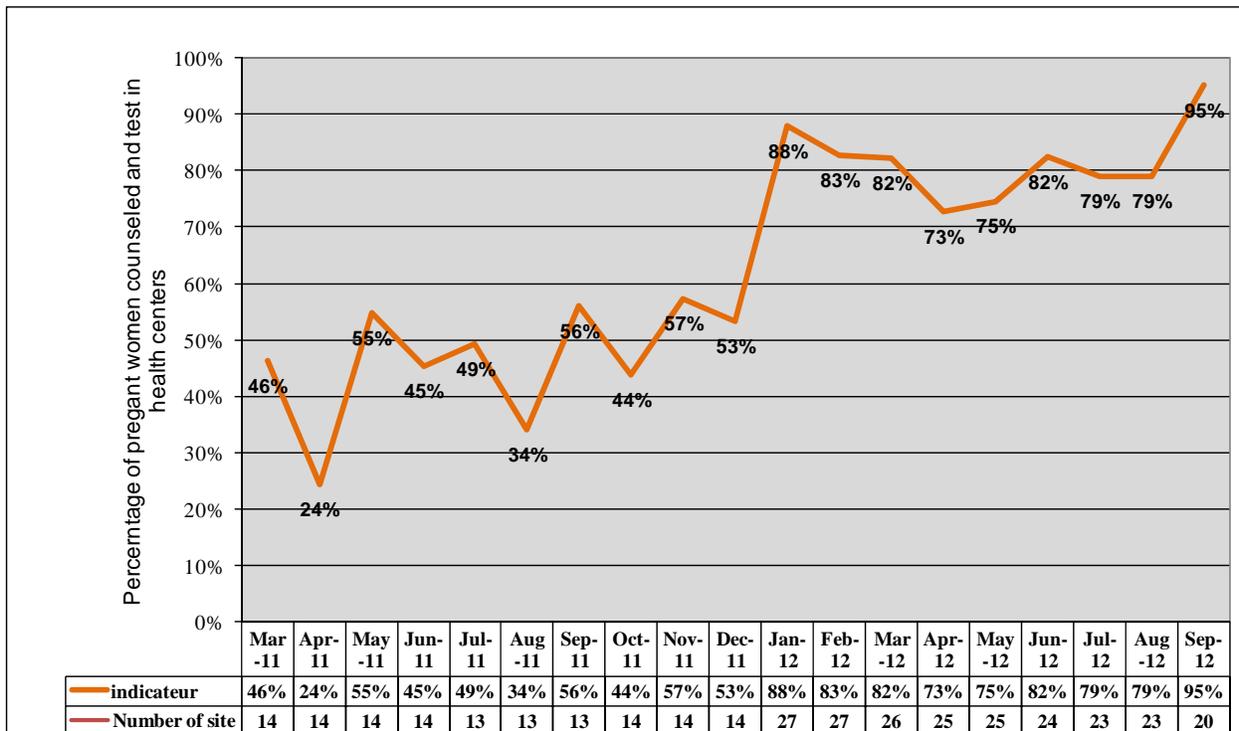


Figure 2. Cote d'Ivoire: Improvement in HIV counseling and testing of pregnant women in health centers, March 2011-August 2012



Pharmacy Improvement Collaborative

In 2011, a pharmacy improvement activity with 13 pharmacies in the city of Abidjan was initiated as part of the ART/PMTCT improvement work to improve pharmacy record-keeping and supply management

to reduce stock-out. Based on national reports on pharmacies activities, we defined improvement objectives and developed tools for pharmacies improvement activities in collaboration with PNPEC, SCMS, MEASURE, and the National Public Health Pharmacy. The first learning session for teams in the pharmacy collaborative took place in December 2011. Participating teams represent the main providers of ART in Abidjan.

Improving Care for Orphans and Vulnerable Children

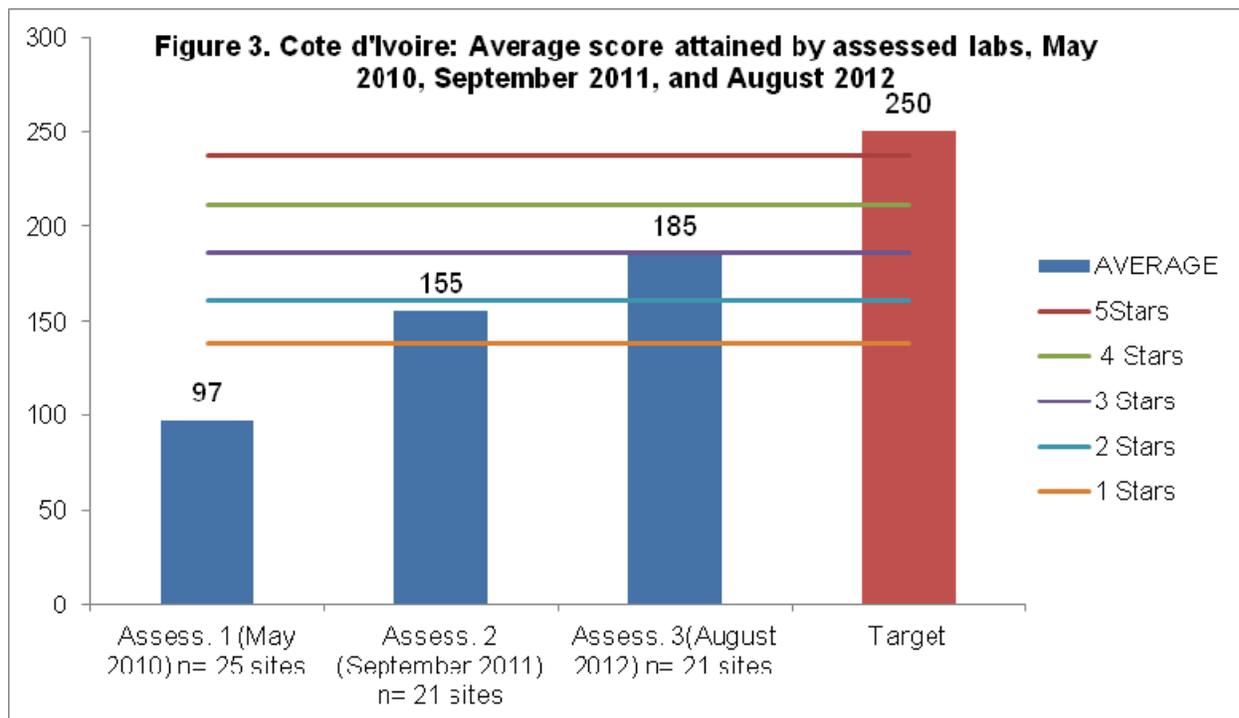
HCI also provided training and coaching support to some 140 non-governmental organizations (NGOs) engaged in piloting standards of care for orphans and vulnerable children (OVC) in 12 sites (platformes) around the country. HCI also worked with the national OVC program (PN-OEV) to develop the managerial capacity of five government-run social services centers, based on a needs assessment carried out in April 2012. HCI provided training in quality improvement and program management and introduced tools. HCI training 160 PN-OEV staff to serve as coaches to support NGOs in applying the standards.

HIV Prevention

In November 2011, HCI organized a national workshop to validate the implementations tools of the peer education standards: the performance assessment tool, individual follow-up sheet for peer educators, and a supervision tool. During FY12, HCI provided support to 95 NGOs in 10 cities to apply the quality standards and provided training in quality improvement for peer education programs for 19 organizations (technical partners, development partners and national networks) which supervise the NGOs. We also supported Ministry of Health (MOH) staff to conduct coaching visits to the NGOs.

Laboratory Accreditation

HCI also worked with the Regional Center for Health Assessment and Accreditation (CRESAC) to implement the WHO/CDC laboratory accreditation program in Cote d'Ivoire. HCI collaborated in the development of national guidelines for accreditation of labs, has organized capacity-building workshops and on-site coaching for staff of 21 labs, and participated in three lab assessments to date. Figure 3 shows the progress achieved through the third assessment in August 2012.



Other Activities

At PEPFAR request, in April 2012, HCI conducted orientation workshops on the quality improvement process for PEPFAR prime partners, to build their capacity to conduct improvement work with their sub-partners and NGOs. Thirty-two staff from 19 organizations participated. We also carried out one-day training and technical assistance to sensitize and create awareness on improvement to many institutions, such as the National Army Hospital, General Directorate of Fight against HIV, General Directorate of Health, and General Hospital of Binger Ville.

Directions for FY13

For FY13 we will continue coaching visits and learning sessions for ART, PMTCT and pharmacy improvement activities. For the OVC and prevention activities, we will support PN-OEV and the MOH to organize the final learning sessions and then convene workshops to review the OVC and peer education standards documents and their implementing tools. HCI assistance in the OVC and peer education areas will close out at the end of 2012. HCI will continue to support the WHO/CDC accreditation process for laboratories.

2.3 Kenya

Overview of HCI's programs in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Disseminating the service standards across the country	<ul style="list-style-type: none"> ▪ Conduct 2 day dissemination meetings with the Department of Children Services (DCS) and OVC implementers at provincial level ▪ Develop and disseminate job Aids and easy to use guidelines for OVC QI ▪ Provide TA to APHIA plus in disseminating job Aids and Easy to Use Guidelines ▪ Distribute and share Kenya specific case studies and best practices with stakeholders ▪ Distribute video documentation on Kenyan QI experience with DCS, APHIA Plus and GOK Line Ministries 	The dissemination exercise will cover the whole country, the population of Kenya is 40 Million people
Capacity building of the Ministry of Gender, Children and Social Development – The Department of Children Services on OVC QI	<ul style="list-style-type: none"> ▪ Train Members of the NSC on OVC QI ▪ Train Regional, County and District DCS GOK teams on OVC QI 	Nationwide targeting all 8 provinces with a total population of 40 Million people
Institutionalizing QI at the point of service delivery	<ul style="list-style-type: none"> ▪ Support APHIA Plus QI Coaches to Hold County/ Regional level Learning sessions ▪ Support APHIA plus QI coaches to hold bi annual National Sharing ▪ Support Collaborative to share results on the HCI portal and locally generated for sharing ▪ Support Implementers to develop mechanisms for sustaining and spreading improvement changes ▪ Promote documentation and sharing of best practices and case studies on QI ▪ Support APHIA plus teams in establishing communities of learning ▪ Provide coaching and mentorship to APHIA Plus QI teams and Coaches 	This activity will be conducted at the national level in the subsequent quarters

National Health Systems Strengthening	▪ Standardize QI approaches and training in the country	National
	▪ Develop a national QI policy to guide quality improvement as a key aspects of revamping the health sector in Kenya	National
	▪ Develop the National QI strategic Plan 2013-2018 for the health sector that will see QI become core component of the overall health sector strategic plan for the next 5 years	National
	▪ Develop a framework for a national accreditation agency for the health sector as a key avenue to drive quality	National
	▪ Establish national database of QI indicators as part of the national health information system.	National & regional
	▪ Develop the capacity of MOH to lead the Quality Management Technical Working Group and Quality management Interagency Co-coordinating Committee to coordinate QI activities in the country	National
	▪ Cascade QI practices through impact training at all levels for APHIA+ and other regional implementers and county health managers	National, and regional all the 47 counties
	▪ Establish a QI demonstration in each of the 5 regions under the USAID funded APHIA+ to be able to work closely and mentor the APHIA+ on QI and assist in QI scale up	Regional/county level

Main Activities and Results

Disseminating the Service Standards across the Country

The dissemination of the standards over the year was an elaborate process that began even before the finalization and eventual launch of the document. Through partnership with the AIDS Population and Health Integrated Assistance (APHIA plus) implementers across the country, over 140 QI teams were taken through the standards implementation process and have used them over time to guide their work. The APHIA partners are an important avenue to reach the whole country.

During the national launch of the standards, 250 copies of the standards in soft and hard copies were distributed to key players in OVC programs from across the country. The launch program ensured participants were taken through the key components of the standards document and the use and function of the standards in mainstreaming QI at the point of service delivery.

After the national launch HCI, jointly with the technical working group, conducted dissemination workshops in eight regions of Kenya. In total, over 800 OVC service providers attended the meetings. District and county level dissemination work plans were developed for implementation under the coordination of the Ministry. APHIA plus implementers and Area Advisory Councils at the grassroots level will support the local dissemination of 3,000 copies of the standards.

Capacity Building of the Ministry of Gender, Children and Social Development and its Department of Children Services on OVC QI

Throughout the year, HCI conducted trainings for 283 of government personnel from the Ministry of Gender, Children and Social Development (MOGC&SD) and the Nairobi City Council. The outcome of the trainings was the development of region specific work plans that will be implemented jointly with HCI, the Ministry, and APHIA plus. The following activities have been ongoing since the training:

- Disseminating the service standards to implementers to the county, district, division and location levels;
- Stakeholder mapping and development of directories of OVC service providers;
- Harmonizing reporting and data management from the location level up to the province;
- Building the capacity of point of service delivery providers in the standards and QI;
- Conducting county and district level learning sessions, documentation, reporting, and consolidation of results.

The department will conduct periodic stakeholder meetings and supportive supervision for the implementers. The government's capacity to provide leadership for QI has been enhanced though a major human resource gap remains within the Ministry.

Institutionalizing QI at the Point of Service Delivery

HCI continued supporting the APHIA/AMPATH plus implementers in QI through coaching and mentorship sessions and learning sessions at both national and project levels. HCI works with six projects, including:

1. APHIA plus Kamili – Central and Eastern provinces
2. APHIA plus Nuru Ya Bonde – Rift Valley province
3. AMPATH plus – Uasin Gishu and Western Kenya
4. APHIA plus Western Kenya – Western and Nyanza Province
5. APHIA plus Nairobi /Coast – Nairobi and Coast Province
6. APHIA plus North Arid Lands – North Eastern, Rift Valley and Upper Eastern regions

The APHIA plus North Arid Lands project closed early in the year and the new project APHIA plus Imarisha is yet to roll out implementation activities. Each partner received a coaching and mentorship visit which helped address key improvement challenges faced by the implementers and helped streamline implementation plans to meet the milestones.

Each project had at least one learning session conducted during the year. APHIA plus Western Kenya held the first learning session in December 2012 which informed a refresher training that was held in April 2012 for both project staff and the QI teams. By the learning session in June 2012, the QI teams had made a lot of progress and shared results of their interventions. Most programs were able to leverage resources to respond to needs of vulnerable children. It was also evident that programs were working much closer with the government and the communities now to address the needs of vulnerable children.

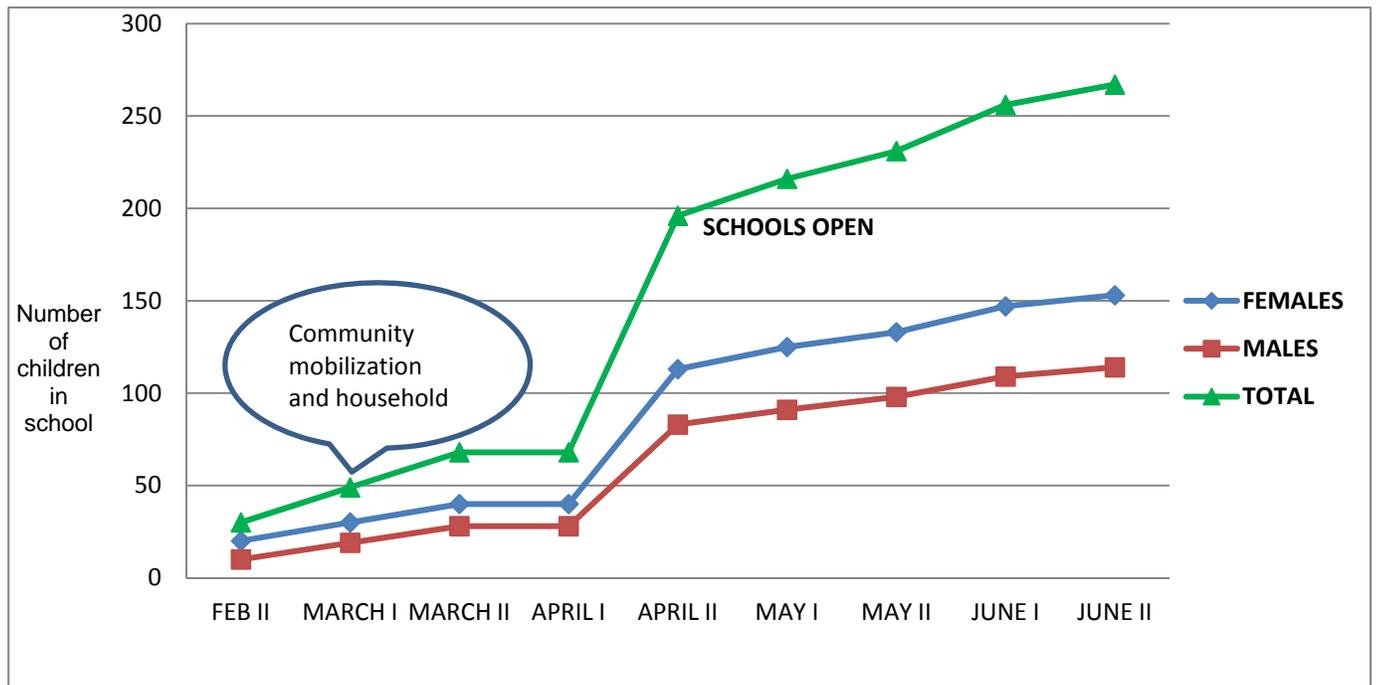
APHIA Plus Western Kenya – Western and Nyanza Province

APHIA plus Western Kenya has QI teams in eight counties and from the Child Status Index (CSI) assessment, it was evident that there were gaps in the service areas of education, child protection, and food/nutrition. Bukonoi community-based organization (CBO), located in an area that has experienced internal violent land conflict, addressed child protection and food and nutrition during the first half of the year and were able to achieve a lot of improvement in child well being. The results were mainly achieved by focusing on community efforts to address challenges facing children. In addressing child protection issues, many community sensitization meetings were held targeting the community gatekeepers, caregivers, and the children. To address legal protection, the team worked closely with the police, the District Commissioner, the local chiefs and the community gate keepers.

Bukonoi CBO had major challenges ensuring access to regular nutrition despite the area being rich in food production. Most caregivers sold their food at through away rates immediately after the harvest, leaving their households vulnerable. To address this, the QI team conducted community sensitization meetings on food security preparation and storage.

In addressing education, Dago Dala Hera CBO QI team set out to involve the children, their households, the school, and the community in the identification of children who had either not enrolled in school or had dropped out for varied reasons among them poverty, truancy, and child labor and re-integrated them in the school system. As shown in Figure 4, they were able to increase school enrollment of both boys and girls after schools opened.

Figure 4. Kenya: Dago Dala Hera CBO results for school enrollment and retention, February – June 2012



APHIA Plus Nairobi Coast – Nairobi and Coast Province

APHIA plus Nairobi Coast has 14 QI teams spread over the region with each of them addressing different region-specific challenges. The coast region has serious issues around child protection and education which are all a spillover effect of tourism on the community. Nairobi region on the other hand grapples with issues that affect residents of urban slum settlements, namely psychosocial support, health, shelter, child protection, and education. The APHIA plus Nairobi Coast received one coaching and mentorship visit which helped them realign their implementation activities to help them achieve results.

The NOFI QI team in Njiru district mapped the community and identified households that had serious issues around provision of shelter for vulnerable children. Most children lived in dilapidated houses and had no bedding or clothing. Through local resource mobilization, the QI team has been able to ensure that out of the 62 needy households with 168 children, 30 received bedding from community members, and three houses were repaired. The team has also linked the households to local economic strengthening activities.

In addressing health, the NOFI QI team linked with community health workers and conducted health action days that have led to improved waste management in the area. There also has been a marked improvement in community/facility linkages leading to increased access to health care services by the community.

Redeemed Gospel Church has ensured increased household support for psychosocial support for children. They have seen an improvement in HIV-positive children’s ability to handle disclosure better

and adhering to drugs for enhancement of their care and treatment. In addressing education, the Redeemed Gospel Church QI team set out to identify the number of children who were not enrolled in school and ensured they were in school through:

- Identifying schools and vocational training institutions willing to enroll vulnerable children;
- Establishing public-private partnerships for sponsorship of children through education;
- Engaging guardians and children as active participants in education for the children.

They were able to increase the proportion of vulnerable children who received educational support from 15% in April 2012 to 31% in July 2012.

APHIA plus Nuru ya Bonde – Rift Valley province

Though APHIA plus Nuru ya Bonde were the first to be trained, they did not start implementation until later in the year when they went through a retraining. The project has 14 QI teams spread over six counties. Most of the teams have conducted a self assessment and baseline CSI which showed them food and nutrition, shelter, and education were the areas of highest need for their children. The QI team prioritized food and nutrition. The QI team mapped the site and households that were affected by food and nutrition and linked them to livelihood programs through the Ministries of Agriculture and Livestock development. The program also realized that food and nutrition and household economic strengthening are interrelated and have intensified their household economic strengthening activities.

AMPATH Plus – Uasin Gishu and Western Kenya

The AMPATH plus project implements activities in two regions of Kenya: Rift Valley and Western Province. AMPATH plus has three QI teams (two in Rift Valley and one in Western Province). HCI provided technical support to the coaches in AMPATH plus and during FY12 saw a marked improvement in the way the program provides services to vulnerable children. The QI teams in Rift Valley identified child protection as performing poorly after using the CSI to assess the situation.

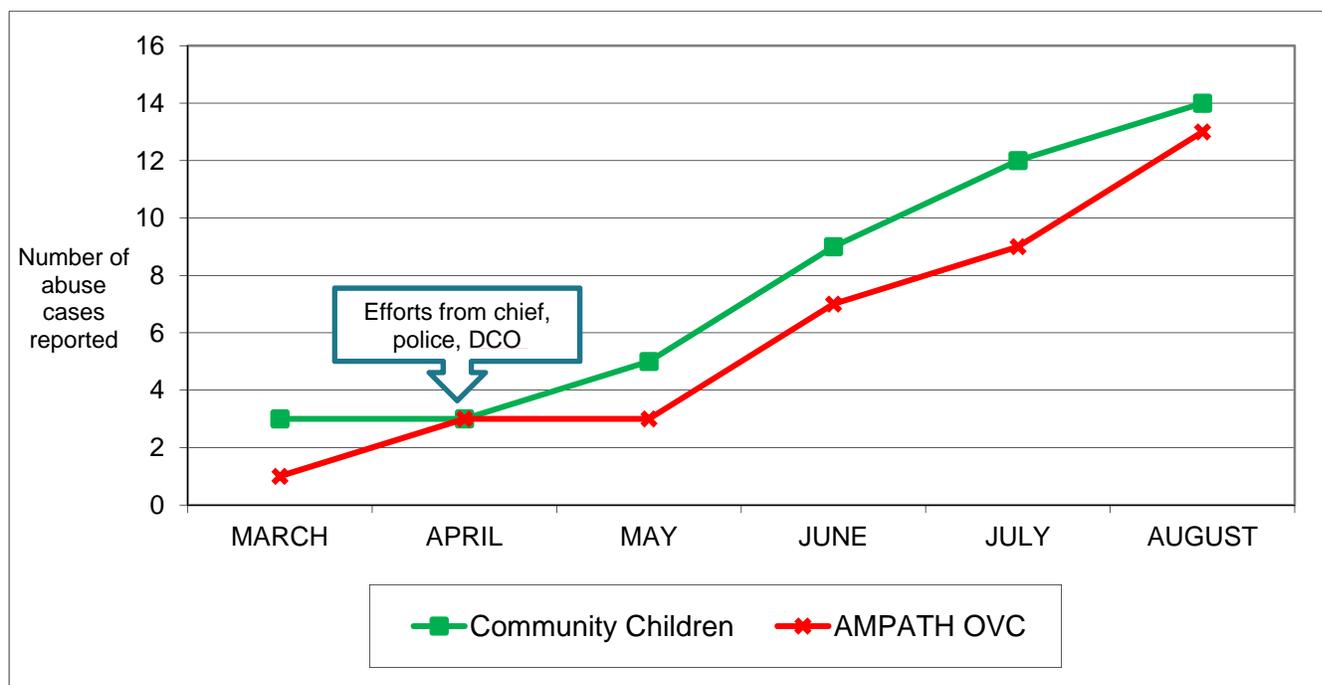
The Kaspoya QI team decided to administer a questionnaire on children to rate their knowledge on child protection and established that most children did not know their rights and could not identify abuse. Of the children who had been abused, it was mainly through sexual exploitation in social places (video dens, pool table centers, and at home). The team decided to conduct child sensitization meetings on protection, conduct meetings at the community on child protection, hold specific meetings with potential abusers, and establish a system to ensure children accessed legal protection for reported cases.

The Kaspoya community has become an active participant in addressing issues of child protection because of these efforts. As shown in Figure 5, there was a steep improvement in the number of reported cases being handled through the government's legal systems including the police, the children's officer, and the courts. Community members are able to follow up on cases to ensure the due legal process is followed up as opposed to the past. Children have established a community peer support program that ensures timely reporting of cases hence minimizing incidences of adults attempting to stall or stop the legal process. In ensuring cases were reported and handled, the local government administration, the police, and the Government Children Officer worked together in managing the reported cases, leading to a gradual increase in cases being reported and handled.

APHIA Plus Kamili – Central and Eastern Provinces

APHIA plus Kamili has 46 QI teams, though only 32 are active. The project held two learning sessions and one coaches' training during FY12. The active QI teams are at different levels of implementation. They had conducted a baseline CSI though the teams have yet to conduct a second CSI to compare effect of the changes on child outcomes. Most teams from Central Kenya handled education as the most challenging service which could be attributed to high incidence of child labor in tea and coffee farms and poverty due to historical land tenure issues. In Eastern Province, a semi-arid region that has experienced food security challenges for decades, most teams identified food security, shelter and care, and some cases of child protection.

Figure 5. Kenya: Kapsoya CBO results for social protection, March – August 2012



Education was the worst performing service for Hope Valley NGO. A further analysis of the problem by the QI team revealed that the major causes of this included lack of role models, lack of proper follow-up by guardians and parents, adolescent girls skipping classes during their monthly periods, inability to complete assignments in the evening due to lack of source of light, lack of uniforms that led to low levels of school attendance, school levies and costs of scholastic materials, and poverty. The QI team addressed these challenges by following up with children to assess their academic performance, engaging education counselors and motivational speakers to speak with vulnerable children and caregivers, establishing a mentorship “Academic Clinic” where 50 above average children were paired with 50 below average children, and distribution of materials (school levies, lantern lamps, uniforms, sanitary towels, geometry sets) through partnership with APHIA plus and other community stakeholders, including the business community.

APHIA Plus North Arid lands – North Eastern, Rift Valley and Upper Eastern Regions

The project close-out was done early in the year, and HCI were requested to stop all activities with the project, at beginning of the calendar year. A new project, APHIA plus Imarisha, was initiated in July 2012 and discussions have been ongoing.

National Health Systems Strengthening

The Kenya Quality Model for Health (KQMH) conceptual framework was launched on May 8, 2012. This was developed more than five years ago with other development partners but could not be launched for use due to lack of support from partners.

The initial draft of the conceptual framework to guide the activities for development of the national QI policy, Strategic Plan 2013-2018, and Accreditation has been developed. There are several partners interested in this work and HCI is assisting the government to coordinate the activities by developing this framework.

With the launch of the KQMH model, HCI has facilitated the development of a national QI training curriculum. This curriculum has already been used in training at pilot stage. Thus far the department of standard and regulatory services has used this draft training curriculum to train two district hospitals.

Information gathered from such trainings over the course of FY13 will enable the finalization of the curriculum and its formal adoption by the Ministries of Health.

HCI has developed a road map to guide the development of a national QI policy. HCI is working closely with the ministerial planning committee (Ministries of Health and Medical Services) to ensure that QI is captured as a key strategy and investment within the Health Sector Strategic plan III, which will guide the efforts of the health sector over the next five years (2012-2017). Developing accreditation mechanisms for health facilities in the country will be a key part of the QI strategic plan.

The KQMH consists of standards and checklist that facilities at different levels of care are supposed to aim at achieving. As part of cascading QI efforts, HCI is in the process of assisting the Ministries of Health and Medical Services through the line departments (Department of Health and Management Information Systems [HMIS] and Standards) to customize these tools as part of routine HMIS.

HCI assisted the Ministries to constitute a Quality Management Technical Working Group. This technical working group is composed of development and implementing partners interested in supporting QI within the health sector; they meet every two to three months.

Directions for FY13

In the first two months of FY13, HCI will continue to support the dissemination of the standards and tools for improving quality with the Ministry of Gender, Children and Social Development (MOGC&S) Department of Children Services in all the provinces. We will also continue to support two APHIA projects to convene sessions to share learning within the provinces. In support of the health systems strengthening initiative at the MOH, HCI will disseminate the KQMH document to the provinces and sensitize them and the APHIA projects on QI as they decide where they would like to focus their improvement efforts. Meetings will be held with the planning committee for the MOH to include QI in the new National Health Strategic Plan to pave the way for developing the national QI policy and strategy. In December 2012, activities will transition to the new USAID ASSIST Project.

2.4 Madagascar

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Madagascar CHW Assessment	<ul style="list-style-type: none"> ▪ Assess functionality of SanteNet2 and UNICEF CHW programs ▪ Conduct focus groups to review supervision tools ▪ Utilize the CHW AIM tool to analyze current services provided by CHWs ▪ Build in-country capacity to apply the CHW AIM tool ▪ Triangulate quantitative and qualitative assessment findings to develop a synthesis report ▪ Disseminate findings of the CHW assessment in a stakeholder's meeting 	2 SanteNet2 regions out of 16 currently supported by SanteNet2/ USAID 1 UNICEF region out of 8 regions

Main Activities and Results

The USAID Mission in Madagascar requested an external assessment to evaluate the overall functionality, effectiveness, and sustainability of current support systems (programs) in supporting Community Health Volunteers (CHV) in providing primary health care services to rural communities within the country. The assessment combined complementary quantitative and qualitative methods, in order to assess organizational functionality, CHV capacity, and the quality of service delivery.

HCI led the qualitative component in August 2011, and applied the methodology described in the Community Health Worker Assessment and Improvement Matrix (CHW AIM) toolkit to assess the USAID/SantéNet2 (SN2) project and CHV programs supported by UNICEF. The objective of this

process was to review progress and provide feedback to implementing partners on ways to improve activities.

Focus groups and interviews were also employed to explore the pertinence and usefulness, along with the strengths and weaknesses, of applied supervisory practices based upon the perceptions, experiences, and options of key stakeholders.

In October 2011, HCI's team met with USAID in Madagascar to debrief on the assessment activities. At the same time, an informational session took place in Antananarivo, during which time preliminary findings were presented and key lessons learned discussed. During the first quarter of FY12, an analysis of materials and results was also undertaken, in addition to the development of a draft report.

In the last quarter of FY12, key stakeholders from UNICEF and SanteNet2 provided final feedback on the qualitative assessment report. The report has been completed and is currently being translated into French and reviewed internally prior to broader dissemination.

In September, the quantitative data tables were received from the U.S. Centers for Disease Control and Prevention (CDC). HCI has sought clarification on the methods of analysis that were used and expects to receive the draft report soon to begin work on the synthesis report.

Directions for FY13

In FY13, HCI will produce the final qualitative assessment report in English and French, copyedit the quantitative assessment report, and produce the final synthesis report integrating the findings of the two. HCI will also translate all reports from English into French for dissemination. The final deliverable will be a dissemination workshop in Madagascar to present findings from the qualitative and quantitative assessment and synthesis report to key stakeholders.

2.5 Malawi

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Assist 12 communities in 4 districts to use CSI to identify priority needs	Help communities to prioritize what services to provide to children in their care based on objective data	12 communities in 4 of 28 districts – Lilongwe, Blantyre, Mangochi and Karongo
Build capacity of communities to use QI methods to implement OVC service standards	Communities have a better ability to analyze and address problems in providing services to OVC	12 communities in 4 of 28 districts – Lilongwe, Blantyre, Mangochi and Karongo
Test standards to see if they are feasible and effective in improving outcomes	Develop an evidence based set of standards which are accepted by the ministry and other stakeholders	National (there are an estimated 850,000 to 1.2 million orphans in Malawi)
Work with Ministry to develop a structure to support the 12 communities	A structure for supporting QI is integrated into ministry systems and involves senior managers in the ministry	National (there are an estimated 850,000 to 1.2 million orphans in Malawi)
Develop a scale up plan	Work with the ministry and stakeholders to develop a plan to support all communities to use the CSI to prioritize improvement areas and use QI methods to apply the standards	National (there are an estimated 850,000 to 1.2 million orphans in Malawi)

Main Activities and Results

During FY12 we trained government staff and community members from four districts (Blantyre, Karonga, Lilongwe, and Mangochi) as well as staff from Save the Children and Catholic Relief Services in how to use the OVC service standards and how to apply the standards using quality improvement methods. We have since supported the formation of multi-sectoral OVC improvement teams in the four districts which are focusing on using the standards, gathering data on the feasibility and effectiveness of the standards and in improving care for vulnerable children. The current status of the piloting in the four districts is summarized in Table 3.

Table 3. Malawi: Status of piloting standards in four districts, September 2012

	Blantyre	Karonga	Lilongwe	Mangochi
CSI	Started organizing trained volunteers for CSI assessments	Completed 30 CSIs	Completed 106 CSIs	Completed 2,790 CSIs
How many essential actions have been tested?*	<ul style="list-style-type: none"> • CP - 4/6 • ECD -3/7 • Educ -3/5 	<ul style="list-style-type: none"> • F&N-4/5 • HES – 5/6 • PSS - 4/10 	<ul style="list-style-type: none"> • CP-5/6 • ECD-5/7 • PSS – 4/10 	<ul style="list-style-type: none"> • CP-5/6 • ECD-5/7 • Educ-5/5
How many essential actions have data?*	<ul style="list-style-type: none"> • CP - 4/6 • ECD -3/7 • Educ -3/5 	<ul style="list-style-type: none"> • F&N-4/5 • HES – 5/6 • PSS - 4/10 	<ul style="list-style-type: none"> • CP-5/6 • ECD-5/7 • PSS – 4/10 	<ul style="list-style-type: none"> • CP-5/6 • ECD-5/7 • Educ-5/5
QI team maturity index ⁺	2.5/5	1.5/5	2.0/5	3.0/5
<p>*The denominator is the number of essential actions in each service area, the numerator is the number of essential actions the district is working on. CP-child protection, ECD-early childhood development, Educ-education, F&N – food and nutrition, HES – household economic strengthening, PSS-psychosocial support</p> <p>+ The maturity index is a score between 0-5. It is scored based on the team's ability to improve care: 0 = nothing has happened; 1= team formed; 2 = making changes but limited improvement; 3 = improvements in processes; 4 = improved outcomes; 5 = sustained, improved outcomes</p>				

Staff from the four district governments and their NGO or CBO partners attended a two-day meeting in May 2012 to discuss progress and learn from each other. As part of the meeting the participants provided initial feedback on the standards, summarized in Table 4. They were asked to provide information on the following dimensions related to the standards: 1) Understandability: did all members of the group understand the standards in the same way? 2) Feasibility: were they able to implement the standards in their district and at what scale? 3) Relevance/acceptability: was the standard relevant to their setting? 4) Effectiveness: did implementing the standard improve children's lives? The majority of teams reported that the standards were well understood and were feasible on a small scale but the teams were still learning if they were feasible on a large scale.

Table 4: Malawi: Feedback on OVC standards from government and NGO staff in four districts, May 2012

	Understandable	Feasible	Relevant	Effective
Child Protection	4.5/6	4.5/6	6/6	6/6
Early childhood education	9/9	7/9	8/9	7/9
Education	10/10	7.5/10	10/10	9.5/10
Food and nutrition	12/14	10.5/14	12/14	12.5/14
Household economic strengthening	5.5/6	3.5/6	6/6	5/6
Psychosocial support	7.5/10	6/10	10/10	9.5/10

For example, Namwera AIDS Coordinating Committee started implementing the OVC standards in January 2010 after training from HCI. They realized that the use of standards and quality improvement would help them do their work better and after the training, the CBO facilitated the establishment of a multidisciplinary QI team. The QI team started coordinating the implementation of the OVC minimum standards in two out of nine Traditional Authorities of Mangochi District and the use of QI and standards is now an integral part of how they work.

After forming the QI team they used the CSI in the two Traditional Authorities they work in. When they looked at the data they discovered that education was a major problem for their children and they decided to focus on improving education in their community. Since 2010, the team has managed to get more children into school and also use the data showing increased enrolment to successfully lobby for more teachers.

The team successfully increased enrolment in primary schools from 8,040 to 13,456 through a variety of strategies. They organized volunteers to mould over 250,000 bricks that were used to construct additional primary school blocks in various communities so that children didn't have to walk so far to school. They also tried to increase the ability and the interest of caregivers to send their children to school. Some of the changes they made included shortening the traditional adult initiation camps and convincing families to instead use the money to send their children to school, fining families whose children were not in school, and assigning community leaders to act as truant officers. After they had seen an increase in the number of children going to school, the QI team worked with the Primary Education Advisor for the Masongola and Mkumba zone to lobby for more teachers to be deployed to the area. The Advisor used the data collected by the community showing the increase in enrollment and the increase in new class rooms to convince the District Education Managers Office to deploy 31 more teachers to the Masongola and Mkumba zone.

Directions for FY13

HCI will work with the communities and districts piloting the standards to gather learning about the feasibility, effectiveness, clarity, and relevance of the standards and with the OVC QI Core Group (appointed by the Ministry's OVC/Child Protection Technical Working Group) to revise the standards based on the learning from the communities and the field. We will also work with the core team to decide whether new standards are needed and to determine the criteria that can be used to decide which standards should be accepted by the government. HCI will also participate in the OVC/Child Protection Technical Working Group to champion discussions on preliminary experiences from implementing OVC standards in the four pilot districts. Further funding to continue this work is anticipated under the USAID ASSIST Project.

2.6 Mali

Overview of HCI's Program in FY12

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Contribute to maternal and newborn mortality reduction through the application of effective quality improvement approaches	Apply the collaborative improvement model to improve evidence based maternal and newborn care at the health facility and community levels in Kayes and Diema districts	HCI Mali will work in the Kayes Region strengthening gains in the 2 target districts (2/7) It will cover 63 facilities (63/63) in two districts for 577,000 inhabitants (out of 1,687,116)

	Apply the collaborative improvement model to improve evidence based maternal and newborn care at the health facility and community levels by spreading best practices from Kayes to Segou and Koulikoro Regions in collaboration with USAID-PKC II project	HCI Mali will work with PKC II to expand to 4 new districts in the Segou and Koulikoro regions (2/9) (Target population of 1,293,657 out of 5,293,317) This work will take place in 86 of 108 total health facilities.
Contribute to reducing morbidity among pregnant women and children under five years old through the application of effective QI approaches at the health facility and community levels	Apply the collaborative improvement model to improve the delivery of evidence-based interventions for prevention and control of anemia in pregnant women and children under five at the health facility and community level	This work takes place in Sikasso Region, one of nine regions in Mali. It covers Bougouni District, one of seven districts in Sikasso Region and targets 525,000 (out of 2,625,919) inhabitants in the Sikasso Region. This work involves 12 of 37 total health facilities in Bougouni District

Main Activities and Results

HCI has been applying improvement science to maternal and child health care in Mali with significant success since 2010. Specifically, HCI has implemented a maternal newborn improvement collaborative in two districts, Kayes and Diema, in the high-need region of Kayes. The collaborative’s technical content consisted of high-impact, evidence-based interventions: In the first phase, on active management of third stage labor (AMTSL) and essential newborn care (ENC), and then in a second phase, focus on prevention and management of pre-eclampsia and eclampsia (PEE), at both facility and community levels. During FY12, in order to capitalize on the gains achieved in FY11, the USAID Mission and the MOH asked HCI to cover all sites in these initial districts and also to introduce the approach on a new topic, anemia control and prevention on pregnant women and children under five in Sikasso Region. HCI was asked to partner with PKC 2 to spread essential obstetric and newborn care (EONC) best practices to four new districts in Segou and Koulikoro regions.

Due to the political crisis in Mali, HCI activities were suspended from March to August 2012, during which time HCI staff could not work with government facilities or managers. As a result, not much progress was achieved in starting up improvement activities for the EONC spread collaborative and anemia work until we were authorized to resume work in August 2012.

Strengthen the EONC Collaborative in Kayes and Diema Districts

This collaborative was focused on AMTSL /ENC/PEE at the facility level in both Kayes and Diema districts, and on ANC/skilled delivery/birth preparedness at community level in Diema. During the past year, coaching visits, coaches’ meetings, learning sessions were the main activities in that region. Despite the suspension of HCI technical assistance for six months, the teams were able to maintain compliance with care standards and health outcomes for AMTSL/ENC/PEE. During the year, the remaining 22 sites not in Kayes district were covered through spread of best practices on AMTSL/ENC, such that now all 63 sites (100%) in Kayes and Diema districts (1 regional hospital, 2 district hospitals and 60 peripheral facilities) are covered with AMTSL/ENC and 19 of them with PEE (sites with physicians by MOH standard). More effort is needed on pre-eclampsia and eclampsia screening and case management. HCI took the opportunity of the work on AMTSL/ENC/PEE to introduce family planning activities at this crucial period of postpartum in all 41 initial sites in Kayes and Diema (see section 3.3 Family Planning).

Spread EONC Best Practices from Kayes to Segou and Koulikolo Region in Collaboration with PKCII

During the first half of FY12, EONC best practices were spread to four new districts in Koulikoro (2 districts) and Segou (2 districts) Regions in partnership with PKC 2, one of the main bilateral AID health

projects in Mali. HCI assisted in organizing one workshop in each of the four target new districts with content on QI and AMTSL/ENC best practices for skilled providers, community health committees' members, and PKC 2 staff. Coaches/supervisors from the four districts were also trained. They were assigned to help each target site to form a QI team and start implementing the best practices. Coaches' meeting and learning sessions will be implemented by PKC2 with some technical assistance from HCI.

Improve the Delivery of Interventions for Anemia Prevention and Control in Pregnant Women and Children under Five in Sikasso Region

The new anemia control and prevention intervention with pregnant women and children under five years old planned for Bougouni District as the intervention area and Kadiolo District as the control, both in Sikasso Region. The baseline assessment, carried out in the second quarter of FY12, sought to describe anemia-related knowledge, attitudes and practices among pregnant women, mothers of young children and community leaders, assess implementation of high-impact MOH community anemia control interventions, including knowledge and self-reported practices of community health workers and assess implementation of high impact MOH facility anemia control interventions, including cross-cutting health system service delivery supports and provider knowledge and self-reported anemia practices. The assessment results suggested strongly that persistent high levels of anemia in pregnant women and young children in Mali are due, at least in part, to the low uptake of household anemia best practices as well as the low quality and coverage of community and facility anemia control interventions officially endorsed in national MOH policy. Assessment findings presented a compelling picture of the need to translate evidence-based MOH anemia control policy into routine practice at all levels, including community, household, and facility. Findings also highlighted actionable gaps at all levels and illustrate many opportunities to accelerate delivery of high-impact anemia control interventions to change household behavior and reduce anemia prevalence in pregnant women and young children. Figure 6 shows some of the maternal knowledge findings with respect to anemia prevention in women and children.

Figure 6. Mali: Baseline findings about maternal knowledge of anemia prevention, 12 communes of Bougouni and Kadiolo districts, Sikasso Region, December 2011

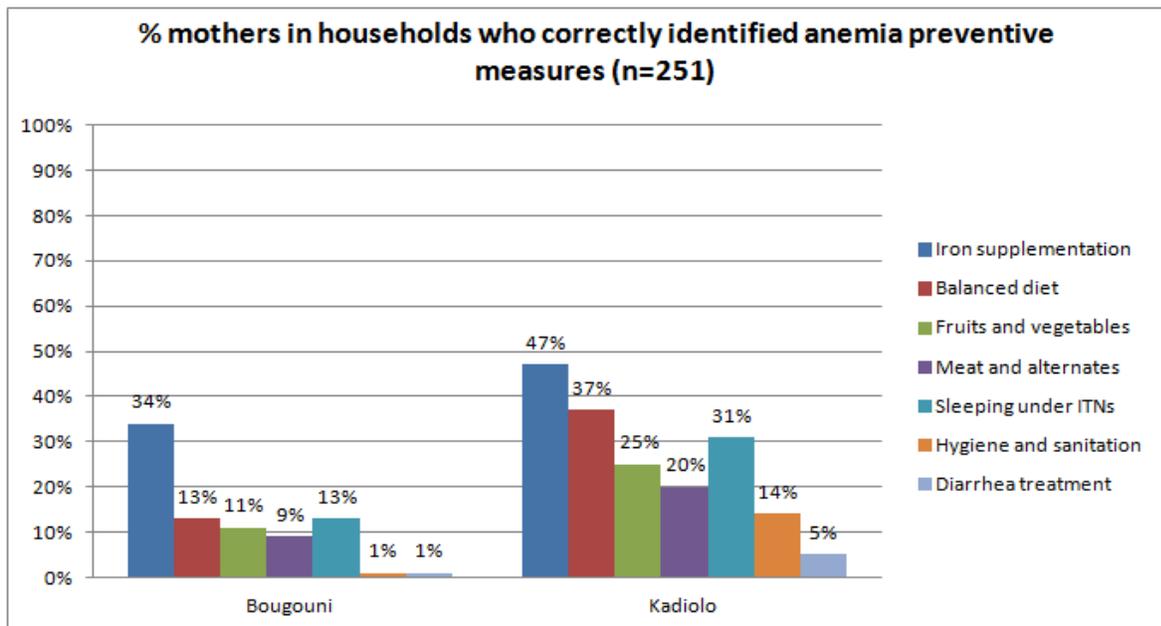


Table 5 reports baseline values for the anemia demonstration collaborative in Sikasso Region.

Table 5. Mali: Baseline values, Maternal and child anemia demonstration collaborative, Sikasso Region (Bougouni and Kadiolo districts), December 2011

Anemia Best Practice	Percent of charts reviewed with best practice documented (n=300 charts from 15 health centers)
Clinical Evaluation	
Pregnant client questioned regarding +/- bleeding	2% (7)
Anemia symptom investigated (any)	32 % (95)
Laboratory Examination	
Hemoglobin or Hematocrit recorded in chart (ever)	3% (8)
Malaria test noted ever (thick smear, RDT or other)	3% (8)
Anemia Prevention Interventions in Pregnancy (per MOH policy)	
SP prescription noted ever (IPTp)	83% (250)
Iron/Folic Acid prescription noted (ever)	87 % (261)
Deworming with Albendazole	7 % (20)
Distribution of insecticide-treated mosquito net	25% (75)

Directions for FY13

In Kayes Region, HCI will reinforce gains in AMTSL, ENC, and pre-eclampsia/eclampsia in former sites but will mainly start expanding these gains and best practices at the facility and community levels to three new districts in Kayes: Bafoulabé, Nioro, and Yelimané. HCI will continuously transfer competency and leadership of QI activities to MOH and partners. Each district and the region will be fully responsible for the organization and management of key activities as coaching visits, learning sessions, and continuous training on QI for new staff. Based on the findings of the anemia assessment implemented in FY12, HCI will help define an intervention package and develop an initial change of already defined strategies in Bougouni district (Sikasso Region) both for facility and community stakeholders.

2.7 Mozambique

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Care for vulnerable children		
Build capacity of the Ministry of Women and Social Affairs (MMAS) and other stake-holders in: (1) Development and implementation of minimum standards for services to vulnerable children (2) Quality improvement principles and methods in OVC programming	<ul style="list-style-type: none"> ▪ Provide leadership in improving quality care for programs serving vulnerable children and families. ▪ Provide TA to ensure development of Standards that are evidence-based. ▪ Build constituencies of support for the Standards and for principles of quality improvement. 	National, cascading to communities: MMAS in 2006 estimates 1.1 million vulnerable children in dire need of support (not necessarily vulnerable due to AIDS)
Gather and communicate evidence on draft service standards	<ul style="list-style-type: none"> ▪ Hold learning sessions during which stakeholders will share experiences, challenges and lessons learned. ▪ Gather evidence that the Standards are feasible at the point of service delivery. ▪ Gather evidence that implementation of the Standards actually makes a difference in children's lives. ▪ Gather evidence that implementation of the Standards is within the context of 	3/10 regions with key implementing partners as identified by USAID and the Ministry: Zambézia, Gaza and Cabo Delgado Ministry of Health (MISAU), MMAS

	organizational practices. <ul style="list-style-type: none"> ▪ Communicate standards across partners. ▪ Support stakeholders to share evidence of QI programming on the HCI portal. 	
Home-based care for people with HIV		
Planning for quality improvement for home-based care (HBC) programs and creating tension for change	<ul style="list-style-type: none"> ▪ Identify champions in the Government, civil society and other development partners ▪ Organize a Task Force to lead the process ▪ Conduct situation analysis of current HBC programming in Mozambique ▪ Build constituencies of support among HBC stakeholders 	National
Define quality of HBC using service standards	<ul style="list-style-type: none"> ▪ Develop capacity of members of the Task Force and other stakeholders in the process of developing quality standards ▪ Establish a process for vetting/reviewing the standards ▪ Develop a plan for pilot-testing the standards 	National level

Main Activities and Results

Activities were delayed at the start of FY12 while registration was being completed. Registration was achieved in July 2012.

Care for Vulnerable Children

In March 2012, two learning sessions were held. The first was held March 7-11, 2012 in the province of Gaza in the Xia Xia district. The MMAS and HCI Senior QI Advisor for Vulnerable Children, Dr. Diana Chamrad, attended. The second session was held March 14-16 in the district of Quelimane and was facilitated by Ms. Roselyn Were, QI Advisor from HCI/Kenya, and the MMAS.

The HCI OVC resident technical consultant, Mr. Juliao Matsinhe, was hired as an employee to continue the piloting process. He contacted MMAS and met with Drs. Francisca and Ines. They agreed on a work plan to propose to the QI task team. MMAS expressed a positive response to HCI's readiness to resume work. We await the MMAS to convene a meeting of the QI task team.

Home-based Care for People Living with HIV

HCI provided a Portuguese-language version of the home-based care (HBC) situation to USAID and the Ministry of Health in July 2012. Mr. Juliao Matsinhe participated in a meeting with MISAU to discuss the standards process and to prepare for a major HBC strategy meeting in July. Based on this situation analysis and the meetings, the Mission decided there is a need to develop standards for HBC. MISAU committed to identify their own technical staff who will take the lead in developing the standards for each of the five service areas in the minimum package. A draft work plan was developed for the standards development process which will be presented to the task work group (TWG) in early November 2012.

Directions for FY13

HCI is in the process of hiring a Chief of Party of HCI Mozambique that will work both on care for vulnerable children and HBC QI. Additionally, HCI will resume OVC task force meetings. Evidence from the evaluation stage in three provinces of Xia Xia, Zambezia and Cabo Delgado will be evaluated and a final report developed on the results of the pilot stage. HCI will also work with MISAU to form a HBC TWG and will train government and partners in QI and standards development. A beneficiaries' meeting is planned in two regions. Partners will be brought together for a standards development

meeting to gather their feedback and draft standards. The TWG will identify groups to test the standards and HCI will train those groups in QI and standards development. The pilot phase will conclude with a finalization meeting. HCI will provide support to develop a plan to scale up the use of QI and HBC standards.

2.8 Namibia

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Assist the Ministry of Health and Social Services (MOHSS) to develop and implement policies and guidelines for safe injection and waste management practices	<ul style="list-style-type: none"> ▪ Ensure districts have incorporated waste management activities and budgets in the overall Government of the Republic of Namibia (GRN) district plans ▪ Support the development of strategies for effective environmental friendly disposal of pharmaceutical glass vials ▪ Conduct a technical review of the current IC guidelines especially sections dealing with the reprocessing of fiberoptic scopes ▪ Finalize review of the Integrated Waste Management guideline, print, and distributed 1000 copies ▪ Establish linkages with the TWG on treatment (under the Prevention Forum) to ensure a technical review process for documents developed. 	10 out of 34 districts (147 facilities)
Prevent transmission of blood-borne infectious diseases by reducing unsafe and unnecessary injections	<ul style="list-style-type: none"> ▪ Provide technical assistance to the MOHSS Division of Quality Assurance (DQA) (staff recruitment, QA assessments and policy development, National Injection Safety Group meetings, M&E systems) ▪ Support the development of common indicators for rational use of medication, an audit and a feedback system ▪ Support the targeted training to 100 staff on rational use of medication (physicians, pharmacists and members of the therapeutic committees) ▪ Review treatment protocols for at least 5 common complaints and diagnoses with MOHSS staff based on the current Standard Treatment Guidelines (STG) ▪ Continue to support poorly performing districts with the scale up of hepatitis B vaccination of healthcare workers (Registers, bottlenecks, reporting) ▪ Train and mentor 2 DQA staff to compile, analyze and report essential data ▪ Explore the possibility of strategic integration of existing injection safety and waste management data sets into the general Health Information System (HIS) 	10 out of 34 districts (147 facilities)
Support post-exposure prophylaxis (PEP) and infection control	<ul style="list-style-type: none"> ▪ Develop case studies to help demonstrate to district ICCs how to synthesize information, analyze problems, set priorities, and devise action plans with measurable outcomes ▪ Strengthen the capacity of district IPC committees through supportive supervision and build in transition plans ▪ Strengthen the reporting system and compliance for PEP ▪ Train 35 lecturers from University of Namibia on infection control ▪ Support one staff member to the Infection Prevention and Control African Network (IPCAN) and the World Health Organization (WHO) Safe Injection Global Network (SIGN) meetings as part of capacity building 	10 out of 34 districts (147 facilities)

Continue to support commodity management on a very small scale	<ul style="list-style-type: none"> ▪ Collaborate with SCMS to ensure continuous availability of commodities and supplies from the general stores ▪ Establish a mechanism by which facilities and staff report on issues related to products 	National
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Main Activities and Results

Assist the MOHSS to Develop and Implement Policies and Guidelines for Safe Injection and Waste Management Practices

After five years of technical assistance under HCI, URC's technical assistance to the Ministry of Health and Social Services (MOHSS) of Namibia was concluded in September 2012. An important part of HCI's work in Namibia was to assist the MOHSS to develop and implement regulatory and guiding tools for the control of blood-borne diseases. In FY12, the Integrated Medical Waste Management Plan that had been developed with HCI support was approved by MOHSS and officially launched in September 2012. The plan addresses waste minimization, segregation, collection, storage, transportation, and treatment, including specifications for new incinerators as well as alternative means of waste treatment.

As shown in Figure 7, over 90% of the 153 facilities reporting by the end of the third quarter of FY12 have shown sustained progress in meeting waste management standards. Access to a functional incinerator stands at 96%, and most facilities indicated that the sharps containers received during the period were of required standard, which is leak proof and puncture resistant. In addition, most facilities reported that the sharps containers are replaced when $\frac{3}{4}$ full.

Figure 7. Namibia: Waste management practices, 2005-Q3 FY12



Prevent Transmission of Blood-borne Infectious Diseases by Reducing Unsafe and Unnecessary Injections

HCI also worked closely with the Infection Control Committees (ICCs) and the Therapeutic Committees (TCs) to reduce unsafe and unnecessary injections. By end of the project, the average number of injections administered per patient among the 153 facilities that reported was approximately 2, a sharp drop from the average of 11.2 injections per patient per year in 2005. In addition, all facilities reported no reuse of syringes or needles and high compliance with practices such as preparing injections

in a clean designated area and use of a disinfectant on injection and vena-puncture sites. However, the misuse of multidose vials was noted in a few facilities. Misuse include practices such as leaving needles protruding on the vials, improper/no labeling on vials or any other practices that can result in contamination of the vial. Contaminated multidose vials have been linked with disease outbreaks such as hepatitis B, C and HIV in other parts of the world. HCI worked very closely with the ICCs and TCs in all of the assisted districts to ensure that they were taking adequate infection control measures, including ongoing in-service trainings and close supervision to ensure safe injection practices were the routine.

Support Post-exposure Prophylaxis and Infection Control

HCI also supported poorly performing districts with the scale up of hepatitis B immunization among health care workers. Among the 92% (6954) of health care workers working in positions that put them at risk from potentially infectious materials, 72% (5049) had completed the three-dose series of hepatitis B vaccination by the end of the second quarter of FY12. This represents a 33% increase over the figures reported by the same time in FY11. At the same time, it was found that 11% of health care workers had received less than the three required doses and that 15% had not received any immunization at all. Efforts were made to ensure a target of 95% hepatitis B immunization was reached by the end of FY12.

Support Commodity Management on a Small Scale

The procurement of commodities such as sharps safety boxes and color coded bags for waste segregation was transitioned to the MOHSS in the first quarter of FY09; however, the project has continued to monitor levels of the commodities across all facilities supported. By the end of the third quarter of FY12, most facilities reporting had sufficient number of needles and syringes, personal protective clothing/equipment and color coded bags in stock. A few facilities that experienced shortages were mainly due to late ordering by the region. HCI collaborated with Management Sciences for Health to support strengthening the supply chain management system through trainings and use of stock cards to ensure continuous availability of commodities.

Directions for FY13

After five years of technical assistance under HCI, URC’s technical assistance to the Ministry of Health and Social Services (MOHSS) of Namibia was concluded in September 2012.

2.9 Nigeria

Overview of HCI’s Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Capacity Building of Federal and state Ministry of Women and social Affairs (FMWSD) in piloting the service standard using QI approach for OVC	Support the country-leadership (Federal and State MWSD) in improving quality care for OVC Programs.	<ul style="list-style-type: none"> ▪ Establish TWG-National level activity to be cascaded down to the regions sensitize staff at the National level and in the six geopolitical zones of the country: <ul style="list-style-type: none"> – South- south (Cross rivers & Akwa Ibom states) – South-Eastern (Ebonyi & Enugu states) – South-West (Lagos & Ekiti states) – North-Western (Kaduna & Kano states) – North East (Bauchi & Taraba states) – Central (FCT & Benue state) ▪ Train the staff from the Federal Ministry of Women and Social Affairs

Integration of OVC Standards of Care within a national strategy	Strengthen integration of OVC Standards of Care within a national strategy response.	<ul style="list-style-type: none"> ▪ 6 Geopolitical Zones ▪ National
Gathering Evidence for QI	Support local and international partners' to organize and gather evidence on the piloting of OVC service standard using QI	<ul style="list-style-type: none"> ▪ Baseline Assessment using Child Status Index (CSI) tool and first learning sessions in Taraba, Bauchi, Kano, Kaduna, Cross River, Akwa Ibom, Enugu , Ebonyi, Lagos, Ekiti, Benue states and FCT
Institutionalizing QI	Create a community of learning across OVC stakeholders	<ul style="list-style-type: none"> ▪ Sharing at the community , state and also national level
Communicating standards	Communicate standards across partners after the endorsement and launch of standards, HCI will provide technical assistant (TA) to support the communication.	<ul style="list-style-type: none"> ▪ Organize dissemination meetings in each zone ▪ Develop job aids for volunteers ▪ Develop child user friendly standards ▪ Develop posters on standards

Main Activities and Results

Capacity Building of Federal and State Ministries in Piloting Service Standards Using QI Approach for OVC

During FY12, HCI provided technical support to Federal and 12 State-level Ministry of Women Affairs and Social Development (MWASD) in establishment and strengthening of the OVC project and QI teams. HCI conducted training on QI approaches and piloting protocol for staff of Federal and State MWASD. At the state level, HCI formed and strengthened the State Technical working group to support the ongoing QI efforts in their states and provided capacity building for 12 state staff and eight local government area (LGA) staff in two states (Ekiti and Cross River States) were built during the QI step down training on service standards. HCI provided technical support to SMWASD in formation of community QI teams and coached the SMWASD to lead implementing partners (PACT, MSH, IHVN, MGIC, HWWN, APIN, FHI 360, Save the Children UK).

HCI and the SMWASD conducted the first learning sessions in 10 states, including Federal Capital Territory (FCT), Benue, Cross River, Akwa Ibom, Lagos, Ekiti, Kano, Kaduna, Bauchi, Taraba, and Ebonyi.

Integration of OVC Standards of Care within a National Strategy

HCI reviewed the National M&E tools and National Plan of Action (2011-2016) and incorporated outcome indicators based on service standards. HCI has also begun review of Nigeria OVC Standard of Practice for 2011-2016. In April, HCI staff participated in a meeting organized at the national level for finalization of the OVC National Plan of Action (2011-2016).

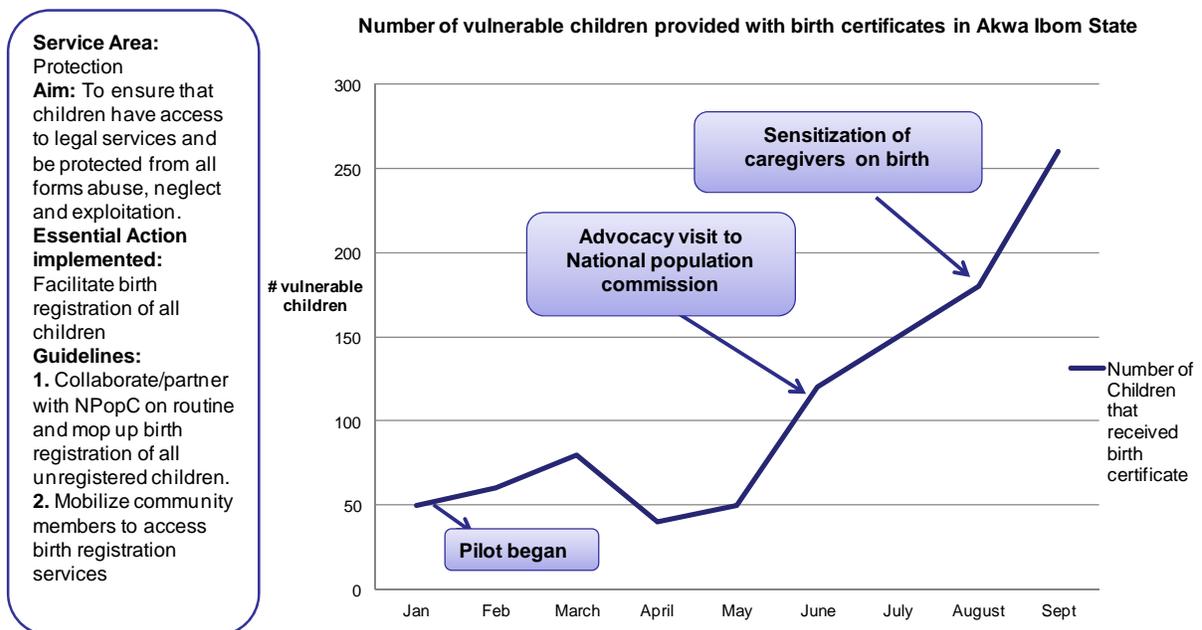
During FY12, HCI strengthened the capacity of lead implementing partners and CBOs in the 12 states to pilot the service standards using QI. HCI coached CBOs and community QI teams during monthly supportive supervision visits in Abuja, Kano, Bauchi, Taraba, Lagos, Ekiti, Cross River, Akwa Ibom, Enugu, Ebonyi, and Kaduna states on the pilot and use of standards in their program implementation. HCI worked with SMWASD and partners, including CBOs, to ensure that the standards are used in routine service delivery to children, making the use of standards an integral part of OVC programs as well as the national strategy.

Gathering Evidence on Standards

In FY12, USAID provided field support to HCI to support the piloting of the draft standards in six states, to gather evidence that using standards improves quality of services and that standards are doable, relevant, effective, and appropriate. Over the course of the year, HCI's support for piloting of standards expanded to 12 states covering all six of Nigeria's geopolitical zones. HCI staff in each zone support SMWASD, US government-funded implementing partners, and local CBOs to introduce the standards in their operations using improvement methods to assess current performance, introduce changes to improve their attainment of the service standards, and measure the effect on children's well-being using the CSI.

Figure 8 below shows the increase in the number of vulnerable children who have been provided with birth certificates in Akwa Ibom State, where three CBOs are engaged in piloting social protection and other services.

Figure 8. Nigeria: Increase in birth registration of vulnerable children in piloting, Akwa Ibom State, January – September 2012



HCI coached and mentored community QI teams on gathering evidence on whether the standards are understandable, feasible, relevant, and appropriate. Follow-up CSI assessment for the vulnerable children was used to gather evidence on improvements as a result of using the standards. Some of the improvements were:

- Increased uptake of health care services in Unwuan Sarki Primary Health Care Clinic, Kaduna state;
- Increased number of caregivers during meetings due to access to Household Economic Strengthen activities in Television community, Kaduna South;
- Improved nutritional status of vulnerable children in Akwa Ibom;
- Increase in school attendance and performance of children in Kaduna;
- 70% increase in OVC re-enrollment in school in Ikwuator Idembia community in Ebonyi state

Institutionalizing QI

The SMWASD has taken the lead in monthly QI review meetings with other line ministries, community QI teams, CBOs, and other implementing partners to provide support to the 31 active community QI team members.

Communicating standards

The OVC service standards were communicated at all levels, federal, state and communities through QI training workshops, routine support supervisory visits, meetings and learning sessions, focus group discussion, and small group discussion. Coaches at all levels did this at different times to ensure that piloting groups fully understand and implement the contents of the standards.

Directions for FY13

HCI activities in Nigeria will be closed out in November 2012, but work in these same technical areas will continue in FY13 under the USAID ASSIST Project.

2.10 South Africa

Overview of HCI's Program in FY12

What are we trying to accomplish?	How will we know?	Geographic scale
Increase the Quality of HIV Prevention, Care, and Treatment Services	<ul style="list-style-type: none"> ▪ Increase number of health care providers trained in QA/QI methodology ▪ Increase number of facilities providing high quality PMTCT services ▪ Increase number of facilities providing high quality CT services ▪ Increase number of facilities providing high quality Basic HIV care services for HIV-infected individuals ▪ Increase number of facilities providing high quality ART services ▪ Increase compliance with guidelines in HIV services 	<ul style="list-style-type: none"> ▪ 5 out of 9 provinces (55%) ▪ 31 out of 52 districts (60%) ▪ The Mid-year population estimate (2011) in these 5 provinces is 30 million ▪ The estimated overall HIV prevalence rate in the country is \approx 10, 6%; with a total number of \approx 5, 38 million people living with HIV in 2011. ▪ The number of new HIV infections for 2011 among the population aged 15 years and older is estimated at 316 900
Health System Strengthening	<ul style="list-style-type: none"> ▪ Percentage of districts with completed District Health Plans (Achieved in FY12: 100%) ▪ Percentage of district implementing the PHC Supervisor's Manual (Achieved in FY12: 42%) ▪ Percentage of district with key program performance data reviewed and documented (Achieved in FY12: 33%) ▪ Number of DOH managers trained in QA (Achieved in FY12: 62) ▪ Proportion of districts assessed utilizing National Core Standards for Health Establishments (Achieved in FY12: 10/31) 	<ul style="list-style-type: none"> ▪ 5 out of 9 provinces (55%) ▪ 31 out of 52 districts (60%)
Support Districts in Implementing National and Provincial Referral Policies	<ul style="list-style-type: none"> ▪ Percentage of districts with evidence of functional integrated referral and follow-up networks for HIV care services (Achieved in FY12: 40%) ▪ Percentage of districts / provinces introducing joint operational meetings with various directorates (Achieved in FY12: 45%) 	<ul style="list-style-type: none"> ▪ 5 out of 9 provinces (55%) ▪ 31 out of 52 districts (60%)

Support Policy Development to Improve Quality of Care	▪ Number of policies and guidelines reviewed/developed (Achieved in FY12: 4)	National
Support Districts in Expanding Community Engagement	▪ Percentage of districts with functional care support groups for PLHIV at facility / community level (Achieved in FY12: 40%)	<ul style="list-style-type: none"> ▪ 5 out of 9 provinces (55%) ▪ 31 out of 52 districts (60%)

Main Activities and Results

Increase the Quality of HIV Prevention, Care, and Treatment Services

The USAID-funded Quality Assurance Project (QAP) and its follow-on HCI have worked since 2000 in South Africa, initially improving treatment outcomes in key health areas (TB, maternal and perinatal health) and then focusing on improving quality of HIV and AIDS programs. Commencing work in one province, assistance gradually expanded to cover over 214 facilities in five priority provinces: Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, and North West.

In FY12, HCI's role was shifted from directly supporting facilities to that of a Specialized Provincial Partner for Quality. The objectives of HCI technical assistance in South Africa in FY12 were to: 1) increase uptake of HIV/AIDS prevention, treatment, care, and support services; 2) improve prevention and treatment outcomes; and 3) increase efficiency of service delivery. HCI provided support to the Department of Health (DOH) at the national and provincial levels, providing mentorship and coaching support to district level staff in Eastern Cape, Limpopo, North West, KwaZulu-Natal, and Mpumalanga provinces. In line with the focus on provincial level support, HCI's support extended to

- Attendance and participation in Provincial AIDS Council meetings (3 provinces)
- Preparation for and participation in Provincial HIV Quarterly Reviews: HAST and CCMT directorates (25 districts)
- Provision of technical support during PMTCT mid-year “stock-taking” reviews (10 districts)
- Elimination of mother-to-child transmission QA training (13 districts)
- Anti-retroviral therapy audits utilizing DOH ‘Standards of Care’ (SOC) tool (7 districts)
- Participation in HIV counseling and testing (HCT) awareness campaign (5 provinces)

In terms of the performance, the project has progressed very well towards meeting many of its output and component-objective targets for FY12. In supported provinces, more than 93% of clients seen were counseled and tested for HIV, approximately 35% of whom were males and 65% were females. Among the first antenatal clients, more than 95% of pregnant women were counseled and tested for HIV.

HCI has also done valuable work to strengthen compliance with NDOH HIV guidelines, and this work has led to some of the following results: CD4 testing rates among PMTCT clients improved from 84% (Q2 FY10) to 95% (Q4 FY12); DNA PCR HIV testing for HIV-exposed babies improved from 30% (Q2 FY10) to 60% (Q4 FY12) and the ART defaulter rate amongst HIV-positive patients on ART dropped from 40% (Q2 FY10) to 32% (Q4 FY12). Improvement in programmatic indicators is shown in Table 6.

HCI has played an important technical support role with the National Department of Health in South Africa. At the national level, HCI staff are members of the PMTCT Steering Committee, chaired by the NDOH. HCI staff are also members of the QA Technical Working Group for PMTCT and have been leading discussions on the role of QA in the implementation of Elimination of MTCT. To this end, HCI staff, with several key stakeholders have trained over 500 DOH PMTCT program managers, information officers and clinic supervisors on the role of QA in EMTCT. HCI staff are also part of an NDOH team that scrutinizes PMTCT data on a quarterly basis and provides critical feedback to provincial staff.

Table 6. South Africa: Improvement in targeted program indicators in FY12

Program	Indicator	Baseline value (indicate date and number of sites)	Achievement FY12 (indicate date and number of sites)	Difference	Duration of obs. (months)
PMTCT	HIV pre-test rate ANC clients (%)	91% (120 sites; Q2'07)	95% (320 sites; Q4'12)	4%	66
	HIV Test rate among ANC clients (%)	86% (120 sites; Q2'07)	100% (320 sites; Q4'12)	14%	66
	CD4 count test rate among HIV+ ANC (%)	84% (196 sites; Q2'10)	99% (320 sites; Q4'12)	15%	66
HCT	HIV testing rate (%)	91% (124 sites; Q2'07)	93% (320 sites; Q4'12)	2%	66
	HIV clients tested and received test results (%)	99% (124 sites; Q2'07)	100% (320 sites; Q4'12)	1%	66
	Referral for TB screening rate among newly HIV-positive clients (%)	45% (198 sites; Q4'09)	90% (320 sites; Q4'12)	45%	36
HIV and TB care and support	TB screening rate among new HIV-positive clients	76% (193 sites; Q2'10)	90% (320 sites; Q4'12)	14%	30
	Referral rate for CD4 test among TB & HIV+ patients (%)	84% (193 sites; Q2'10)	92% (320 sites; Q4'12)	8%	30
ART	% of eligible HIV-infected clients provided with ART	5% (12 sites; Q2'08)	85% (30 sites; Q4'12)	80%	54

Health System Strengthening

As part of HCI's mandate, health system strengthening activities involve QA/QI, District support and M&E initiatives. In FY12, HCI staff participated in the following QA/QI initiatives: QA training; on complaints procedures; QA evaluations of the patient experience of health care; assessment of PHC service delivery; participation in National Health Insurance inspection of hospitals; the development of facility-level improvement plans (13 districts); and facilitated the establishment of quality improvement teams (12 districts).

In line with the National DOH strategy to strengthen the district-level platform for service delivery, HCI staff was involved in the following initiatives: District Maternal and Perinatal Mortality meetings; development of District Quality Improvement Plans (15 districts); establishment of District Quality Assurance forums (seven districts); compilation of District Health Expenditure reports (10 districts); provision on training in Excel, District Health Planning, and Health Expenditures tracking (seven districts); and provision of technical assistance for completion of District Health Plans (12 districts). In supported provinces, HCI staff assisted M&E program managers to develop and implement Provincial Monitoring and Evaluation Plans; prepare for provincial M&E forums and quarterly review meetings (three provinces); implementation and monitoring of the TIER.net system process for ART; and support visits for ARV data clean-up and TB/HIV data management.

Referrals and Linkages

In supported provinces, HCI staff provided technical support for the implementation of national and provincial referral policy guidelines. In particular, HCI staff advocated for the introduction of joint operational meetings with various directorates, on a quarterly basis. HCI staff have also participated in the development of guidelines for functional integrated referral and follow-up networks for HIV care services and are in the process of assisting provincial program managers to track the functionality of these networks, through modern technology.

Policy Development

In supported provinces, HCI staff have contributed to the development of M&E and strategic information policies. At National level, HCI staff have contributed to the development of guidelines for PMTCT QA/QI and job aids on the use of PMTCT information for program improvement. HCI staff have also been involved in assisting the PEPFAR M&E team to review and develop appropriate indicators to measure technical assistance for all PEPFAR-funded partners.

Community Engagement

In FY12, HCI staff worked closely with the KwaZulu-Natal Provincial DOH to roll out the provincial family planning (FP) strategy in communities and implement FP training for health workers across the province. Specifically, HCI staff provided technical support for developing its strategy for community outreach, training on FP methods, conducting a rapid assessment of knowledge and attitudes towards FP services, and assessing sites for the availability of FP equipment.

Directions for FY13

In FY13, HCI will continue to provide support to the following directorates / clusters: HIV and AIDS; Strategic Planning; District Health Services; Family Planning, Quality Assurance, M&E/Information Management, at national and provincial level. In line with specific National and Provincial DOH initiatives, including the Negotiated Service Delivery Agreement, National Health Insurance, and PHC Re-engineering, HCI staff will provide technical assistance to supported provinces. HCI will continue to support the five provinces (Eastern Cape, Limpopo, North West, KwaZulu-Natal, and Mpumalanga). It is expected that HCI assistance will transition to the USAID ASSIST Project by April 2013.

2.11 Swaziland

What are we trying to accomplish?	Activities	Geographic scale
Scale up and Strengthen the Provision of TB/HIV Services, Including MDR-TB Care and Treatment in PHC Clinics and Communities	<ul style="list-style-type: none"> ▪ Increasing the number of peripheral clinics involved in TB (including MDR-TB) diagnosis and treatment. ▪ Ongoing support supervision, mentoring and training of health care workers ▪ Developing and implementing a down referral strategy for TB and MDR-TB patients to peripheral clinics and the community ▪ Providing TA to strengthen national and regional activities including supply chain management of drugs, case management and QA/QI activities and strengthen information management systems including recording and reporting tools. ▪ Institutionalize quality improvement at the facility level ▪ Strengthen the capacity of MOH Tuberculosis control and AIDS programs to lead and manage roll out of TB/HIV care and treatment services 	<p>HCI provides support to all 4 regions of the country. HCI supports 67 (100%) facilities providing TB diagnostic and TB treatment initiation services</p> <p>HCI supports 54 out of 96 facilities that provide only TB treatment refill/ treatment continuation services.</p>
Strengthen Adult HIV Care and Treatment in TB Clinical Settings	<ul style="list-style-type: none"> ▪ Provide TA to ensure implementation of guidelines. ▪ Providing support for provision of cotrimoxazole prophylaxis to co-infected TB patients. ▪ Conduct support supervision and on-site mentoring for implementation of the 3Is in HIV care settings ▪ Provide support supervision and ongoing mentoring to improve HIV testing and counseling in TB settings ▪ Strengthen provision of ART services to TB co-infected patients. 	<p>HCI supports all 67 diagnostic facilities and 55 of 96 TB treatment refill clinics to provide Adult HIV care and support (HTC, CPT).</p> <p>Of the 67 TB diagnostic facilities, 65 offer ART in the TB clinic in All 4 regions of the country</p>

	<ul style="list-style-type: none"> ▪ Increase the number of TB sites initiating ART ▪ Provide support supervision & on-site mentoring for quality ART provision in TB clinics to TB/HIV co-infected adults. ▪ Support supply chain management for ART provision in TB clinics. ▪ Conduct trainings for health care workers on Integrated Management of Adolescent and Adult Illness 	
Strengthen Pediatric Treatment, Care, and Support for Co-infected Children	<ul style="list-style-type: none"> ▪ Support compliance with guidelines on the provision of Cotrimoxazole (CTX) prophylaxis for HIV-exposed and infected children ▪ Support scale-up of IPT among HIV-infected children ▪ Ongoing support for compliance with guidelines for intensified case finding and the provision of IPT for HIV-exposed and infected children ▪ Trainings on pediatric TB, TB/HIV ▪ Increase the diagnostic capacity for TB in children through use of mucus extractors and PPD ▪ Strengthen provision of ART services to TB co-infected patients. ▪ Work with relevant partners to provide ongoing support for compliance with guidelines for provision of ART for eligible children 	HCI supports all 67 diagnostic facilities and 54 of 96 TB treatment refill clinics to provide pediatric HIV treatment, care and support
Health Systems Strengthening	<ul style="list-style-type: none"> ▪ Clinical systems mentoring and supervision ▪ Training of both HCI staff and health care workers in the programmatic management of TB and MDR-TB. ▪ Public private partnerships that serve to inform the employees ▪ Provision of job aids and work tools to ease the carrying out of activities ▪ Minor renovations of selected facilities ▪ Provide support resources and staffing for TB/HIV activities 	Country wide
Conduct Operational Research to Inform Technical Assistance	<ul style="list-style-type: none"> ▪ Assess the effectiveness of mucus extractors to increase diagnostic yield of sputum in children ▪ Investigate the adverse effects of ARVs in TB patients on treatment. ▪ Improving the MDR-TB diagnostic pathway ▪ Incidence of TB among health care workers ▪ Impact of decentralization on TB mortality ▪ Mapping and identifying roles and responsibilities for CHWs in provision of community TB/HIV services 	Targeted
Strengthen Community Participation in TB/HIV and MDR-TB Services and Strengthen Linkages with NGOs and CBOs	<ul style="list-style-type: none"> ▪ Support clinic health committees to strengthen the linkages between the clinics and the community ▪ Support community sensitization and engagement in TB/HIV and MDR-TB activities ▪ Support the development of community-based support program for medication adherence among TB/HIV co-infected adults 	HCI is working with the Salvation Army, the Luke Commission, and Cabrini Ministries to provide community TB services.
Cross-cutting Areas, Special Populations, and	<ul style="list-style-type: none"> ▪ Strengthening child survival activities through supporting the NEPI to promote TB prevention through BCG ▪ Implement Gender mainstreaming into HCI activities 	Country wide

Global Health Initiative	<ul style="list-style-type: none"> ▪ Work with Defense Forces to increase the number of military clinics providing TB/HIV services ▪ Work with Police Force to establish TB/HIV services at the Police College clinic ▪ Support the Correctional Service to set up a TB clinic at the Matsapha Prison 	
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Main Activities and Results

Scale up and Strengthen the Provision of TB/HIV Services, Including MDR-TB Care and Treatment in PHC Clinics and Communities

During FY12, HCI supported the Government of Swaziland to expand coverage and integration and improve case and programmatic management of TB, TB/HIV and multi-drug resistant tuberculosis (MDR-TB) services and help health service providers better meet the needs of underserved populations, especially adults and children at high risk of TB and MDR-TB, including people living with HIV/ AIDS, vulnerable populations like prisoners, uniformed services, and people with diabetes. HCI activities cover all four regions of Swaziland, supporting all 67 facilities in the country that provide TB diagnostic and treatment initiation services and 54 out of the 96 facilities nationwide that provide TB treatment and continuation services.

In FY12, focus was placed on the delivery of quality support supervision and clinical mentoring of the facilities already providing care. HCI participated in assessment of facilities for accreditation to become diagnostic units, additionally building capacity both at regional and national level to conduct assessments. Through the process of assessment and accreditation and capacity building at facility level, HCI increased the number of peripheral clinics involved in sputum collection, TB treatment initiation and treatment follow up. At the end of FY11, there were 60 diagnostic facilities which have now been scaled up to 67 over the year (17 in Hhohho, 25 in Shiselweni, 19 in Manzini and 6 in Lubombo). There are currently six facilities providing MDR-TB treatment initiation (Piggs Peak hospital, TB hospital, Hlathikhulu, Nhlanguano, Matsanjeni and Mankayane hospitals), 67 TB diagnostic facilities and seven primary health clinics providing follow up care of MDR-TB patients.

HCI staff provided clinical mentoring and support supervision to implement TB case finding, case holding, and recording and reporting to all 66 diagnostic sites and 55 of 97 treatment clinics including five prisons. The HCI team conducted clinical mentoring and support supervision to 66 diagnostic TB centers and 55 of 97 treatment clinics and the five prisons over the course of the year. Of the 960 planned supervisory visits, 800 were conducted using the national support supervision tool. The mentoring visits involved either a one-on-one session with the TB clinic nurses or on-site training for weak implementation areas like infection control practices or the introduction of new services like TB treatment initiation.

Providing cell phones and air time to health facilities to communicate with patients has improved TB treatment adherence and treatment outcomes. Seven health facilities and one community MDR-TB team benefited from this initiative. Additionally, a vehicle and driver have been provided to support the mobile clinical teams and home assessment teams. Since February 2012, 250 homes were visited, 210 home assessments were conducted, and 230 patients have benefitted from this service.

HCI provided technical assistance to the NTCP to review and adapt the programmatic management of drug resistant tuberculosis toolkit during this past year. This was done through a National Stakeholder's consultative workshop attended by development partners, civil society and the private sector. The toolkit is envisioned to assist in strengthening the program in identifying the gaps and develop an implementation plan.

HCI has supported the revision of the MDR-TB guidelines in keeping with international recommendations. Additionally, the MDR-TB training curriculum was reviewed and adapted to reflect

the changes in the guidelines. Standard operating procedures for management of side effects were distributed to DR-TB treatment sites.

HCI provided technical assistance for both facility and community management of MDR-TB, strengthening national and regional structures to support both models. HCI supported the National TB Hospital to improve communication with other health facilities through providing telephone and internet access for use by the staff at the TB Hospital. These communication facilities ensure direct communication with the National TB Reference Laboratory, the TB diagnostic facilities, community health workers, and health programs for updates, referrals, and follow up of patients.

HCI participated in supply chain activities to ensure uninterrupted First Line TB drugs. HCI was involved in quantification, ordering, management of drug stock level at health facility level, and reporting to the TB program. HCI also worked closely with NTCP, Central Medical Stores and other development partners to support the supply chain management for Second Line TB drugs and consumables at the national level and facilities.

HCI worked with NTCP and National TB Reference Laboratory to develop a surveillance mechanism for patients diagnosed with DR-TB, which will be shared with health facilities. A dedicated health information officer was placed at the TB Hospital and is responsible for updating the national MDR-TB register. HCI continued to support the GIS mapping of MDR-TB patients and treatment supporters throughout the year through training of community treatment teams and provision of GIS mapping equipment, transport, and logistics. The mapping facilitates linkage of treatment supporters to patients located in the same geographical areas and has strengthened the community treatment program's ability to provide regular home assessments and visits and patient follow up. In Hhohho, Manzini and Lubombo regions there are 250 patients and 150 treatment supporters mapped so far. Additionally, during home assessments and visits, active contact tracing and follow up are performed. Contacts that screen positive for TB symptoms are actively referred and followed up by the facility at which the index case is registered.

The project worked with the National Quality Assurance Programme to develop a QA strategic plan. The team also participated in stakeholder's QI consultation meeting to strengthen implementation and monitoring of QI activities at facility, regional, and national level. Technical assistance has been provided to the national QA office to; operationalize the strategic plan, conduct training for 15 Nazarene Health Institutions supervisors on QA/QI and facilitate a learning session for Nazarene Health Institutions (17 clinics and a regional hospital) and support use of the journal to document QA/QI projects.

HCI has participated in multiple trainings facilitated by HealthQual targeting Regional Health Management Teams. Each region identified QI projects. HCI works closely with the Hhohho Regional Health Management Team whose aim is to improve supportive supervision and clinical mentoring.

In November 2011, HCI established a QI team at Phocweni Army clinic for TB/HIV and is working with the NTCP to establish a home-based care team for bedridden soldiers.

Strengthen Adult HIV Care and Treatment in TB Clinical Settings

HCI continued to support the roll-out of ART in TB clinics through support for improving patient flow in TB settings and implementing a "one-stop shop" model in TB clinics. To ensure compliance with treatment guidelines as well as provision of quality treatment services, HCI provided regular clinical mentoring to health care workers at supported health facilities as well as onsite training, to reduce the amount of time health workers have to spend away from the facility attending training. Currently, 65 of the 67 TB diagnostic clinics are providing ART. The current uptake for ART in adults is 71% which is an improvement from 64% during the previous quarter. HCI coordinates with the TB/HIV Regional team to develop strategies for improving ART uptake in TB settings, including improved patient flow and the implementation of the one-stop shop model in the TB clinics.

HCI has also continued to support SNAP and other development partners to train nurses for Nurse-led ART Initiation Program (NARTIS) in both hospitals/health centers and primary health clinics to increase access to ART for clients, reduce delays in initiation of treatment, and implement the task shifting model adopted by Swaziland. Sixty-five of the 67 TB clinic nurses have received this training. The remaining two clinics are managed by nursing assistants who do not qualify for NARTIS.

To ensure compliance with guidelines as well as provision of quality treatment services, HCI provided regular clinical mentoring and supportive supervision to HCWs at health facilities. To reduce the amount of time a HCW has to spend away from the facility attending training, HCI has instituted onsite trainings and this has led to greater numbers of staff within a facility receiving standardized training on a topic.

All facilities providing TB treatment and care services have been supported to provide HIV care. The clinic staff received ongoing mentoring and support supervision to ensure the high levels of uptake are maintained. Job aides and IEC materials on infection control as well as TB screening were disseminated to the facilities. HCI supported TB screening and the provision of Isoniazid Preventive Therapy in ART clinics. To date, 25 facilities in Shiselweni, seven facilities in Hhohho, two in Lubombo and four in Manzini provide Isoniazid Preventive Therapy to HIV-infected patients; 2,316 eligible HIV-positive patients received Isoniazid Preventive Therapy over the year. On average, 47,000 patients are screened for TB per quarter in 13 ART clinics (six hospitals, five health centers, one Public health unit and one NGO clinic and their feeder clinics). The HTC uptake rate in adults and adolescents is 91%, positivity is 78%, and CPT uptake is 99%. Infection control assessments also took taking place during the support visits and facilities have been trained onsite on how to develop site specific infection control plans.

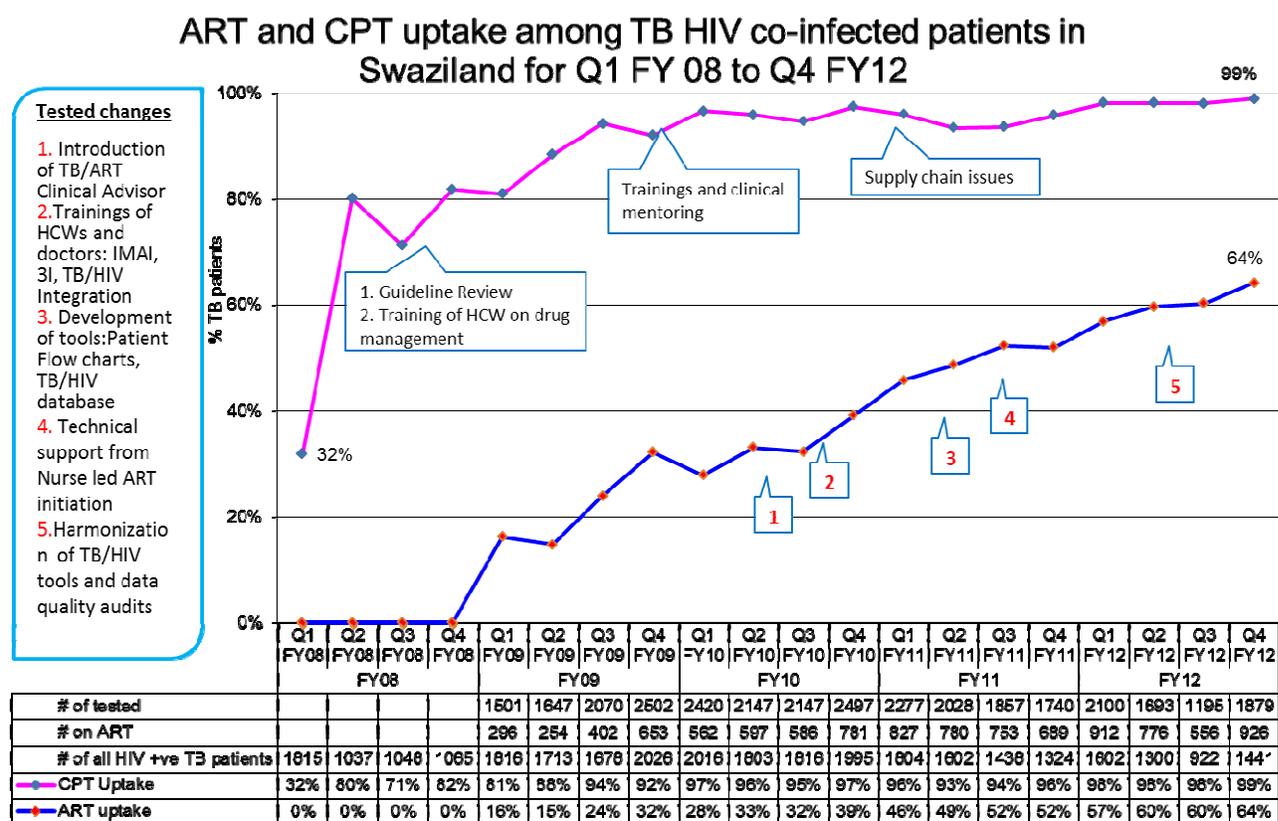
HCI supported TB screening and management among PLWHA, by ensuring TB screening in the HIV clinics is done routinely, the TB screening was extended to woman and child clinics (PHU). All patients who screen positive in the PHUs are referred to the TB clinics for further management. This has proven to be one of the points of loss to follow-up and a discussion with the management of PHUs and supporting partners is ensuing to develop a care plan within the PHUs for those who may have TB. The project also supported review meetings with the cough officers to address any hindrances that are facing the TB screening. As a new initiative, HCI has started discussion with NCD department to introduce TB screening into the diabetic clinics as this is another at risk population. Figure 9 below shows progress in raising the ART uptake rate among adult and adolescent co-infected patients.

Strengthen Pediatric Treatment, Care, and Support for Co-infected Children

In FY12, HCI focused on provision of CPT, intensified case-finding for HIV-exposed and infected children, and provision of IPT among HIV-infected children. HCI has provided training on pediatric TB, TB/HIV and increasing the diagnostic capacity for TB in children through use of mucus extractors and PPD. The HIV counseling and testing uptake in children is currently at 81%, the positivity rate is 66%, and the CPT uptake is 98%. To address the lower rate in HIV counseling and testing uptake, orientation on the new HTC guidelines is ongoing. It is hoped that the concerns of the HCWs regarding consent to HIV testing in children will be allayed.

HCI continues to strengthen and support health care workers to comply with guidelines on the provision of Cotrimoxazole prophylaxis, ICF for HIV-exposed and infected children, and provision of Isoniazid Preventive Therapy among HIV-infected children. HCI also works with the Expanded Program for Immunization (EPI) to ensure BCG vaccination is available for all children. At Well Child Clinics, in addition to the current contact tracing, TB screening has been introduced using a pediatric screening tool developed in-country. All children under five and HIV-infected children who screen negative for TB are offered isoniazid prophylaxis. All exposed or HIV infected children attending TB clinics are given prophylactic cotrimoxazole and monitored for malnutrition. If a child is malnourished, they are referred to an outpatient therapeutic point for feeding.

Figure 9. Swaziland: ART and CPT update among TB-HIV co-infected patients, FY08-FY12



HCI continues to support Pediatric HIV treatment; strengthening provision of ART services to TB/HIV co-infected children through supportive supervision, clinical mentoring and use of onsite trainings. Working with relevant partners like Baylor Centre of excellence, ongoing support is provided for compliance with guidelines for provision of ART for eligible children and strengthening documentation in facilities providing ART for children. Currently 65 of the 67 TB diagnostic clinics are providing ART. The current uptake for ART in children is 69%. Pediatric TB/HIV management modules have been incorporated into the current HIV training syllabus and are updated on a regular basis.

Health Systems Strengthening

In FY12, HCI hired an HSS Advisor to provide technical assistance in a number of MOH health system strengthening activities including: promoting common understanding of HSS and its integration in the health sector priorities; participating in a HSS forum chaired by the Deputy Director Public Health; facilitating coordinated assessments and implementation of the six HSS building blocks.

In the area of human resources for health (HRH), HCI, working in close collaboration the lead PEPFAR partner on HRD, HRAA, WHO and the MOH HSS focal person, advocated for the establishment of the HRH TWG. The TWG reviewed of the draft HRH policy, national HRH strategic plan 2012-2016 which clearly articulates HRH planning, development, performance, management, retention, information, and research on human resources for the health care sector. During the various nurse managers for a, this activity served to created awareness of the critical role of HRH in strengthening health system performance and improving health outcomes.

HCI also participated in the MOH task force in development of staffing norms road map. A preliminary report will be out in December 2012.

HCI jointly with the regional health management team (RHMT) conducted a programmatic review of the Hhohho region TB, TB/HIV and MDR-TB program. The review included tools development, data collection, entry, and report writing. Participation of the RHMT at all the levels facilitates and ensures sustainability, ownership, and reinforces the RHMT's stewardship role. Following the baseline assessment of facilities for the Hhohho region, an action plan was drafted with the RHMT and model clinics were identified for intensified support. The model clinics will illustrate the newly launched Essential Health Care Package which includes community support and participation in delivery of health care services.

Conduct Operational Research to Inform Technical Assistance

HCI developed protocols and concept papers on key issues affecting our performance in the field during FY12. Data collection and analysis has been completed to study reducing TB diagnostic and treatment delays. The results inform the development of an integrated set of recommendations for TB program managers and service providers regarding the appropriateness of different strategies for reducing delays in patients accessing diagnostic health services and treatment in Swaziland. Also completed is an assessment of the TB/HIV service delivery assessment in select Hhohho region facilities. The facilities included will form the basis for the implementation of the model clinic concept.

Data collection is ongoing to investigate the adverse effects of ARVs in TB patients on treatment. HCI is working in collaboration with MSH on the reporting of all reported adverse effects. To date, adverse reporting forms have been distributed to facilities and onsite staff training on reporting of adverse effects is ongoing.

Concepts and discussions for implementation are ongoing to assess the effectiveness of mucus extractors to increase diagnostic yield of sputum in children, focused on two centers (Mbabane Government Hospital and Pigg's Peak Hospital). There have been challenges procuring the mucus extractors and hence delay in study completion. Also ongoing are studies on improving the MDR-TB diagnostic pathway, incidence of TB among health care workers, and mapping and identifying roles and responsibilities for CHWs in provision of community TB/HIV services.

HCI participated in CDC/ICAP's ART cost-effectiveness study. The team analyzed the findings from the study which looked at implementation of ART in Swaziland in the last eight years. Variables looked at included prescribing practices, number of patients retained in care, and number of patients developing TB while on ART.

HCI, in collaboration with NTCP, conducted four quarterly data review workshops: the four workshops had over 230 participants from 40 TB health facilities, NTCP, HCI and other stakeholders. The workshops were able to facilitate the review of TB quarterly reports, conduct data verification, discuss areas of improvement in TB management, and review TB data management. Facility and regional teams developed improvement plans to assist with improvements in TB service delivery.

Strengthen Community Participation in TB/HIV and MDR-TB Services and Strengthen Linkages with NGOs and CBOs

HCI, in conjunction with the NTCP, developed a down referral strategy for TB patients to peripheral clinics and the community. The strategy provides referral processes to and from the PHCs and community programs. HCI also supported the integration of the HIV care and treatment referral standard operating procedures within the TB control program. Over the year, Pigg's Peak hospital and RFM Hospital have been capacitated to implement the down referral strategy.

During the year, HCI engaged 10 clinic health committees in Hhohho and Manzini regions to increase their involvement and participation in TB, TB/HIV, and MDR-TB issues. The committees were trained on TB symptom identification, use of referral tools, and the roles and responsibilities of community TB treatment supporters and other community health care workers. It is expected that this intervention

will reduce defaulter rates, and treatment interrupters in the community as well as improve community linkages.

MDR-TB activity in the northern Hhohho covers a total of 22 communities which are supported by six clinics in the northern Hhohho region where the 52 cohort patients come from. Patients are gradually being linked to community support as some are very distant from treatment supporters. The Hhohho regional team started twice a week visits to communities for defaulter tracing, contact tracing, mapping, and linking patients to community support where possible.

In order to strengthen ambulatory and community MDR-TB care, HCI dedicated a vehicle and driver to support the TB Hospital and Piggs Peak Hospital. Mapping of the patients and community treatment supporters is also done during the visit. Forty-three home assessments (26 OPD and 17 Inpatients) have been conducted and 113 contacts were screened with only 13 screening positive. All their sputum cultures and DST were done and came out negative.

Cross-cutting Areas, Special Populations, and Global Health Initiative

HCI is working with Gender Based Organizations to ensure our activities are gender sensitive. HCI focused on data review to determine any gender disparities in those receiving TB/HIV services, leading to a decision to focus on pediatric TB/HIV care. Discussions are underway with SWAGAA, a local gender-focused NGO, to facilitate broader capacity building on gender mainstreaming and a comprehensive long-term program for collaboration which would include incremental training sessions, mentorship, referral of patients/survivors for services and comprehensive support, among other interventions. HCI has worked to address some of the identified gender disparities by providing TB information, education and communication (IEC) materials targeting males through their spouses as well as developing campaigns that address men directly.

HCI provided support to the uniformed forces, and the prisons health services to increase TB case detection and treatment success. HCI supported one Military facility with three feeder clinics, one police clinic, and five prisons through onsite training, support supervision, and clinical mentoring. The intervention areas were: TB Screening, Sputum collection and handling, cough etiquette, management of TB/HIV, ART, isoniazid prophylaxis, infection control and recording and reporting. Out of the 11 correctional facilities, three have had an assessment and accreditation to provide integrated TB/HIV and ART services. A road map has been developed for the packages of care for each facility based on size and inmate capacity and the process of assessing and accreditation for them. Since the introduction of TB screening in the correctional settings in 2011, 1153 prisoners have been screened in six correctional institutions and 19 have been diagnosed with sputum smear positive TB.

In recognition of the risk that diabetic patients face, HCI developed an integrated training module on TB/Diabetes. Training on TB/diabetes was conducted for clinicians at Mbabane government hospital. Further trainings are planned in FY13.

In recognition of the TB risks health care workers face, HCI has signed a Memorandum of Understanding with the Wellness Center to support activities that will increase TB prevention efforts and case finding for health care workers. The Wellness Center is an NGO providing health care services to health care workers with a focus on HIV and TB located in Manzini. HCI will support the Wellness Center to raise awareness and conduct TB screening among health care workers to assist with early identification of TB.

Directions for FY13

In FY13, HCI will transition support for 65 hospitals, clinics and health centers that provide ART care and treatment at the TB clinics to the USAID ASSIST Project beginning in October 2012. HCI activities in Swaziland in FY13 will focus on wrapping up some pending activities from FY12 and project close-out.

2.12 Tanzania

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention (see map below)
Support the MOHSW and Implementing Partners in strengthening QI interventions in existing demonstration collaboratives	Development and dissemination of national community home-based care (HBC) standard operating procedures (SOPs) Integration of HBC and most vulnerable children (MVC) services in Muheza district, Tanga region Prototype the SOPs in Tanga and Dodoma and develop national scale up plan	Development of SOPs: National activity Prototype SOPs: Tanga <u>Tanga region:</u> Population - 1.9 million, Adult HIV prevalence - 3.8%, Estimated PLHIV on ART -17,128 <u>Tanga district:</u> HBC and MVC services supported by 2 health facilities out of 7 <u>Dodoma Region:</u> Population – 1.9 million Adult HIV Prevalence- 3.3% Estimated PLHIV on ART 13,120 Prototyped in 1 out of 6 district in Dodoma within 7 wards out of 37
	Improve quality care in patients with chronic conditions through patient self-management approach in Morogoro	Implemented in one rural and one urban district, <u>Morogoro Region:</u> Population - 2.1 million. Adult HIV prevalence - 4.2%, Estimated PLHIV on ART: 16,327 Health Facilities: 14 out of 33
	Integration of provider performance management into Mtwara ART/PMTCT QI collaborative	<u>Mtwara Region:</u> Population. - 1.3 million, Adult HIV prevalence - 3%, Estimated PLHIV on ART: 9,668 Health Facilities: 9 out of 60
	Support the ART/PMTCT improvement collaborative in Lindi to achieve improvement targets and strengthen district health management performance through application of QI techniques	<u>Lindi Region:</u> Population - 872,188, Adult HIV prevalence of 3.9%. Estimated PLHIV on ART: 6,640 Health Facilities: 10 out of 53
	Narrow the attrition gaps in PMTCT in Iringa Region	<u>Iringa Region:</u> Population – 1.6 million, Adult HIV prevalence - 14.7% Estimated PLHIV on ART 44,595 Health Facilities: 10 out of 45
Provide TA to IPs, National AIDS Control Program (NACP), RHMTs, and CHMTs to roll out PMTCT and infant feeding QI collaboratives in new regions	Support IP partners and RHMTs to extends ART/PMTCT QI to new region (IP) and new Health centers (RHMT)	In 2/26 regions <u>Shinyanga Region</u> (AGPAHI): Population. - 3,5 million, adult HIV prevalence 7.6%; Estimated PLHIV on ART 21,644 Health Facilities: 10 out of 46 <u>Kilimanjaro Region</u> (EGPAF): pop. - 1.5 million, adult HIV prevalence 1.9%, Estimated PLHIV on ART 15,559 Health Facilities: 13 out of 41
Improve the scope and quality of PMTCT services	Prototype the WHO 2010 PMTCT new guidelines in Iringa	In 1/26 regions <u>Iringa Region:</u> pop. – 1.6 million, Adult HIV prevalence - 14.7% Estimated PLHIV on ART 44,595 Health Facilities: 11 out of 45
	Integrate PMTCT, Pediatric HIV and RCH services	In 1/26 regions <u>Manyara Region:</u> Pop: 1,3 million: Adult HIV prevalence: 1.7%; Estimated PLHIV on ART: 4,862 Health Facilities: 6 out of 27

Provide TA to Department of Social Welfare (DSW) and Most – Vulnerable Children (MVC) Partners to roll out and document QI standard for MVC services	Provide TA to DSW and IP to communicate the National QI guidelines and service guidelines	Ten IPs - FHI/Tunajali, CRS, Africare, PACT, UNICEF, Save the Child, Balm Gilead, Walter Reed and Pathfinder
	Support IPs to strengthen MVC QI interventions	CRS, Africare, Save the Children, Balm Gilead, Water Reed and Pathfinder
	Work with DSW and UNICEF and expand the MVC demonstration QI collaborative in Bagamoyo to cover the whole district	<u>Pwani Region</u> : Population 1million: Prevalence: 5.3% Estimated number of MVC in Bagamoyo 5,500 Implemented in 1 out of 6 districts, all 22 wards

Main Activities and Results

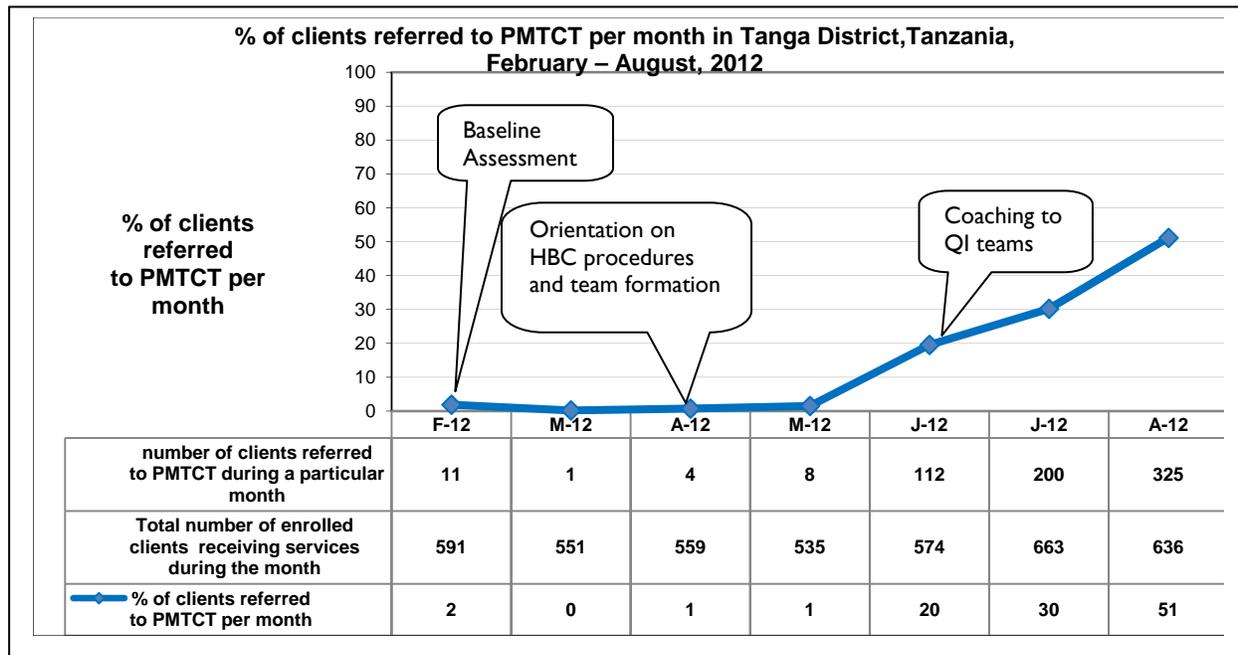
In FY12, HCI continued to work with structures of the Ministry of Health and Social Welfare (MOHSW) and implementing partners to move to scale lessons learned from the regional improvement collaboratives in Tanga, Morogoro, Mtwara, Lindi, and Iringa and test new ideas to increase access, efficiency, equity, and effectiveness of HIV/AIDS care. To ensure institutionalization and harmonization of QI efforts, the project supported the development of a Sector QI Strategic Plan that also defined the national QI agenda. In addition, new improvement ideas were tested in a number of regions, including strengthening patient self-management in Morogoro, exploration of options of strengthening District Health Management to provide QI leadership in Lindi, finding solutions to barriers to PMTCT in Iringa, and prototyping the latest WHO PMTCT guidelines in Njombe district of Iringa Region. Other project-supported improvement activities sought to scale up ART/PMTCT improvement activities to new sites in Shinyanga, Kilimanjaro, and Manyara regions and spread improvements in community-based programs for vulnerable children and home-based care (HBC) in Tanga, Bagamoyo and Kigoma regions.

Develop and Disseminate National Community Home-Based Care Standard Operating Procedures

In FY12, HCI worked with the MOHSW Technical Working Group to develop National Community HBC QI standard operating procedures (SOPs). At a three-day workshop, national consensus was reached on the 2011 HBC SOPs and simplified Pocket Guides in English and Kiswahili were developed. An additional three day workshop was held for HCI, MOHSW/NACP, and BAKITA (The Kiswahili Council of Tanzania) to come up with consensus on the appropriateness of the Swahili language used during translation of the SOPs. Six months of data (August 2011 to January 2012) were collected and review of monthly reports prior to orientation of service providers to the SOP pocket guide. Monitoring indicators were revised to reflect the revised SOPs. The finalized HBC SOPs were then disseminated by the MOHSW/NACP and IPs in the Lake Zone which consists of five regions of Mwanza, Shinyanga, Mara, Geita, and Kagera where a total of five RHMTs and 28 CHMTs were reached. Dissemination was also done in the Southern-Highlands zone which consists of Mbeya, Iringa, Ruvuma, and Rukwa regions where four RHMTs and 28 CHMTs participated. In total, about 300 RHMT and CHMT members were reached with advocacy on the use of HBC SOPs.

During the same reporting period, HCI prototyped the HBC SOP in Tanga and Dodoma regions to demonstrate proper usage of SOPs and document how utilization of SOP by HBC providers facilitates access to broad range of HBC services to clients. The prototyping process was preceded by pre-work followed by two days of in-class orientation of HBC service providers and later three days field practice and feedback. Thereafter, the HCI technical team followed up closely to see how the SOPs were used and documentation of key outcomes. Prototyping SOPs in Tanga involved 98 service providers and 18 supervisors from 16 out of 24 wards where they serve a total of 2,316 clients in Tanga district. In Dodoma Urban district, the same exercise involved 97 home-based care providers and 25 home-based care supervisors (total 122) in 25 out of 37 wards. Figure 10 below shows the increase in HBC clients who were referred to PMTCT services in Tanga district.

Figure 10. Tanzania: Increase in home-based care clients referred to PMTCT, February-August 2012



In addition, HCI, in collaboration with MOHSW and implementing partners, is piloting integration of HBC and MVC services in Muheza district in Tanga region. With this intervention, HCI conducted orientation training to HBC and MVC service providers on the SOP HBC pocket guide and the MVC job aid to improve client outcomes.

Improve Quality Care of Patients with Chronic Conditions through Patient Self-Management Initiatives in Morogoro

In FY12, HCI continued to support Morogoro region RHMT in rolling out patient self-management (PSM). The aim of PSM intervention in Morogoro was to develop strategies and modalities of applying self-management principles to improve the quality of care for patients with chronic illnesses using ART as the platform. As result of the initiative, the proportion of patients who attended HIV education sessions led by peer mentors rose from 0 in 2011 to 80% in 2012. Likewise, the percentage of patients at CTC who had confidence in self-management of their illness increased from 18% in 2011 to 74% in 2012 and the proportion of patients joining PLHIV groups increased from 11% in year 2011 to 50% in 2012.

Sites implementing PSM continue to monitor the process of harmonizing PSM with home based services and leverage PSM support program in the context of HIV. Morogoro Regional Hospital has integrated hypertension screening among PLHIV attending CTC services to expand the scope of conditions included for PSM. The RHMT, CHMT, Tunajali, and HCI are working to initiate income-generating activities through a council-level peer mentors support group to motivate peer mentors as an important cadre in chronic care.

Integrate Provider Performance Management into Mtwara ART/PMTCT QI Collaborative

The fourth learning session was conducted in the Tandahimba HRH collaborative, during which a team of three CHMT members and 12 service providers shared their experiences on applying QI methods to improve HRH productivity and engagement to three regional, 17 councils', and eight health facilities' management teams from the ART/PMTCT collaborative in Mtwara region. In addition, consensus to integrate HRH QI activities to the Mtwara ART/PMTCT collaborative was reached, and the first learning

session for integration of HR performance improvement initiatives into the Mtwara ART/PMTCT QI collaborative was conducted with seven out of eight participating sites. In this venture, learning from the Tandahimba HRH performance improvement initiative was applied to an additional eight sites in Mtwara. HCI, in collaboration with regional implementing partners and RHMT, conducted mentoring and coaching to the eight ART/PMTCT collaborative sites to follow up after the first learning session and introduce a new M&E framework for the HRH and ART/PMTCT integrated improvement collaborative. A total of 77 health care workers were reached during this coaching visit.

Baseline data for the new ART/PMTCT and HRH indicators were collected, analyzed, and communicated back to facilities. Average waiting time and contact time for HIV services were measured in the eight ART/PMTCT sites in Mtwara. Average patient waiting time was 55 minutes for an average 19 minutes of provider contact time.

Implement PMTCT/Infant Feeding QI Collaborative in Iringa Region to Narrow Attrition in PMTCT Service Uptake

HCI continued to provide support to PMTCT implementing partners, RHMTs, and CHMTs to implement PMTCT QI activities. Three coaching sessions were conducted for the 11 implementing sites. Two additional coaching sessions were conducted to strengthen the community component of AIMGAPS. During the coaching sessions, four RHMTs, 25 CHMTs, and 57 QI team members were supported to test and implement changes to increase PMTCT service uptake, follow up, and retention. Familiarization meetings were conducted for CBOs and FBOs from Iringa Municipal, Mufindi, and Njombe Town Council to map their location and range of HIV related community activities.

The aim was to involve these organizations to implement community-based PMTCT activities for improving uptake, follow-up, and retention in PMTCT services. A total of 27 representatives from 13 CBOs and two FBOS participated. Community groups were involved to strengthen PMTCT service uptake. A total of 143 community members from community groups were oriented on the importance of early ANC booking, men escorting their partners to ANC, mothers practicing exclusive breastfeeding for six months, and bringing children under five for follow-up at RCH clinics. The role of community group members was to solicit members in their households to participate in these aspects of care.

HCI also supported PMTCT implementing partners, RHMTs, and CHMTs to implement PMTCT QI activities to AIMGAPS in the Iringa region. The third and fourth learning sessions were conducted.

Improvements have been observed in enrollment to PMTCT and CTC from 73% to 100% and 33% to 91% respectively; the proportion of women testing for CD4 from 12% to 32%; the proportion of HIV-positive pregnant women receiving ARVs for prophylaxis and treatment from 23% to 90%; the proportion of HIV-exposed children enrolled for follow-up care from 31% to 96%, and the proportion of children receiving definitive HIV testing increased from 10% to 74%. Teams have continued to face the challenge of stock-outs of CD4 and HIV reagent testing kits which affected the performance for these indicators.

In the Iringa Region, new PMTCT registers were delivered to sites that were still using 2006 registers, and service providers were mentored on documentation and data collection pertaining to the new registers. Community health/HIV committee members from the three facilities of Iringa participated during the third and fourth learning sessions and provided feedback whereby PMTCT has been included as a permanent agenda in village meetings. The HIV committee members also participated during coaching visits where they provided feedback to their respective facilities. Kiponzelo Ward had conducted 12 meetings to 10 hamlets and gave feedback to the facility. At Ismani, service providers participated in Ward Development committee meeting and advocated for early ANC booking, men escorting their partners to ANC, exclusive breastfeeding, and child follow up. Ismani observed an increase on ANC booking from 14% to 70% in the following month. Community groups were later included as agents to strengthen the community component of PMTCT. QI teams were formed for

each of the 11 villages in the community component, and 143 members from these groups participated during the orientation session.

HCI was able to spread effective AIMGAPS changes to Kilimanjaro and Njombe regions where 13 and 10 respective spread sites have been established. In the Kilimanjaro region, the first coaching was conducted to the 12 sites of the region where RHMT and CHMT were introduced to aspects of coaching and mentoring. All facilities had QI teams in place except one which did not attend the learning session. All sites are providing FP counseling and TB screening to HIV-positive pregnant women at RCH and to HIV-positive women of reproductive age at CTC. Facilities have introduced a one-stop shop to improve patient flow. Enrollment of HIV-positive pregnant women to CTC and collecting CD4 blood samples are carried out at RCH. They are contacting women by phone or verbal messages through the neighborhood “please could you attend to the clinic to discuss issues with the service providers” to collect PCR results. Communities have been reached through messages read at all worship houses to motivate early booking for pregnant women and male support in antenatal care. Men escorting their partners to ANC are given a free check for blood pressure, weight, height, and at some places hemoglobin testing as motivation. Posters on early booking and male involvement have been developed and posted at the hospital and various public places.

The second mentoring and coaching was conducted in August 2012 to the 13 hospitals whereby two CHMT, 12 CHMT and 70 participated. There was significant improvement on teams’ performance and most of the indicators had improved such as percentage on exclusive breast feeding (48-83%), percentage of TB screening (0-88%), and percentage of mothers counseled on FP at RCH and CTC (13-85% and 0-90% respectively).

Strengthen ART/PMTCT Activities in Lindi Region

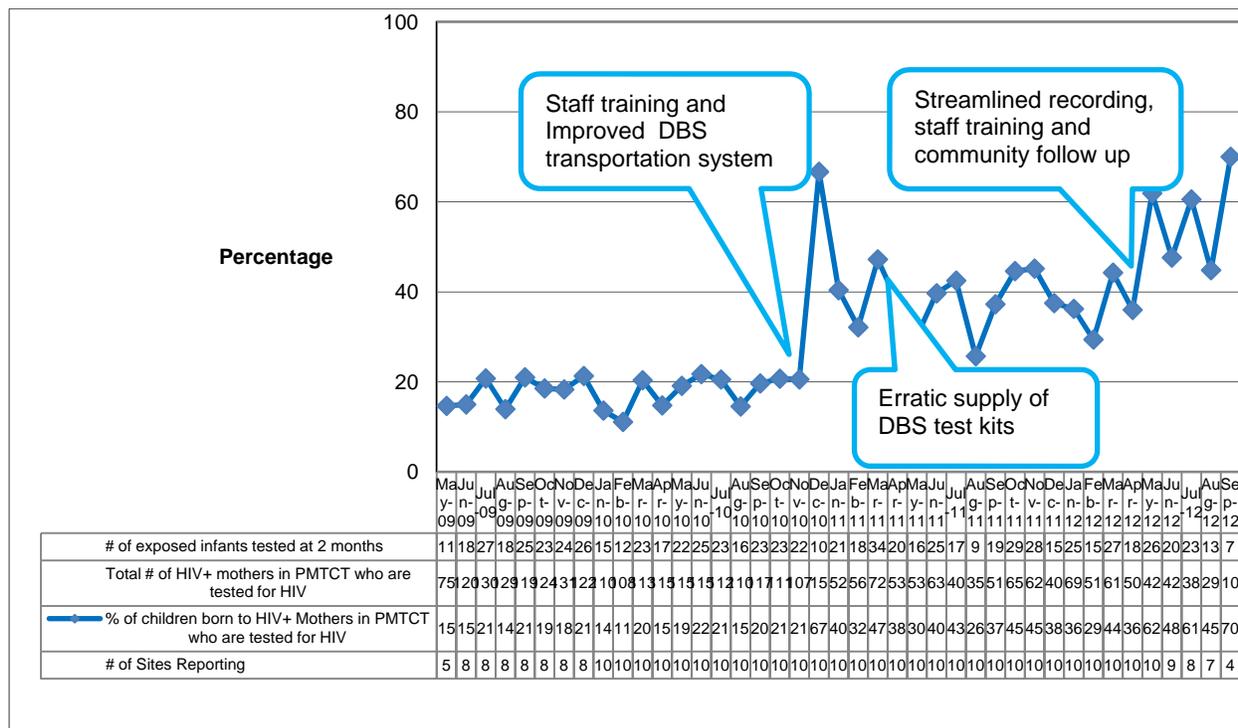
In Lindi region, HCI, in collaboration with MOHSW and the regional implementing partner, conducted mentoring and coaching to the 10 ART/PMTCT collaborative sites in Lindi region. Capacity of the QI teams on filling the SES journal and document tested changes has significantly improved. Most of the teams use their data for decision-making and analyze it to assess the significance of the tested changes. ART/PMTCT QI Teams worked with HBC to bring back HIV exposed children to follow-up care and confirmatory HIV testing, which has improved HIV confirmatory testing. Figure 11 shows the increase in the percent of children born to HIV positive mothers who were tested for HIV within two months of birth in Lindi.

Implement Quality Improvement in PMTCT and Infant Feeding in Kilimanjaro and Njombe Regions

HCI, in collaboration with EGPAF, RHMT and CHMTs from seven districts of Kilimanjaro region conducted a Quality Gap Analysis of PMTCT services in 14 hospitals in the region. Among other issues, the assessment revealed that only 10% of pregnant women booked for ANC by 14 weeks of gestation, 15% of ANC attendees came with partners for HIV testing, and there were delays in giving PCR results in some facilities.

The first learning session was conducted for Kilimanjaro (attended by 79 service providers and nine CHMT members) and Njombe (attended by 56 service providers, nine CHMT members and one RHMT member) participated. Results of the baseline assessment were shared and poorly performing indicators were identified as a basis for improvement in Kilimanjaro. CHMTs in Njombe region supported sites to collect baseline data and the capacity and quality of data were used to support the case for QI in the region. In Kilimanjaro, the percentage of mothers seen at RCH practicing exclusive breastfeeding increased from 48% at baseline to 83% by July 2012.

Figure 11. Tanzania: Percent of children born to HIV positive mothers tested for HIV within two Months of age in 10 facilities in Lindi region, Tanzania. May 2009 – Sept 2012



Developing Minimum Package for PMTCT/RCH Integration of Services in Manyara Region

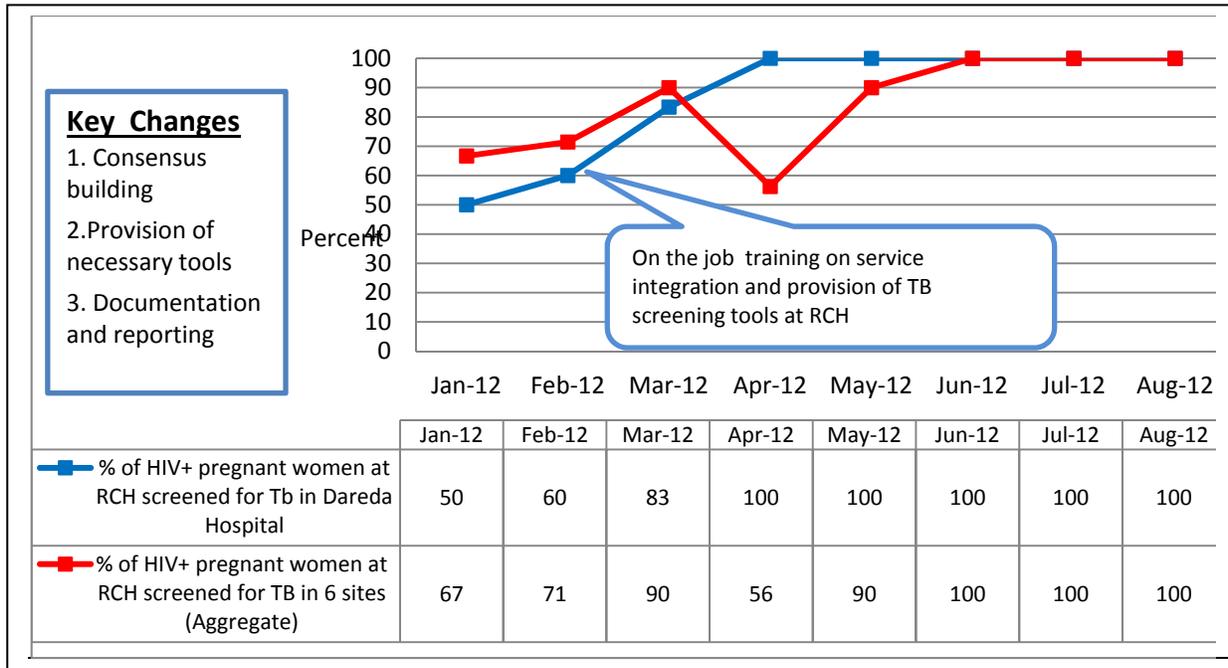
In order to develop the minimum package, an initial assessment was conducted in 21 of the 151 health facilities in Manyara Region. It was found that RCH services are integrated with PMTCT services in 17 out of 21 (71.4%) of the facilities assessed. RCH clinics visited needed improvement in the quality of care given, improvement of processes and systems such as record keeping tools for monitoring and evaluation systems, and improvement in the use of indicators for monitoring of quality of services. About 90 health facilities were providing the most-efficacious regimen for PMTCT, and about 33 health facilities had CTC services.

HCI, working with Manyara RHMT, EngenderHealth and members of CHMTs from all districts in Manyara Region, developed a minimum package for PMTCT/RCH service integration. This began with a first learning session which was conducted in 2012 for RHMT and CHMTs. During this learning session, key areas for improvement were identified, and a minimum package for PMTCT/RCH integration of services was developed. The minimum package's contents were guided by PEPFAR and the National PMTCT Guidelines. Regional and district QI teams were formed and follow-up plans for QI activities were developed. There was consensus with the RHMT and CHMT on modalities for improving RCH supplies and logistics, processes of obtaining DNA/PCR, community services linkage with health facilities, clinical and counseling skills capacity building for health care workers, and PMTCT/CTC service integration.

A QI collaborative involving six facilities (Mirerani Health Centre, Mbulu District Hospital, Dared District Designated Hospital, Babati Town Council Hospital, Kiteto District Hospital and Tumaini Hospital) has been formed. HCI and partners conducted the first learning session involving 30 health care workers, six DRCHCO, and six DACC from the implementing facilities and district level management in the region.

A package of eight indicators was accepted for tracking by QI teams. Changes in processes of care have enabled integration of services such as FP services for CTC clients and TB screening for HIV-positive pregnant women. As shown in Figure 12, we have seen an increase in the percent of HIV-positive pregnant women who were screened for TB at RCH in Manyara.

Figure 12. Tanzania: Percent of HIV-positive pregnant women at RCH screened for TB in six facilities in Manyara region and Dareda hospital, January 2012 – August 2012



The six health facilities’ status in Manyara region continued to be monitored through monitoring of the indicators for integration (FP, HIV testing, male partners’ testing for HIV, initiation of eligible HIV-positive pregnant women on HAART, TB screening for HIV positive pregnant women, and initiation of ART to HIV-positive children under two years of age). All facilities developed work plans for the following three months and documented them in the QI files for follow-up. Changes to be tested were designed and documented in their QI files.

Provide Technical Support to MVC Implementing Partners and the Department of Social Welfare in Rolling Out Communication of the MVC Standards to Service Delivery Level

In FY12, HCI continued to strengthen the capacity of Department of Social Welfare (DSW) and Most Vulnerable Children (MVC) implementing partners to communicate, implement, and apply MVC QI guidelines in service provision. HCI, in collaboration with the DSW and Balm in Gilead–Tanzania Interfaith partnership, conducted an MVC QI training in Zanzibar. During the training, participants were able to share how the different services are provided, identify quality gaps on the services based on the actual performance and desired outcomes stipulated in the guideline. In addition HCI, DSW, and Balm in Gilead conducted a pre-work visit in Kigoma Region’s Kigoma/Ujiji Municipality and Kigoma Rural districts in order to introduce the overall MVC QI objectives and approaches for scaling up to different stakeholders (i.e., RHMTs, DSW Officers, Ward and Village MVC Committees) as well as collecting basic information on MVC activities in the region.

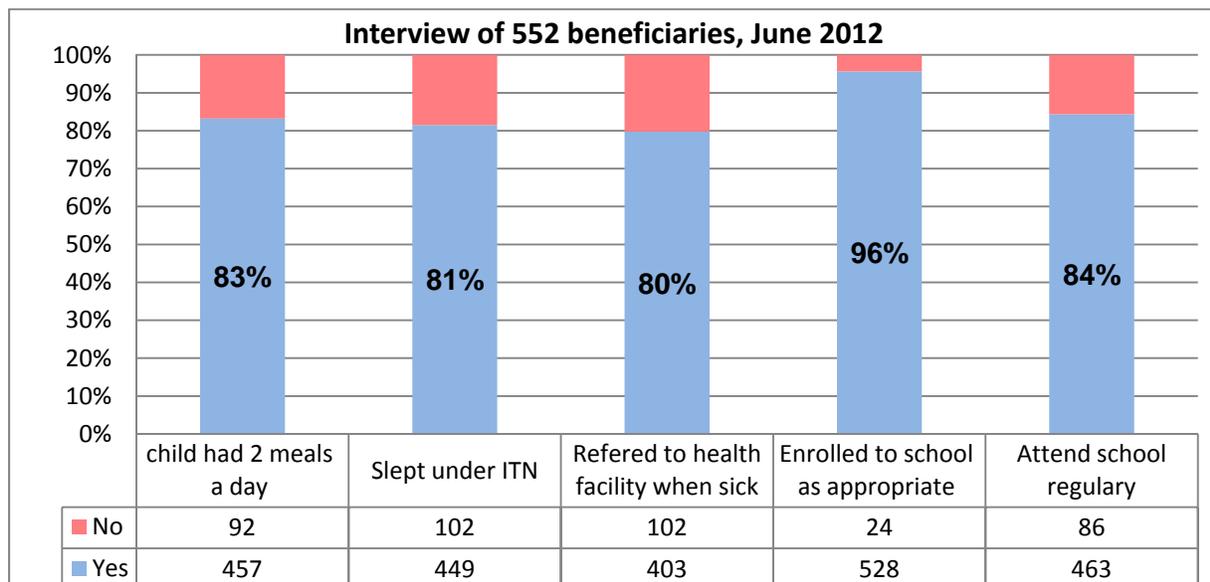
HCI supported the DSW to conduct an evaluation of the effectiveness and impact of QI trainings in five regions of Mbeya, Morogoro, Pwani, Kilimanjaro, and Shinyanga. The main objective was to evaluate the effectiveness of MVC QI trainings in improving service delivery to MVC and their households. Data were gathered at the national level (MOHSW, implementing partners), regional (RHMT), district

(CHMT, implementing partner), community (MVCC, CJF, parasocial workers, volunteers) and household levels (caregiver and vulnerable child). The results from the evaluation show QI trainings have assisted stakeholders to plan for activities to support vulnerable children by looking into the problems identified and setting priorities, applying guidelines while providing services, involving beneficiaries during planning and service provision, providing close follow-up to vulnerable households, and strengthening local structures (i.e., MVC Committees) by educating them on how to provide quality support to vulnerable children. As shown in Figure 13, interviews with 552 beneficiaries in June 2012 showed that over 80% have access to basic services such as two meals a day and insecticide-treated bednets (ITN), receive referrals to health facilities when ill, are enrolled in school, and attend school regularly. Satisfaction among beneficiaries on services provided to them were ranked ‘fair’ with 34% by vulnerable children and 25% by caregiver; while 33% of caregivers and 33% of children had rated ‘good’.

In FY12 HCI continued to strengthen the capacity of Bagamoyo district council as a demonstration site to implement MVC standards at the community level. During learning sessions, MVC Committee members were facilitated to understand the National MVC QI guideline; how they can plan, analyze, document, and implement changes on agreed indicators, and how to use the CSI to measure children wellbeing. Each team had an opportunity to prepare their action plan to facilitate changes in improving the quality of services provided to vulnerable children and households. QI coaches at district and ward levels were coached and mentored to facilitate coordination and support to QI teams at village level.

HCI, in collaboration with coaches at district and ward levels, conducted periodic coaching and mentoring sessions to QI teams in Bagamoyo with the purpose of assessing the functionality of QI teams and MVCC and to provide hands-on support on the identified quality gaps, review collected data on desired outcomes and essential actions implemented by MVC Committees, assess the quality of data collected for each priority essential action, review the ability of QI teams to carry out system and process analysis, and to strengthen the capacity of district and ward coaches in providing regular technical assistance to teams and MVC Committees.

Figure 13. Tanzania: Assessment of MVC QI program results in five regions that that received MVC QI training, June 2012



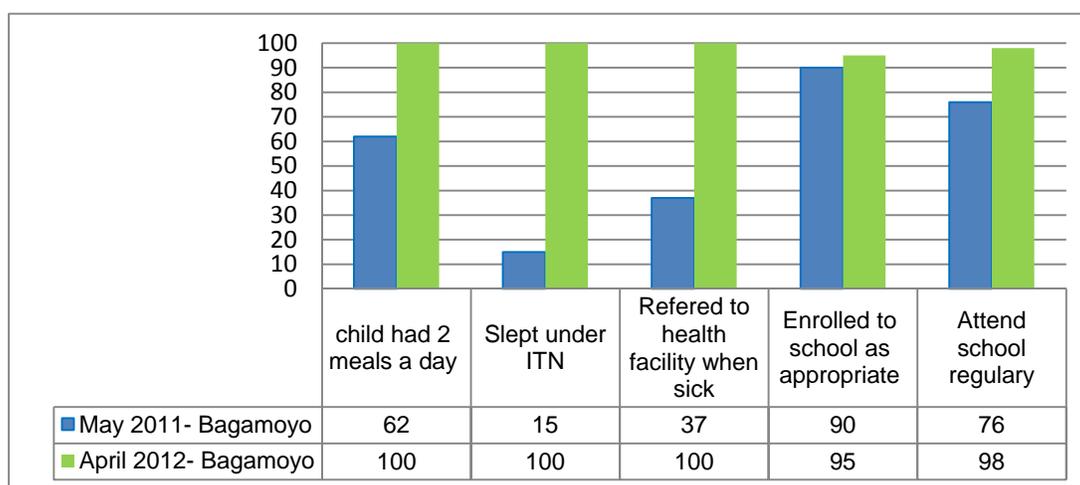
During these coaching sessions, QI teams were able to identify successes and challenges encountered during the action period. Some of the successes identified included: QI team members were able to identify stakeholders and link vulnerable children with various services (e.g. school support); MVCC collaborated with village authorities to mobilize community members to contribute resources (e.g. to

process birth certificates, food support, etc.); conducting follow-up to ensure that vulnerable children attend school regularly; some teams and MVC Committees meet regularly and document their work; and some MVC Committees or QI teams have volunteered to train vulnerable children to sew as a way of generating income.

Teams also faced a number of challenges, including the following: inconsistent completion of QI tools (CSI, documentation tool and national OVC/MVC identification register); misunderstanding and leadership conflicts in some villages that affect the performance of the team; low numbers of QI team members in some villages as well as team members without enough time to participate; lack of transportation (e.g., bicycles); and lack of incentive to team members to prioritize the work.

Follow-up assessment of MVC program results in Bagamoyo showed substantial improvement in the coverage of vulnerable children with key services, as shown in Figure 14.

Figure 14. Tanzania: Follow-up assessment of the MVC QI Program in Bagamoyo, May 2011 versus April 2012



Directions for FY13

HCI activities in Tanzania were closed out in October 2012 and new work begun under the USAID ASSIST Project.

2.13 Uganda

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
Improve care for people living with HIV	Increased number in care Improved retention Improved outcomes	92 sites located in 45 districts out of a total of 443 sites in a total of 112 districts in the country
Improve maternal and newborn care	Improve newborn care Improving maternal care	2 Districts (Masaka and Luwero and 34 out of 100 sites) (Core-funded activity) 2 Districts: Kamwenge and Kyenjojo - 10 high volume facilities out of a total of 44 facilities) (Mission-funded activity)
	Integrating family planning with ART and MNCH	2 districts: Masaka and Lwengo districts: (4 sites out of 7 facilities)
Improve chronic care	Improve chronic care	1 District: Buikwe (15 out of 16 sites) SUSTAIN is working in Kawolo hospital

Develop a model of community-based support for chronic care for people living with HIV	Improve functionality of VHTs through a community health system. Improve care for HIV+ patients in the community	1 District: Buikwe 1 facility - Buikwe Hospital and in 10 out of 475 Villages and 20 Village health teams (VHTs) out of 950
Strengthen Pharmaceutical Human Resources and Improve Medicines Availability and Use for Better Patient Outcomes in Uganda	Improve the performance of pharmaceutical human resources to improve the availability and use of HIV and TB medicines	Intervention is in 14 HIV care health facilities in 3 districts.
Strengthen MoH QI systems	Integrate QI into national systems	National system, all 13 health regions, (45/112 Districts)
	Have functional regional QI structures	
	Strengthen the district QI structures	
Support other USAID implementing partners in QI	Building capacity of IPs to be able to implement QI	MSU, STAR EC (JSI), STAR E (MSH) , STAR SW (EGPAF) and SUSTAIN (URC)
Document and disseminate QI best practices	Share best practices and avail resources with all partners Disseminate our results in national and international conferences	National, and international fora

Main Activities and Results

Improve Care for People Living with HIV

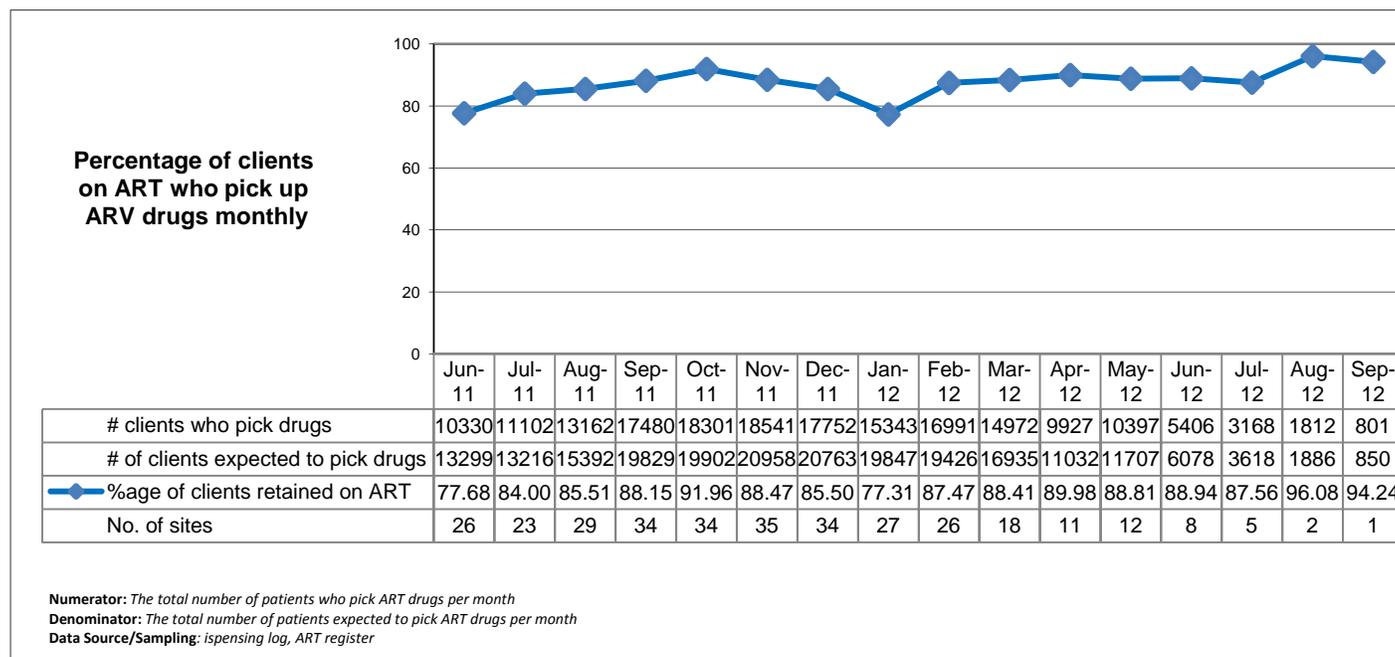
Uganda's ART Framework collaborative improvement activities have been ongoing since October 2010, involving 96 sites in 45 of Uganda's 112 districts. During FY12 we involved 92 facilities in the first quarter and thereafter reduced to 48 sites due to a USAID request to implement QI in the Saving Mothers Giving Life (SMGL) program.

Sites have worked on ensuring all HIV positive mothers get enrolled into care. In general, these sites have stabilized in their improvement activities, reaching a plateau of around 80% coverage. Possible reasons for this are that most sites have been able to integrate ANC services with HIV clinic activities and improvement in the clinic efficiencies.

The retention of clients on ART involves ensuring that clients who are initiated on ART keep taking their drugs. It involves bridging the gap between the number of clients expected to pick up drugs and those who actually do pick up their drugs. Results show that the quality of care offered has met the MOH standard of ensuring all patients started on ART, 85% of them are retained in care. Figure 15 below shows there has been an increase in the percentage of HIV clients who pick up their drugs every month.

The assumption is that picking up drugs is a true reflection of clients who actually take their drugs. To realize this assumption, adherence assessment is done routinely for clients on ART. At Lyantonde Muslim Health Centre III, as of September 2011, there was a big gap between those who picked up drugs and those expected to pick them up. This was due to the team not being aware of which clients were expected on a monthly basis. This gap began narrowing in November 2011 when the team introduced an appointment register to track the number of clients expected and those who actually pick up their drugs. Knowing who the non-adherent clients were enabled the site to tailor their counseling and drug supply to the needs of these clients.

Figure 15. Uganda: Percentage of clients who were retained on ART, June, 2011 – September, 2012



The overall objective of the ART framework is to increase the number of ART patients (adults and children) in care who are doing “well”. Every patient on ART taking ARV medicine as prescribed is expected to experience good clinical outcomes and HCI supports sites to implement changes aimed at improving the clinical outcomes of patients. The aggregate data shown in Figure 16 below illustrates sites performing above the national target of 80% during FY12.

Figure 16. Uganda: Percentage of HIV clients with good clinical outcomes, June 2011 – September 2012

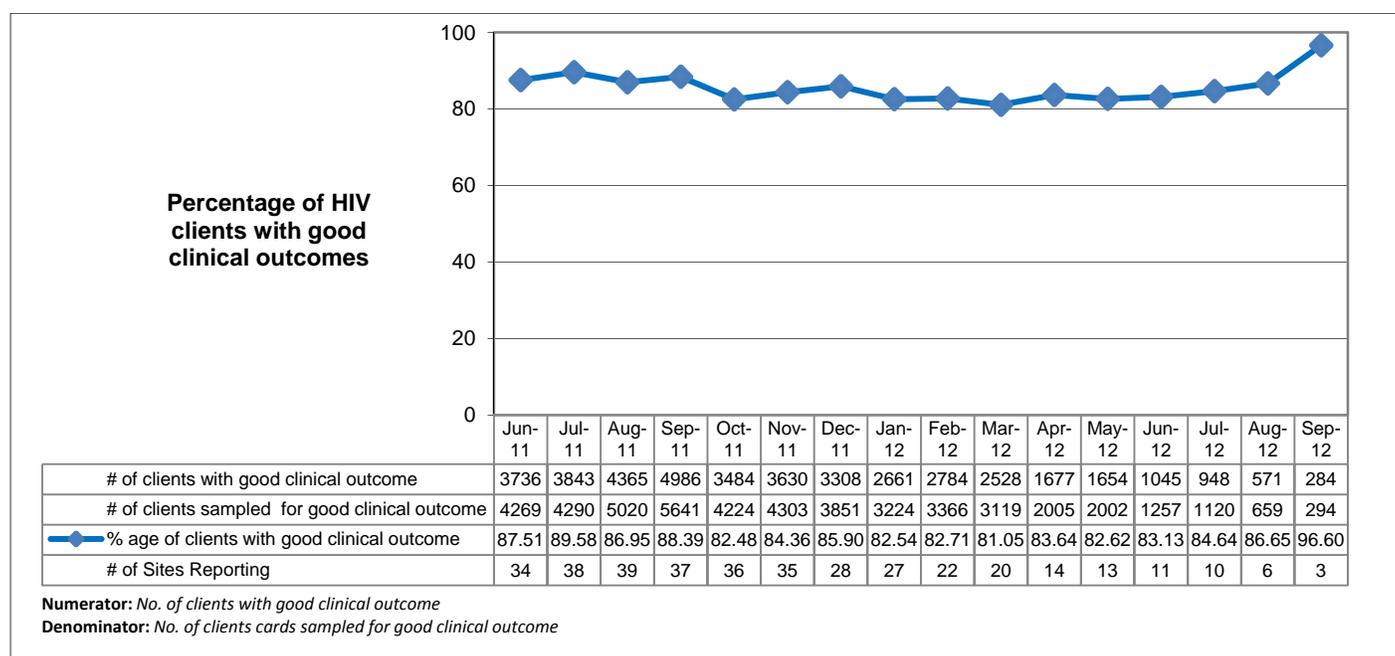
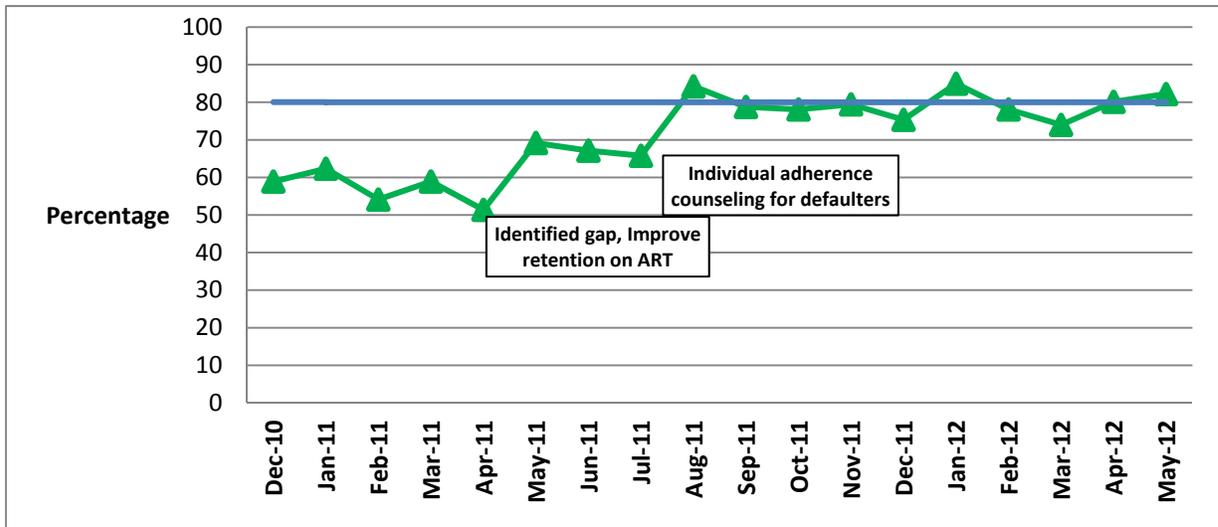


Figure 17 below shows the percentage of clients on ART who experience good clinical outcomes at Rakai Hospital. It shows that the proportion of patients experiencing good clinical outcomes has improved from less than 60% when the problem was first identified to close to the national target of 80%. After gap identification, the team implemented changes to identify treatment defaulters through identifying the clients who miss their ART appointments. However, this led to a modest improvement; it was not until the team introduced individual counseling for treatment defaulters that some reasonable improvement was observed.

Figure 17. Uganda: Percentage of HIV clients with good clinical outcomes on ART at Rakai Hospital



Improve Maternal and Newborn Care - Community Collaborative

With core funds from the MCH office in the Global Health Bureau, HCI has supported the MOH to apply the collaborative approach to maternal and newborn care to adapt and spread evidence-based practices across facility teams in central Uganda. HCI, the MOH, and the District Health Offices in Masaka and Luwero districts are implementing an improvement collaborative in MNCH care in 34 health facilities. The collaborative focuses on contributing to reduction of neonatal deaths through increasing number of newborn babies receiving essential newborn care (ENC) and to reduction of maternal mortality through prevention of postpartum hemorrhage by actively managing third stage labor. The collaborative also seeks to link pregnant mothers to HIV services through working with facilities to ensure that pregnant mothers are tested for HIV and thus have a known HIV status.

Over the past one year HCI, developed a strategy for building the Village Health Teams (VHTs) capacity to implement QI activities in 24 villages within the 2 districts of Masaka and Luwero. This collaborative was developed with an aim to ensure that; all babies receive ENC, all babies are born in the facilities and those born in the community are initiated on the breast within one hour, mothers are knowledgeable of the newborn danger signs, newborns are examined at 2-3 and 4-7 days after birth and all newborns and postpartum mothers with danger signs are referred to the health unit for examination. Over the course of one year, HCI has organized 2 learning sessions for the 24 villages to address gaps found at the various action plan periods. VHTs were trained in QI principles and data collection tools, thus leading to increased VHT participation in the communities. VHTs increased the examination of more newborns at 2-3 days and at 4-7 days. In January 2012 percentage of newborns being examined at 2-3 days had reached 100% whereas at 4-7 days it increased from 59% in October 2011 to and 98% in September 2012. The main challenge at 4-7 days is some women that deliver from the facility come as visitors; they usually leave after 3 days (after being examined at 2-3days) and thus missed during the 4-7 day examination. Also when the mothers don't see anything wrong with the infants, they are reluctant to

return for examination at 4-7 days. With the VHT support there was an increase in mothers being able to state 3 newborn danger signs from 23% in October 2011 to 100% in January 2012. For more details, see section 3.6 Maternal, Newborn, and Child Health.

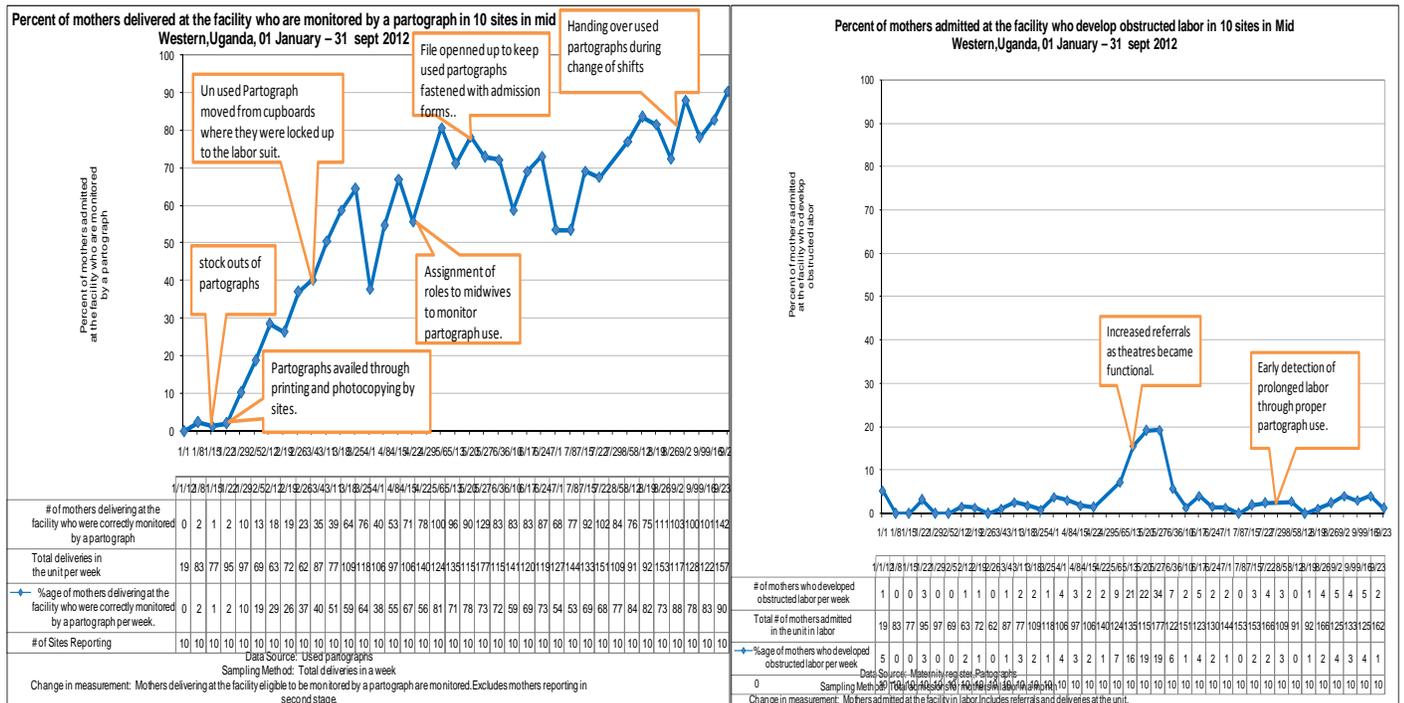
Saving Mothers Giving Life (SMGL)

At the request of USAID Uganda, HCI developed a concept paper and data collection tools and began data collection in early 2012 in 10 high-volume facilities (each handling more than 100 deliveries per month) to ensure that women delivering in these facilities reliably received high-impact, low-cost, evidence-based interventions to prevent or manage complications. This was in line with the objective of the Mission to reduce the maternal mortality ratio by 50% in 2012 in the four districts of Kyenjojo, Kamwenge, Kibale, and Kabarole (in mid-Western Uganda) as part of its “Saving Mothers, Giving Life” Initiative. Changes implemented include adding a column in the maternity register; assigning a midwife to monitor the application of AMTSL; reallocating oxytocin from over-stocked sites to under-stocked facilities; setting up drug ordering teams at health facilities; and moving oxytocin to the labor suite for easy access. Results show an increase in AMTSL from 0% in January 2012 to 100% in June 2012 and these changes have resulted in a drop in PPH.

Partograph use has increased from 0% to between 70-80% at the 10 sites as shown in Figure 18 below (the graph on the left). Similar to PPH, cases of obstructed labor increased with the massive increase in patient load following operationalizing of the two theatres within the districts as shown in Figure 18 (graph on the right). To address this, teams implemented changes, including assigning a midwife to monitor partograph use, checks for completeness of partographs, and physical handing over of mothers during the change of shifts. With the introduction of these changes cases of obstructed labor reduced. With the partograph use, cases of obstructed labor detected ranged between 0-2%. Prolonged labor cases are diagnosed early enough for timely obstetric interventions and referred appropriately.

Figure 18. Uganda: Results of Saving Mothers, Giving Life, Jan.-Sept. 2012

(Left) Percent of mothers delivered at the facility who are monitored by a partograph in 10 sites; (Right) Percent of mothers admitted at the facility who develop obstructed labor in 10 sites



Integrating Family Planning in HIV Care

During FY12, HCI developed a strategy of integrating FP into HIV care. The goal was to produce tools and knowledge that would enable more efficient and effective scale up of integrated FP services in the HIV program. As part of partner support, HCI helped Marie Stopes Uganda (MSU) to carry out joint coaching visits (through its regional coaches) and supported the MSU learning session in Kampala in which 23 health workers were trained. Results indicate an increase in HIV-positive clients counseled for FP from 29% in November 2011 to 85% as of August 2012 and an increase in the proportion of HIV-positive patients of reproductive age using at least one FP method from 16% in November 2011 to 51.7% in August 2012 in the four supported sites. This is attributed to: improvement in documentation; integration of counseling at all HIV service points like ART and ANC; delivery of counseling guides and emphasizing to staff the importance of counseling of HIV clients through monthly coaching visits. For further discussion, see section 3.3 Family Planning.

Improve Care for People with Chronic Conditions

A model for achieving optimal quality of care has been adapted from the WHO Chronic Care Model in Uganda. A strong MOH commitment to prototype, implement, and spread this model was achieved at a workshop with Ugandan officials and international experts in May 2010. The Chronic Care prototype collaborative was launched in one Ugandan health district (Buikwe) in FY11 and was further developed in FY12. Results from the core-funded chronic care work in Buikwe are discussed in section 3.5 HIV/AIDS.

Community Support for Chronic Care for People Living with HIV

Building community linkages can help to improve tracking and follow up of patients in the community leading to better health outcomes. However, such linkages were inadequate in Buikwe District. In FY12, HCI began a core-funded community support demonstration project in Buikwe District of Uganda, forming a total of 10 community QI teams by bringing together village health teams and representatives of religious leaders, community groups, HIV patients, health workers, schools, and local leaders. The community QI teams focused on improving patient outcomes by (1) identifying the HIV patients on ART, (2) assessing patients for clinical outcomes, and (3) promoting self-management support. A regular QI team meeting was held to update the monthly activities of the community groups and the village health teams collected data using personal diaries to document the clinical status of HIV patients, self-management plans, progress on plans, and clinical improvement. Results of this activity are described further in section 3.2 Community Health.

Strengthen Pharmaceutical Human Resources and Improved Medicines Availability and Use for Better Patient Outcomes in Uganda

During FY12, HCI started a new core-funded activity with the MOH to introduce a prototype application of QI and performance management approaches in pharmaceutical care, a non-clinical area. The goal of this improvement activity is to determine whether improvement approaches can strengthen pharmaceutical human resources, and improve medicines availability and use at the intervention health facilities, and whether that results lead to better patient outcomes. There are 14 health facilities in three districts in Uganda participating in this activity. For further discussion of the progress in FY12, see section 3.3 Health Workforce Development.

Strengthen Ministry of Health QI Systems

In May 2012, HCI conducted a baseline assessment to determine the role of leaders and their involvement in improvement work in 10 health facilities within three districts. Results showed that very few leaders were involved in improvement work, few felt they were able to make their own decisions on what to do, and hardly any leader was able to leverage resources for improvement work. The leaders were also unable to look beyond financial and human constraints to implement QI work.

With HCI support, districts have made progress in implementing some of their action plans, for example, Lwengo district health office selected mentors and made a schedule for supporting health facilities in the district. They have integrated their coaching activities within another partner's (Mildmay) activities so as to leverage resources and improve coordination. One facility, Kyazanga Health Center (HC) IV, was able to lobby an NGO to provide them with additional HIV drugs through improved coordination and accountability and have increased the number of clients on ART from 235 in June to 279 in August 2012.

For the past year HCI has supported the MOH to develop the national QI framework and strategic plan which is currently being tested in the Rwenzori region. A QI stakeholders meeting was held to introduce and disseminate the framework and strategic plan to seven districts. As a result, the regional QI committee has been constituted with QI partners' representation and a QI focal person, although community representatives to the committee are yet to be identified. Three of the seven districts have fully constituted district QI committees and have at least held a district QI committee meeting between July and September 2012. The other four districts in the region have only been able to identify a focal person for QI and have not fully developed their committees. Fourteen of 19 health facilities in the region have established QI teams focusing on HIV services and six health facilities have QI teams for service areas other than HIV care such as MNCH.

The AIDS Control Program and the nutrition division of the MOH requested HCI's technical support to integrate QI into the national nutrition training materials. A session on the use of QI to integrate and improve Nutrition Assessment, Counseling, and Support (NACS) was included in the national training manual and is currently under review by the MOH nutrition technical team.

Support to USAID/CDC Implementing Partners in QI

HCI continued to support other USG partners to improve the quality of care at the sites they support. Partners supported included STAR EC (JSI), STAR E (MSH), STAR SW (EGPAF) and SUSTAIN (URC).

- STAR-E: Following the joint planning, HCI supported STAR E to plan for a learning session in the eastern region by providing them with agenda, learning session materials, and technical support on how to conduct a learning session.
- STAR EC: Following the joint planning, HCI supported STAR-EC district based learning sessions in Mayuge and Namutumba. HCI co-facilitated two learning sessions together with the MOH in order to assist STAR EC to continue with the palliative care QI efforts. The learning session was used identify gaps in the sustainability of palliative care and recommendations made.
- HCI trained five SUSTAIN technical staff to equip them with knowledge on QI and supported them in developing their capacity through the joint coaching visits. HCI provided technical support to SUSTAIN by holding a one day seminar on QI and nutrition for coaches and regional coordinators to improve their QI/nutrition skills and develop indicators for the Baby Friendly Hospital Initiative.
- Supported Mildmay Uganda CDC funded to carry on QI efforts through a joint coaching sessions at two health facilities Nkokonjeru hospital and Ngogwe HC III.
- During FY12, we conducted joint QI coaching focusing on implementation of the QI framework and strategic plan in the districts in East-Central Uganda with STAR EC. Joint supervision by MOH/HCI and STAR EC revealed that all the districts QI committees are still missing some key stakeholders stated in the QI framework.
- HCI, MOH, and SCIPHA project held a joint QI coaching to the following civil society organizations (CSOs); Ssesse Health Effort for Development, Kalangala District Forum for PLHA, Bukomero Development Foundation and Mityana Community AIDS Care. All the CSOs reached had no prior exposure to continuous QI.
- HCI supported Save the Children Uganda in conducting training for 24 HBBPlus National trainers.

- HCI held joint coaching sessions with SURE to improve documentation and inventory keeping in medical stores.

Document and Disseminate QI Best Practices

In FY12, HCI held a national QI conference at the beginning of the year in collaboration with the Ministry of Health and other implementing partners. HCI organized and held two-day harvest meetings for health facilities which have been working on the ART framework, chronic care, and MNCH collaboratives in September 2012. The specific objectives of the harvest meetings were to obtain information on all the changes which sites have tested regardless of whether they worked or not; to share evidence about particular changes; and to develop a detailed how-to-guide for the changes so that they are spread. The outcome of the harvest meetings was the development of a change package, and a detailed ‘how-to- guide’ for improving coverage, retention and outcome for clients on ART, chronic care, and MNCH. The change package will offer health workers practical and effective changes that can be implemented to address the existing gaps in the quality of health care.

Directions for FY13

HCI activities in Uganda will be closed out in November 2012, and work continued under the USAID ASSIST Project.

2.14 Zambia

Overview of HCI’s Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Build capacity of the Ministry of Gender and Child Development and other stakeholders in: 1) development and implementation of minimum standards for services to vulnerable children, and 2) quality improvement principles and methods in OVC programming	<ul style="list-style-type: none"> ▪ Provide leadership in improving quality care for programs serving vulnerable children and families ▪ Provide TA to ensure development of standards that are evidence-based. ▪ Build constituencies of support for the standards and for principles of quality improvement ▪ Create a community of learning across OVC stakeholders 	<p>National level National level to be cascaded to the communities. Estimated 1,600,000 OVC</p> <p>Provincial level Child development Coordinator Provincial Social Welfare Officer Provincial AIDS Coordination Advisor</p> <p>District Level District social welfare officer District aids task force</p> <p>Community level STEPS OVC, CHIN and CHILDFUND will pilot the standards in Senanga, Lusaka, Nyimba, Kafue, Chongwe and Chipata districts.</p>
Integrate OVC minimum standards of care within a national strategy	<ul style="list-style-type: none"> ▪ Strengthen integration of OVC standards within a national strategy response such as the National Child Policy ▪ Ensure country ownership of the standards ▪ Ensure participation that is reflective of all levels of stakeholders from government to the children and families served 	<p>National level</p> <p>Multiple levels of government involved in development of standards – Office of the President, Gender and Child Development Division as lead, Ministry of Community Development Mother and Child Health, Ministry of Health, Ministry of Education, Ministry of Home Affairs (Zambia Police – Victim Support Unit), Ministry of Local Government Early Education and Environmental Protection</p>

Main Activities and Results

In FY11, HCI was invited by USAID Zambia to provide technical assistance to facilitate the process of developing OVC service standards in Zambia in partnership with USG implementers, government

departments, NGOs, and CBOs in efforts to improve the quality of services offered to vulnerable children and families affected by HIV.

Build Capacity of Stakeholders in the Development and Implementation of Minimum Standards for Services to Vulnerable Children and Quality Improvement

HCI assistance in Zambia began in May 2011 with a stakeholders' workshop in Livingstone that produced the first draft OVC standards, followed by a workshop with children who provided valuable input to the OVC standards document. Participants in the first stakeholder workshop were a mix of government representatives and NGOs drawn from the OVC sector. The team was later constituted as a national Task Team whose mandate was to oversee the development of OVC standards and guidance of the piloting phase.

In November 2011, HCI appointed a resident QI Advisor who provided direct assistance to the government structures responsible for children issues. After a series of meetings, the Department of Child Development of the Ministry of Gender and Child Development took up the leadership mantle supported by the Social Welfare Department. HCI supported meetings of the Task Team in November and December 2011 and in April 2012 under the Chairmanship of the Ministry of Gender and Child Development. HCI supported a QI coaches training in January 2012 with 38 participants that included Provincial Child Development Coordinators, Provincial Social Welfare Officers, District Social Welfare Officers, and community-based officials such as the Community AIDS Task Forces and Community Welfare Assistance Committees. In February 2012, the OVC service standards were reviewed by Task Team members and content experts.

Five districts were selected as pilot sites from three provinces of Lusaka, Eastern and Western provinces. The district sites chosen were Kafue and Chongwe in Lusaka Province (ChildFund), Nyimba (World Vision) and Chipata (Africare) in Eastern Province and Senanga in Western Province (CRS). These sites represented areas where implementing partners had presence running OVC programs.

Standards of Care within a National Strategy

The OVC standards were developed over a period of 12 months. During the first stakeholder workshop in May 2011, the initial draft was developed, adapting other OVC standard documents for the Zambian context and within the framework of the National Child Policy, National Plan of Action and the Child Health Policy. The standards addressed eight thematic areas: Education and Vocational Training, Psychosocial Care and Support, Food and Nutrition, Coordination of Care, Child Protection, Health, Economic Strengthening, and Water and Sanitation. During a February 2012 review meeting, the OVC standards document went through a further refinement by stakeholders. It was aligned with the SADC minimum standards and indicators were revised.

Despite the circulation amongst stakeholders, feedback from stakeholders was less than expected even with additional time for comments. The poor response continued to the close-out phase when the call for comments was renewed. The final version of the standards as developed under this project will be submitted to the Ministry of Gender and Child Development.

In May 2012, HCI was informed by the USAID Mission in May 2012 that standards development would no longer be funded through HCI but through a new mechanism, the ZOVSS project. The HCI QI Advisor met with stakeholders and the Ministry of Gender and Social Development to discuss status of standards process and transition plan for next several months, until ZOVSS activities begin.

ASIA

2.15 Afghanistan

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
Support the MOPH in building capacity for improvement nationwide	The purpose of this activity is to adapt and institutionalize the science of improvement in Afghanistan.	<ul style="list-style-type: none"> ▪ Nationwide: This work focuses on strengthening the MOPH at the central level through establishment and support of a technical Unit within the MoPH that leads the development, implementation and revision of national strategy for quality in health care in Afghanistan.
MNH Facility Demonstration Collaborative and wave I and II spread	<p>The overall objective of this activity is to reduce maternal and newborn mortality and morbidity through improved quality of care using the Improvement Collaborative approach. There are three phases of this work: Phase one focus on</p> <ul style="list-style-type: none"> - ANC and PNC counseling - AMTSL and ENC - TT2 vaccination for pregnant women - Institutional deliveries - Postnatal monitoring - Partograph <p>Phase two will focus on:</p> <ul style="list-style-type: none"> - Pre-eclampsia and Eclampsia <p>Phase three will focus on:</p> <ul style="list-style-type: none"> - Maternal and Neonatal Sepsis - Infection Prevention 	<ul style="list-style-type: none"> ▪ The collaborative began in 2009 in Balkh and Kunduz and expanded to Kabul, Parwan, Bamyan, and Herat provinces in Q3 2010. HCI works in 10 provinces out of 34 in Afghanistan. (See chart for facility level details) ▪ Kunduz Province: HCI works in 14 facilities for a total estimated target population of 200,644 out of 935,600 people. ▪ Balkh Province: HCI works in 15 facilities for a total estimated catchment population of 316,445 out of 1,219,200 people. ▪ Herat Province: HCI works in 8 facilities for a total estimated target population of 299,180 out of 1,744,700 people. ▪ Bamyan Province: HCI works in 9 facilities for a total estimated catchment population of 101,473 out of 418,500 people. ▪ Parwan Province: HCI works in 9 facilities for a total estimated target population 242,876 out of 620,900 people. ▪ Wardak Province: HCI works in 7 facilities for a total estimated target population 144,522 out of 558,400 people ▪ Saripul Province: HIC work in 9 health facilities for a total estimated target population 172,823 out of 522,900 people. ▪ Samangan province: HCI works in 8 facilities for total estimated target population 87,124 out of 362,500 people. ▪ Logar province: HCI works in 4 facilities for a total estimated target population 65,729 out of 367,000 people.
MNH Community Demonstration Collaborative and wave I spread	The overall objective of this activity is to reduce maternal and newborn mortality and morbidity through improved quality of care at the community level using the improvement collaborative approach.	The collaborative began in 2009 in Balkh and Kunduz and expanded to Parwan, Bamyan, and Herat provinces in 2011. HCI works in 5 Provinces out of 34 in Afghanistan. Community collaborative focuses on health posts of 17 HFs out of 353 health facilities in Balkh, Kunduz, Parwan, Bamyan, and Herat provinces. Five of these health facilities are based in Balkh and three health facilities are based each in

Activities	What are we trying to accomplish?	Scale of intervention
		Kunduz, Parwan, Bamyan and Herat provinces and cover a total estimated target population of 239,504.
Maternity Hospital Demonstration Collaborative and wave I and wave II spread	The overall objective of this activity is to improve outcomes for women and newborns in participating 12 located in Kabul, Parwan, Bamyan, Herat, Logar, Balkh and Wardak provinces through improved prevention and treatment of the major causes of direct maternal and neonatal mortality using the Improvement Collaborative approach.	<ul style="list-style-type: none"> ▪ Two public maternity hospitals within Kabul plus three private hospitals. Total estimated target population is 3,449,800 out of approximately 4,000,000 residents of Kabul. ▪ The participating hospitals in this collaborative are as below: <ul style="list-style-type: none"> – Malalai and Isteqlal Governmental Hospitals in Kabul – Mehdi, Shinozada and Afghan private hospitals in Kabul – Mazar-e-Sharif Regional Hospital in Balkh province – Parwan, Bamyan, Wardak, and Logar provincial hospitals – Sayeda Rahmani and Loqman Hakim private hospitals in Herat province
Research and Evaluation	Scientifically document progress of QI activities in country and assess impact on quality of care.	<ul style="list-style-type: none"> ▪ All 25 demonstration phase health facilities in Kunduz and Balkh provinces ▪ Five collaborative hospitals in Kabul

Main Activities and Results

Support the MOPH in Building Capacity for Improvement

The Ministry of Public Health (MOPH) of Afghanistan has established a clear mission “to improve the health of the people through quality health care services provision and the promotion of healthy life styles in an equitable and sustainable manner.” In order to achieve this goal, the MOPH and donors have introduced and implemented a number of different strategies, tools and methodologies aimed at improving the quality of health care services. Some have been established country-wide, others in particular provinces. However, attempts to make improvements have not been well-coordinated or applied uniformly across the sector. Quality improvement approaches with different names, structures, steps and terminology, yet similar core components existed across the health system. On the other hand, limited capacity of the MOPH to implement multiple quality approaches and confusion among front-line providers and partners over basically similar quality approaches was the reason behind the need for a Harmonized Quality Approach in Health to be implemented nationwide.

A meeting was held with senior health team of USAID and MOPH leadership in December 2011 regarding the need for a unique harmonized approach at national level. Since January 2012, the Improving Quality in Health Care (IQHC) Unit of the MOPH, with financial support from USAID and technical support of its partners, has been working to harmonize the main quality approaches in health at national level. A core group from senior leadership of USAID, HSSP, Tech-Serve, HCI and the IQHC Unit was established on January 8, 2012 to provide general guidance and oversight to the process. Meanwhile, several task groups were established to develop a framework to harmonize major quality approaches in health care and work on the components of the Harmonized Approach. Since then, several meetings of the Core Group and Task Groups were held to work on priority interventions of the Harmonized Approach with MOPH Departments, and work on other tasks of the process such as problem identification and analysis and development of a package of minimal tools for the mentioned purpose, community involvement, and measurement for the approach.

A three-day workshop was held in June 2012 to accelerate the process. Subsequently, the IQHC Unit had several technical meetings of the assigned Task Groups, half day workshops and orientation meetings with partners. As a result of these efforts, all currently existing Quality Assurance Standards were comprehensively reviewed; changes were proposed by working groups; and standards and verification criteria were classified into critical and important categories based on a pre-defined set of criteria. This package was adapted for all provincial health system facility levels (i.e., district hospitals, comprehensive health centers, and basic health centers) and it was reviewed further by HCI and Jhpiego technical teams in the US.

Maternal and Newborn Health Facility Collaboratives

During FY12, HCI supported provincial-level maternal and newborn health (MNH) facility collaboratives in nine of the country's 34 provinces: demonstration phase provinces (Balkh and Kunduz); Wave I spread provinces (Bamiyan, Parwan, and Herat); and Wave II spread provinces (Wardak, Samangan, Saripul and Logar). The sixth learning session was held in Balkh in November 2011 to start QI interventions related to the third phase of technical content (maternal and neonatal sepsis and infection prevention). In June 2012, the seventh learning session in Balkh was held as a joint session of the teams of the health facility and community collaboratives. The main focus of the joint learning session was to introduce second phase interventions (identification, management and referral of pre-eclampsia and eclampsia), learn about the third phase intervention (improve infection prevention, identification, management and referral of maternal and new born sepsis), and establish better coordination between health facility and community collaboratives. Due to insecurity, HCI started close-out in Kunduz at the end of 2011. The final learning session in Kunduz was conducted in February 2012 to share lessons learned with the provincial health authorities and others stakeholders.

The fourth and fifth learning sessions were held in the Wave I spread sites: Herat (November 27-28, 2011 and June 13-14, 2012), Parwan (December 27 -28, 2011 and July 10-12, 2012) and Bamiyan (October 25 -27, 2011 and July 3-4, 2012).

The first learning session was conducted in each Wave II province: in Wardak (October 12-13, 2011), Samangan (November 27 –28), Saripul (November 21-22, 2011) and Logar (April 1-2, 2012). During the learning sessions, common indicators assessment results were shared and teams were prepared to start making changes to introduce phase I QI interventions (ANC/PNC counseling, AMTSL, ENC, TT2 vaccination for pregnant women, institutional deliveries and partograph) in HCI targeted provinces, drawing on lessons learned from HCI Wave I provinces. A second learning session was completed in each of the Wave II provinces by September 2012. During these sessions, QI teams of the HCI-targeted provinces also shared experiences about pre-eclampsia, eclampsia, neonatal and maternal sepsis to develop new change ideas for the phase II and III QI interventions. By the end of FY12, most of health facilities participating in the Wave II spread completed phase I and began the phase II and prepared to start phase III QI interventions. Figures 19 and 20 show the scale-up of improved newborn care in Bamiyan (first spread wave started in FY11) and in Wardak (second spread wave in FY12).

MNH Community Collaborative

In addition to the facility-based MNH improvement work, HCI also worked with provincial health teams to improve community-based maternal and newborn care. The community MNH collaborative began in Balkh and Kunduz in FY10 but added sites in Parwan, Bamiyan, and Herat provinces in FY12, at the request of authorities in those provinces. The same approach was used in each province: three health posts were selected to participate and interventions introduced to boost the performance individual community health worker (CHWs) by providing training, job aids, and monthly support meetings to provide CHWs with feedback and motivation. The interventions extensively improved the performance of CHWs and their counseling skills. Antenatal and postnatal visits increased considerably, as did the referral of pregnant women for institutional delivery, as shown in Figures 21 and 22, with results from the community MNH work in Balkh and Herat during FY12.

Figure 19. Afghanistan: Spread of newborn care best practices in Bamiyan Province

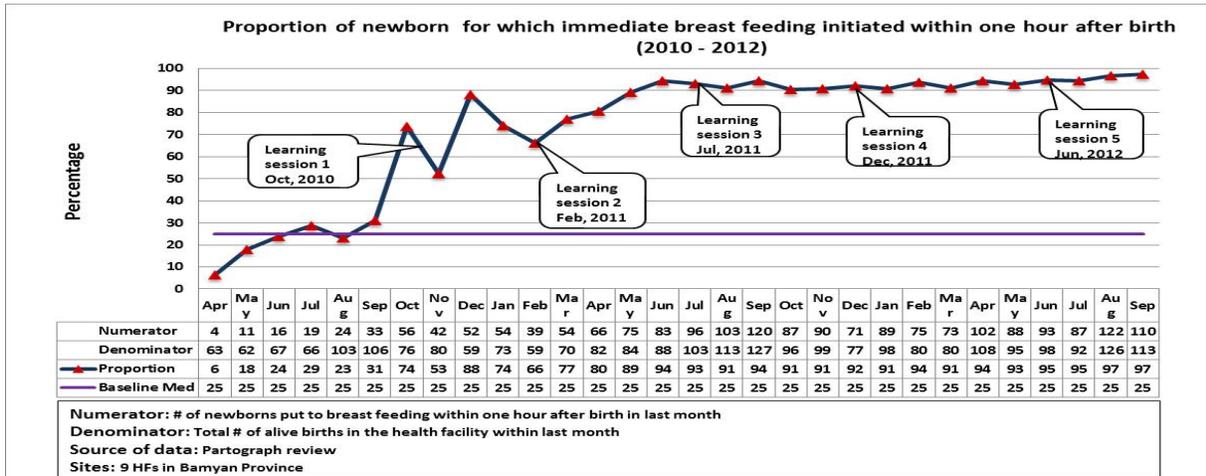


Figure 20. Afghanistan: Spread of newborn care best practices in Wardak Province

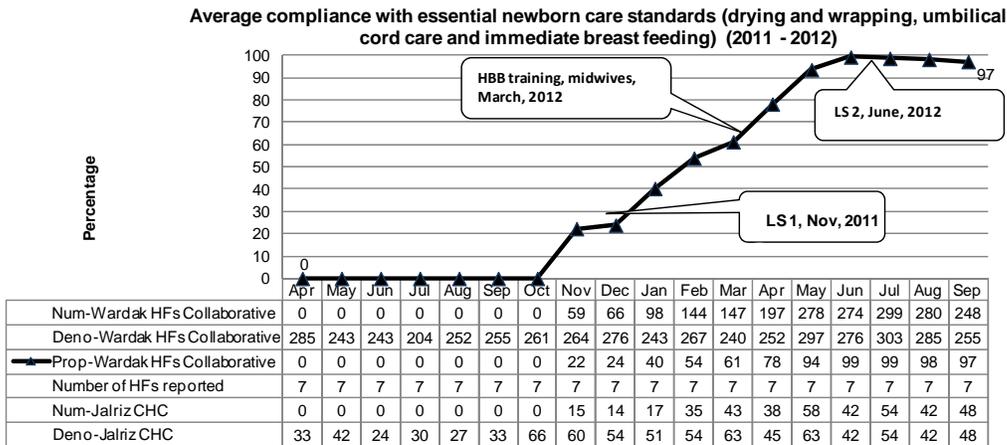


Figure 21. Afghanistan: Increasing coverage of pregnant women with ANC visit by CHWs, Community MNH collaborative, Balkh Province

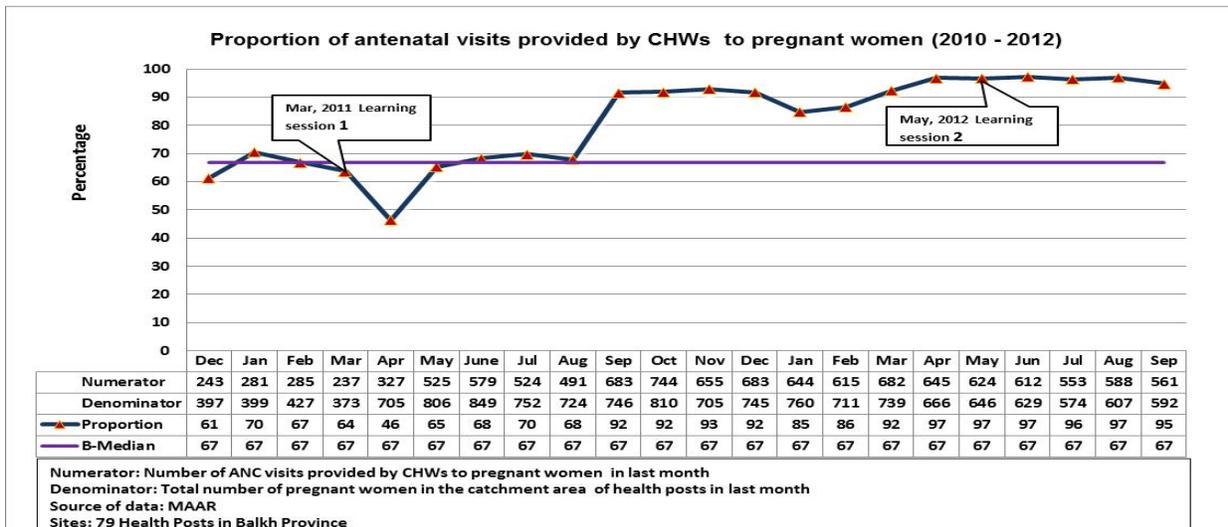
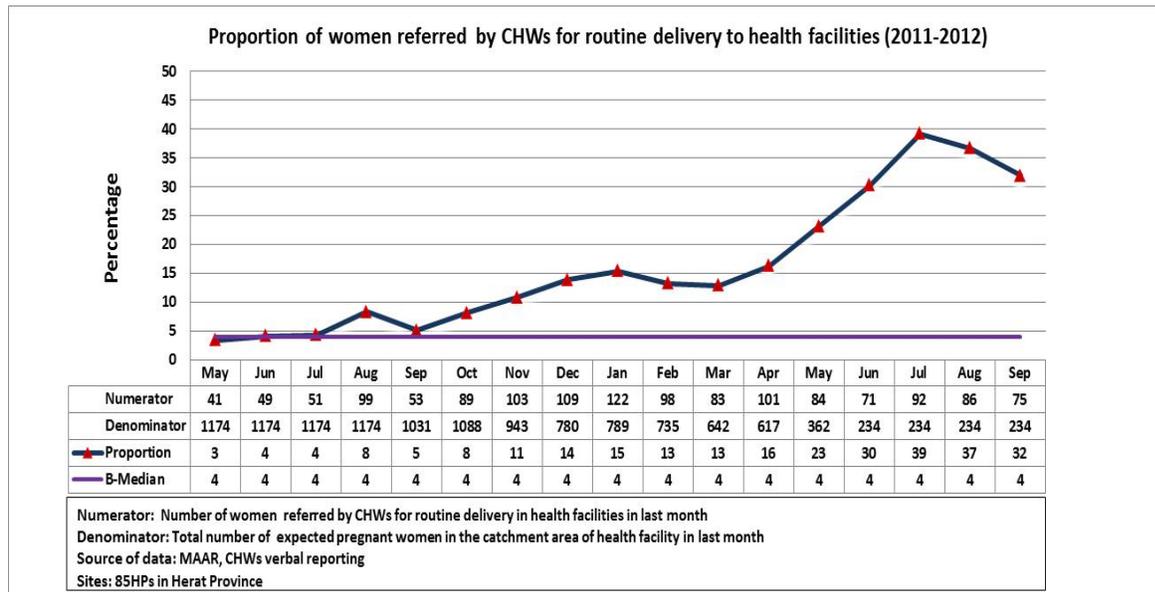


Figure 22. Afghanistan: Increasing referral of pregnant women by CHWs for delivery in health facility, 85 health posts in Herat Province, May 2011-Sept 2012



Maternity Hospital Collaborative

During FY12, Maternity hospital collaborative completed phase I (improving partograph, active management of third stage of labor, essential newborn care, postnatal monitoring and newborn resuscitation) and phase II (identification and management of pre-eclampsia and eclampsia) QI interventions. Phase III (maternal and neonatal sepsis, infection prevention) interventions were started (infection prevention was started in Kabul and all provinces including health facilities, but maternal and neonatal sepsis improvement work started only in Kabul). Significant gains have been demonstrated in phase I by improving prevention and management of PPH and newborn asphyxia.

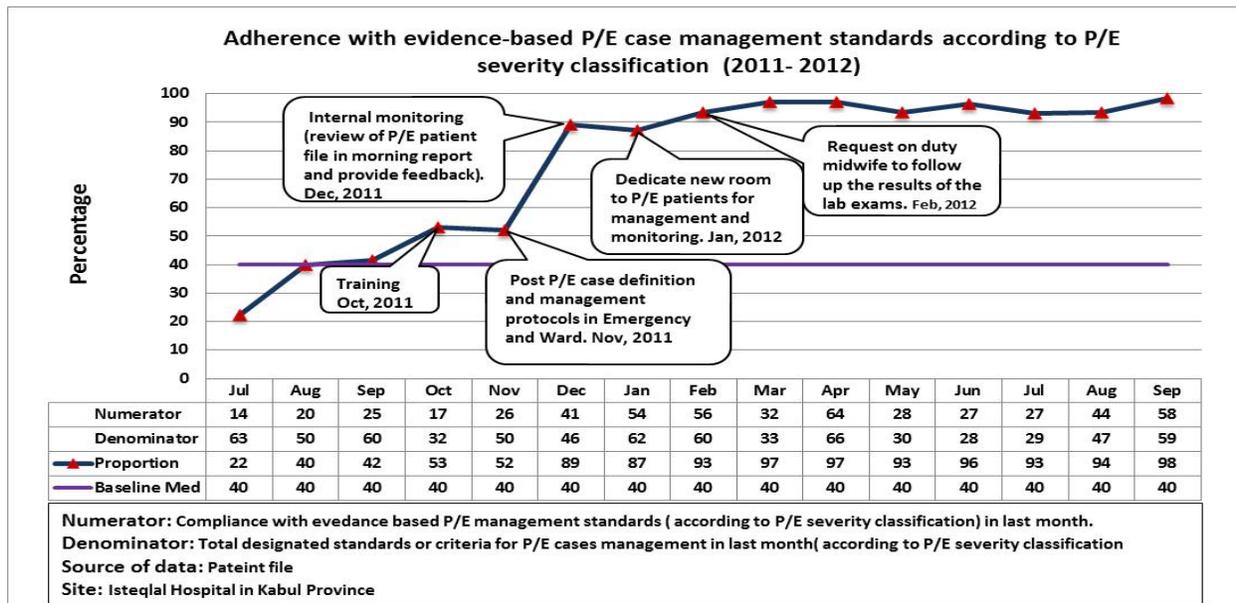
Infection prevention standards were modified and tailored for hospitals as one of the phase III interventions. HCI conducted infection prevention baseline assessments addressing four areas (waste management, all services, surgery and safe injection) in Kabul and in the targeted spread provinces (Herat, Bamyan, Balkh, Parwan, Logar, Wardak, Samangan and Saripul). Phase III interventions were started in maternity hospital collaborative targeted hospitals in Kabul and provinces. HCI trained some 160 first-line providers on infection prevention standards in HCI-assisted hospitals in Kabul and 69 in Balkh, Parwan, Herat and Bamyan Regional hospitals.

Learning Session 4 was conducted in Kabul in December 2011 with the participation of Kabul hospitals (Malalai, Isteqlal, Shinozada, Afghan and Mahdi Hospitals), provincial hospitals (regional hospital of Mazar-e-Sharif, provincial hospitals of Parwan, Bamyan, Logar and Wardak) and private sector hospitals (Loqman Hakim and Sayeda Rahmani Heart province). Learning Session 5 was held in Kabul in May 2012. Figure 23 shows results from Isteqlal Hospital for improving correct management of pre-eclampsia/eclampsia (PEE) according to severity classification.

Research and Evaluation

During FY12, the HCI team in Afghanistan implemented several research studies to examine the results and process of spread, the validity of data collected by QI teams, evaluate the impact of the community and facility MNH collaboratives. (Further details on these studies are provided in section 4.3.) HCI also supported the MOPH to complete a pilot study on improving the recording and reporting systems of maternity hospitals. HCI supported the design of a revised medical recording system and piloted it in three hospitals (Malalai, Isteqlal and Khair Khana).

Figure 23. Afghanistan: Increasing adherence with pre-eclampsia/eclampsia case management standards, Isteqlal Hospital, Kabul Province, July 2011-September 2012



As a result of the use of the new medical records package, more than 90,000 patients were recorded in the Patient Master Index from September 2011 – up to October 2012. The final results were presented at a workshop in Kabul in May 2012. Since then, the MOPH has issued a Request for Proposals to develop a national system based on the HCI prototype.

After the successful pilot Medical Records Package finalization one-day workshop was conducted on March 7, 2012 to solicit the final inputs from Malalai, Khair Khana, and Isteqlal Hospitals about the tested package of medical records.

Other Activities

HCI also supported the national roll-out of HBB in Afghanistan. HCI trained 538 first-line providers and 46 national trainers in series of training in HCI-targeted provinces as well as four other provinces (Nengrahar, Khost, Paktia and Kandahar); 26 of the national trainers were from Community Midwifery Education Schools. HCI supplied 474 HBB resuscitation sets (penguin, suction bulb, resuscitation bag with masks in two sizes), training materials (training flip charts, participants’ books, and resuscitation flip charts), and 44 Mannequin sets for hospitals in Kabul, Balkh, Parwan, Bamyan, Herat, Samangan, Saripul, Wardak, and Logar.

Directions for FY13

USAID has requested that HCI phase out provincial level support in 2013. HCI will close all provincial offices and focus its assistance on the IQHC Unit and other MOPH Departments to implement QI methodology through the Harmonized Quality Improvement Approach.

2.16 Indonesia

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Hospital Accreditation Process Impact Evaluation (HAPIE): Evaluating the quality of care provided in hospitals undergoing JCI and KARS accreditation in Indonesia	Quantitative and qualitative evaluation of the effect that implementing a new hospital accreditation system has on process and outcomes measures in 9 Indonesian hospitals	Nine hospitals have been selected in 3 provinces. 3: JCI accreditation 3: KARS accreditation 3: (later renewal of accreditation under KARS.

Main Activities and Results

In an effort to improve the quality of hospital services, the Government of the Republic of Indonesia requires hospitals to undergo periodic accreditation. To that end, in 1996, a hospital accreditation body known as KARS (*Komisi Akreditasi Rumah Sakit* or Commission for the Accreditation of Hospitals) was established by the Indonesian Ministry of Health. Although all hospitals are required to obtain accreditation through the KARS system, as of 2011 only 720 of the approximately 1700 hospitals (42%) in the country had achieved accreditation. The system was widely regarded to have failed in its mission of improving hospital care. In 2011 USAID agreed to support the Government of Indonesia in a two-pronged effort to improve the quality of care in Indonesian Hospitals. One part is providing support to seven hospitals seeking international accreditation through the Joint Commission International (JCI) process. This effort will be conducted in two stages. First, it supports two hospitals achieve JCI accreditation by the end of 2012 and the remaining five hospitals to be accredited by the end of 2014. The second part is supporting a restructuring and upgrade of the KARS system to have the process approved by the ISQua "International Accreditation Program" (accrediting the accreditors).

HCI was asked to perform the first stage of the "Hospital Accreditation Process Impact Evaluation (HAPIE). This independent evaluation of the accreditation reforms will be carried out at Public Hospital Class A in Indonesia in collaboration between URC and the Center for Family Welfare, Universitas Indonesia (CFW UI), the local contractor commissioned by HCI to contribute to protocol and data collection tool design and to take the lead on data collection in the hospitals. The overall objective of the study is to evaluate the assessment on Hospital Accreditation Process Impact Evaluation (HAPIE) to the quality services and hospital performance. The assessment of HAPIE will be conducted in three phases, i.e., baseline, mid-term (at 18 months after baseline), and end line (36 months after the baseline).

The HQ lead on the study, Dr. Edward Broughton, traveled to Jakarta in June 2012 to work with the local partners from CFW as well as the USAID representative, KARS and MOH officials and the WHO team who is working with KARS and the MOH to implement reforms to the accreditation system. Dr. Charles Shaw, the consultant assisting with the HAPIE evaluation, visited Jakarta for two weeks beginning July 30 to work with the Indonesia team from CFW UI under the direction of Dr. Anhari Achadi. During the visit, the protocol was completed, the data collection tools were finalized, the core data collection team was trained and the whole data collection process was pilot-tested in a hospital that is not part of the HAPIE study. Dr. Shaw also met with implementing partners at the WHO who are providing technical assistance to the MOH and KARS (Indonesia hospital accreditation body) in this process of upgrading the national accreditation system.

A series of tools were developed and pilot tested to measure quality services and hospital performance and patient experiences, which can be used in the baseline, midline (18 months after baseline) and end line (three years after baseline) to assess changes associated with accreditation. The pilot test took place under the direction of Drs. Shaw and Achadi in a hospital that is not part of the main study but has asked to be included in the dissemination meeting because they are keenly interested in implementing improvement activities according to the findings of the pilot evaluation.

Following this period, the completed tools and protocol were submitted to the Universitas Indonesia Institutional Review Board (IRB) for ethical clearance. Approval was granted in the last week of September. The English language version of the protocol, tools and consent form was submitted to the URC IRB also in the last week of September and approval was also obtained shortly afterwards.

Directions for FY13

Data collection for the study commenced in October and will be ongoing through November and possibly beyond, depending on the degree of cooperation received from the hospitals involved in the study. Data entry should occur simultaneously with the data collection and the whole set of data should be available for analysis in mid-December. Preliminary analysis is scheduled for the end of November when three of the hospital surveys will be completed. In January 2013, analysis and a preliminary write-up of the results from the initial evaluation will be completed and a dissemination meeting will be held in Jakarta with all relevant stakeholders.

EUROPE AND EURASIA

2.17 Georgia

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Improve Quality, consistency and continuity of medical care through a demonstration collaborative in one region	<ul style="list-style-type: none"> • Improve timeliness, continuity, effectiveness, efficiency, patient-centeredness of provided services and their consistency with clinical guidelines through improvement collaborative approach • Strengthen capacity of medical providers to provide safe, timely, continuous, effective and efficient medical care; • Strengthen capacity of local partners (medical associations, training centers, teaching hospitals and medical schools) to deliver continuous learning opportunities; • Improve awareness on quality improvement experiences countrywide; • Strengthen HIS to support development of evidence-based decisions on improvement quality of medical care; • Ensure equitable access to priority “best-buy” high-impact medical services in intervention region 	<p>Dissemination of evidence for priority conditions to all physicians countrywide, Demonstration of QI intervention to improve quality, consistency and continuity of care in one region</p> <p>Demonstration phase is taking place in 4 hospitals (out of 40), 4 polyclinics (out of 42) and 13 village doctors (out of 212) in Imereti (1 out of 12 Regions of Georgia)</p> <p>This region has 699 890 population</p>
Improve access and use of evidence-based medical information by Georgian physicians and enhance availability of modern evidence based treatments.	<ul style="list-style-type: none"> • Improve access to evidence-based medical literature (guidelines, manuals, pathways, protocols) of Georgian Physicians; • Enhance the use of evidence-based clinical guidelines, protocols and pathways in clinical practice; • Strengthen capacity of professional associations in developing and adapting international guidelines and evidence-based literature to Georgian context; • Provide technical assistance to hospital and insurance company executives on planning and introduction of new essential medical technologies; 	Dissemination of evidence for priority conditions to all physicians countrywide

Major Activities and Results

Improve Quality, Consistency, and Continuity of Medical Care through a Demonstration Collaborative in One Region

A four-country assessment (Georgia, Albania, Armenia and Russia) of maternal newborn care and ambulatory care for non-communicable diseases for women of reproductive age conducted by HCI in 2011 at the request of the USAID Europe and Eurasia Bureau demonstrated some gains, especially for maternal newborn care, and many significant quality of care gaps, especially for delivery of high-impact services for leading causes of death and disability in Georgian adults (cardiovascular disease, chronic respiratory disease, etc). The assessment results, along with other assessments recently conducted in Georgia, provided an essential evidence base to help guide project prioritization of leading quality of care gaps, as well as implementation strategies that can effectively overcome identified barriers and leverage low-cost opportunities to rapidly improve quality, consistency and continuity of medical care in Georgia.

In August 2011, USAID asked HCI to provide technical assistance in Georgia to address quality, consistency, and continuity of medical care, to improve access and use of evidence-based medical information by Georgian physicians, and to enhance the availability of modern, evidence-based treatments. HCI developed in FY12 an intensive program of support to the Ministry of Labor, Health, and Social Affairs, Georgian medical associations, training centers, and private health care provider organizations to introduce evidence-based clinical practices related to the leading causes of adult morbidity and mortality: cardiovascular disease, acute coronary syndrome, chronic obstructive pulmonary disease, and asthma. The project is also addressing child respiratory tract infections, pneumonia, and asthma. HCI also developed a collaborative improvement activity in Imereti Region to demonstrate how improve the clinical content and processes of medical care delivery to achieve reliable delivery of high-impact, cost-effective prevention and treatment services.

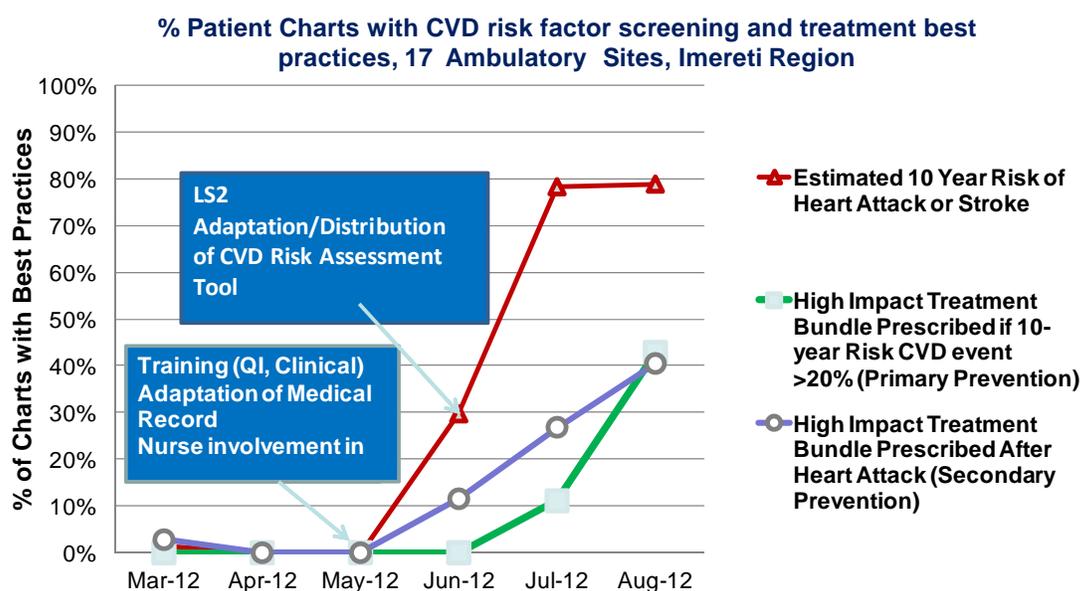
The Imereti non-communicable disease (NCD) improvement collaborative, involving 17 ambulatory care sites and three hospitals, has already demonstrated impressive gains in its first nine months of quality improvement activities with respect to nutrition and physical activity counseling, screening for smoking, and the delivery of tobacco cessation interventions for smokers. Table 7 shows results from the initial six months of improvement work in 17 ambulatory centers in Georgia's Imereti region. Random monthly chart reviews in all participating ambulatory clinics show that routine screening, counseling and treatment (when indicated) for modifiable cardiovascular disease (CVD) risk factors has increased from less than 10% of charts at baseline to 40-90% after six months of quality improvement interventions.

Calculation of 10-year risk of CVD event is important measure of prevention: if elevated, it can be reduced dramatically with a low-cost "bundle" of medications (including aspirin, blood pressure and cholesterol drugs). Intensive training in dyslipidemia management (identified as one of major gaps in providing evidence-based primary or secondary prevention), distribution of detailed instruction of CVD risk-factor screening and modification interventions (including filling standard ambulatory medical chart inserts), routine monthly monitoring and feedback improved calculation of 10 year risk of CVD. Due to abovementioned activities, secondary prevention of CVD and its complications has been improved: Figure 24 shows that routine screening, counseling (including calculation of estimated 10-year-risk of heart attack or stroke), and treatment (when indicated) for modifiable cardiovascular disease risk factors has increased from less than 10% at baseline to 40-90% after five months of QI interventions.

Table 7. Georgia: Improvement in cardiovascular disease prevention, acute coronary syndrome management, and pediatric respiratory tract infection ambulatory management in FY12

Cardiovascular disease prevention indicators being collected (5 sites)	Baseline (March 2012)	August 2012
% of charts with current updated list of medications	0%	53%
% of chart with BP last visit	92%	100%
% of charts with hypertension with antihypertensive treatment prescribed/adjusted at last visit	76%	93%
% of charts with Body Mass Index calculated last year	8%	90%
% of charts with nutrition & physical activity counseling provided last year	10%	94%
% of chart with tobacco status documented at last visit	6%	88%
% of charts of smokers with tobacco cessation intervention	6%	96%
% of charts with 2 or more risk factor with total 10 year CVD risk calculated	0%	76%
% of charts on primary multidrug therapy if CVD risk >20% or diabetes	0%	36%
% of charts with coronary artery disease on secondary prevention	3%	38%
Key acute coronary syndrome management indicators being collected (3 sites)	Baseline (April 2012)	August 2012
% of charts with ACS with Vital Signs in 10 min	26%	73%
% of charts with ACS with EKG in 10 min	27%	75%
% of charts with ACS with Oxygen for initial treatment	16%	40%
% of charts with ACS with Aspirin for ongoing treatment	74%	96%
% of charts with ACS with Beta-blocker for ongoing treatment	36%	72%
Key child respiratory tract infection (RTI) management indicators being collected (4 sites)	Baseline (April 2012)	August 2012
% of charts of children treated for RTI, where diagnosis supported by chart document	37%	72%
% of charts of children treated for RTI with heart rate, respiratory rate and temperature recorded	60%	86%
% of charts of children treated for RTI with antibiotics where antibiotic therapy is justified	14%	50%
% of charts of children treated for RTI with antibiotics where 1st line antibiotic is prescribed	15%	43%

Figure 24. Georgia: Increasing application of CVD screening and treatment best practices in sites participating in the Imereti Region improvement collaborative



Improve Access and Use of Evidence-based Medical Information by Georgian Physicians and Enhance Availability of Modern Evidence-based Treatments

The HCI team started the year with a review of national guidelines of prevention and management of priority clinical conditions in terms of their relevance with current best practices and developed recommendations for the MoLHSA to adopt and/or conduct focused review of national guidelines.

To support access to and use of evidence-based medical information, the HCI team also contributed to the development/adaptation and electronic and written dissemination of evidence-based medical information (including guidelines and protocols) to health care providers. Specifically, Georgia HCI team adopted, translated and distributed 25 job aids and informational materials for providers through the project's web page and Facebook page and through dissemination of hard copies to providers in collaborative improvement facilities. The project also supported development of evidence-based clinical protocols for nationwide use. To date, HCI has developed or contributed to nine national protocols in collaboration with MoLHSA, professional medical associations, and physicians of the Georgian Medical Diaspora in US. These protocols will be institutionalized at the national level by MoLHSA and are intended to: a) Standardize diagnostic/treatment interventions at specific levels of care; b) Evaluate quality of medical services through standard audit criteria and use these criteria for making evidence-based decisions at each level of health system; and c) Be used for billing and reimbursement purposes by different payers (including state purchaser, insurance companies and etc).

To support electronic access to evidence-based medical information, guidelines and protocols, the project has created the web resource: <http://www.hciproject.org/georgiahealthquality>, where clinical tools, job aids, pathways and training materials in different clinical focus areas are available in Georgian. The project is also using Facebook page to connect with medical professionals and other key stakeholders in Georgia to post alerts about newly published clinical evidence, with brief summaries in Georgian (<http://www.facebook.com/USAIDGeorgiaHealthCareImprovementProject>).

Directions for FY13

HCI will continue intensive support of facility QI teams in Imereti Region in all project priority clinical areas. HCI will also continue its collaboration at the national level to advocate for inclusion of WHO best-buy interventions in publicly funded programs and private insurance schemes. The project will support the development of user-friendly medical web portal to improve access and use of evidence-based medical information for Georgian physicians. The endline data collection for the cost-effectiveness analysis of results in intervention and control sites will also be completed.

2.18 Russia

Overview of HCI's Program in FY12

In FY12, HCI's program in Russia encompassed three technical components: 1) HIV/AIDS care and support, 2) tuberculosis diagnosis and treatment, and 3) initiating a new activity focused on reduced tobacco and alcohol use during pregnancy. In first quarter of FY12, HCI finalized the "Improving care for mothers and babies" collaboratives initiated in FY10. In the third quarter of FY12, HCI initiated, together with our long-term federal-level MCH partner, the Federal Research Institute for Healthcare Organization and Informatics, a new activity aimed at reduced tobacco and alcohol use during pregnancy in Tula, Tambov, and Tver oblasts. HCI assistance to Russia also included a sub-contract with the Eurasia Medical Education Program, which deployed expert physicians on three visits to Russian academic medical centers in Irkutsk, Vladivostok, and Novosibirsk between April and September 2012.

Due to the sudden closure of USAID activities in Russia, all HCI technical assistance was terminated on October 1, 2012.

Component 1: HIV Treatment, Care and Support

Activities	What are we trying to accomplish?	Scale of intervention
<p>HIV/AIDS Treatment, Care and Support Collaborative (Regional level) Capacity development for improved delivery of HIV care in Sverdlovsk oblast, Leningrad oblast and Republic of Tatarstan</p>	<p>Provide technical assistance to Yekaterinburg and Sverdlovsk oblast, Leningrad oblast and Republic of Tatarstan in improving organization and delivery of HIV care</p>	<ul style="list-style-type: none"> ▪ Sverdlovsk oblast (including Yekaterinburg) (SO), inclusive of the Sverdlovsk Oblast AIDS Center and 5 sub-oblast AIDS Centers, 73 Central Rayon hospitals, 100% of the TB facilities equals to eight (Oblast TB Dispensary and its affiliates). A total number of PLWH registered for care is 37,899 (end June, 2012) ▪ Entire Leningrad oblast (LO), inclusive of the Oblast AIDS Center, 18 Central Rayon Hospitals, 19 (all) TB facilities, 19 (all) substance abuse treatment facilities, 5 rayon social rehabilitation centers. A total number of PLWH registered in care is 12,636 (end June, 2012).
<p>HIV/AIDS Treatment, Care and Support Collaborative (National level) Institutionalization of best practices on HIV care organization</p>	<p>Complete development of Federal guidelines on provision of social support services for HIV infected families</p>	<ul style="list-style-type: none"> ▪ Nationwide ▪ A total number of PLWH registered in care in the Russian Federation (83 regions) is 351,022 (end December 2010).

HIV/AIDS—Main Activities and Results

In FY12, HCI's HIV program in Russia sought to sustain gains in capacity development for improved delivery of HIV care in Leningrad and Sverdlovsk oblasts achieved in FY11 and expand assistance to the Republic of Tatarstan. The HIV component also included limited technical assistance to the City Committee on Social Policy in St. Petersburg to develop standards for social care delivery for HIV positive mothers and their children in St. Petersburg based on the collaborative on improving social support for HIV-infected mothers and their children completed in FY11. We also worked in close cooperation with federal level institutions and the Federal AIDS Center to promote the Framework for Engagement into HIV Care country-wide and to complete development of Federal guidelines on provision of social support services for HIV infected families.

In Sverdlovsk Oblast this year, HCI's assistance helped the AIDS Center to expand access to services. The AIDS Center, reviewing its performance, realized the need for organizational changes to decrease high work load of specialists (30 patients per doctor a day), long waiting time to make an appointment in advance (30 days before the visit), and expand accessibility of currently hard-to-reach AIDS Center phone lines to schedule appointments. The AIDS Center asked HCI to help in solving these organizational problems using QI methodology. In March 2012, HCI supported and facilitated a meeting of the Center's specialists to discuss issues of burnout, task shifting, and reorganization of patient flow and identified several changes for implementation, including dividing patients into groups according to the regularity of their medical follow-up, engaging social workers to provide patient groups with information, and installation of a multi-channel phone station. By June 2012, the AIDS Center has reduced the time that patients spend on hold, waiting to make an appointment by telephone, and have added informational messages during the waiting time. Registration of newly detected HIV patients increased by 28% during April-June 2012 as compared with April-June 2011.

In Leningrad Oblast, HCI facilitated meetings of the Oblast Healthcare Committee, Narcological Dispensary, AIDS Center and NGO 'Humanitarian Action' in November 2011 to identify joint activities for HIV prevention among at-risk groups, including intravenous drug users. In April 2012, HCI organized a study visit of 15 heads and care providers of oblast-level and municipal health care facilities

to St. Petersburg's NGO "Humanitarian Action" and the St. Petersburg Center for HIV Prevention to discuss opportunities for cooperation between state institutions and NGOs in implementing HIV prevention activities among most at-risk populations. HCI also provided support to the Oblast Committee on Healthcare in developing a Decree on HIV Examination (including HIV pre- and post-test counseling) in oblast health facilities of the Oblast. The document was approved in June 2012. However, in late spring the governor was changed, and all further activities related to HIV prevention among PLWH including intravenous drug users were put on hold.

In April 2012, HCI's specialists visited Kazan to discuss possible collaboration with the Oblast authorities. The meetings were held with the Republic AIDS Center's Director, Deputy Director as well as the Minister of Health and Deputy Minister. In July, HCI staff met with 13 partners to agree on strategic goals for collaboration in the Republic of Tatarstan. In September, a draft memorandum of collaboration was forwarded to the Minister of Health for their further review. It was anticipated that the memorandum will be signed at the official start-up round table meeting that was scheduled October 3, 2012. The event was cancelled due to the sudden closure of USAID assistance in Russia.

HCI also continued its collaboration with federal level authorities to disseminate results from HIV improvement efforts. In December 2011, HCI organized with the Federal AIDS Center a round table with a purpose of presenting and discussing the Framework for Engagement into HIV Care with heads of oblast AIDS Centers. There were 31 heads and HIV specialists from 13 AIDS Centers in attendance. In June 2012, HCI partnered with the Federal AIDS Center to organize another round table to present and discuss experiences on scaling-up coverage of preventive and social-medical services for at-risks groups exposed to HIV infection and those who already live with HIV/AIDS. Leningrad and Sverdlovsk oblasts presented their progress. There were 38 participants from 22 regions representing Oblast AIDS Centers, Narcological services, Rospotrebnadzor, Saint Petersburg Committee on Social Policy, The Federal AIDS Center, Federal Research Institute for Healthcare Organization, and non-governmental organizations.

HCI also provided technical assistance to the FRIHOI Center for Quality in developing a federal-level course for QI training of trainers. The Center piloted the first QI training of trainers on May 28-30, 2012 with 22 attendees, including representatives of five HCI-supported regions (Sverdlovsk, Leningrad, Tatarstan, Bryansk and Saratov).

The Draft Order on organizing social support services for HIV patients developed with HCI assistance in FY11 has been modified into methodological recommendations and sent to Director of the Federal AIDS Center for his consideration. The recommendations were expected to be presented at an internal meeting of the Federal AIDS Center in April 2012. However, due to political changes in the Ministry of Health, finalization of the recommendations is still pending. Our expert from the Federal AIDS Center mentioned that the Center is much interested in these recommendations and will facilitate their approval by the Ministry of Health. Upon approval the Center plans to disseminate the guidelines country-wide.

In St. Petersburg, standards for social support services for HIV-affected families were developed by with HCI technical assistance and submitted for final revision at the City's Committee on Social Policy. The standards were expected to be officially presented in released in March 2012. However due to political changes in St. Petersburg final approval of the standards is still pending.

The FRIHOI Center for Quality continues to maintain public portion of www.healthquality.ru developed under MCH collaborative in FY11. The cumulative number of those who completed the QI course and received certificate in March 2012 equals to 110 (including 5 MCH collaborative participants and 105 non-participants). The cumulative number of continuing students in March adds up to 265 (including 39 MCH collaborative participants and 226 non-participants). At the end of the MCH collaborative (September 2012) the number of those completed the QI course and received certificate was 20

(including 3 MCH collaborative participants and 17 non-participants); the number of continuing students was 134 (including 41 MCH participants and 93 non-participants).

Component 2: Improving Early TB Detection and Enhancing Treatment Efficiency by Strengthening the Role of the General Health Care System

Key Interventions	What are we trying to accomplish?	Scale of intervention
Assist Russian partners in improving early TB detection and enhancing treatment efficiency by strengthening the role of general healthcare system.	<ul style="list-style-type: none"> ▪ To provide assistance to the regional TB control programs in efficiency enhancement of the TB control activities; ▪ Promote better cooperation between the TB service and PHC system and between different facilities and organizations (government and non-government, civilian and penitentiary, federal and regional, research, educational and healthcare organizations); ▪ Assist in the development and strengthening of the social support of TB patients for treatment adherence and improvement of TB treatment; ▪ Promote better awareness of the TB patients and PHC specialists on prevention, early detection and treatment of TB, assist in strengthening the local capacity to train the staff and improvement of their qualification in TB control. 	<p>Saratov Oblast (total population of 2,564,835 million) with a total of 4,522 registered TB patients (of them 1,768 detected in 2010). Participating districts-Saratov, Engels and Balakovo districts.</p> <p>Saratov- 19 PHC facilities, oblast TB dispensary, 2 district TB dispensaries, and Medical Department of Penitentiary System; Engels-6 PHC facilities and district TB dispensary; Balakovo-4 PHC facilities and district TB dispensary</p> <p>Bryansk oblast (total population of 1,292,144 million) with a total of 1,920 registered TB patients (of them 1,138 detected in 2010).</p> <p>Participating districts- Bryansk, Novozybkovsky, and Karachevsky districts. Bryansk-10PHC facilities, oblast TB dispensary; Novozykovsky –TB district dispensary, Central district hospital; Karachevsky – Central district hospital (polyclinic and district TB service within it)</p>

TB—Main Activities and Results

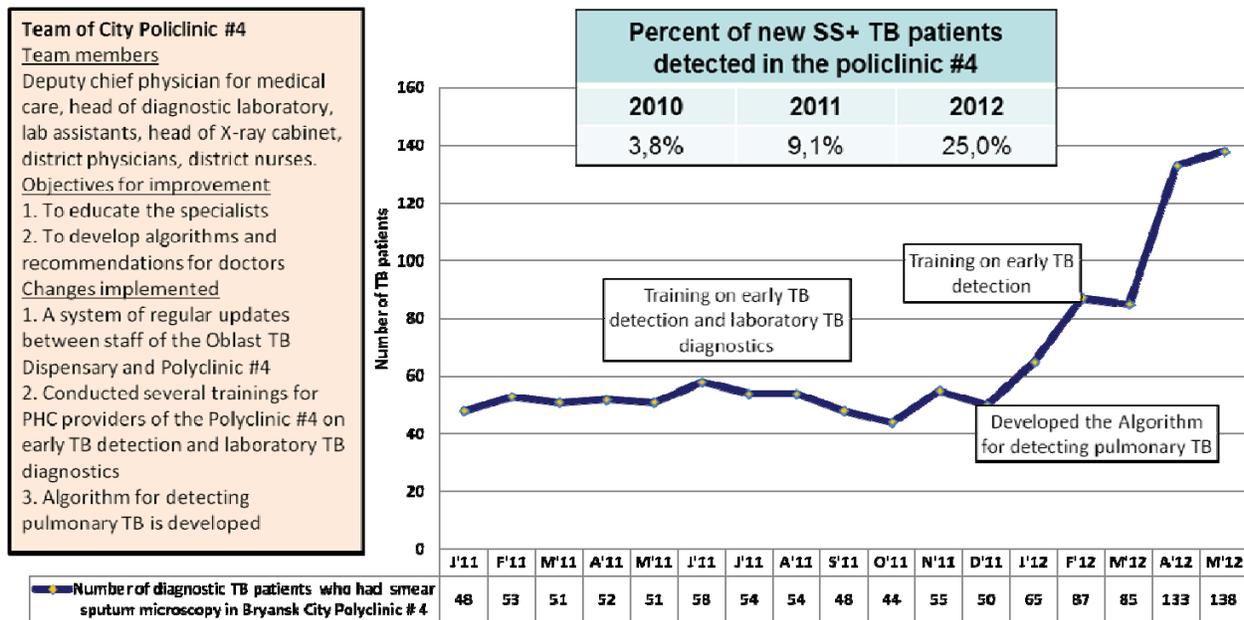
Building on gains achieved in FY11, in FY12 HCI continued to provide assistance to local partners in Saratov and Bryansk oblasts in improving early TB detection at primary care settings, improving TB treatment outcomes and adherence, improving infection control (IC), and establishing linkages with social support services through provider capacity building. In Saratov, HCI also supported the establishment of a Center of Excellence that will provide state-of-the-art training in TB care. Per request of the USAID/Russia HCI/Russia did not expend to a third region of Astrakhan as originally planned in FY11.

In the interventions to increase early TB detection at polyclinics in Saratov Oblast, HCI facilitated cooperation between the federal experts and specialists of the Oblast TB Dispensary to develop training capacity of the dispensary personnel in teaching care providers from PHC facilities on early detection of TB. To improve quality of diagnostic materials, all project polyclinics allocated an appropriate place for sputum collection, assigned a focal point for sputum collection, organized regular feedback between lab assistants and general practitioners, and ensured regular fill-in of the lab specimen registry.

In Polyclinic No. 4 in Bryansk, the team introduced the following changes to improve early TB detection: all therapists of the polyclinic were trained in early TB detection; algorithms of TB detection developed, printed and distributed; therapists started to refer patients with TB symptoms to sputum microscopy; the laboratory introduced a specimen discarded register and started to provide feedback on all discarded cases to doctors and nurses. In 2012, the number of patients referred to sputum microscopy increased by 62%, from 421 in 2011 to 683 patients in 2012. Based on an external quality audit implemented by experts of the Federal TB Research Institute, the Polyclinic was recognized for its high

performance on implementing sputum microscopy. As shown in Figure 25, these efforts led to a sharp increase in TB examinations using sputum smears.

Figure 25. Russia: Increase in number of patients examined with sputum smear microscopy in Polyclinic No. 4, Bryansk Oblast, January 2011-May 2012



Data source: facility records, reporting data of the Oblast TB Dispensary

To improve TB treatment outcomes, HCI trained 50 nurses from Bryansk and Saratov oblasts in directly observed treatment, short course (DOTS), quality sputum collection, and infection control (IC) as a part of an effort to create “Patient’s schools.” Those nurses then trained all remaining nurses in Saratov and Bryansk Oblast TB dispensaries. In Bryansk, nurses were also mobilized to begin systematically monitoring directly observed treatment. The proportion of patients taking their anti-TB drugs under direct observation by nurses increased from 70% in July 2012 to 89% in September.

New Initiative: Reducing Alcohol and Tobacco Use among Pregnant Women

In April 2012, HCI initiated a new activity with purpose of assisting the Russian partners in improving alcohol and tobacco control during pregnancy through the implementation of an evidence-based Brief Physician Intervention. The approach is based on the “5 A’s”: Ask about substance use, Advise the patient to quit, Assess willingness to quit, Assist in quitting, and Arrange follow-up. The activity was designed to build on the "Improving Care for Mothers and Babies" work carried out by HCI in six Russian regions from 2008-2011. The activity also built on findings from the four-country assessment completed by HCI in FY11 of non-communicable disease prevention, screening, and care best practices for women of reproductive age, which found that in Russia, routine screening and counseling for tobacco was reported by only 17% of practitioners and for alcohol, by just 12% of practitioners.

The Ministries of Health in Tver, Tula and Tambov regions expressed interest and willingness to participate in the project. Ten women’s consultation clinics were assigned as pilot sites. More than 100 physicians, patients and medical education institutions were expected to participate from the three regions. The Russian Ministry of Health and Social Development (MOHSD) had officially approved the project, which was seen as a preparatory phase for development of recommendations to MOHSD for

the Federal program on improving control for alcohol and tobacco use among public, including the women of reproductive age.

The project was officially launched on August 6, 2012 at the Federal Institute for Health Care Organization and Informatics and has brought over 30 participants, including representatives from Tver, Tambov, and Tula regions, USAID/Moscow, and two project experts from the United States. The event was highlighted by USAID as the first known project to simultaneously address both alcohol and tobacco use during pregnancy. Introductory visits to selected project pilot sites in Tula and Tver regions were conducted in August. Forms and questionnaires for a baseline assessment of the extent of smoking and alcohol use among pregnant women in the project regions were adopted from the English-language materials and translated into Russian. The baseline assessment has been scheduled for October. The project was cancelled due to the sudden closure of USAID activities in Russia.

LATIN AMERICA AND THE CARIBBEAN

2.19 Bolivia

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
<p>TB Spread Collaborative in El Alto</p> <ul style="list-style-type: none"> ▪ To support the 5 professionals in charge of TB in five health care networks to consolidate the use of QI methods and lessons learned in FY11, comprising 3 hospitals, 61 health centers, and 19 laboratories. ▪ To complete a smaller collaborative specifically aimed at detection of new TB cases in selected 27 facilities ▪ To expand the QI approach to 5 private services and 2 Social Security services. 	<ul style="list-style-type: none"> ▪ To institutionalize a sustainable CQI approach to the TB program in the five health care networks aimed at: ▪ To improve the quality of sputum samples and laboratory activities ▪ To ensure availability of TB drugs and supplies ▪ To increase TB cure rates and reduce abandonment rates ▪ To strengthen the managerial capacity of the regional TB office and health networks ▪ To test/learn the most effective interventions to increase detection of new TB patients ▪ To increase coverage of TB patients who have been tested for HIV ▪ To improve MDR-TB surveillance processes 	<ul style="list-style-type: none"> ▪ Approximately 900,000 inhabitants in the Municipality of El Alto, encompassing five MOH Health Care Networks, including all 4 hospitals, 42 out of 47 public health centers and all 19 laboratories. ▪ Approximately 630 TB patients are expected in El Alto each year. (Annual goal 70%)
<p>TB Spread Collaborative in the city of Cochabamba</p> <p>To spread QI methods and lessons learned in the collaborative in El Alto, to 42 health care facilities comprising 9 hospitals, 29 health centers, and 6 laboratories in Cochabamba.</p>	<ul style="list-style-type: none"> ▪ To improve the quality and coverage of TB control activities ▪ To increase detection of new TB patients ▪ To increase TB cure rates and reduce abandonment rates ▪ To improve the quality of sputum samples and laboratory activities ▪ To strengthen the managerial capacity of the regional TB office and health networks 	<ul style="list-style-type: none"> ▪ Approximately 620,000 inhabitants in the city of Cochabamba, encompassing all nine hospitals, all 29 health centers and 16 out of 19 laboratories ▪ Approximately 434 TB patients are expected in El Alto each year (Annual goal 70%). Historically the MOH (detects and treats only 250 (41% of those). ▪ Cure rate is 80% and abandonment rate is 9%.
<p>Technical support to the National TB Control program (NTCP) and local</p>	<ul style="list-style-type: none"> ▪ To support the NTCP to organize and implement a national scope training activity for facilitators using the TB CD 	<p>National level</p>

universities	Rom and updated distance learning modules. <ul style="list-style-type: none"> Together with the NTCP expand the current activities in two private universities to two additional private ones in Cochabamba and El Alto, as well as to one public university in El Alto and another one in Cochabamba. 	
Technical support to UNICEF-FORTALESSA Project	<ul style="list-style-type: none"> To inform and orient UNICEF officials to the CQI methods as applied on TB and implementation experiences in Bolivia To help UNICEF-FORTALESSA to plan their TB activities 	National level

Main Activities and Results

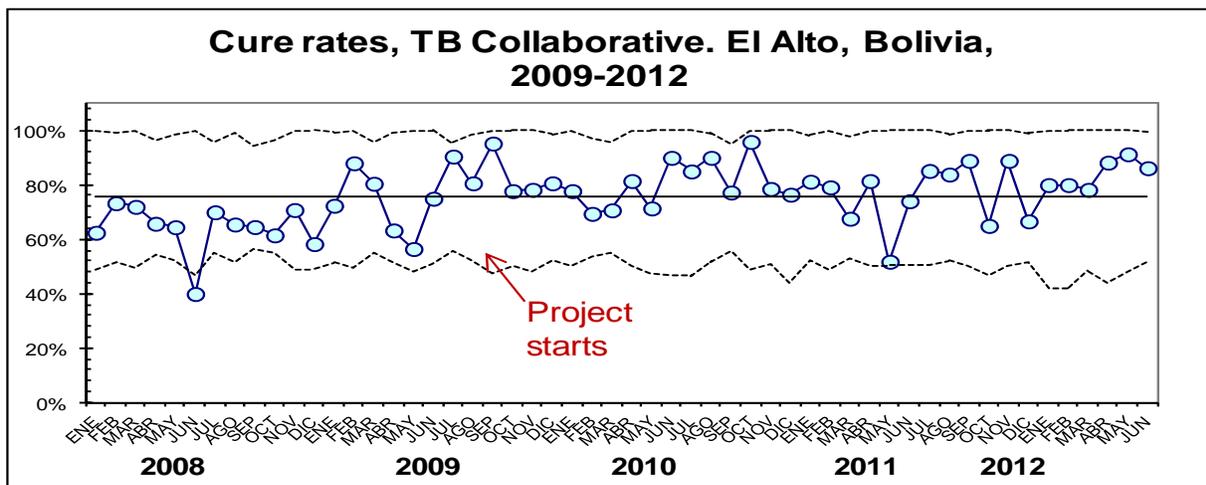
TB Spread Collaborative in El Alto

HCI implemented two improvement collaboratives with the Ministry of Health in Bolivia in FY12: one in the city of El Alto, and the other in the city of Cochabamba. Both activities were closed out at the end of FY12. The assistance provided to the Regional TB Control Program and the five MOH health care networks in El Alto has been successful in improving processes such as ensuring the availability of TB drugs and supplies, the quality of sputum samples, the adherence of TB patients to treatment which resulted in improvements of cure rates, treatment success rates and reduction of abandonment rates.

Another key process on which HCI and the MOH improvement efforts were successful was the logistics and availability of TB supplies and TB drugs. HCI successfully completed the development of logistics manuals and procedures, as well as training materials, and together with these, HCI streamlined the design and implementation of the “DOTS Boxes”. These two interventions were powerful in securing a steady supply of necessary elements for TB treatment, making a reality that every TB patient has its own supply of treatment, ensuring there will be no interruptions or dropouts due to a lack of drugs.

Many of these improvements, as well as the increased proportion of health care personnel that received training on TB care through the CD Rom and distance learning modules, resulted in increased cure rates of TB patients at most of the facilities and the El Alto municipality as a whole, as can be seen in Figure 26.

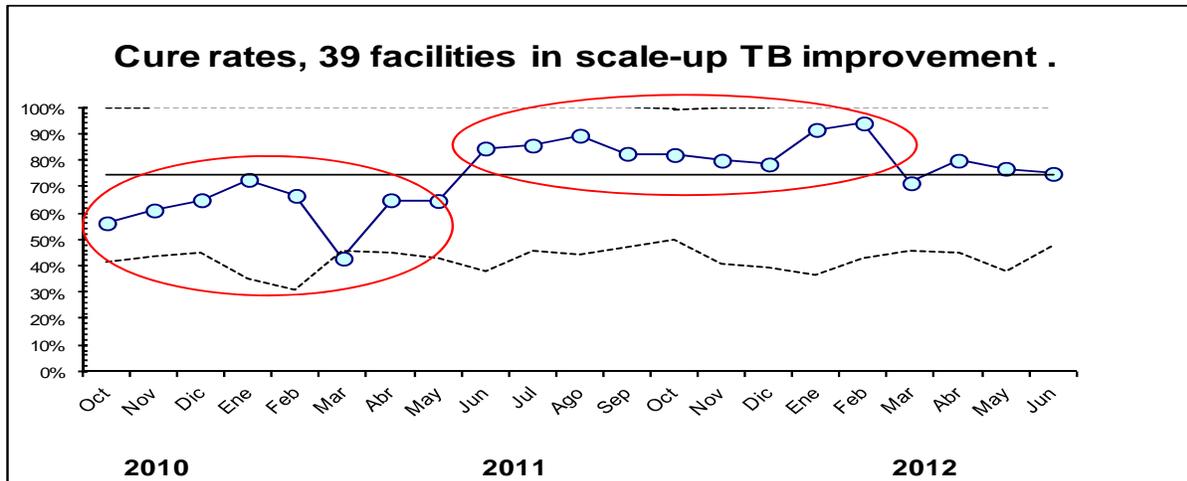
Figure 26. Bolivia: TB cure rates achieved in the 47 health facilities in El Alto, 2009-2012



By the end of the fiscal year, HCI was successful in synthesizing the main improvements in these processes through the publication of five “How-to” Guides aimed at facilitating a national scale-up that

the National TB program is planning for 2013. A couple of these guides were pilot tested with very good results in the scale-up in the city of Cochabamba. The knowledge gained on how to improve the quality of sputum samples, the availability of TB drugs and supplies, the detection of new TB cases and several other TB control processes such as training on TB through the CD-ROM and distance learning modules that had been developed by HCI was scaled up and implemented in the city of Cochabamba, beginning in FY11. The effect of this spread of improvement knowledge can be seen in Figure 27, which shows that in a much shorter period of time, similar positive results were obtained in Cochabamba with respect to TB cure rates.

Figure 27. Bolivia: TB cure rates achieved in the 39 health facilities in Cochabamba, 2010-2012



In September 2012, HCI and the Cochabamba TB Program as well as the Cercado network management team had a close-out ceremony for HCI's assistance, where all the successful experiences were presented. Responsibilities and tasks for the continued implementation of the QI program were discussed, as part of a sustainability strategy.

HCI also provided technical support to the National TB Control Program (NTCP) and local universities during FY12. By September 2012 the NTCP and HCI held discussions about implementing a national scale-up of several key improvements, including the use of the TB CD-ROM, DOTS boxes, and other successful change ideas tested in El Alto and Cochabamba. The NTCP is preparing a national meeting to be held in October in the city of Santa Cruz, to advance their scale-up plans. In addition, HCI supported the NTCP in improving the Excel-based TB data collection and reporting tool that was developed and tested at El Alto and Cochabamba, for its deployment nationally.

Another important contribution of HCI in Bolivia during FY12 was the transfer of our improvement methodology to technical staff of the USAID-UNICEF-FORTALESSA and of the USAID-Health Communities Projects. HCI technical staff worked closely with staff from these two new USAID projects to train them in the use of QI methods and tools. Our technical staff worked together with USAID/UNICEF FORTALESSA and with the Healthy Communities Project in their application with the recently formed quality improvement teams at selected facilities and health care networks in the departments of Chuquisaca and La Paz.

Directions in FY13

HCI closed out activities in Bolivia in September 2012.

2.20 Guatemala

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
Promotion and improved delivery of essential obstetric and newborn care (EONC) at the community level (Community ProCONE) and for basic EONC (Basic ProCONE) and management of EONC complications (Complications ProCONE), including prenatal and postpartum family planning counseling	Reduce maternal and neonatal mortality through the institutionalization of EONC best practices at the community, primary, secondary, and tertiary levels, including improvement management of newborn complications through the Helping Babies Breathe and Kangaroo Mother Care Initiatives	<ul style="list-style-type: none"> ▪ 6 of 29 Health Areas; 144 2nd level and 182 first level of 401 services (81%) ▪ 8 hospitals, 50 permanent (24-hour_ health centers (CAP), 2 Integrated MCH clinics (CAIMI), 81 health centers, and 182 health posts. ▪ 1,716 of 6,215 service providers in the region ▪ 1,705,789 people benefitted out of 5,856,230 in the region (14 million in the whole country) <p>Prioritized communities per Health Area (Total = 112): Quetzaltenango (8); Totonicapán (10); Huehuetenango (54); Quiche (16); Ixil (24)</p> <p>Hospitals per Health Area (Total = 8): Quetzaltenango (1); Totonicapán (1); Huehuetenango (2); Quiche (2); Ixil (1); San Marcos (1)</p>
Maternal and child essential nutrition actions	Reduce maternal and child malnutrition by supporting QI and compliance with cost-effective maternal and child essential nutrition actions (ENA) at the community and health services levels to ensure impact at the population level Support the expansion of Baby Friendly Hospital Services to promote breastfeeding	<ul style="list-style-type: none"> ▪ 12 prioritized municipalities in five priority health areas (out of 29 health areas in Guatemala) ▪ Total municipalities in the country = 334
Quality Management System (QMS)	Maintain MOH status as an ISO-certified institution; this applies only to the units already certified by September 2011 Maintain an MOH quality committee responsible for identifying and keeping the system on track	<ul style="list-style-type: none"> ▪ MOH HQ, 5 Health Area Directorates, and 10 facilities in Health Areas ▪ 305,117 women of reproductive age benefitted ▪ 171,774 children under 5 years benefitted

Main Activities and Results

In FY12, HCI support focused on building the capacity of district health teams in to promote community outreach to increase awareness of danger signs in pregnancy and the newborn and to increase the percentage of pregnant women who have an emergency plan and are able to both list danger signs, explain what the emergency plan is, and have her prenatal care identification card completely filled out (indicating where she will go for care in an obstetric emergency, transportation, money needed, things to be taken with her, who will take care of house and children, and the name of the person who will put the plan into action if there were an emergency). During the first two quarters of FY12, the percentage of women interviewed at the community level in the 20 prioritized districts who met all of these criteria increased from 26% in October-December 2011 to 48% in April-May 2012.

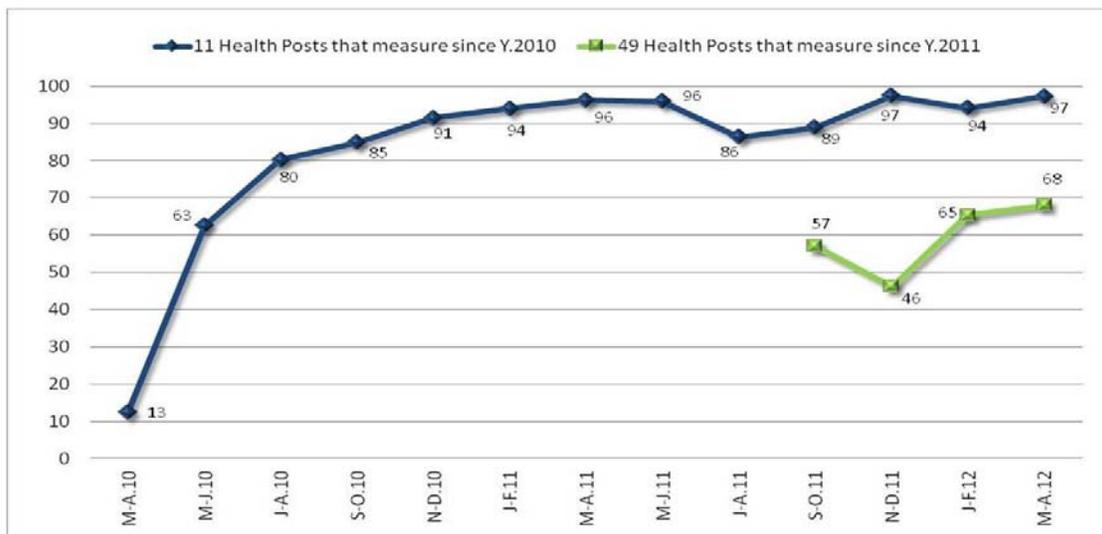
During FY12, HCI provide support to improve basic level EONC services in the 12 prioritized municipalities in the five health areas, in which there are 60 health posts and six permanent care centers and two district hospitals that attend deliveries. Eleven of these health posts had been supported by

HCI since 2010, and the remaining 49 being covered in FY12. The main intervention was training personnel on quality standards for antenatal care and on the use of clinical files to record care provided during prenatal visits. Figure 28 shows the progress made in improving the quality of antenatal care in the two groups of health posts. The second group of 49 health posts started at a higher level (57%) than the original 11 health posts and improved their performance to 68% by March-April 2012. The same two groups of health posts also demonstrated improvement in compliance with post-partum care standards. The first group of health posts increased compliance from 6% in March-April 2010 to 97% by March-April 2012. The second group of health posts started higher at 68% and increased to 84% due to the training of personnel care according to standards and documentation in clinical files.

To improve the management of obstetric complications, HCI introduced to eight hospitals in the five priority health areas, the “Code Red” and “Golden Hour” approaches to prevent and respond to postpartum hemorrhage that were first applied in the San Marcos hospital. The expansion was led by the QI team from the San Marcos hospital, which had introduced the Code Red approach in 2011 to deal with cases of rapid blood loss during delivery or postpartum, by ensuring systematic, quick and opportune management of the obstetric hemorrhage by a qualified team. Another area of emphasis in the target hospitals was to increase the correct management of PE/E in all hospitals through refresher courses for doctors on detection of pre-eclampsia and the correct use of magnesium sulfate.

In health posts and centers in the 12 prioritized municipalities, HCI supported facilities to monitor performance of five of seven essential nutrition actions (ENA): counseling on optimal breastfeeding, counseling on optimal complementary feeding, appropriate nutritional care of sick and severely malnourished children, vitamin A for infants and young children, and adequate intake of iron and folic acid for women and children through supplementation. At baseline and follow-up, cluster samples of mothers of children under two years of age were interviewed about their attendance of growth monitoring sessions and the provision of micronutrients to children 6-24, finding that 31% of children had two weights plotted and the growth trend marked on their child card at baseline. This improved to 52% in the second measurement (Jan-Mar 2012).

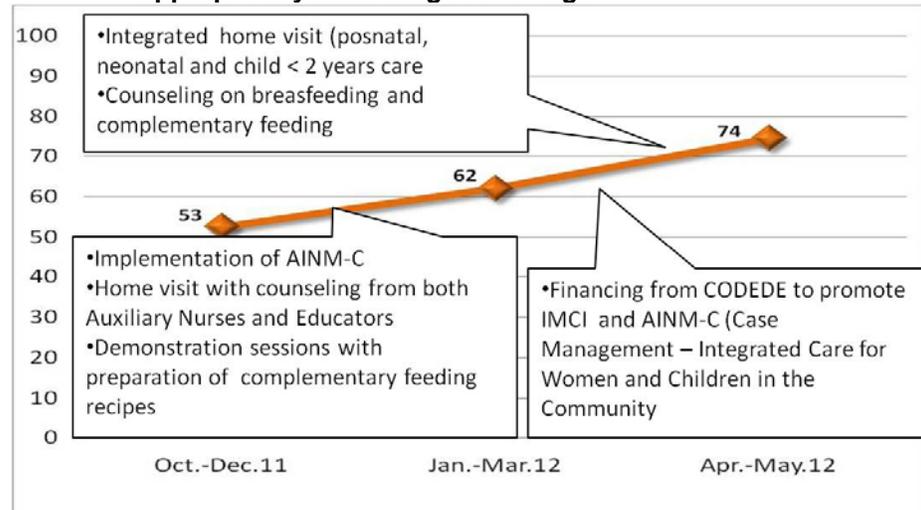
Figure 28. Guatemala: Compliance with selected criteria of antenatal care in 12 priority municipalities (60 health posts), March-April 2010 through March-April 2012



11 Health Posts													
Num	2	50	178	134	96	93	176	227	194	221	249	126	138
Den	16	80	222	158	105	99	183	237	225	249	256	134	142
49 Health Posts													
Num										37	24	291	357
Den										65	52	445	523

Figure 29 shows the improvement in children under two years of age who were fed appropriately according to their age from 53% to 74% in an eight-months period. The main interventions that contributed to the improvement were the expansion of integrated home visits that addressed postnatal, neonatal, and young child care, counseling on breastfeeding and complementary feeding, and demonstration sessions with preparation of complementary feeding recipes.

Figure 29. Guatemala: Increase in percentage of children from 0 to 24 months who are fed appropriately according to their age



	Oct.-Dec.11	Jan.-Mar.12	Apr.-May.12
Numerator	70	118	99
Denominator	133	190	133

Source: LQAS interviews in 12 priority municipalities. Preliminary data .

During FY12, HCI also continued to provide technical and financial support to the MOH to consolidate the Quality Management Unit within the MOH and sustain the gains from the ISO certification process. In FY12, the assistance was oriented to implement the agreement signed between the MOH and the Ministry of Finance in order to implement, for the first time in Guatemala, a process of management for results, whose initial product is a MOH budget for results for FY13.

HCI staff made monitoring visits to the ISO-certified facilities and facilitated the following results:

- Adequate drugs/medicines and input warehousing practices strengthened in all six health facilities
- Adequate laboratory practices in three CAP (Patzicia, Momostenango and San Cristobal)
- Implementation of improvement changes in the process of equipment sterilization in three CAP (Patzicia, Tejutla, and San Cristobal)
- Adequate management of solid waste in three CAP (Patzicia, San Cristobal and Comalapa) strengthened
- Follow-up to Quality Committees and to monitoring user satisfaction in all six health facilities

Directions in FY13

HCI closed out activities in Guatemala on June 30, 2012.

2.21 Haiti

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Capacity building of the Ministry and other stakeholders in development and implementation of minimum standards for services to vulnerable children and quality improvement principles and methods in OVC programming	<ul style="list-style-type: none"> ▪ Provide leadership in improving quality care for programs serving vulnerable children and families. ▪ Provide TA to ensure development of Standards that are evidence-based. ▪ Build constituencies of support for the Standards and for principles of quality improvement. 	National level to be cascaded to the communities
Integration of OVC Minimum Standards of Care within a national strategy	<ul style="list-style-type: none"> ▪ Strengthen integration of OVC Standards within a national strategy response ▪ Ensure country ownership of the Standards ▪ Ensure participation that is reflective of all levels of stakeholders from government to the children and families served. 	National level

Main Activities and Results

Capacity-building of the Ministry of Social Affairs and Other Stakeholders

During FY12, HCI's main objective was to build the capacity of the IBESR/Ministry of Social Affairs and other key OVC stakeholders. This process required technical meetings, a coaches training session, and convening the first QI Task Team meeting. HCI staff explained the standards development process and the importance of quality improvement to develop standards of care for orphans and vulnerable children. Following the QI task team meeting, a Coaches Training occurred on September 4–6, 2012 at the Hotel Le Plaza in Port-au-Prince. The training session was attended by 33 participants, including the members of the QI Task Team. The training session was focused on the principles of quality improvement (QI), its science, methodology, and tools used in QI programs. Dr. Diana Chamrad, Mr. Shawn Dick and Ms. Hawa Camara from URC facilitated the training session. The participants also had the opportunity to share and exchange their knowledge and experiences in implementing programs for orphans and vulnerable children. They were instructed on how to use the tools, methodologies and the Child Status Index as an outcome measure.

Integration of OVC Minimum Standards of Care within a National Strategy

To set up a functional QI Task Team, a consultative process took place: critical OVC stakeholders were identified and asked to commit to the QI Task Team and its purpose. Informational meetings were held with each QI Task Team member separately to discuss the standards development process as well as the need for their continued involvement in and commitment to the process. The current QI Task Team is constituted as follows: three international agencies, three Haitian Ministries (including the Ministry of Health, the Ministry of Education, and Ministry of Social Affairs/IBESR), and 11 NGOs. After the closure of the consultative process, the first QI Task Team meeting took place on August 31, 2012 in Port-au-Prince.

Discussions between the key OVC representatives, which included UNDP-Global Fund, UNICEF, INSHAC, International Care, World Vision, World Concern, CMMB, FHI 360, CRS, PIH/ZL, MEASURE Evaluation, Ministry of Education, Ministry of Health and Maison Arc-En-Ciel (MAEC), centered on the formation of a QI Task Team and ensuring clear understanding of each member's key role during the standards development process. IBESR then disseminated the draft standards to the QI Task Team. They have been asked to review the standards related to the seven sectors of services and to provide feedback during the next QI Task Team meeting.

Directions for FY13

During FY13, HCI will support the final review and refinement of the draft OVC standards through a partner workshop with international NGOs and their local partners. HCI will also support the development of measures of quality for OVC programs. Once the standards are finalized and measures developed, the piloting phase will be initiated. The piloting phase will help to build knowledge and competencies of the standards. During piloting, learning sessions for partners are held to share experiences in implementing the standards.

2.22 Honduras

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
Improve the management of neonatal complications at ambulatory and hospital levels.	<ul style="list-style-type: none"> ▪ Reduce the neonatal fatality rate by Asphyxia, Sepsis and Premature 	20 Maternal Clinics in the five USAID priority health regions: La Paz, Comayagua, Copan Lempira, and Intibuca
Intra-hospital Infections Demonstration Collaborative	<ul style="list-style-type: none"> ▪ Reduction of intra hospitals infections 	Demonstration: Hospitals of Copán, Cortes and Atlántida
Quality Health System	<ul style="list-style-type: none"> ▪ Review and update the licensing standards of health facilities ▪ At least 5 hospitals have a rehabilitation plan 	At central level
	<ul style="list-style-type: none"> ▪ Develop standards for all processes in the framework of Hospital Autonomy 	

Main Activities and Results

Improve the Management of Newborn Complications

HCI worked closely with the Quality Assurance Department (QAD) of the Secretariat of Health to develop a comprehensive expansion approach for quality care for obstetric and neonatal complications and childhood illness management, to be implemented in five focus regions. In this last year of HCI assistance in Honduras, our work was assisting the QAD to spreading to all five USAID priority health regions the best practices in improving the management of newborn and obstetric complications and assuring quality EONC in the regional hospitals and maternal clinics that assist deliveries in the five regions.

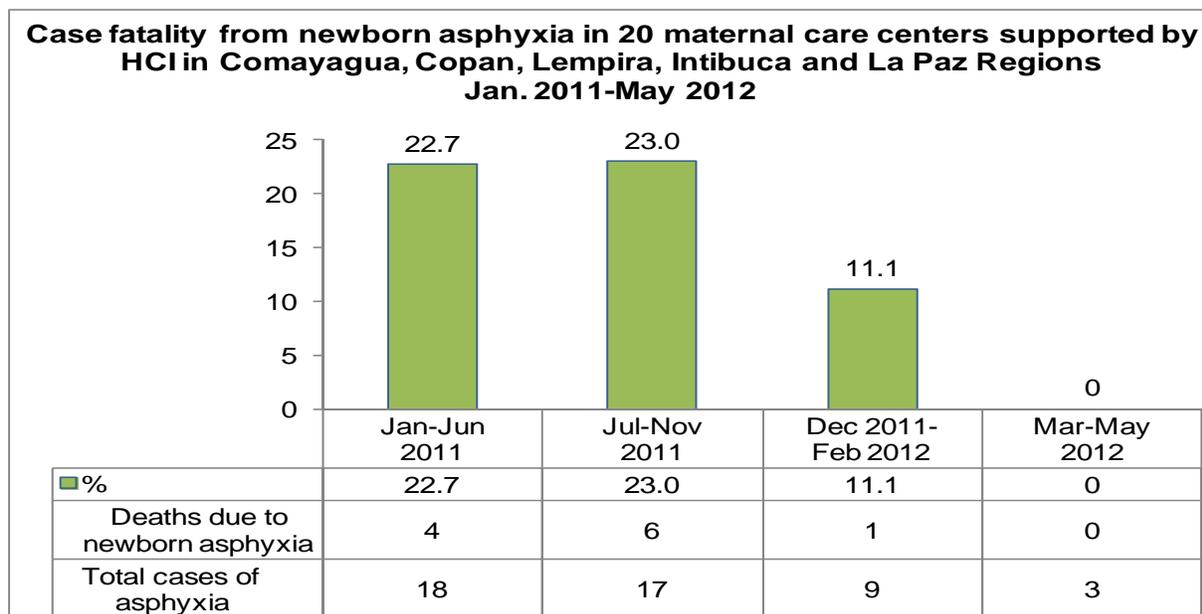
HCI delivered trainings for eight facilities in December 2011 in Copan on the use of an emergency medication kit, which was originally developed in Comayagua through HCI's work there. Drawing on work this year with 45 health centers in the five USAID priority regions, HCI organized in June 2012 a session with representatives from the five regions to review the results, lessons, and remaining challenges faced by the health center in providing quality prenatal care and early detection and initial management of obstetric complications.

HCI also provided support to 20 maternal clinics across the country to support their implementation of the Helping Babies Breathe newborn resuscitation program and provided limited technical support for the Kangaroo Mother Care program in the national teaching hospital in Tegucigalpa. The Escuela Hospital KMC program continued to implement changes to improve the program, such as extending its hours, developing a new information system for monitoring, and beginning psychology services for parents. During the year, the Hospital Kangaroo Mother Care (KMC) team developed, implemented, and validated a new clinical form for patients. A care protocol is in development. In December 2011,

Dr. Norma Aly and two doctors from the hospital attended the Regional KMC Meeting in the Dominican Republic.

HCI staff worked with the national Program for Integrated Child Care to develop national training materials on Helping Babies Breathe and monitor facilities' performance in terms of outcomes of newborns with asphyxia. HCI also supported the program to revise the newborn hospitalization record form to specify which data should be recorded for premature newborn, including whether or not kangaroo mother care was provided and newborn weight gain. Results from the monitoring of newborn asphyxia outcomes are shown in Figure 30.

Figure 30. Honduras: Declining case fatality from newborn asphyxia in 20 maternal clinics supported by HCI to implement Helping Babies Breathe



Intra-Hospital Infections Collaborative

After delays in starting up this activity by the Department of Hospitals, this collaborative was finally launched at the end of FY11 in three hospitals: Tela, Ceiba and Copan. Each hospital has established a Committee on Bio-safety with three sub-committees: intra-hospital infections, patient safety, and waste management. Preliminary discussions with teams in the three hospitals led to the decision to focus initially on obstetrics, pediatrics, and surgery. Six quality indicators and monitoring instruments were designed, as well as pre- and post-test instruments to evaluate training activities. The first learning session of the collaborative was held in October 2011 with 26 staff from the three hospitals, focused on biosafety. Teams conducted baseline assessments on intra-hospital infection rates in obstetric, pediatric, and surgery wards, use of colored plastic bags for the management of bio-hazardous hospital waste, completion of reporting forms on compliance with bio-safety norms, rates of medication errors, and accidents or infections related to the management of dangerous waste.

HCI also supported QI training for infection prevention teams in three hospitals, which are monitoring quality indicators such as rate of newborn sepsis and surgical site infections, and implementing improvement plans to address the problems found. The Department of Hospitals intends to continue these efforts to improve infection control and prevention following the closure of HCI assistance in Honduras.

National Quality Health System

Since 2010, HCI has been supporting the Secretariat of Health in designing and implementing a national quality system in health and a national quality policy, which gives priority to three major functions: develop of standards, quality monitoring, and continuous improvement. HCI helped write the document summarizing the national health quality policy was launched in March 2011. In FY12, HCI prepared for a workshop to develop the plan for establishing standards for the national quality framework. HCI worked closely with the Secretariat of Health and the USAID-funded ULAT project to review regional directives for the quality framework. HCI also provided technical support to the Standardization Technical Committee of the Secretariat of Health to develop guidelines for writing or revising any technical standards for any clinical area. HCI also continued to support the revision of national clinical standards of care for normal delivery, postpartum care, and care for the low risk newborn.

Directions in FY13

HCI closed out activities in Honduras in August 2012.

2.23 Nicaragua

Overview of HCI's Program in FY12

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention Total SILAIS: 17 Total Maternal Hosp:22
Clinical improvement sustainability and Institutionalization with A Continuous Quality Improvement (CQI) approach in MNCH, FP and HIV.	Developing managerial and teaching skills among SILAIS officials, to contribute to sustainability of organization and continuity of care processes in MNCH, FP and HIV.	<ul style="list-style-type: none"> ▪ 10 SILAIS Chontales, Río San Juan, Granada, RAAS, Chinandega, Carazo, Nueva Segovia, Boaco, Estelí and Rivas. ▪ UNAN Leon, UNAN Managua, BICU-RAAS and POLISAL.
Family Planning (FP)	Decrease incidence of unmet FP demand by supporting quality services offered and contraceptive methods delivery according to established norms in MINSAs and Nicaraguan Social Security Institute primary and secondary units. Providing support for FP services organization, emphasizing on post obstetric event contraception (POEC), long-term methods use, in three hospitals from SILAIS Managua.	<ul style="list-style-type: none"> ▪ 8 SILAIS headquarters, 9 hospitals and 23 municipal health units in 8 SILAIS (Madriz, Masaya, Matagalpa, RAAN, Jinotega, Estelí, Leon and Boaco) and 20 PMCs in 17 SILAIS, for a population of 300,000 men and women in reproductive age. ▪ Aleman Nicaragüense, Velez Paiz y Bertha Calderon Hospitals, for a population of 11,650 women whom received care for an obstetric event.
Maternal Neonatal Complications	To reduce obstetrical and neonatal discharges with emphasis in PPH, Preeclampsia-Eclampsia, Severe Asphyxia, neonatal sepsis, distress respiratory syndrome in 4 hospitals.	<ul style="list-style-type: none"> ▪ 4 Prioritized hospitals: Jinotega, Matagalpa, Chontales, and Masaya. <u>Expected pregnancies:</u> 51,337 (80% expected to have antenatal care: 41,070). ▪ <u>Expected deliveries:</u> 20,514 (40% of expected deliveries occur at hospitals)
Improve quality of care of children under five years old with pneumonia and diarrhea	To reduce the number of deceased cases discharges to children from 1 month to 5 years old with pneumonia or diarrhea in 4 hospitals of the country	<p>4 Prioritized hospitals: Jinotega, Chontales, Matagalpa and Masaya.</p> <ul style="list-style-type: none"> ▪ 260,603 children under five years old (86,157 at 0 years and, 174, 446 1 to 4 years old)

Infection Prevention and Control	To reduce the rate of ventilator-associated pneumonia in neonatal and pediatrics intensive care units (ICUs) in 5 hospitals of 4 SILAIS.	5 Prioritized hospitals: Jinotega, Matagalpa, Masaya and Managua-HBCR and HFVP
	To reduce the rate of bloodstream infections in neonatal and pediatrics ICU in 6 hospitals of 5 SILAIS.	<ul style="list-style-type: none"> ▪ 6 Prioritized hospitals: Jinotega, Matagalpa, Chontales, Masaya and Managua-HBCR and HFVP.
Humanization of premature newborns	To promote humanization of care for premature newborns through implementation of the Mother Kangaroo Program at 1 hospital.	<ul style="list-style-type: none"> ▪ Granada’s Hospital.
Helping Babies Breathing (HBB)	To implement the HBB strategy in 2 hospitals.	<ul style="list-style-type: none"> ▪ 2 hospitals: Juigalpa-Chontales and HEODRA-Leon
STDs and HIV/AIDS	Support the organization of high quality services for PMTCT, counseling, voluntary testing, recruitment, and treatment of people with sexually transmitted diseases (STDs) and HIV/AIDS	<ul style="list-style-type: none"> ▪ 11 health centers in 1 SILAIS Managua ▪ 1,021,679 people
HIV VCT for TB patients	To increase promotion of HIV counseling and voluntary testing to people with TB, in order to guarantee timely capturing and treatment for people with HIV in department of Managua, emphasizing on active search of TB and HIV co-infection.	<ul style="list-style-type: none"> ▪ 11 health centers in 1 SILAIS Managua ▪ 210 TB patients
ART	To strengthen knowledge and advising multidisciplinary teams from 6 Health Units in the care and follow up services for men and women with HIV.	<ul style="list-style-type: none"> ▪ 2 Hospitals in Managua (1 HALF), Boaco (1) and 4 Health Centers: Somotillo, Chinandega, Corinto El Viejo. ▪ 100 HIV-positive patients

Main Activities and Results

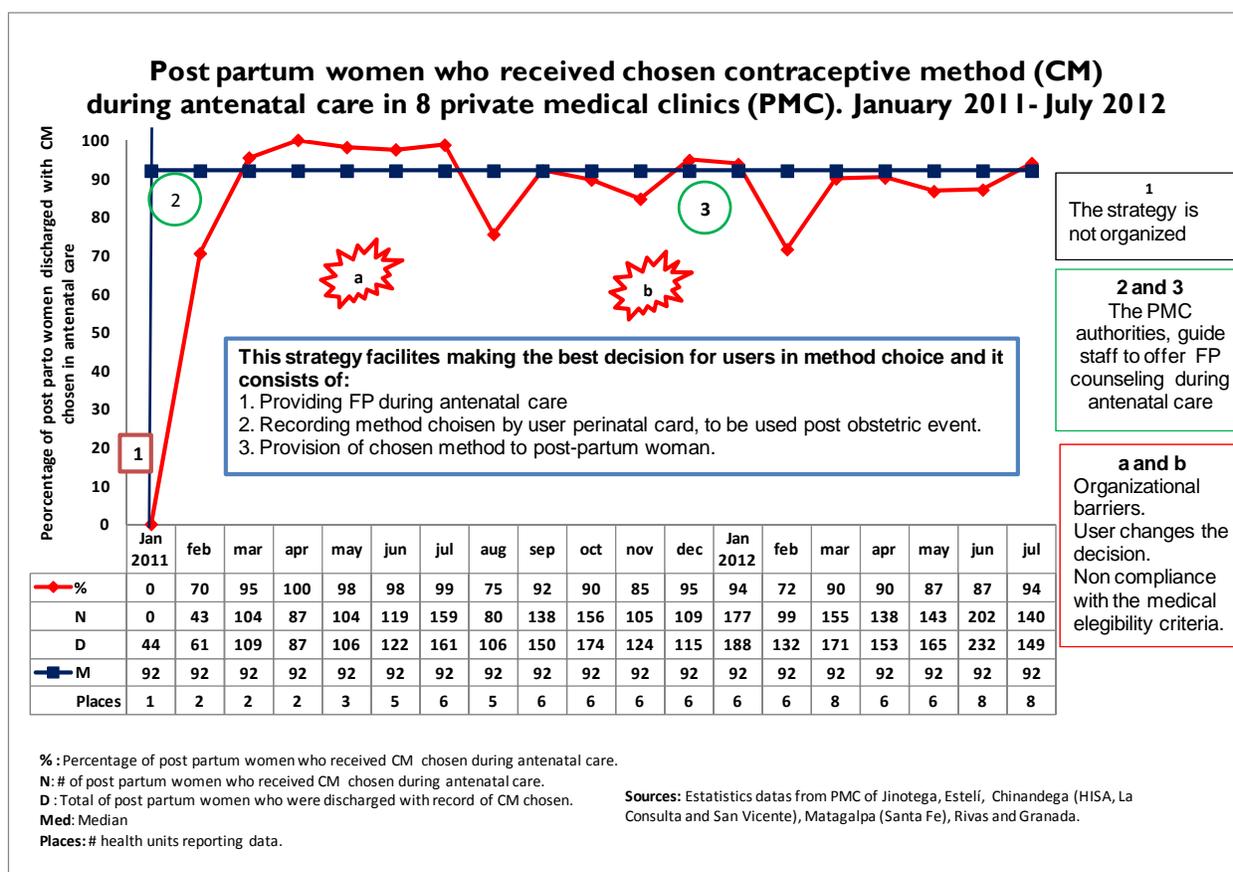
FY12 was a year of great challenges for HCI in Nicaragua due to the forthcoming graduation of Nicaragua from USAID maternal and child health and family planning technical assistance in September 2012. Through technical assistance and coaching, HCI supported activities related to the institutionalization of quality of care, sustainability, and the implementation of quality tools and Ministry of Health (MINSa) standards. HCI specifically worked to incorporate all tools and standards into national training institutions, specifically universities. In order to accomplish this task, HCI developed a teaching package focused on how to implement MINSa standards with a continuous quality improvement approach. The teaching package focuses on FP, MCH, and HIV services and collaborative improvement and is designed to make students graduating from medical and nursing school aware of these concepts before they enter into the health system.

Given this scenario and specific USAID guidance, HCI assistance in FY12 targeted pre-service training (universities) and service delivery (MINSa health facilities) institutions to establish the link between health resources training with health services provision. HCI provided technical support related to pre-service training for doctors and nurses to four universities: Universidad Nacional Autónoma de Nicaragua (National Autonomous University of Nicaragua or UNAN) Managua, UNAN León, Bluefields Indian and Caribbean University (BICU), and UNAN’s Politécnico de la Salud (Health Polytechnical or POLISAL). HCI trained faculty on teaching students how to comply with MINSa standards for FP, MCH, and HIV services. With respect to HIV, students were specifically trained on combination prevention, behavior change communication, addressing stigma and discrimination, voluntary counseling and testing, and care standards and protocols for children, pregnant women and adults.

HCI also provided direct technical assistance to MINSA units and facilities, prioritizing certain activities and facilities to emphasize reduction in gaps in quality of care, strengthening capacity to manage and implement continuous quality improvement (CQI) activities, and transferring management of all quality tools developed by HCI to the central MINSA and local integrated health systems (SILAIS) managers. HCI carried out orientations on the use of the teaching package in all 17 SILAIS in the country.

In the area of family planning, HCI worked to strengthen FP counseling and service provision post-obstetric event in primary and secondary care MINSA facilities and in private medical clinics (PMC) affiliated with the Social Security Institute. Strengthening FP counseling during pre- and post-natal care and recording the contraceptive method chosen by user in the perinatal card allows for at least four opportunities of contact with health staff to receive counseling and choose a method. During FY12, the proportion of PMCs monitoring this strategy increased from one in January 2011 to eight by July 2012. The percentage of women which receive the method they chose during antenatal care also increased from 0% to 94% in the same period, as shown in Figure 31.

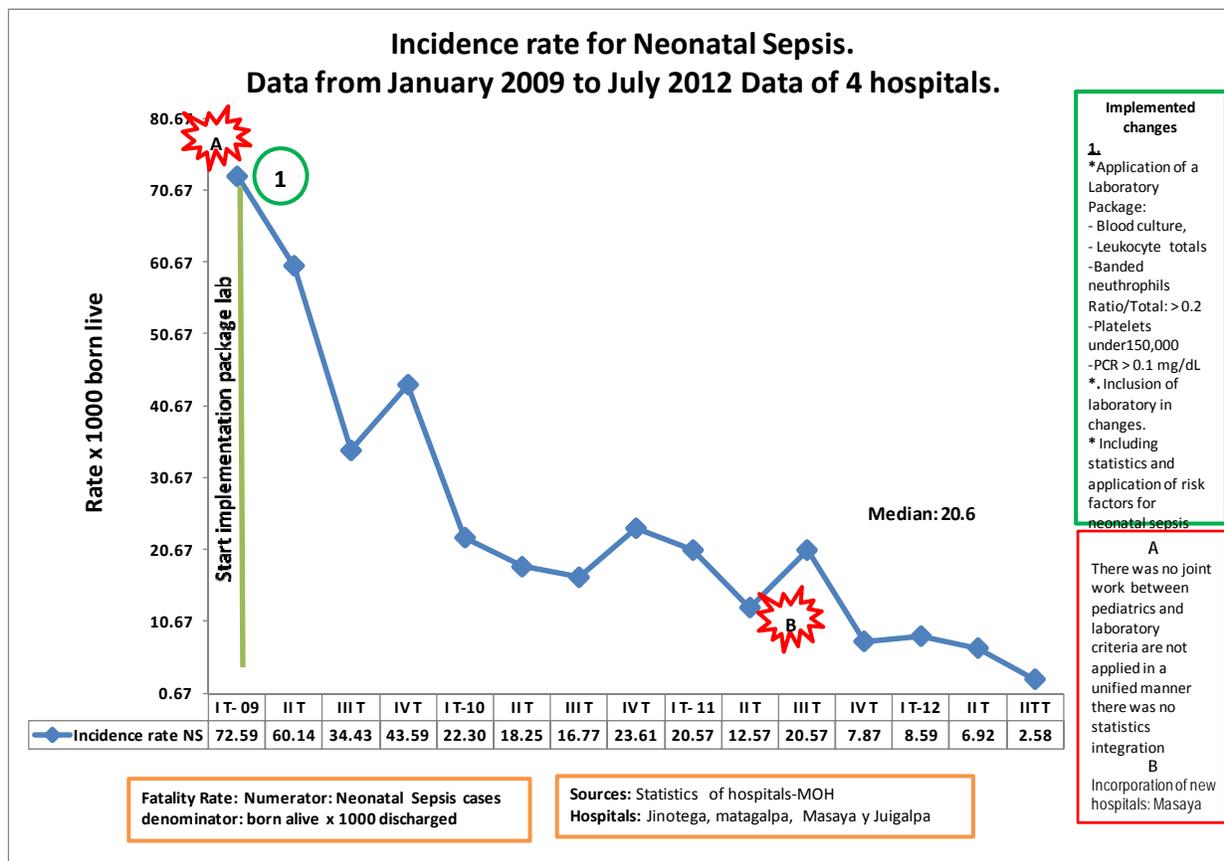
Figure 31. Nicaragua: Increasing coverage of post-partum women with desired contraceptive method, Eight private medical clinics, January 2011-July 2012



Another priority area for HCI technical assistance in FY12 was to improve the diagnosis and treatment of neonatal sepsis. Before HCI technical assistance in this area began in the first quarter of 2009, the overall neonatal sepsis rate recorded in Jinotega, Matagalpa, Masaya, and Juigalpa hospitals was 72 per 1,000 live births. At that time, sepsis diagnosis was not confirmed by laboratory tests and there were no objective clinical criteria upon which to base suspicion of sepsis. One of the most important changes implemented was the design and introduction of a diagnostic algorithm to guide health workers on the steps to be followed to confirm clinical sepsis suspicion through laboratory tests, starting with a list of signs in the mother for clinical suspicion in the newborn. The four participating hospitals formed teams

involving statistics, laboratory, medical and nursing staff, which were responsible for sharing the diagnostic algorithm with the entire pediatric staff and systematically monitoring compliance through monitoring patient records and daily review of cases admitted into neonatology with this diagnosis. In the October 2010 to July 2011 period, there were 338 cases of sepsis reported; this was reduced by 62% in the October 2011 to July 2012 period, when only 127 cases were reported. The number of deaths due to neonatal sepsis also dropped, from 35 in the first period to 15 in the second--a 57% reduction. Early sepsis incidence went from 72 per 1,000 live births in the first quarter of 2009 to 2.58 per 1,000 live births in July 2012 (see Figure 32).

Figure 32. Nicaragua: Reduction in neonatal sepsis in four hospitals, January 2009-July 2012



In hospitals prioritized by MINSA for HCI technical assistance in FY12 (Matagalpa, Jinotega, Masaya and Juigalpa hospitals), HCI support for the introduction of new evidence-based antibiotic treatment regimens, monitoring quality indicators compliance focusing on the correct classification and management of diarrhea or pneumonia in children under five years, and the systematic analysis of quality indicators, together with MINSA's introduction of new vaccines against rotavirus and pneumococcus, have contributed significantly to decreasing fatality rates by these two pathologies. When comparing the October 2010 to July 2011 and October 2011 to July 2012 periods, the number of hospital discharges by pneumonia was decreased by 24% (2,546 to 1,935) and the number of deaths by 39% (31 to 19). The corresponding declines for diarrhea for the same period were 23% for discharges (1,091 to 838) and 67% for deaths due to pneumonia (6 to 2).

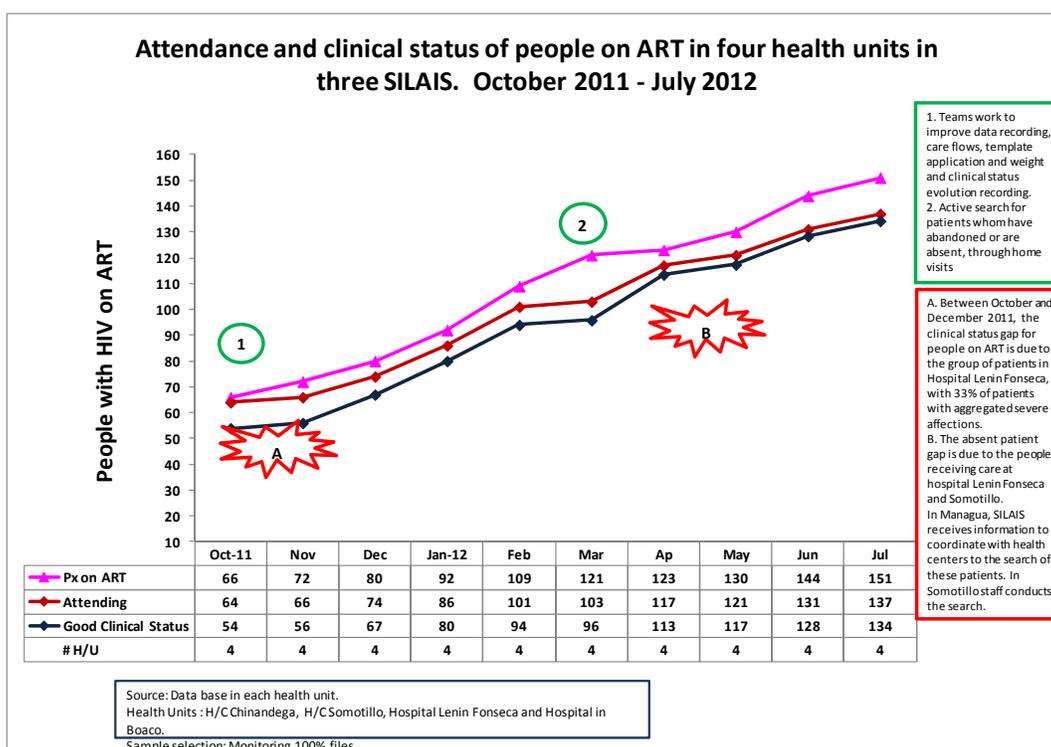
Access to antiretroviral therapy (ART) in Nicaragua has increased. More than 1.713 people currently receive ART in the country's hospitals (National Statistics HIV, MINSA, 2011). During FY12, HCI continued to provide support to two hospitals (in Managua and Boaco) and four health centers (Somotillo, Chinandega, Corinto and El Viejo) to improve ART quality for patients with HIV. In addition,

we provided support to the decentralization process at Aleman Nicaragüense Hospital in Managua. HCI supported teams to monitor quality indicators related to health care for people with HIV who are on ART. End-year achievements reported by teams in the four facilities include:

- 100% of people with HIV receiving ART according to MINSAs protocols
- 100% of people with HIV have started ART according to established criteria
- 56% of people with HIV receive prophylaxis for opportunistic infections according to MINSAs protocols
- 92% of people with HIV are tested for TB
- 98.7% of people with HIV show a good clinical status during the last visit

ART patient retention was on average 93.6%, mortality of people on ART was recorded at 1.8%, and the annual average for abandonment of treatment (i.e., missing appointments for more than three consecutive months) was reduced to 4.6%, as seen in Figure 33. This has been possible due to increased coordination among hospitals and health centers, achieving closer monitoring of patients admitted to the ART program, and active searching for absent patients.

Figure 33. Nicaragua: Reducing gaps in retention in care and clinical outcomes for people on ART in four health facilities in three SILAIS, October 2011-July 2012



Directions in FY13

In FY13, HCI will continue providing technical support to UNAN Managua, UNAN Leon, BICU Bluefields and POLISAL but will expand the work to include three new private universities: Universidad Politecnica de Nicaragua (Nicaragua Polytechnic University, UPOLI), Universidad Americana de Nicaragua (American University of Nicaragua, UAM) and URACCAN. Per the USAID mission request, technical support for quality improvement of HIV services will also target services for transgender and transsexual populations. This request responds to the findings of a recent study on the health care needs of these at-risk populations in Nicaragua.

3 USAID Global Health Element and Core-funded Activities

3.1 Care that Counts Initiative to Improve Quality of Programming for Orphans and Vulnerable Children

Overview of HCI’s Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Build capacity of government in establishing and strengthening standards and accreditation agencies for child and family welfare services	<ul style="list-style-type: none"> ▪ Develop a harmonized vision for efficient and effective child and family welfare services mitigating the impact of HIV/AIDS on vulnerable children and families ▪ Build the understanding and buy-in towards the science of improvement for vulnerable children’s care 	Africa
Develop tools to support applying quality improvement methods to OVC programs	<ul style="list-style-type: none"> ▪ Complete an E-learning module that guides key stakeholders when engaging in the QI process 	Global
Strengthen communication about quality improvement among OVC program stakeholders	<ul style="list-style-type: none"> ▪ Build the QI capacity of champions, government and other stakeholders, through various mediums 	Global
Establish the African Alliance for Child Protection	<ul style="list-style-type: none"> ▪ Establish an African-based alliance to strengthen quality programming and policy for children and families 	Africa

Main Activities and Results

Build Capacity of Government in Establishing and Strengthening Child and Family Welfare Services

In February 2012, Wondwossen Hailu Tadesse began work as the HCI Regional Advisor for Orphans and Vulnerable Children Programs. He is based in Addis Ababa and along with HQ staff, provides support to the nine countries in which HCI currently provides technical assistance for OVC activities: Ethiopia, Nigeria, Zambia, Mozambique, Malawi, Tanzania, Cote d’Ivoire, Kenya, and Haiti. HCI OVC staff builds the capacity of HCI staff and government by providing technical assistance on applying QI and monitoring our current OVC programs.

In November 2011, Dr. Diana Chamrad, Senior QI Advisor, provided technical assistance to the HCI Cote d’Ivoire team to plan the phase-out of HCI support to the OVC standards implementation and plan with the Ministry of Women and Social Affairs its ongoing support for standards implementation. She discussed challenges in using the Child Status Index as a measurement tool. She also met with PEPFAR/CDC to discuss the transition plan and made recommendations for ongoing PEPFAR support to enable the Ministry to continue leadership of the implementation of standards of care for children.

HCI’s headquarters team provided support in Haiti to facilitate a children’s workshop in June, a QI Task Team meeting in August, and a coaches training in September and conducted two learning sessions in Mozambique in March.

Develop Tools to Apply QI Methods to OVC Programs

Encompass is in the final stages of completing the E-Learning modules. USAID requested the addition of a pre- and post-test to the modules. The Encompass team is revising the module to address HCI HQ comments and USAID addition requests.

Establish the African Alliance for Child Protection

Consistent with Global Health Initiative (GHI) principles of building country ownership for improvement and developing partnerships to strengthen national and regional capacity, HCI worked in FY12 to bring to life the concept of an African alliance for child protection. The concept of the African Alliance grew out of the need to establish a southern entity that would provide south-to-south support in the care and support of vulnerable children and share knowledge through a community of learning. The aim of the Alliance is to create an entity that would build African leadership to provide technical support in the area of child protection and safety.

To promote the concept of an Alliance for Child Protection in Africa, the HCI HQ Senior QI Advisor attended the Strengthening Child Protection Systems in Sub-Saharan Africa in Dakar in May 2012 and presented a session on Quality of Care in the OVC response, along with Dionisio Matos (USAID/Mozambique), Manasa Dzirikure (SADC), Nicole Benham (Moderator from the US Department of State). She also introduced the Alliance to numerous conference participants by distributing over 200 Alliance flyers.

HCI proposed to post an RFP to invite African entities to propose to HCI how they would develop the idea of an alliance and bring it to life. An RFP for a fixed-price contract to initiate Alliance activities was emailed to over 130 organizations and individuals and was posted to several websites and listservs in May 2012 with a due date of June 15, 2012. Twelve proposals were received, of which nine did not meet a minimum criterion score of 65. The three remaining proposals were reviewed by six internal and external reviewers in June 2012. Unfortunately, the proposals were unsatisfactory, primarily due to the omission of quality improvement methodology in the proposals.

Following the cancellation of the procurement, an alternative approach was pursued in establishing the Alliance. Four organizations were invited to meet in Kampala, Uganda to explore the potential of establishing an Alliance. HCI's role would be to support the Alliance organizations to increase their technical capacity in areas of child protection, family strengthening, and the science of improvement, including research and evaluation, and at the same time to build their organizational and leadership capacity to create and manage partnerships, exercise governance, and manage learning and communications. The organizations were:

- Regional Psychosocial Support Initiative (REPSSI) based in South Africa, operating in 13 countries
- The Africa Child Policy Forum based in Ethiopia, operating in eight countries
- The African Network for the Protection and Prevention of Child Abuse and Neglect (ANPPCAN), headquartered in Nairobi but with chapters in 22 countries
- Regional Centre for Quality of Health Care (RCQHC) based in Uganda, operating in nine countries (RCQHC cancelled participation in the Kampala meeting)

While RCQHC decided not to participate in the Alliance, representatives from the other three organizations came together in September 2012 to discuss how to develop an integrated quality approach towards protection and safety of children that can align national policies and community practices. Participants used the Theory of Change process to define child protection outcomes and contributors. This provided a framework of common understanding to guide participants in defining priority areas of focus, specific objectives, strategies, and inputs required to achieve the group's objectives. The participants identified opportunities and barriers for the implementation of strategies, and key stakeholders and their roles. The group discussed challenges and opportunities in aligning with one another in a joint effort at implementing child protection strategies. Timelines, roles and responsibilities were also articulated.

After four days of discussion, the group members developed a level of trust and openness with one another. Their preference was to keep the group closed for the time being, until they had achieved a clear sense of purpose. Plans are in place for frequent communications between group members and a

second meeting of members is scheduled for February 2013 in Johannesburg. HCI will act as the coordinating body for the Alliance, co-leading some activities with the three organizations and promoting their leadership in the area of child protection.

Directions for FY13

The Care that Counts Initiative will continue to provide support to countries, particularly Mozambique and Haiti. After the finalization and OHA approval of the E-modules, the course will be disseminated to all OVC stakeholders across the globe. The next in-person meeting of the African Alliance for Child Protection will take place in February 2013. Negotiations with each of the three organizations will scope out capacity-building opportunities and specific topics. Workshops will be scheduled in the early months of FY13.

3.2 Community Health

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Communities of Excellence Pilot Study	Develop and test a tool to measure community competencies to provide OVC services to children and their families	Ethiopia: Two districts (<i>woredas</i>) out of 550 in the country: Dire Dawa and Debre Zeit
CHW Collaborative	Apply quality improvement methods to improve the performance of Health Extension Workers (community health workers)	Ethiopia: 2 <i>woredas</i> (Illu and Tole) in the Oromia Region, out of 180 <i>Woreda</i> (districts) in Oromia Region Total population of Illu = 70,784 Total population of Tole = 72,922 Prevalence of HIV in Oromia Region is estimated to be 1.6% (2010) Six health centers and 18 health posts and their surrounding communities are involved in the collaborative
Community Support to CHWs by Strengthening Community Health System	Improve performance of CHWs and the CHW program by strengthening the community health system	1/112 districts in Uganda (Buikwe), targeting four parishes in the district 2/16 health facilities 10/475 villages 20/950 Village Health Teams (VHTs)

Main Activities and Results

Communities of Excellence Study in Ethiopia

Based on a Communities of Excellence (CoE) Conceptual Framework developed in FY11 from a literature review and interview with OVC implementing partners, the local research institute, the Addis Ababa University School of Social Work (AAU SSW), developed qualitative and quantitative questionnaires to conduct a study in a selected communities in Dire Dawa, Debre Zeit, and Awassa that have demonstrated excellence in their support for the needs of vulnerable children. Data from this work were analyzed to develop a draft CoE assessment tool. As advised by USAID /Ethiopia, HCI worked closely with Pact's five-year bilateral "Yekozeb Berhan" project which focuses on highly vulnerable children. With the support from the Ministry of Women and Children Affairs (MoWCA) and Pact, the CoE Pilot project formed a Technical Working Group that is composed of 10 members' from USAID, UNICEF, MoWCA, NGOs, and implementing partners. The role of the TWG is to provide technical comments and suggestions during the development of the CoE tool.

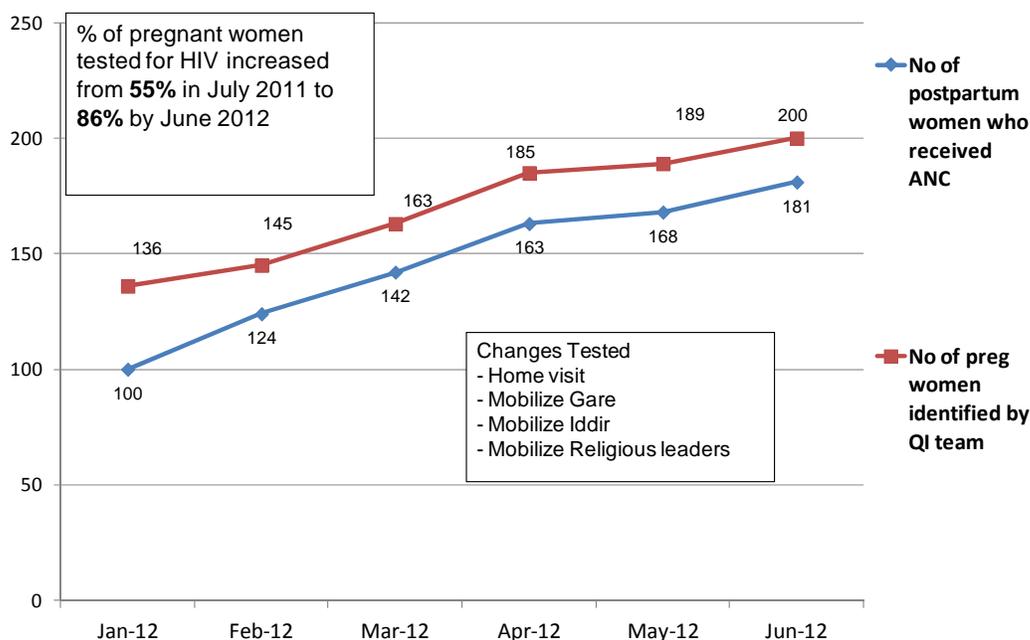
AAU SSW revised the draft tool after the second round of comments from the TWG and OVC implementing partners and developed a guideline for administering the community capacity pilot tool. The guidelines describe the definition of capacity dimensions, implementing procedures, how to score capacity, and classification of CBOs' capacity. This guideline was also shared with stakeholders for their comments. AAU SSW and HCI conducted two-days orientation in Debre Zeit for Ratson staff and in Dire Dawa for ProPride staff. As most of the CBO staff does not read English, the CoE tool was translated into the local language. In order to complete the pilot testing of the CoE tool before the end of HCI TO3, the period of pilot testing was revised from one year to six months. The final tool will be produced in May 2013.

Community Health Worker Collaborative in Ethiopia

In FY12, HCI supported a core-funded improvement collaborative aimed at improving the performance and productivity of CHWs (known in Ethiopia as health extension workers) by engaging the community health system to support them in their work. The collaborative involved 18 health posts within the catchment area of three health centers in two districts of the Oromia region of Ethiopia. This demonstration project addressed the challenges of the poor performance of CHWs in providing high quality of services to all households in the village by strengthening the community system, i.e., existing community groups and their networks. Mobilizing such networks can identify target groups and refer them to a facility for health services, improve the participation of households in community-level health services, and strengthen communications between health facility staff, CHWs, and households.

The CHW collaborative in Ethiopia showed the total number of pregnant women identified in the community could be increased when community groups were mobilized. As shown in Figure 34, community-based QI teams were able to identify increasing numbers of pregnant women for referral to the health post for antenatal care (ANC). When the improvement activities began October 2011, the proportion of pregnant women being identified by community QI team members who had actually received ANC at the health post was 72%. By June 2012, this ratio had increased to 86% and the number of pregnant women identified had almost doubled.

Figure 34. Ethiopia: Number of postpartum women identified by QI team who had received prenatal care services at Health Post, Illu District

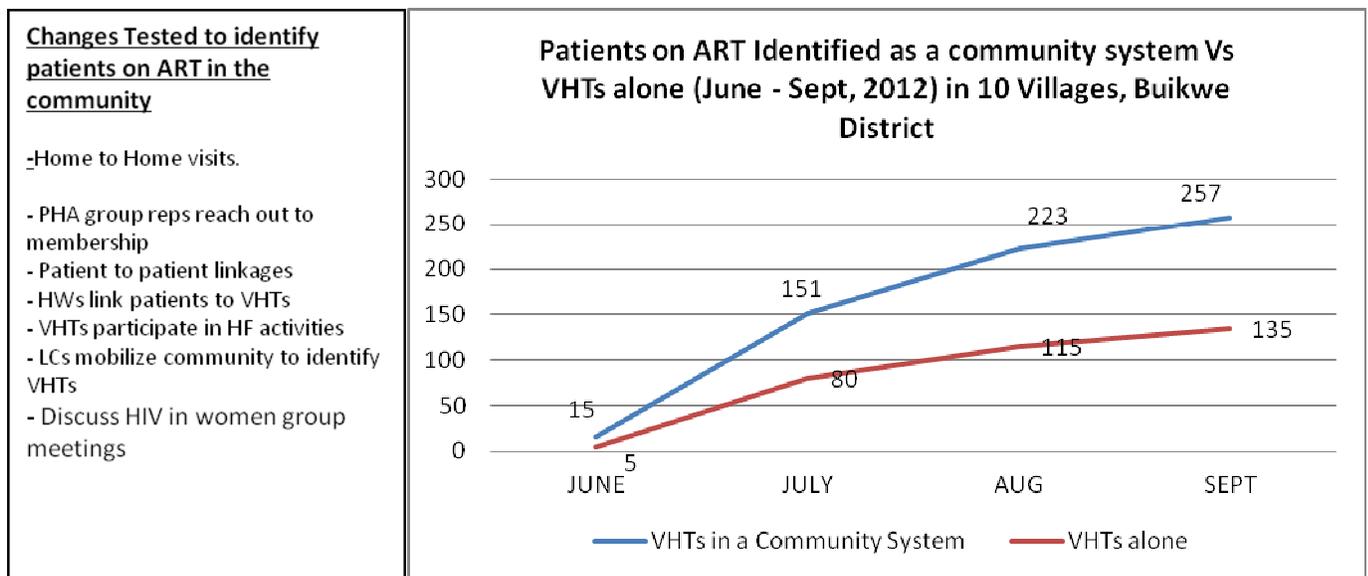


Strengthening the Community Health System in Uganda

In FY12, HCI began a community support demonstration project in Buikwe District of Uganda, forming a total of 10 community QI teams by bringing together Village Health Teams (VHTs) and representatives of religious leaders, community groups, HIV patients, health workers, schools, and local leaders. The community QI teams focused on improving patient outcomes by first identifying the HIV patients on ART, secondly assessing patients for clinical outcomes, and lastly promoting self-management support. A regular QI team meeting was held to update the monthly activities of the community groups and the VHTs collected data using personal diaries to document the clinical status of HIV patients, self-management plans, progress on plans, and clinical improvement.

Figure 35 shows that the number of ART patients identified for follow-up support increased from 15 patients in June to 257 patients in September 2012 when community groups assisted CHWs in identifying patients needing HIV care.

Figure 35. Uganda: Increasing the identification of ART patients in the community through mobilization of the community health system



The above demonstration projects in Ethiopia and Uganda addressed the challenges of the poor performance of CHWs in providing high quality of services to all households in the village by strengthening the community system, i.e., existing community groups and their networks. The lesson learned from the above projects was that a community system composed of community groups and their networks can identify target groups and refer them to a health facility for health services, can improve the participation of households in community level health services, and can strengthen communications among health facility staff, CHWs and households. It has also become clear from the above projects that the functionality of community system can be strengthened to provide improved quality of health services by applying improvement methods. However it must be pointed out that the continuity of an effective community system to support the CHWs work needs sufficient time to test and document change ideas which will lead to the development of a package of change ideas for strengthening the functionality of the community groups and their networks that would be applicable across global health programs.

Directions for FY13

The CHW collaborative project in Ethiopia ended in October 30, 2012. The CoE activity will be completed under HCI funding in FY13. It is expected that as of January 2013, the USAID ASSIST Project will continue to provide technical support to community support project in Uganda.

3.3 Family Planning

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Geographic scale
Provide technical support for efforts to improve contraception use.	<ul style="list-style-type: none"> ▪ Improve the effectiveness of family planning counseling during post-partum care by building on selected ongoing collaborative improvement programs at health facility and/or community level, to increase the number of women using modern family planning methods ▪ Strengthen service delivery between delivery centers or hospitals and family planning counselors or centers 	Afghanistan: 5 maternity hospitals in Kabul, serving a target population of approximately 3,449,800
	<ul style="list-style-type: none"> ▪ Improve the integration of HIV and family planning services for people living with HIV 	Masaka District (I/III) in Uganda Population 831,300, PLWHA 6%

Major Activities and Results

Post-partum Family Planning Improvement Collaborative in Afghanistan

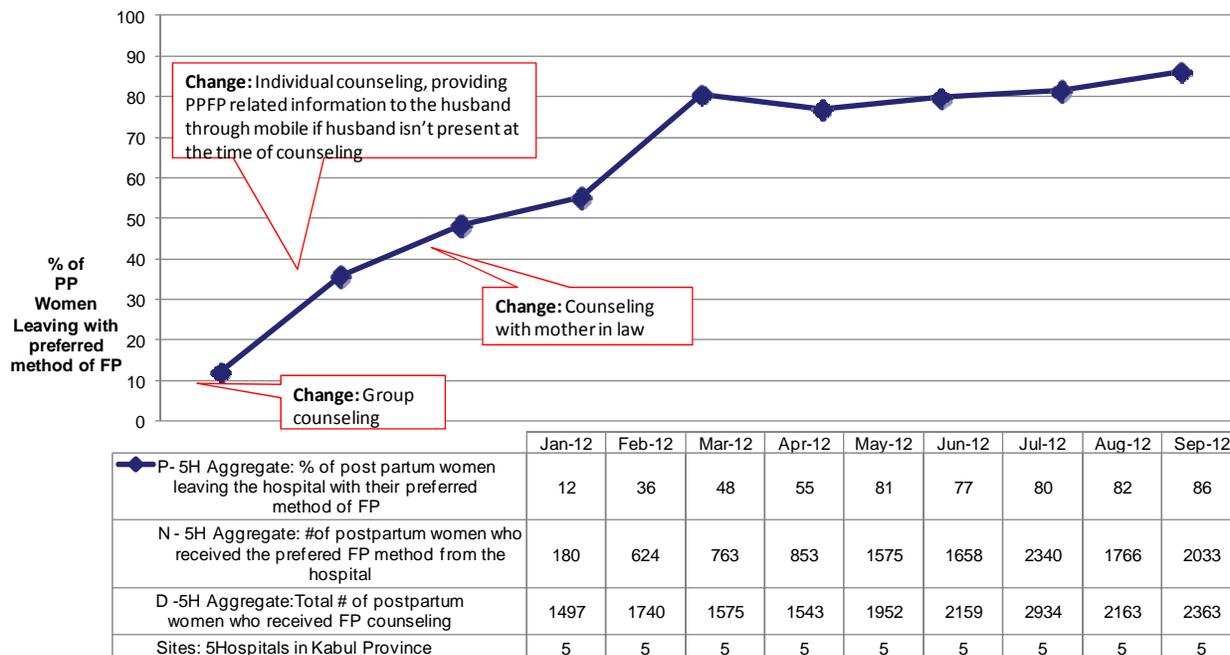
In FY12, HCI supported a postpartum family planning (PPFP) improvement collaborative in selected maternity hospitals in five hospitals in Kabul (originally planned for six hospitals, but one hospital dropped due to change in the hospital leadership). The primary aim of the collaborative is to demonstrate the value of QI approaches in integrating FP and postpartum care. Over the year, QI teams in participating facilities tested the effect of a change package which included some of the following: training the postpartum hospital staff in PPFP, creation of a PPFP checklist for use by providers and PPFP counselors on the postpartum ward, group counseling, creating a private FP counseling space where husbands and wives can be counseled together, and in some cases, involving the wives' mothers-in-law. Husbands have been reached by cell phone when not able to receive counseling with their wives in person. In addition, coordination with the Afghan Family Guidance Association (AFGA) has been forged to assure FP services provision. An effective link between the maternity hospital and AFGA has been created to facilitate referral of postpartum women for FP services and commodities. Two PPFP counselors were hired at both Istiqlal and Malalai Hospitals. Figure 36 presented results from the PPFP collaborative in Kabul.

While work had been planned to continue on a core-funded postpartum family planning demonstration collaborative that HCI had started in FY11 in 41 facilities in two districts of Kayes Region, after a learning session in the first quarter of FY12, activities to improve post-partum family planning were suspended in March and not allowed to resume during the rest of FY12.

Integrating Family Planning Counseling with HIV Services in Masaka District, Uganda

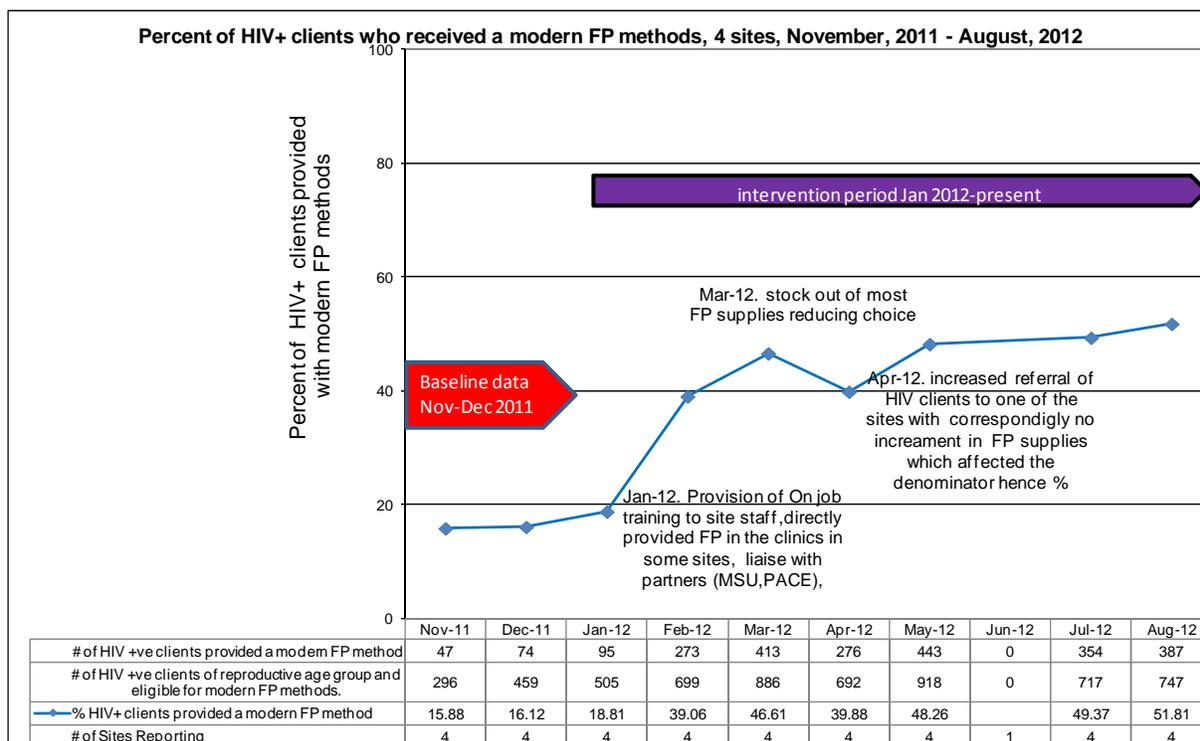
In September 2011, HCI started a program in Masaka district, Uganda, with support from OHA core funds to apply QI approaches to the integration of FP services into HIV/ART services in all facilities that offer ART services to PLWHA in the district (four facilities). An initial assessment was conducted to understand current service provision and client flow in the target sites. Twenty providers from the four sites were trained in December 2011, and another 20 providers were trained in January 2012 in integration of FP into HIV/AIDS services and quality improvement. Monthly coaching visits began in

Figure 36. Afghanistan: Proportion of post partum women leaving hospitals with preferred FP method, Five hospitals in Kabul, January-September 2012



March 2012, and providers are testing changes to integrate and strengthen FP services. The first learning session for the four facilities took place in June 2012. Preliminary results for this work are presented in Figure 37.

Figure 37. Uganda: Proportion of HIV-positive clients who received a modern family planning methods, 4 sites, Masaka District, November 2011-August 2012



Directions for FY13

In Afghanistan and Uganda, we will complete the postpartum family planning collaborative and FP-HIV integration collaborative, respectively, and summarize the change package and lessons learned for dissemination to national stakeholders and other selected hospitals and provinces. We will also conduct a follow-up study with a sample of postpartum family planning users in Kabul.

3.4 Health Workforce Development

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish?	Scale of intervention
HIV-funded Activities		
Ethiopia CHW performance improvement collaborative	Apply quality improvement methods to improve Community Health Workers and community health system performance and productivity	2 Woredas (Illu and Tole) out of 180 Woredas in the Oromia Region, Ethiopia. The Total population of Illu and Tole is 12,600 (2008 stats). The Prevalence of HIV in Oromia Region is estimated to be 2.4% 6 health centers and 18/80 health posts and community QI teams in Tole and Illu.
Integrating provider performance management into the Mtwara ART/PMTCT QI Collaborative in Tanzania	To improve individual health worker performance for providing ART/PMTCT care	1/26 Regions: Mtwara Region –population 1.3 million; Adult HIV prevalence - 3%; Estimated PLHA in needs of ART is 7,619. 5/6 Districts. 19 facilities/198 (12 original, 8 spread)
Strengthening district health management performance in Tanzania	Strengthen district health management performance to support the establishment and management of quality improvement systems and improve Strengthen district health management team competencies and processes to improve ART/PMTCT services	1/30 Regions: Lindi Region – population 0.8 million; Adult HIV prevalence of 3.9%; Estimated PLWHA in need of ART is 6,803. 6/6 Council Health Management Teams in all districts. 1/1 Regional Health Management Team.
Strengthening pharmaceutical human resources to improve access to HIV care medicines	Improve the performance of pharmaceutical human resources to improve the availability and use of HIV care medicines	Intervention is in all 14 HIV care health facilities in 3 (Jinja, Tororo, Bukedea) out of 112 districts in Uganda. Average HIV prevalence in the three districts is 5.0%, with an estimated population of 1,143,800 in the 3 intervention districts.
Developing a toolkit for team based performance management of health workers	Conduct a literature review and country case studies of team based performance management interventions and their effectiveness	1 literature review 2 country case studies (Tanzania and Niger) Global application
Developing tools to support implementation of global recommendations for CHW programs	Gather existing and develop new tools to help countries and organizations apply recent recommendations from UN, WHO and USAID effective CHW programs Build upon lessons learned and make improvements to tools and approaches including CHW AIM and CHW engagement	Global application 26 experts from 12 countries are participating in the process
Strengthening the community health system to support CHW performance	Improve performance of CHWs and the CHW program by strengthening the community health system	Uganda. 1/111 districts 1/16 health facilities, 10/475 villages, and 20/950 VHTs in one district.

Tanzania health worker engagement study	Develop a validated tool to measure engagement that will be used to explore relationships between engagement, performance, and retention, in order to identify implications for HRH management and policy	1330 health workers including over 800 providing ART/PMTCT services from 183 health facilities in 6/30 regions: Dar es Salaam, Morogoro, Iringa, Mtwara, Tabora and Kigoma
CHW productivity study	Conduct research to quantify and analyze productivity of CHWs and factors influencing productivity and performance in Uganda Develop and validate a methodology by which to quantify productivity of CHWs	Two districts in Uganda (Busia in eastern Uganda and Kitgum, in the northern part of the country. Sample size to be determined.
In-Service Training Improvement Framework and study	Develop an improvement framework, in collaboration with international development partners for in-service training Survey in-service training programs to identify opportunities for improvement	International improvement framework developed through consultation and consensus-building with international development partners involving 25 experts and 89 key stakeholder representatives from 26 countries. National survey of in-service training program providers in Ethiopia representing over 27,000 training encounters in 2011. 20 key informant interviews in Ethiopia.
CHW AIM operations research in Zambia	Conduct end line assessment and final report on Ops research in Zambia to assess the effectiveness of the CHW AIM in improving program functionality, CHW engagement and CHW performance	5 NGO partners in Zambia
MCH Funding		
CHW AIM Africa Regional Workshop (Initiatives task order)	Hold one regional workshop to disseminate the CHW AIM toolkit and build capacity of key stakeholders (MOH, NGOs, partners) on the CHW AIM approach	Workshop held in Addis Ababa, Ethiopia. 60 governmental and non-governmental (NGO) representatives from six African countries (Ethiopia, Kenya, Mali, Rwanda, Uganda, and Zambia), as well as participants from international NGOs and organizations
CHW Central website (Initiatives task order)	Continue to develop and maintain the CHW Central website through: <ul style="list-style-type: none"> ▪ Research, design, construction and functionality ▪ Enlisting and engaging membership; developing strategic partnerships; and creating a Technical Advisory Group (TAG). ▪ Continual resource collection, review and posting, responding to technical glitches to reduce frustration, and finding and nurturing discussion leaders. 	Web-based Participation from local NGOs, missions, country programs, international organizations (WHO, CARE, WV) Currently 975 members have signed onto CHW Central.
Common Agenda Funding		
Niger Scale Up and Institutionalization	Implement a training of trainers workshop for the Niger MOH wishing to spread the HR collaborative effort in other regions	One national workshop with participants from central and regional authorities

Major Activities and Results

Ethiopia CHW Performance Improvement Collaborative

See section 3.2 Community Health.

Integrating Provider Performance Management into the Mtwara ART/PMTCT QI Collaborative in Tanzania

In FY12, HCI closed out core-funded activities in its original 12 sites in Tandahimba District of Mtwara Region and spread lessons learned and interventions for HRH from the demonstration into an ongoing ART/PMTCT Collaborative in an additional 8 sites of Mtwara. The activities for the 12 original sites included a learning session to gather change ideas tested and lessons learned in November 2011 and a qualitative evaluation to determine progress over baseline in December 2011.

The qualitative assessment used similar tools to the baseline assessment and additional interview tools to document the experience of implementing the HRH change package. Engagement scores in areas such as having clear expectations, opinions counting, participation in decision-making, and feeling listened to all increased as a result of being involved in the process. Providers also reported better team work and communication within the facility and improved feedback mechanisms. The evaluation reflected areas in which the change package needed to be strengthened and implemented further, including expanding the job descriptions to tasks beyond HIV, finding ways to address gaps in competencies uncovered through preparing competency models, and working with districts to improve performance evaluation and recognition models. The final activity report on the original 12 sites was drafted and includes findings from the evaluation as well as an analysis of the ongoing project monitoring data. By April 2012, the sites had improved in all five indicators being monitored.

HCI continues to support the integration of the HR activities into the ongoing Mtwara ART/PMTCT QI Collaborative in eight sites using mission funding. These eight facilities have been involved in an ART/PMTCT collaborative and are now adding the human resources improvement component based on the lessons from Tandahimba District. The first Learning Session with a human resources component was conducted in February 2012 at which health care providers from Tandahimba District shared their experiences.

Strengthening District Health Management Performance in Tanzania

This demonstration improvement activity seeks to apply quality improvement approaches and performance management methods to strengthen the support and coordination of QI at regional and district levels, while also improving the execution of management functions in the Lindi Region. This activity supports all six CHMTs at the district level and the Lindi RHMT to develop and test changes to improve management performance in the four core functions of management teams: quality improvement, human resources for health, health information systems, and supplies and logistics.

A rapid situational analysis was conducted in February 2012 with the participation of all six CHMTs and the RHMT of Lindi. Then, following the March 2012 design workshop where participants identified weaknesses in district and regional management processes and areas and priorities for improvement, CHMTs and the RHMT established QI teams and defined specific improvement aims to address priority needs. All teams also planned changes to facilitate the scale up of improvements to other health facilities which are not supported by HCI or other donors in applying improvements to HIV services.

In the last quarter of FY12, a two-day learning session was held in Mtwara and was attended by a total of 43 participants including six RHMT members and 36 CHMT members from all six districts in the Lindi Region. The session aimed to facilitate teams to share their experiences since the first learning session on how they formed improvement teams at the district and regional levels, their improvement aims and experiences with tested changes proposed in the first learning session. Teams shared tested changes to improve supportive supervisions for QI, retention of new staff, the flow of supplies and logistics, the recording, management and reporting of district health information and the implementation of activities in their annual plans.

Strengthening Pharmaceutical Human Resources to Improve Access to HIV Care Medicines in Uganda

HCI is working to improve medicines availability and use, while also strengthening pharmaceutical human resources in 14 health facilities in three districts in Eastern Uganda. This activity was initiated under HCI, in collaboration with the Ministry of Health Quality Assurance Division and the Pharmaceutical Division (PD), the District Health Offices of Jinja, Tororo and Bukedea and the Faculty of Pharmacy, Makerere University. A rapid situational analysis conducted in March 2012 identified gaps such as stock outs of HIV testing kits and HIV care medicines. 40% of clients were not able to explain how to take their medicines upon leaving the pharmacy window, there were delays in ordering, ordering was not based on actual needs, there was lack of communication between clinical and pharmacy staff, and there was a 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.

Teams were formed at the district and in 14 health facilities to make improvements at both levels. This activity utilized a staggered design with three health facility improvement teams added to the collaborative each month, in order to examine whether improvement was due to background variables independent of this collaborative or due to the activities supported in this collaborative. Therefore, health facilities had varying periods of baseline data starting at least six months before the collaborative was formed, in addition to time before the facility joined the collaborative.

HCI provided technical assistance to build the capacity of coaches from the Ministry of Health as well as the District Health Offices and the USAID bilateral project SURE staff to provide monthly onsite coaching for improvement and training to build improvement competencies. In August, HCI organized district-level sharing sessions where representatives of improvement teams from each of the 14 participating health facilities met at the District Health Offices (with the District Health Officers) and shared their progress in this new area of application of improvement in pharmacy practice. Hosted at the District Health Office, this positioned the districts to lead and facilitate improvements. Highlights of the district sharing session included the participation of 83 health workers, the sharing of changes to address gaps, and the development of specific action plans.

Developing a Toolkit for Team-based Performance Management of Health Workers

Data were collected in Niger and Tanzania in the last quarter of FY12 to inform the development of case studies on both of these HR collaborative experiences. The case studies will describe the steps teams took to implement the team-based performance management approach and provide the tools and approaches (checklists, matrices, questionnaires, etc.) used to implement those steps.

Developing Tools to Support the Implementation of Global Recommendations for CHW Programs

HCI is developing an evidence-based tool to provide practical support on the design, development, and implementation of CHW programs. The tool is intended for use by national-level decision-makers to support and guide them as they progress through CHW program design, planning, and scale-up. HCI has completed the first round of a modified Delphi process to develop the tool, and has interviewed stakeholders in 12 countries to gain their insights into major decisions, stumbling blocks and obstacles, and what ideas they have for the final format of the tool itself. Data is currently being analyzed, and the second round is expected to begin in December. The full process will run three more rounds to gain consensus on key points, options, and resources. The final tool and materials will be disseminated through www.chwcentral.org, through CHW Central partner organizations and via online forums and relevant meetings.

Strengthening the Community Health System to Support CHWs in Uganda

See section 3.2 Community Health.

Tanzania Health Worker Engagement Study

This cross-sectional study is being undertaken in Tanzania in collaboration with the Ministry of Health and Social Welfare, and Muhimbili University of Health and Allied Sciences. It employs mixed quantitative and qualitative methods to study engagement among health workers providing HIV services and the relationships between engagement, performance and retention. In December 2011, members of the research team in Tanzania and the US worked together to finalize the sampling protocol and selected facilities to be sampled in 6 regions in Tanzania (Dar es Salaam, Morogoro, Iringa, Mtwara, Tabora, and Kigoma). The National Institute for Medical Research also reviewed the ethics review application and returned its recommendations for minor revisions to the research team in December 2011. The team obtained ethical approval from the National Institute for Medical Research (NIMR) in February 2012 and internal ethical approval from URC in January 2012.

The research team has undertaken preliminary quantitative and qualitative analysis, with hands on support and training for quantitative analysis provided in September 2012 in Dar es Salaam. Quantitative data were collected across six regions, including 27 districts and 183 health facilities.

CHW Productivity Study

HCI seeks to fill gaps in current literature and methodologies by developing a standardized methodology for quantifying and defining CHW productivity, identifying its determinants, and exploring the relationship between CHW productivity and performance. This evidence will aid program planners and policy makers in the design and development of CHW programs and interventions to consider and/or improve the productivity of this critical cadre of health worker. In FY12 HCI conducted a review of the literature on health worker productivity to inform the design of the study and the development of the study concept note. By the end of FY12, we have gained USAID mission approval to work in Uganda and signed a Memorandum of Understanding with World Vision with whom we will be collaborating in two districts.

In-service Training Improvement Framework and Study

The purpose of this activity is to develop an improvement framework for in-service training (IST) programs for increasing sustainability, effectiveness and efficiency. A modified Delphi approach was employed to identify, define, review and refine recommended practices and strategies to improve IST with a panel of experts. All five rounds of the Delphi process were completed with the fourth Round held as an online open consultation 3-29 November 2011, and the fifth Round held with the consensus group 13-21 December 2011.

Revisions are currently being made by taking into account the feedback, and a revised version of the improvement framework guidance will be sent out for a second and final round of peer review. Two articles as part of the new journal series on in-service training have been submitted thus far to the Human Resources for Health journal that HCI is editing in collaboration with USAID, CapacityPlus, Jhpiego and I-TECH.

HCI also worked with the Federal Ministry of Health and key stakeholders to conduct a rapid assessment of the in-service training system in Ethiopia in June and July 2012. The mixed methods rapid assessment sought to describe the national IST situation, IST program provider practices and key stakeholder opinions on IST priorities, issues and strategic development. Surveys were self-completed by 43/62 (55%) of eligible IST program providers, and structured interviews were help with 20 key informants. Respondent IST program providers submitted data on 72 IST programs representing over 27,000 training encounters between January and December 2011. Assessment findings highlighted priority issues, such as the absence of a comprehensive and standardized system of processes by which to plan, implement, coordinate, track, monitor and evaluate IST in Ethiopia. The assessment also raised

concerns regarding the quality, effectiveness, sustainability and local ownership of IST programs. HCI facilitated a national workshop in August in Wolisso, Oromia to support stakeholders to develop a national in-service training strategic framework for Ethiopia.

CHW AIM Operations Research in Zambia

Data collection for the CHW Assessment and Improvement Matrix (CHW AIM) tool operations research activity was completed in December 2011. Data on CHW engagement were collected from the five intervention sites, followed by final CHW AIM workshops. The principal investigator joined the in-country data collection team to help conduct the workshops and led a debriefing meeting with the USAID mission in November 2011. The final report was published in June 2012.

CHW AIM Regional Workshop

The CHW Regional Meeting was held in Addis Ababa, Ethiopia June 19-21, 2012. The objectives of the meeting were to provide a forum for policymakers and program managers to share best practices, innovations and challenges in CHW programming, familiarize participants with the CHW AIM tool and its applications, and develop a framework for analyzing key constraints and enablers for achieving functional, scalable and sustainable CHW programs.

The nearly 60 participants included government and NGO representatives from six African countries: Ethiopia, Kenya, Mali, Rwanda, Uganda, and Zambia. (NGO representatives also traveled from the US, Malawi, South Africa and India to participate in the meeting.) The workshop focused upon the following: an in-depth introduction to CHW program functionality and the CHW AIM tool; discussions on the application of the CHW AIM tool in different countries; CHW program scalability and sustainability; progress and challenges to CHW programs in participant countries; the development of action plans.

The participants of the meeting developed action plans for applying CHW AIM in their countries and have requested technical assistance to do so. This activity will be to develop a scalable, virtual way to offer such technical assistance. In addition, the outputs of this meeting included a brainstorming of key constraints and enablers to achieve functional, sustainable, scalable CHW programs. These ideas will be organized and used to develop a framework which will be circulated for feedback by participants.

CHW Central Community of Practice

This web-based community of practice has been active since June 2011. It involves active participation from local NGOs, missions, country programs, international organizations (CARE, WV, WHO). Over 975 members have signed onto CHW Central. Every second month, a discussion topic is posted and members make comments. The most recent topic is on Empowering CHWs, Engaging Communities—looking at how Manoff, a nutrition-focused organization, was able to engage volunteers, bring programs to scale, strengthen sustainability, and encourage community ownership.

Niger HR Institutionalization and Scale-up

The Niger human resource (HR) demonstration collaborative, started in 2009, ended its work in the first quarter of FY12. In January 2012, the Ministry of Public Health in Niger held a Training of Trainers (TOT) workshop that was co-facilitated by the Director General and his deputy, with assistance from HCI field staff. The trainer's guide and materials were developed with support from HCI common agenda funds. Implemented in each of the eight health districts within the Tahoua region (Illela, Konni, Madaoua, Bouza, Keita, Tahoua, and Tchintabraden Abalak), a full day in each district was dedicated to introducing and spreading this approach to all clinical directors and heads of facilities, in addition to other clinical and administrative staff. Tahoua regional, district, and facility staff that participated in the HR collaborative served as trainers for other sites and shared the experiences they gained during the implementation of the collaborative. The final technical report was published in September 2012. The MOPH has committed to implementing this HR improvement process nationally, and three new regions have initiated activities: Marady, Tillaberi, and Zinder.

Directions for FY13

Teams in Tanzania will continue to apply performance management interventions, and a final evaluation of the District Management Collaborative is planned in FY13. We will carry out the endline evaluation of the pharmaceutical HR collaborative in Uganda, which will include analysis of time-series data, qualitative case studies and an economic evaluation. The IST Improvement Framework, the team-based performance management case studies and toolkit, the Tanzania health worker engagement study, and the Uganda CHW productivity study will be completed and publications prepared to disseminate findings in FY13.

3.5 HIV/AIDS

Overview of HCI's Program in FY12

What are we trying to accomplish?	Activities	Geographic scale of interventions
HIV Prevention		
Apply QI principles to strengthen the global effort to maximize HIV-free survival of children through PMTCT through: <ol style="list-style-type: none"> 1. establishment of best practices and guidance for implementation of the latest WHO - PMTCT and infant feeding guidelines, and 2. Improving uptake and retention of women and infants along the PMTCT continuum 	WHO - PMTCT and Infant Feeding Guidelines Prototype	3 sites (1 district, hospital, 1 health center, and 1 dispensary) in Njombe Town Council (1 out of 4 districts in Njombe Region) in Tanzania
	PMTCT – AIMGAPS [“Assuring Infants and Mothers Get All PMTCT Services”]	21 sites in 8 districts in Iringa Region, Tanzania (total of 425 facilities in these 8 districts)
	ANC Service Uptake (MCH – PMTCT integration)	Kenya , Kwale District, 21 Health Facilities – 20 public health and 1 private (out of 21 total in the district)
Apply QI methods to improve access to family planning services by HIV-positive patients	Family planning for people living with HIV	4 out of a total of 4 sites offering ART services in Masaka District, Uganda (Population 74,000)
Apply QI principles to improve injection safety practices and reduce the incidence of unnecessary medical injections	Injection Safety	Pakistan 25 sites (2 public facilities, 23 private) in Karachi District, Sindh Province (Population 90,000) Mali 15 sites total (11 public and 4 private facilities) (Population 120,000) -Sikasso region: 5 public facilities (out of 25) and 2 private facilities - Bamako region: 6 public facilities (out of 55) and 2 private facilities
Chronic Care of HIV		
Leverage lessons from QI in HIV /AIDS to establish and facilitate spread of best practices for chronic conditions care	Strengthening the Health System for Chronic Conditions Care	15 sites (5 hospitals and 10 Health Center III's out of 32 total facilities) in Buikwe district, Uganda Buikwe District (pop. ~407,100 w/ HIV prevalence of 6.8% for 27,683 HIV-positive), 1 of 111 districts in

		Uganda
Improve patient self-efficacy at managing their chronic illnesses	Chronic Conditions Patient Self Management & Community Support	14 sites in 2 out of 5 districts in Morogoro Region, Tanzania Morogoro pop. ~1.2 million w/ HIV prevalence of 5.1% (61,200 HIV-positive)
Improve nutritional outcomes of patients with HIV	Nutrition Care in HIV Programs	8 facilities in 4 districts (out of 19) in Nyanza Province, Kenya
Global Technical Leadership	Provide technical assistance to HCI country programs in HIV and AIDS Disseminate information on learning from HCI country programs and research	All HCI HIV/AIDS and Chronic Illness programs

Main Activities and Results

HIV Prevention

PMTCT and Infant Feeding Guidelines Prototype in Tanzania

The 2010 WHO guidelines for PMTCT and Infant Feeding recommend more effective use of ARVs by women and breast-feeding infants. This will pose new operational challenges for PMTCT programs. As countries begin to adopt and scale up services based on the new guidelines, it is imperative to examine the impact of these guidelines on the health system and adapt the system accordingly. In order to guide the adaptation of the health system to facilitate implementation of the new guidelines, in FY11 a prototype of the guidelines was launched at three facilities (hospital, health center and dispensary) in the Njombe district of Tanzania to identify and develop solutions for the challenges that that new guidelines pose for PMTCT programs.

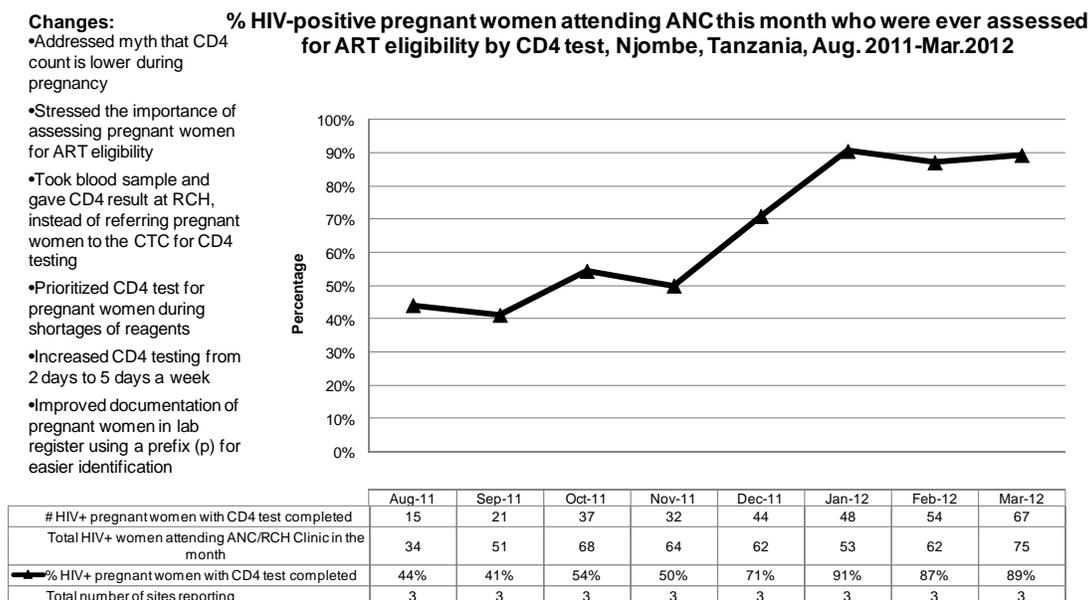
In January 2012, HCI conducted an in-depth follow up through documentation of progress in systems and processes of care before and after introducing QI methods. Direct observation and informal interviews were used to gather information from the service providers, CHMTs and HMTs. Interviews revealed that providers were not assessing ART eligibility of HIV-positive pregnant women. Instead, CD4 testing was only used on patients who were enrolled in the care and treatment center because providers believed the myth that women experienced lower immunity during pregnancy. HCI advisors worked with staff at the three facilities to debunk this myth. As a result, CD4 testing of HIV-positive pregnant women increased from 44% to 89% from August 2011 to March 2012, as shown in Figure 38.

We also found a low percentage of women initiating ARV prophylaxis early (at 14 weeks gestational age) compared to those initiating late (more than 28 weeks gestational age). This was in part due to the low percentage (14.3%) of women booking early (< 14 weeks gestational age) at ANC over the eight-month period. Throughout FY12, QI teams continued to identify gaps in care and tested changes. In mid FY12, the three WHO guidelines prototype sites joined the AIMGAPS collaborative. A final report is being drafted and results will be shared with the global community.

PMTCT: Assuring Infants and Mothers Get All PMTCT Services (AIMGAPS) in Tanzania

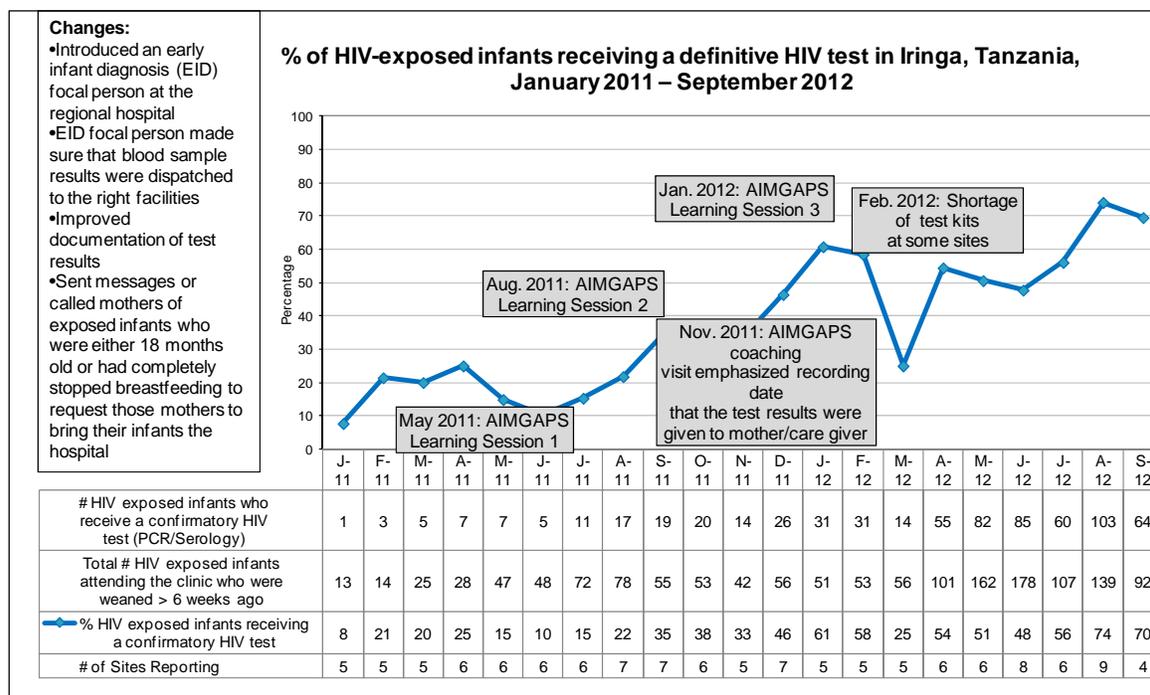
HCI has been working with the Ministry of Health and Social Welfare (MOHSW) and EngenderHealth in the Iringa Region of Tanzania to improve uptake, retention and quality of prevention of mother-to-child transmission (PMTCT) services across the continuum of care from the antenatal period through the entire breastfeeding period until the HIV status of the exposed infant is definitively determined. Initially, this activity, Assuring Infants and Mothers Get All PMTCT Services (AIMGAPS) began at the facility level. Working purely at the facility level, some indicators improved while others lagged behind.

Figure 38. Tanzania: Applying WHO guidelines to increase ART eligibility assessment of HIV-positive pregnant women attending ANC



Several gaps in technical content have been identified after testing changes and monitoring indicators for two years. For one, it became apparent that increasing uptake and retention of PMTCT services requires community support. Facility-level changes of care processes alone led to little or no improvement in some indicators, such as enrollment of HIV-exposed infants into PMTCT follow-up care and male involvement in ANC, while progress was made in indicators such as definitive testing of HIV-exposed infants (see Figure 39), and HIV-positive pregnant women receiving ART.

Figure 39. Tanzania, AIMGAPS: Increasing coverage of HIV-exposed infants with a definitive HIV test, Iringa Region, January 2011- August 2012



In an attempt to improve indicators, and based on the advice of several PMTCT experts, HCI incorporated a community component into AIMGAPS in 2012. The community component first attempted to enhance PMTCT efforts primarily through sensitization, i.e., sending letters home with pregnant women inviting their male partners to accompany them to ANC and spreading messages in the community about PMTCT. In August 2012, HCI expanded the community work to strengthen the linkages between the health facility and the community in 11 villages of three AIMGAPS sites.

MCH-PMTCT Integration in Kenya

This activity is reported in section 3.6 Maternal, Newborn and Child Health.

Family Planning for People Living with HIV - Uganda

This activity is reported in section 3.3 Family Planning.

Injection Safety Pakistan

The problem of injection safety is particularly dire in Pakistan, where the rampant reuse of syringes and needles has been documented as contributing to the spread of Hepatitis B, Hepatitis C and HIV. Pakistan also has one of the world's highest rates of overuse of therapeutic injections. HCI began working in Pakistan in February 2012 with a local organization, Bridge Consultants, to improve safe injection practices and waste management in Karachi, Sindh. The activity is being carried out in three union councils in Karachi - Memon Goth, Gujro and Darsanna Channa. In Pakistan, the majority of medical care is in the private sector, and within the private sector there is a very high proportion of unlicensed providers who do not have the requisite qualifications to practice medicine but do so nevertheless. Thus, the focus of this activity is the private clinics which are run by trained and untrained practitioners. A total of 25 sites were included in the activity, including two government facilities and 23 private facilities. Of the 23 private facilities 14 are staffed by trained medical doctors (MBBS), and nine are staffed by unlicensed providers.

An initial assessment was conducted in March 2012 and revealed major gaps in all aspects of safe injection practices and waste management. Training in quality improvement and safe injection practices was held in May 2012. Dr. Abdul Naser Ikram, the National Improvement Director for HCI Afghanistan travelled to Karachi, Pakistan to conduct this training, thus facilitating south-south exchange of knowledge and experience. Monthly coaching visits began in May 2012, and providers began implementing changes to improve safe injection practices and waste management at the facility. The coaches also meet regularly to share experiences from across the Union Councils.

Despite major challenges and lack of systemic support, there has been a significant improvement in safe injection practices at the participating sites. The aggregate compliance with selected criteria for safe injection practices at the facility improved from 18% at baseline (May 2012) to 54% (October 2012) (see Table 8). Provider compliance with criteria for administering injections safely also improved from 13% in May 2012 to 58% in October 2012. The aggregate compliance with selected criteria for safe injection practices at the facility improved from 18% at baseline (May 2012) to 54% (October 2012). Provider compliance with criteria for administering injections safely also improved from 13% in May 2012 to 58% in October 2012.

Injection Safety in Mali

In January 2012, HCI conducted a baseline assessment on injection safety in 15 sites selected in the Bamako city and in Bougouni district (Sikasso region). The baseline assessment identified several gaps that threaten patient and health worker safety. Very few sites had any guidelines or job aids on waste management, safe injection practices, or management of needle stick injuries.

Table 8. Pakistan: Improvements in injection safety, May 2012 vs. October 2012

	Baseline May-12 n=13	Oct-12 n=12
Average compliance with best practices for injection safety and waste management at the facility level (11 criteria)	18%	54%
1. Running water and soap is available for washing hands in the clinic	23%	75%
2. Alcohol-based hand rub is available for cleaning hands in the clinic	15%	42%
3. Gloves are available in the clinic	0%	92%
4. Reminders and/or job aids are posted promoting safe injection practices and waste management	0%	92%
5. Facility has no loose needles, syringes, or sharps left lying inside or outside the facility	46%	33%
6. No multi-dose vials are left with a needle in the diaphragm.	46%	42%
7. No cotton swabs are kept wet or soaked in water/alcohol.	38%	33%
8. Separate waste containers are available for waste segregation	0%	33%
9. Sharps container is available	8%	67%
10. Sharp waste disposal containers are not more than 3/4 full?	0%	100%
11. Access to an acceptable final waste disposal method (e.g. incinerator)	0%	0%
Average compliance with safe injection practices by providers administering injections (8 criteria)	13%	58%
1. Adequate hand hygiene prior to administering injection.	0%	55%
2. Use of a new pair of gloves prior to a venous access injection/iv	0%	9%
3. Use of a clean designated tray, or area to prepare the injection.	8%	73%
4. Sterile syringe and needle used [taken from an unopened packet].	31%	73%
5. Patient's skin cleaned adequately before the injection.	38%	91%
6. Did the provider discard the needle without recapping?	8%	55%
7. All sharps disposed in a safety box immediately after the injection.	8%	64%
8. Adequate hand hygiene after administering injection.	8%	45%

Unfortunately activities came to a hold because of the coup d'état that broke out in Mali in late March 2012. In August 2012, we received authorization from the USAID Mali mission to resume activities. We have resumed our discussions with the MOH to continue the implementation of the activity by supporting the selected sites and districts to improve safe injection practices. A total of 15 sites are included in this activity; from Bamako city and from Bougouni district (Sikasso region); including 11 public facilities and four private facilities.

Chronic Care for HIV

Strengthening the Health System for Chronic Conditions Care in Uganda

The two-year demonstration collaborative was launched in FY11 following a commitment by the MOH of Uganda to adopt the WHO-endorsed Chronic Care Model to improve its health care system so that it can more effectively serve people with chronic illnesses. In FY12, sites worked to:

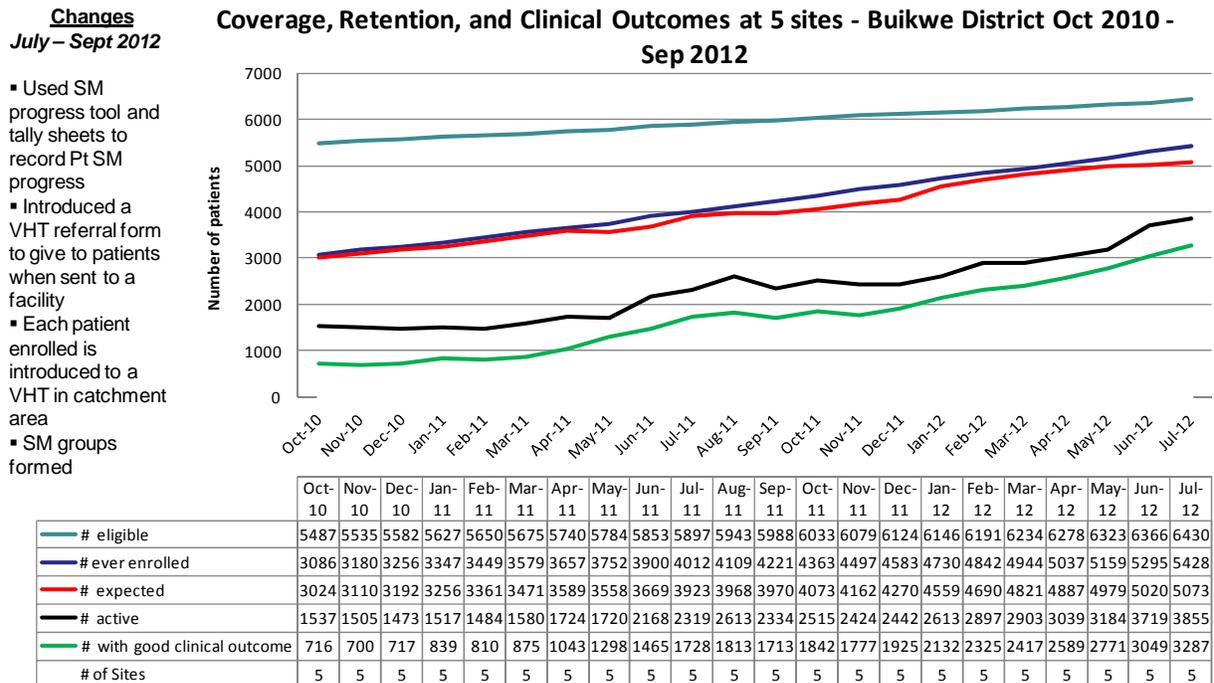
- **Develop and expand the use of a tool for supporting patient self-management** which allows for providers/counselors to review what has been discussed during previous patient encounters and assesses patients' progress towards achieving desired goals.
- **Close the retention gap** by first determining why patients were not returning to the clinic and then working to develop patient-centered solutions. To address challenges, for example, some sites

employed a policy where adherent patients with difficulty traveling to their clinics monthly are provided with more than a two or more month supply of ARVs and some sites established ART outreach centers to bring ARVs closer to patients. Most facilities also established designated HIV clinic days and used appointment books, expert patients, and village health teams to track/follow-up patients who missed appointments.

- **Strengthen district level QI structures** by conducting joint QI activities with district health teams that allowed district officials to gain a better understanding of the differences between acute and chronic care and to understand the need to adapt health systems to provide chronic care.
- **Standardize changes across sites** so that QI teams could develop and display care protocols for triage, guidance for counselors, and clinical guidelines for clinicians.

These are among the multiple system redesign activities that have yielded substantial improvements in the delivery of care and clinical outcomes for HIV patients. For example, the proportion of patients with good clinical outcomes who are actively on ART, increased from 45% at baseline to 85% by September 2012 (see Figure 40).

Figure 40. Uganda: Applying Chronic Care model to improve coverage, retention, and clinical outcomes in Buikwe District

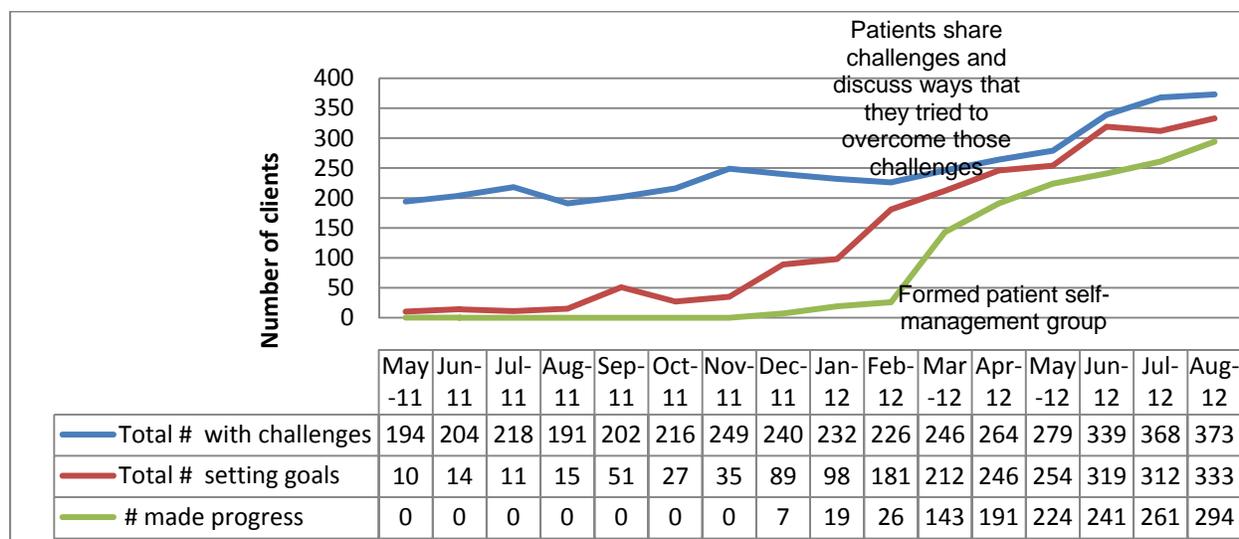


During the past year HCI has been able to standardize changes across the 15 sites involved in the chronic care collaborative in Buikwe, including developing and displaying care protocols for triage, counselors, and clinicians. All pre-ART sites were supported to use attendance registers to monitor patient retention and make monthly reports. It has also facilitated the spread of changes to improve retention by working with sites that had challenges with improving retention by learning from what other health facilities did. HCI also supported the 15 sites to improve their efforts to enable patient self-management. Sites have made changes in the process of care to include identification of patients who have challenges at triage. The patients then have one-on-one counseling sessions with the health workers, and they set goals. In addition to the one-on-one sessions, patients have set up five self-management groups with an objective of income-generation. Across eight sites, the number of patients

who set goals and made progress on the set goals has increased from 19% (19) to 88% (294) between January and August 2012 as shown in Figure 41.

Patient goal setting and action planning with expert patients and health workers have also shown to be an important component of self-management, as patients who make progress on their set goals has increased dramatically (see Figure 41). While the primary aim of this effort is to improve HIV chronic care, there continues to be a “spill-over effect” that has benefited the management of chronic care for diabetes and hypertension as well.

Figure 41. Uganda: Increasing patient self-management in eight sites in Buikwe District, May 2011- August 2012



As a culminating activity for this demonstration collaborative, a two-day harvest meeting was convened on September 17-18, 2012 with approximately 50 participants representing 16 health facilities. Based on the group work at the harvest meeting a “how-to” guide (change package) was developed and designed for spread and scale-up of the CCM interventions. The change package, now in its final draft form, will be used to spread the Chronic Care model to new sites under the USAID ASSIST Project.

Patient Self-Management and Community Support in Tanzania

HCI has applied the Chronic Care Model at 14 health facilities in two districts of the Morogoro region in order to strengthen existing activities aimed at improving the quality of HIV and AIDS services in Tanzania. This effort has placed particular emphasis on improving support for patient self-management. Through this effort, HCI and local health officials strengthened the capacity of lay and professional health care workers’ to support patients to better care for themselves. The lay workers are expert patients, referred to as “peer mentors”, and were selected and introduced to facilities to work with HIV-infected patients.

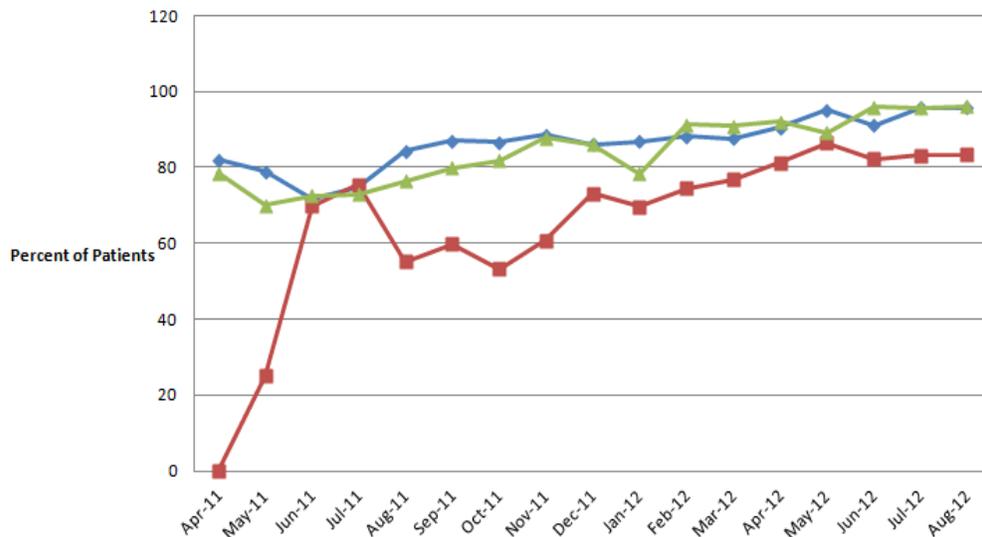
Throughout the fiscal year, HCI worked with Tunajali (a local implementing partner) and local CBOs, the RHMT, CHMTs, and facility QI teams to strengthen patient self-management. These efforts included: finalization of the development of a patient self-management support database to track 10 improvement indicators; task shifting of peer mentors in adopting some duties previously done by clinical staff such as filing, tracking patients, and packing medications; integration of hypertension screening among PLWHAs attending the Care and Treatment Center (CTC); harmonization of the patient self management program with the home based care program; implementation of peer mentor-led patient self-management support groups; stakeholder engagement of peer mentors in income-generating activities; joint coaching visits with MOHSW to the sites; and monthly peer mentor meetings

which focused on building the skills of peer mentors to better support patient self-management. HCI has also worked with the MOHSW to harmonize patient self-management with home-based care (HBC) services.

The above activities have contributed to improvement of tracked indicators, as shown in Figure 42. Over time, the percentage of patients who set a self management goal and action plan increased from 25% in May 2011 up to 83% in August 2012; the percentage of patients started on ART who are keeping appointments has increased from 76% in January 2011 to 96% in August 2012; and the percentage of patients that have reported less than two missed doses in the last month has increased from 82% in April 2011 to 96% in August 2012.

Figure 42. Tanzania: Increased ART adherence among patients engaged in self-management

PSM Facility & Patient Indicators in Morogoro Urban District, Tanzania (April 2011 - August 2012)



	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12
◆ % of patients on ART recorded to have good adherence last month (not missed ART treatment for less than two days)	82	79	72	75	84	87	87	89	86	87	88	88	90	95	91	96	96
■ % of patients on ART who have Self Management goals and action plan	0	25	70	75	55	60	53	61	73	70	75	77	81	86	82	83	83
▲ % of patients started on ART who are keeping appointment	78	70	73	73	76	80	82	88	86	78	91	91	92	89	96	96	96

Nutrition Care in HIV Programs

Nutrition Care in HIV in Kenya

During FY12, the nutrition demonstration project in Kenya continued testing and documenting improvement activities in QI journals which captured: gaps (issues/challenges), change ideas, tests of changes, measurements, and time series charts with annotations. Two learning sessions were conducted during this fiscal year, where participants discussed their experiences and shared best practices which have continued to yield improved service delivery. Learning session participants included peer educators (expert patients), data officers, nutritionists, and nurses from Patient Support Centers. The National, Provincial and District health management team representatives also participated in the learning sessions, as well as representatives from collaborating partners including: APHIAplus, HIVQUAL/NASCOP (National AIDS and STI Control Program), and Concern Worldwide. During the

work in Uganda and Kenya and how to integrate monitoring and evaluation at the clinic level. HCI staff also participated in quarterly global technical NACS partner leadership meetings. HCI staff have also participated in joint country visits with FANTA and LIFT to South Africa and Lesotho.

Directions for FY13

Several HCI activities will continue into FY13 to complete the scopes of work. Both the Pakistan and Mali injection activities were delayed in starting work in FY12, so work will continue into FY13. The chronic care collaborative will work to finalize a change package and will share the results of the two-year activity at a dissemination meeting in November 2012. The patient self-management activity in Tanzania will continue coaching and mentoring at all 14 sites and will transition activities to the USAID ASSIST Project. The remaining HCI funding for AIMGAPS will go towards continued monitoring of AIMGAPS indicators and strengthening the community component by implementing community quality improvement in a total of 10 villages of three AIMGAPS sites. Lastly, the WHO prototype work in Tanzania will continue into FY13 in order to complete the final report and share findings with MOHSW, USAID Mission, and other implementing organizations as applicable. The NACS activities will continue in Malawi with HCI working in two districts: Balaka and Karonga. NACS activities are expected to begin in Zambia in January 2013.

3.6 Maternal, Newborn, and Child Health

Overview of HCI's Program in FY12

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Contribute to MNC mortality reduction through the application of effective QI approaches at the health facility and community levels in selected USAID priority countries	Apply the collaborative improvement model to improve evidence based child survival interventions care at community levels (Health Huts) in Senegal	<ul style="list-style-type: none"> ▪ Mbour District, population 300,000 and Tivaouane District, population 200,000.
	Apply the collaborative improvement model to improve evidence based maternal and newborn care at the health facility and community levels in Uganda	<ul style="list-style-type: none"> ▪ Luwero District, population 416,000 and Masaka District, population 250,000.
	Apply the collaborative improvement model to improve evidence based antenatal care and PMTCT services at facility and community levels in Kenya	<ul style="list-style-type: none"> ▪ Kwale District population 161,000
Support and scale up USAID Global Initiatives	<ul style="list-style-type: none"> ▪ Introduce Helping Babies Breathe in three countries and provide regional support to HBB in LAC ▪ Contribute to the global working group to scale up Integrated Community Case Management of Child Illness: ▪ Test locally made training models to improve health workers' skills in maternal and newborn care ▪ Support HBB initiative 	<ul style="list-style-type: none"> ▪ National level: Afghanistan, Uganda, and Guatemala ▪ Global ▪ Uganda ▪ Global
Promote the application of QI methods in the Global Health Initiative	<ul style="list-style-type: none"> ▪ Develop papers to promote and facilitate the use of QI in MNCH ▪ Promote the use of QI in MNCH program 	<ul style="list-style-type: none"> ▪ Global

Main Activities and Results

Facility and Community Maternal and Newborn Health Collaboratives in Uganda

With core funds from the MCH office in the Global Health Bureau, HCI is supporting the MOH in Uganda to apply the collaborative approach to maternal newborn care to adapt and spread evidence-based practices across 34 facility teams in Masaka and Luwero districts in central Uganda. HCI, the MOH, and the District Health Offices in Masaka and Luwero districts are implementing two linked maternal and newborn health (MNH) improvement collaboratives in 34 health facilities and surrounding communities: one on facility-based MNH collaborative and the other on community-based MNH care. The facility collaborative focus on contributing to reduction of neonatal deaths through increasing number of newborn babies receiving essential newborn care (ENC), including newborn resuscitation, and to reduction of maternal mortality through prevention of postpartum hemorrhage by actively managing third stage labor. The collaborative also seeks to link pregnant mothers to HIV services through working with facilities to ensure that pregnant mothers are tested for HIV and thus have a known HIV status

HCI trained 20 health care workers as district trainers in QI, AMTSL, and ENC using the Helping Babies Breathe (HBB) curriculum. Training materials were used to cascade training to 82 MNCH providers. The district coaches, through monthly coaching, and quarterly learning sessions, support 34 health facility QI teams to improve maternal newborn care. Challenges, results, changes and next steps from the facilities are shared with coaches through monthly meetings. Good practices are identified and shared with facilities thus spreading good practices through coaching sessions and learning sessions. Data on ENC, prevention of PPH by application of AMTSL, and linking of pregnant mothers to HIV testing are analyzed monthly by facility teams with support from district coaches to identify gaps, causes and solutions to improve maternal newborn health. Figure 44 shows some of the results from the facility-level collaborative with respect to essential newborn care. Figure 45 shows coverage and results of promoting newborn resuscitation.

Figure 44. Uganda: Improving compliance with essential newborn care in facility collaborative in Luwero and Masaka districts

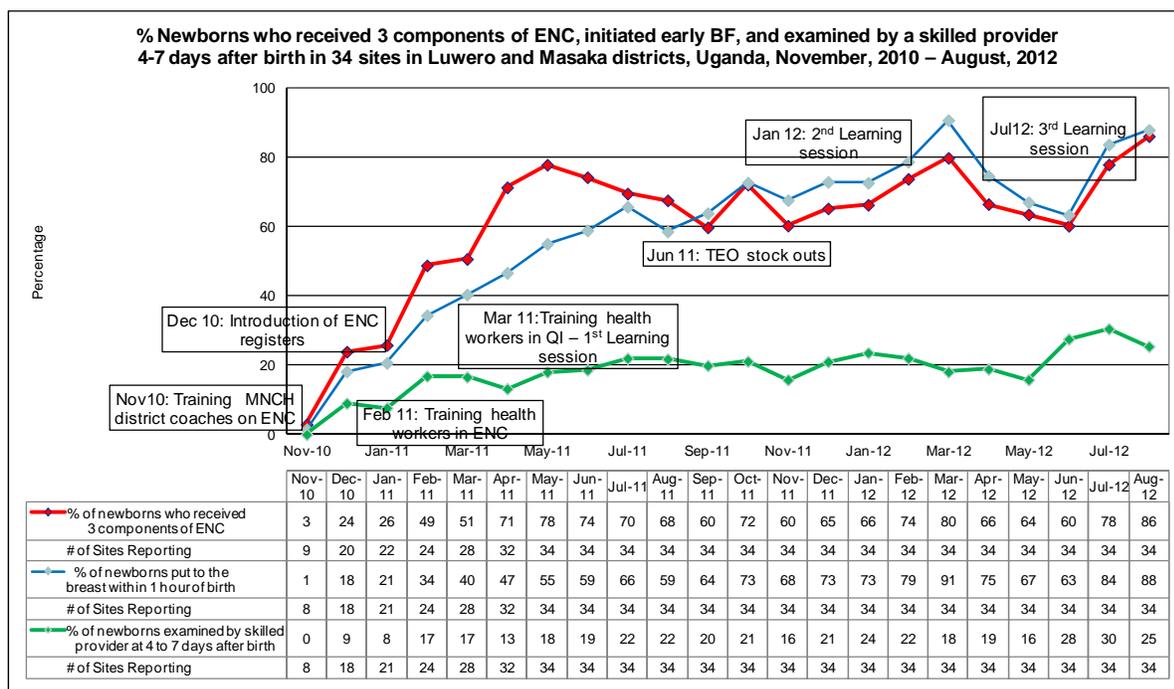
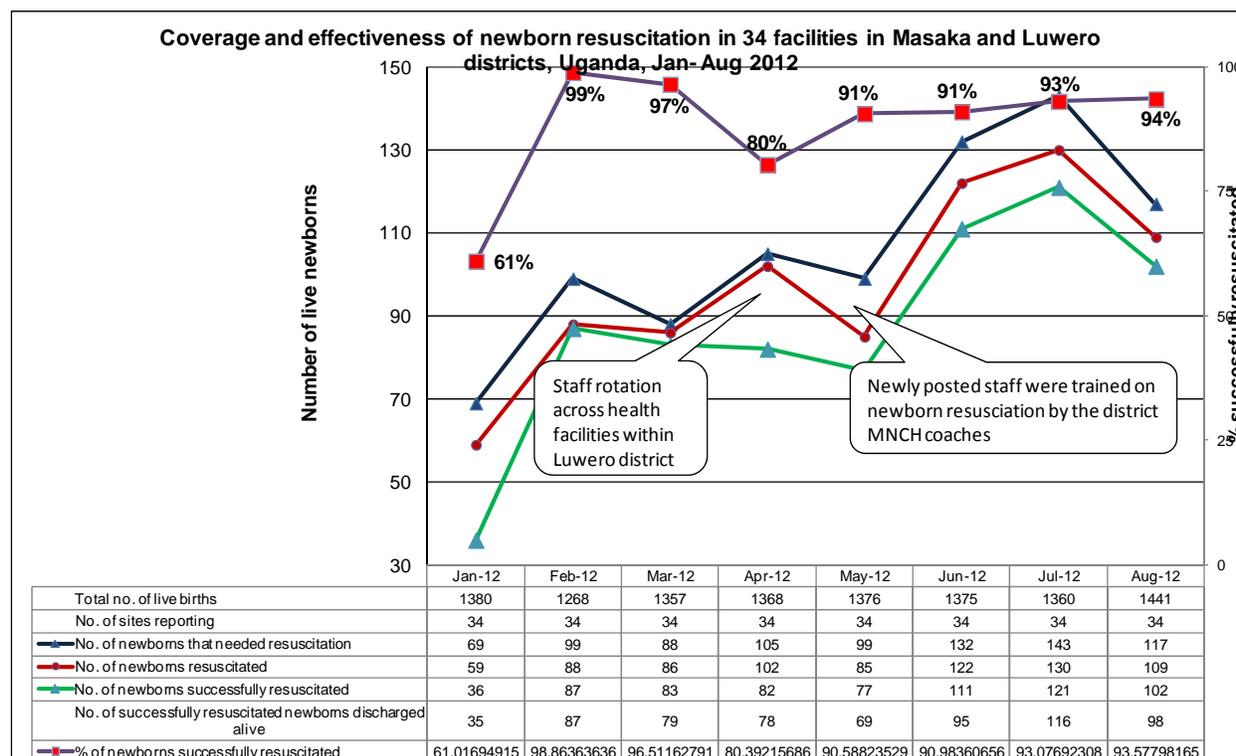


Figure 45. Uganda: Coverage and effectiveness of newborn resuscitation in 34 facilities in Luwero and Masaka districts, January 2012-August 2012



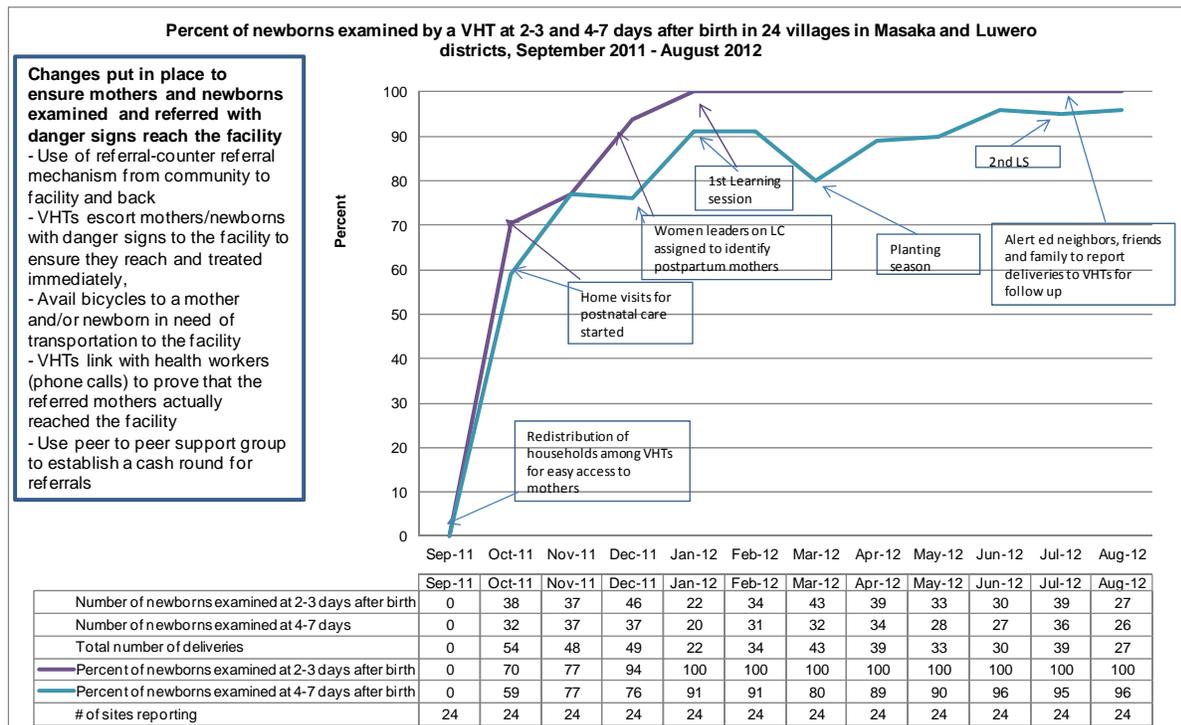
To complement the efforts to reduce maternal and neonatal mortality at facility level and reach the previously unreachable, HCI is applying quality improvement approaches at the community level in the same two districts in Uganda. The intervention supports the national policy of establishing and activating the functions of Village Health Teams (VHT) in all villages of Uganda to scale up community health care.

The project partners with VHTs comprised of volunteer community health workers and empowers them to play an active role in improving and measuring data related to essential newborn care services. Innovative and inexpensive training models, suitable for use in rural Uganda and produced locally, were developed and tested to increase the capacity of community health workers to provide essential newborn care services. Prior to the development of the collaborative improvement, there were no means by which data to support the indicators could be recorded and analyzed. A supplementary data collection tool and training has been provided to the VHTs. A coach who is a health care provider at the referral facility visits each community once a month to support the VHTs and collect data. Figure 46 shows the progress made in increasing home follow-up of newborns within 2-3 days after birth.

Improving Coverage and Quality of Antenatal Care in Kwale District, Kenya

The Kenya MOH, HCI, and other stakeholders decided to pilot this effort in a rural district, which was performing below the national average in ANC/PMTCT utilization. Kwale (Matuga) district is one of the poorest districts in Kenya with an estimated population of 161,000. The aim of the activity is to improve the coverage and quality of ANC services by using quality improvement approaches to institutionalize better care practices. QI teams were established at all 21 health facilities in the district. These teams were then tasked with reviewing the facility data on ANC indicators to establish a baseline level. This data triggered awareness of the low utilization and quality of ANC services. QI teams, with facilitation from the QI advisor and the coaches, introduced the concept of strengthening the health facilities outreach activities to reach more pregnant women. In addition, health facilities were encouraged to use some of their disposable cash to purchase some missing essential supplies, such as

Figure 46. Uganda: Community newborn examination at 2-3 and 4-7 days in 24 villages, Luwero and Masaka districts, September 2011-August 2012



iron and folate. Additionally, the QI teams, also ensured ANC services included counseling on the importance of taking iron and folate tablets. Strengthening of community linkages was one of the key drivers to increasing the utilization of ANC services. Figure 47 shows gains made in the quality of ANC; Figure 48 shows the impact of improved ANC quality and getting more women to complete a fourth ANC visit on increasing institutional deliveries.

Figure 47. Kenya: Improved quality of ANC in 21 facilities, Kwale district, Jan. 2011- Aug. 2012

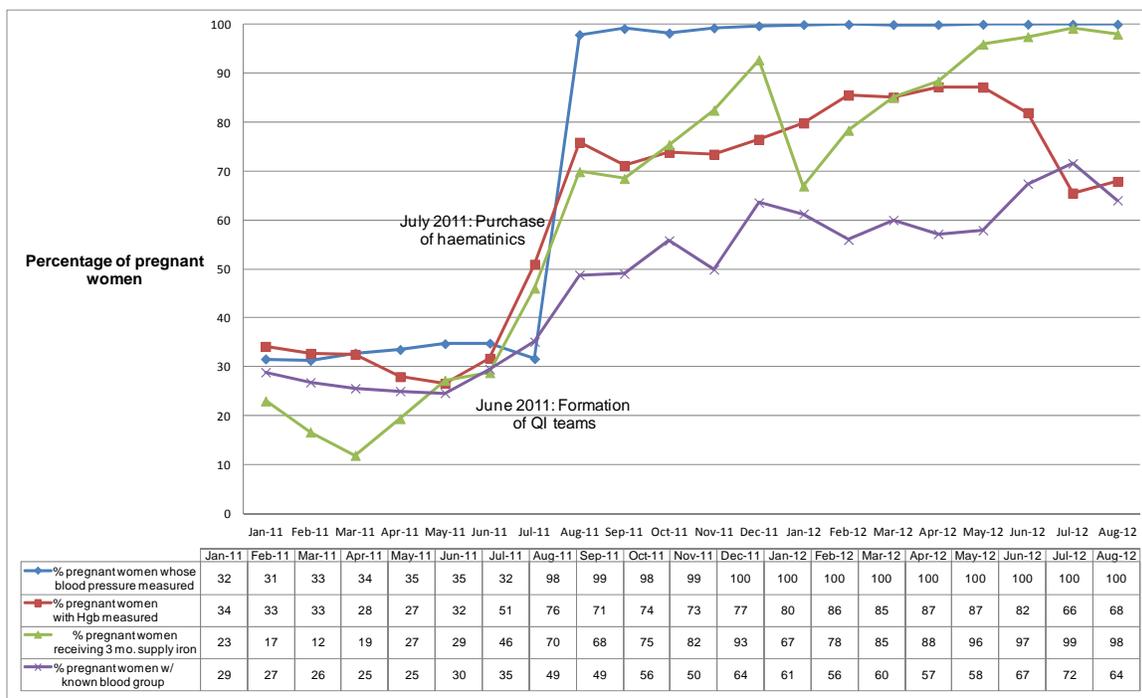
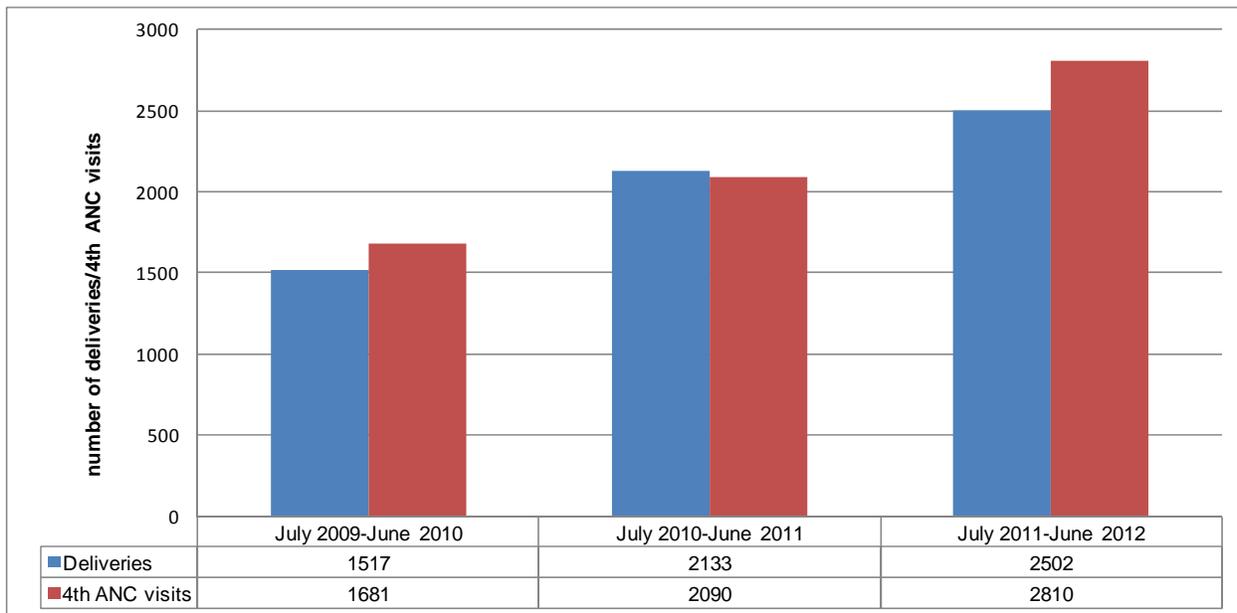


Figure 48. Kenya: Increasing ANC coverage and institutional deliveries in 21 facilities, Kwale District, 2009-2012



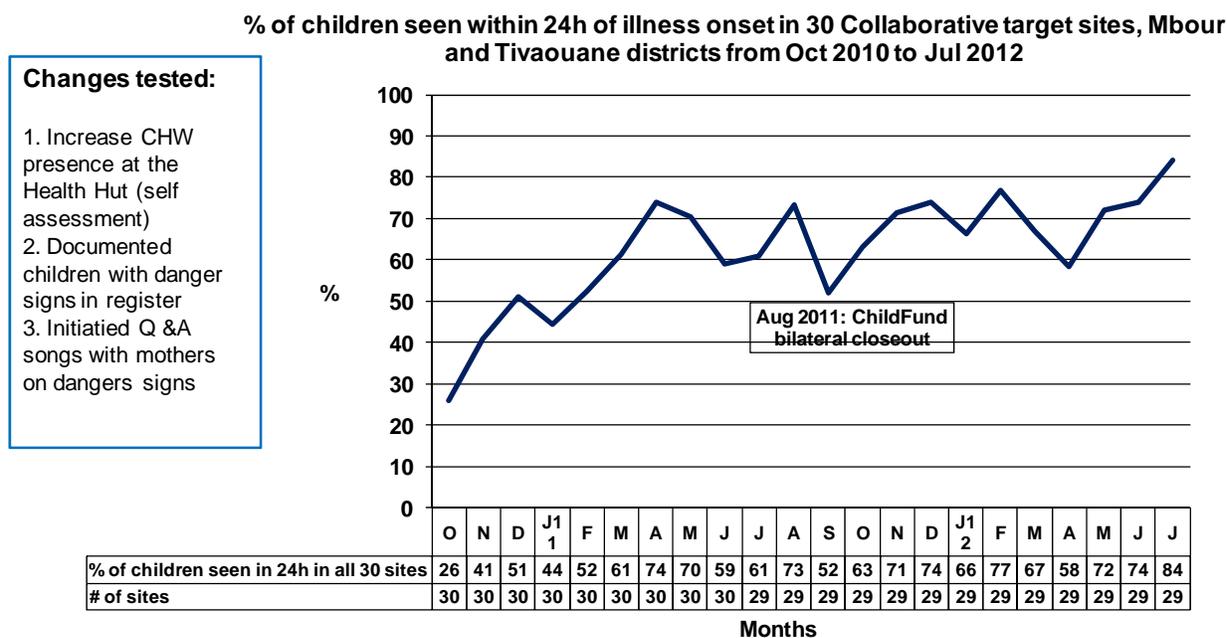
Community Case Management of Childhood Illness in Senegal

In Senegal, HCI worked in partnership with ChildFund International to apply QI at the community level in two districts, Mbour and Tivaouane, to improve the community case management of childhood illness. The objective of the project, begun in FY11, is to contribute to reducing child mortality in the project area by systematizing the community management of diarrhea, acute respiratory infection, and malaria for children under five years, strengthening the systems essential to providing effective management of child illness, and rapidly spreading best practices through the application of the collaborative improvement approach. Two learning sessions were organized for QI teams to share their results and discuss challenges with each other. The enthusiasm was very high not only because of the achieved improvement but also for the rare opportunity for community teams to meet and learn from each other. Improvements were achieved in compliance with IMCI norms in the 29 participating health huts through the introduction of simple changes to the current community services, such as:

- Adding a new column to the CHW register to assure the follow of sick children within 24 hours
- Setting a new Referral-Counter Referral booklet instead of a single form
- Systematic vital sign recording for each child seen at the Health Hut
- Improving the procurement of essential child survival supplies (e.g., oral rehydration salts)
- Involving school children to sensitize parents / neighbors to increase utilization of child survival health services
- Increasing CHW outreach and time spent at the household level
- Better involvement of the community leaders and committees

Figure 49 presents results for increasing the proportion of sick children seen within 24 hours of illness onset.

Figure 49. Senegal: Proportion of children seen within 24 hours of illness onset in 29 sites, Mbour and Tivaouane districts, October 2010-July 2012



Directions for FY13

In FY13, the MNCH programs will continue to apply modern QI approaches in the continuum of MNCH care in USAID priority countries and summarize lessons learned for applications at a wider scale. Change packages in Uganda, Kenya and Senegal will be described and disseminated. In addition, MNCH programs will make a special effort to link field programs' experience with national level policy makers to prepare for scaling up the QI gains achieved in HCI supported programs.

4 Common Agenda Activities

4.1 Project Management

Overview of HCI's Program in FY12

HCI Task Order 3 continued to evolve during FY12, with new activities starting up in existing project countries and new countries while other HCI country program offices closed down. New offices were established in Burundi, Mali, and Haiti, while others closed in Namibia, Honduras, and Bolivia. URC's internal process improvement efforts in management and project administration thus focused more on efficient project closeout and startup processes during FY12. At the same time, the existing project support team was restructured at HQ in order to best respond to the demands of the field offices while also preparing staff for the global FY13 transition to HCI's follow-on project, USAID ASSIST.

Main Activities and Results

Project staffing

At the headquarters office, the changes to project management during FY11 included the recruitment of an experienced finance officer to support the day-to-day operations as well as the complex budgeting and financial management needed by HCI. Tracey Clarke, CPA, MBA, joined the team in this capacity after transferring from URC's corporate field accounting team. Otherwise, staffing levels on the management team remained stable in order to keep management and administration costs at their ongoing low levels for a project of this size.

Coordination of technical activities

As in prior years, progress on all TO3 activities was formally reviewed each quarter with the Contracting Officer's Representative (COR) for HCI. During FY12, we held four Quarterly Review Meetings (QRM) with the COR in October 2011, February 2012, May 2012; August 2012.

In addition, the HCI Director and COR maintain weekly coordination meetings throughout the year. These meetings are made more useful both for reporting and management purposes by structuring sessions within them with pertinent unit directors meeting face-to-face with the Project Director and COR.

The annual budgeting and planning sessions for FY13 were not held during FY12 as in previous years' because of the timing of HCI closeout and the ASSIST follow-on award, which was made at the end of September 2012. As a result, individual country work planning was instead completed in the field and coordination of global ASSIST and HCI annual work plans was achieved in a workshop held in Bethesda more appropriately in October. This year, field office directors from almost every country participated in order to ensure proper planning of the final HCI year while also planning their transition to the integrated country plans of the follow-on USAID ASSIST project.

Budget management

Building on the success of the budgeting and expense monitoring improvements of prior years, the monthly expense review and budget realignment process was adhered to during FY12. Through monthly calls and WebEx participation by field offices and in-person reviews by HQ unit directors, expenses and budgets are closely monitored and continuously re-planned in order to ensure the most efficient possible use of USAID resources. Using our standardized templates, the global project budget is linked together thus facilitating even a close quarterly review and re-planning session by the Project Director.

Reporting and deliverables

The preparation of contractually required deliverables and other reporting to USAID are overseen centrally at headquarters and conform to the deliverables schedule outlined in Section F.6 of the TO3 contract. Templates and formats were established for the annual work plan, the performance monitoring reports, trip reports, research and technical reports, the annual project report, the annual self evaluation report, and financial and other deliverables. Contributions from technical groups and countries are delivered to the communications team using standardized templates that allow for efficient compilation of all contributions.

In addition, many informal reports are delivered to Missions and Element Groups at USAID/Washington. These are also overseen centrally, yet prepared and delivered locally, to ensure the quality of the reports delivered, the efficiency in which they are produced, and the internal usefulness of them in sharing information across the HCI Project. During FY12, HCI has formalized the dissemination of quarterly reports originally prepared for the COR so that the Project Director now shares them directly with Missions and other activity managers. This has improved communication with other USAID activity managers while also encouraging more widespread dissemination of project results across USAID globally without adding any new reporting burden.

Directions for FY13

During FY13, the HCI management team will focus on closeout of HCI activities and an efficient handover to ASSIST for all technical work, staff, and resources that USAID would like to build upon through the new project. Through tight relationships with USAID activity managers, maintenance of ongoing relationships with partners and host-country counterparts, close monitoring of separate individual project and contract finances, and streamlined processes guided by improved checklists and procedure flowcharts, URC will ensure efficient and effective closeout of HCI and startup of ASSIST.

At the same time, URC will continue to build upon its internal process improvements through company-funded administrative visits to field offices by corporate representatives, the continued work of our field operations improvement team, as well as other knowledge management improvements such as URC's new financial database and intranet-hosted collaboration spaces.

4.2 Knowledge Management

Overview of HCI's Program in FY12

Key activities	What are we trying to accomplish?	Scale
Promote wider use of improvement knowledge generated by QI activities through the HCI KM system	<ul style="list-style-type: none"> ▪ Establish the HCI Portal as a well-known source of useful information to support health care improvement in USAID-assisted countries ▪ Engage HCI partners, country institutions, cooperating agencies, and QI teams in contributing content to the HCI KM system ▪ Develop linkages with the new ISQua Knowledge web site and other health care KM sites ▪ Develop a social media strategy to reach out to other networks to promote sharing of improvement knowledge 	Global
Expand the use of KM strategies to connect implementers and foster deeper knowledge exchange	<ul style="list-style-type: none"> ▪ Develop staff capacity to apply KM strategies and approaches to enhance QI results ▪ Expand the use of “connecting” strategies like Communities of Practice to facilitate transfer of tacit knowledge ▪ Expand the use of storytelling and video clips to complement written improvement reports ▪ Support the CHW Central Community of Practice ▪ Facilitate learning and knowledge management across partners in the HBB Global Development Alliance about effective strategies for scale-up of newborn breathing interventions within integrated maternal newborn care ▪ Support information exchange and dissemination for LAC Newborn Health Alliance through the alianzaneonatal.org site 	Global
Incorporate new content in the KM system	<ul style="list-style-type: none"> ▪ Bring in new content to reflect the breadth of HCI activities ▪ Bring in new content drawing on work outside HCI ▪ Make the Improvement Database accessible in Russian, French, and Spanish and launch HCI Portal pages in each of those languages ▪ Expand content and functionality of the maternoinfantil.org site as well as undertake other activities to support Spanish language communities of practice on MNCH topics 	Global
Conduct studies to enhance the HCI KM system	<ul style="list-style-type: none"> ▪ Complete five more studies to evaluate and inform ongoing enhancements to the HCI KM system 	Global

Main Activities and Results

Promote Wider Use of Improvement Knowledge Generated by QI Activities through the HCI KM System

In FY12, HCI added social media to promote wider use of improvement knowledge. In December 2011, HCI launched a Vimeo page under the name “Improving Health Care.” The Vimeo page is intended to complement the HCI Improvement Database and provide a place where any implementer could place a video related to improving health care and then link to that video from an improvement report posted by the implementer on the HCI Portal. In January 2012, HCI launched a project Facebook page, accessible at <http://www.facebook.com/HCIProject>. The purpose of the HCI Facebook presence is to increase the visibility of health care improvement results and project activities. In April 2012, HCI launched a Twitter account for the project, @usaidhciproject, to complement our Facebook activity and

also provide a way to engage with others in the global health community in Twitterverse conversations around particular events, such as the International AIDS Conference. Our initial Tweets related to the Salzburg Global Seminar and to HCI staff presentations at the International Forum on Quality and Safety in Health Care.

HCI joined forces with the International Society for Quality in Health Care (ISQua) to sponsor two discussion forums on the ISQua Knowledge Portal, www.isquaknowledge.org. Dr. Edward Broughton led an online discussion about the value of and need for economic analysis of health care improvement interventions on ISQua Knowledge from January 30-February 12. In conjunction with the Salzburg Global Seminar “Making Health Care Better in Low and Middle Income Economies: What are the next steps and how do we get there?”, held in Salzburg, Austria from April 22-27, 2012, HCI organized a three-part discussion forum to gather insights from implementers on how to create health systems capable of continually improving, to feed into the discussions at the Salzburg Global Seminar. The “Spotlight on Salzburg” discussion forum was led by HCI Director Dr. M. Rashad Massoud, Professor Sylvia Sax of Heidelberg University, and Dr. Edward Kelley of the World Health Organization. Conducted over the period March 20-April 19, the forum received 28 posts from implementers in over 20 countries. A synthesis of the discussion forum comments was published as a joint Salzburg Global Seminar-URC flyer and posted on ISQua Knowledge website and HCI Portal. During the Seminar April 22-27, the ISQua Knowledge web master posted daily summaries from chairs of each block and five issues of “Salzburg Diaries” newsletter which were produced by Salzburg staff for distribution to seminar participants.

As of the end of FY12, usage of the HCI KM system, encompassing the HCI Portal (www.hciproject.org), the CHW Central Community (www.chwcentral.org), and the Spanish Maternal and Child Health (www.maternoinfantil.org) and Russian Health Russia (www.healthquality.ru) websites, was on track to meet all usage targets set in the TO3 contract. Total visits to these sites through the end of FY12 exceeded 200,000 users. Analysis of the usage of just the Improvement Database on the HCI Portal, which is the core resource of the project’s knowledge management system, shows that during the FY10-FY12 the database of improvement reports and collaborative profiles received 4,136 unique visitors who came to the database 5,698 times. The total number of outside submissions to the KM system through FY12 was 122.

Expand the Use of KM Strategies to Connect Implementers and Foster Deeper Knowledge Exchange

HCI continued to develop the capability of the HCI Portal to support learning and sharing about improvement. An external listserv function was added to the HCI Portal Communities to facilitate communication with group members in the CHW Central community, designed to be a one-stop resource on CHW programs that enables the sharing of resources, experiences, expertise and real-time discussion on issues relating to community health worker programs. Accessible either through the Communities tab of the HCI Portal navigation or directly at www.chwcentral.org, CHW Central is the first website focused on CHWs and CHW programs. It was developed by URC’s partner Initiatives Inc. in collaboration with 17 partner organizations. Since the CHW Central launch in June 2011, over 975 individuals from almost 100 countries have joined the community of practice.

In the past year, we have made strides in applying these ideas in our country programs by encouraging the use of storytelling, knowledge cafes, and other KM techniques in learning sessions and gatherings of QI teams organized to draw out key insights about what changes were most effective in an improvement collaborative. We have found that using these approaches to complement data effectively engages people in generating new insights about how results were achieved and what were the most important changes made that led to those results. Doing a better job of synthesizing key learning out of improvement activities also helps to develop knowledge products that effectively communicate that learning to others.

We also provided greater support to HCI country teams in applying KM approaches. In October 2011, QI Specialist for Knowledge Management Ms. Kate Fatta visited Tanzania to orient the HCI staff on knowledge management and its application in their work. She led an orientation session on KM practices and principles and the team tried out a practice KM approach. During the same period, Ms. Emily Treleaven traveled to Nicaragua to train HCI staff on KM strategies and approaches, methods for collecting and connecting knowledge, exercises to practice these new methods, and a discussion of how they can be applied in HCI activities in Nicaragua. Each technical advisor developed a KM plan for FY12, which included documents to be produced as well as how new KM techniques would be used in planned workshops and activities.

At the Latin America and Caribbean Regional Annual Conference on the Implementation of Kangaroo Mother Care (KMC), Ms. Treleaven led, together with Dr. Jorge Hermida, a one-hour discussion on the planned KMC Spanish-language community of practice that HCI will host virtually through the maternoinfantil.org website. During the session, the goals and activities of the community of practice were shared, and participants brainstormed on topics of interest and knowledge they could share through the community. The community of practice section of HCI's Spanish language maternal and newborn care knowledge portal, www.maternoinfantil.org, was launched in June. Two communities have been created: one on Kangaroo Mother Care and the other on Helping Babies Breathe.

In September 2012, the LAC Newborn Alliance website was transferred from a stand-alone site managed by Kipukuna in Ecuador to a bilingual partner page on the Healthy Newborn Network website, accessible by the same address, www.alianzaneonatal.org.

In the last quarter of FY12, KM consultant Nancy Dixon designed a four-day training course on knowledge management approaches for health care improvement. We intend to convene the course in Africa in 2013 for HCI country teams.

Incorporate New Content in the KM System

Google Translator was added to the HCI Portal in July 2012 to provide a simple means for site users to translate content to any one of the large number of languages available using Google's machine translation function. Also in July, a Georgia page was created on the HCI Portal where the Georgia team can post technical documents in Georgian and link to them from the HCI Georgia Facebook page.

Conduct Studies to Inform Ongoing Enhancements to the HCI KM System

Five KM studies were completed in FY12:

1) Bolivia: Evaluation of methods used to spread learning from the El Alto TB collaborative to new sites in Cochabamba. This study completed in FY12, but its report is in editing. (Results from the Bolivia KM study are also described in section 2.2.1.2 of this self-evaluation report.) Ms. Emily Treleaven of HCI's KM team at headquarters worked with Luisa Mendizabal and HCI staff in Cochabamba to conduct a study on health workers' preferred mechanisms for learning and sharing information in the collaborative context. 84 collaborative participants in Cochabamba, Bolivia completed a self-administered survey in January 2012. They represented 42 health facilities in the Cercado health network, where HCI is working to spread improvements in tuberculosis management and care. The objective of this study was to gain a better understanding of how four kinds of best practices identified from demonstration collaboratives could be spread to and implemented by new sites at scale, as well as the factors affecting information uptake and application of best practices identified in demonstration collaboratives, and how to introduce such practices to spread sites.

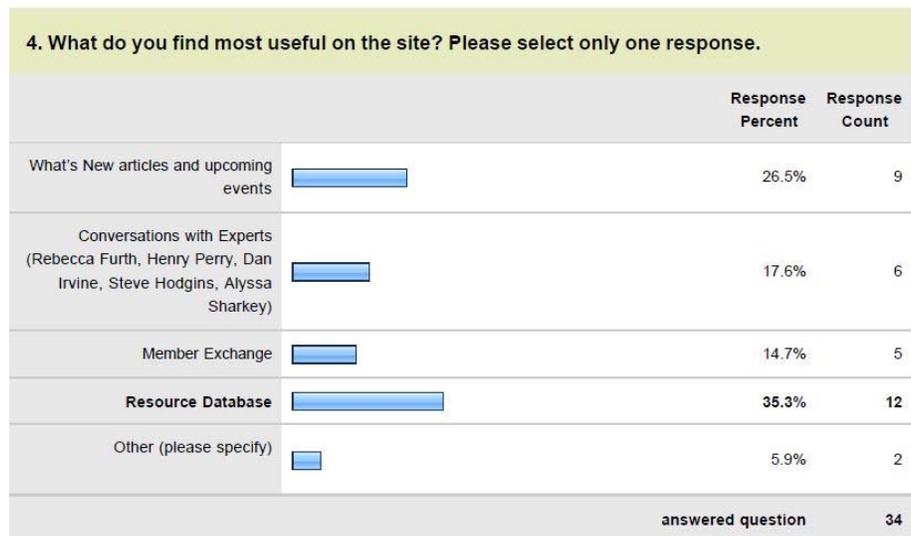
The study found that the preferred mechanism for learning about changes was the learning session (preferred by 31% of respondents, n=84), followed by the information modules on various aspects of TB program improvement that HCI developed and a CD-ROM course developed by HCI and the Ministry of Health and Sports (each preferred by 23% of respondents). Learning sessions were also the most motivating mechanism for teams to implement changes, and was the most frequently reported impetus

for change for implementation of the four changes. The majority of respondents shared some type of information about what they had learned or their experience in the collaborative. There was not a significant correlation between job role and sharing information. Respondents were more likely to share information about how to implement changes rather than their personal experiences with implementation of changes. Among respondents who desired more information about recommended changes, most wanted more details about how to implement the changes. Respondents reported a desire for more written, audio, and electronic content. A lack of time to share information with colleagues was reported as a barrier to implementation, as were a lack of interest by colleagues and a lack of time to read materials.

2) Survey of users of the CHW Central site (completed by Initiatives Inc. in November 2011).

After the CHW Central community had been operating for four months, partner Initiatives Inc. carried out a web survey of members of CHW Central. Thirty-four members responded, 53% of whom were based in Africa, 56% of whom had recommended the site to others, and 86% of whom use Facebook for professional information. Figure 50 shows responses on what parts of CHW Central they find most useful.

Figure 50. Key finding from the CHW Central user survey, November 2011



3) Design of a Spanish-language community of practice for implementers of KMC and HBB (completed in June 2012).

This study began in December 2011 with the application of a questionnaire on areas of interest for a KMC Community of Practice that was completed by 26 participants in the Regional KMC Meeting in Santo Domingo in the December 2011. Meeting participants were especially interested in continuing the conversation about a standardized set of program indicators and said they hoped to use the forum to offer each other support and advice.

The online component of the community would be hosted on HCI's Spanish-language maternal and child health knowledge portal, www.maternoinfantil.org. Based on the feedback in the questionnaires, HCI's local web programmer in Ecuador, Kipikuna, designed the community of practice section of the site to feature news, research, clinical tools, "ask-the-expert," and discussion forums for users.

The Community of Practice section of the Salud Materno Infantil website was launched in June 2012 at http://www.maternoinfantil.org/comunidades_practica, shown in Figure 51. This section of the site allows users to join a community-specific listserv, post messages and share resources with the listserv (including documents, photos, videos, and presentations), create and participate in discussion forums, and invite others to join the community. Two communities have been started: one on Kangaroo Mother Care and the other on Helping Babies Breathe (HBB). The purpose of the communities is to create a more dynamic forum for sharing of best practices and experiences related to these two interventions on which HCI has worked closely with Ministries of Health in Ecuador, El Salvador, Guatemala, Honduras, and Nicaragua.

The communities are not limited to HCI staff and counterparts but rather were designed to engage other implementers not affiliated with HCI, including all of the participants in the Regional Kangaroo Mother Care conference organized in December 2011 by MCHIP, other USAID-supported implementers, Ministries of Health, and HBB Global Development Alliance partners. Activities in the two communities will be initiated in FY13, once a larger number of members has been achieved. We plan to invite experts to lead webinars on KMC and HBB as a strategy to encourage greater participation in the communities.

Figure 51. Spanish-language virtual community of practice for KMC on www.maternoinfantil.org

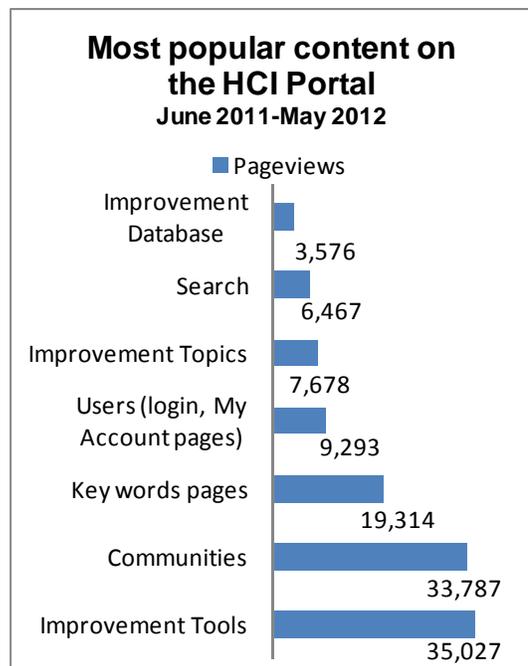


4) Evaluation of a links to and referring websites for the HCI Portal (completed in June 2012). At URC’s request, subcontractor Johns Hopkins University Center for Communication Programs (CCP) completed in June an in-depth analysis of use of the HCI Portal by page and source of traffic (including referring sites for visitors landing on specific pages), looking at data for the period June 1, 2011- May 31, 2012. As shown in

Figure 52, the study found that the improvement tools (the largest section of the site, which encompasses information on various improvement methods and analytical tools) were the most popular content on the site, followed by the Communities section.

Figure 52. Most popular content on HCI Portal, June 2011-May 2012

5) Best improvement report contest to increase outside submissions to HCI Improvement Database (held in February 2012). In January and February 2012, HCI convened another contest for “Best Improvement Report” submitted to the HCI Portal Improvement Database. The contest was promoted on several listservs as well as HCI’s new Facebook page and received 57 entries from implementers in 20 countries, including Jordan, India, Nepal, Pakistan, Peru, South Africa, Tajikistan, Tanzania, Uganda, and Zimbabwe. The entries were judged by the HCI KM staff, USAID COR, and HCI Project Director. The entry judged to be the most complete and compelling description of specific changes made and results achieved through efforts to improve care for patients was submitted by Mrs. Racheal Mwape, Executive Director for Community Based



TB/HIV/AIDS Organization (CBTO) of Lusaka, Zambia. In collaboration with her team, Margaret Makukula, Evelyn Mwansa and Barbara Kashiwa, Mrs. Mwape submitted the report entitled, Improving early detection of TB treatment defaulters among unsupervised patients through their adherence to scheduled dates of TB drug collection at CBTO's TB treatment Centre in Lusaka, Zambia. The report provides details on how CBTO introduced a simple monitoring system and appointment reminders that resulted in a decrease in the center's TB treatment defaulter rate to just 4%. Interviews with finalists were conducted in April 2012 to validate their submissions. Mrs. Mwape was hosted by HCI to present her team's work at the International AIDS Conference in July 2012 in Washington, DC, since the Global Health Council conference was cancelled.

Directions for FY13

In FY13, we will transition the content on the HCI Portal to a new knowledge management portal being developed under the USAID ASSIST Project. We will continue to operate both sites for much of FY13 to facilitate use of the ASSIST web portal but transition HCI's social media pages (Facebook and Twitter) to new ASSIST social media pages in the second quarter of FY13. We will also prepare a paper summarizing the experience of the HCI KM system and submit the paper to a peer-reviewed journal.

4.3 Research and Evaluation

Overview of HCI's Program in FY12

Research Topic	What are we trying to accomplish?	Scale of intervention
Institutionalization of modern QI approaches and QI results	Advance learning globally on status and drivers of institutionalization of results and QI implementation	<ul style="list-style-type: none"> ▪ Ecuador (2) ▪ Guatemala ▪ Niger ▪ Russia ▪ All HCI countries
Methods and approaches for effective design and implementation of improvement collaboratives	Advance learning globally on design & implementation of improvement collaboratives, especially related to application of QI at community level	<ul style="list-style-type: none"> ▪ Afghanistan (3) ▪ Cote d'Ivoire ▪ Ethiopia (2) ▪ Guatemala ▪ Mali ▪ Niger ▪ Tanzania
Methods and approaches for effective design and implementation of spread activities	Advance learning globally on shared learning and spread of effective changes (better care practices)	<ul style="list-style-type: none"> ▪ Afghanistan ▪ Cote d'Ivoire ▪ Ecuador ▪ Guatemala (2) ▪ Mali ▪ Uganda (2)
Cost-effectiveness of QI approaches and strategies (including comparative studies)	Advance global learning on comparative advantage and economic efficiency of QI activities	<ul style="list-style-type: none"> ▪ Afghanistan (2) ▪ Cote d'Ivoire ▪ Honduras ▪ Mali (Comparative) ▪ Nicaragua (2) ▪ Russia (2) ▪ Uganda (2) ▪ Uganda (Comparative)
Other QI methodologies, distinct from the improvement collaborative approach	Advance learning globally on QI methodologies distinct from the overall improvement collaborative approach	<ul style="list-style-type: none"> ▪ Afghanistan ▪ Guatemala (2) ▪ Cote d'Ivoire ▪ Kenya ▪ Tanzania (3) ▪ Uganda (5)

Mission-requested research on barriers to implementation	Advance knowledge on barriers to improvement	<ul style="list-style-type: none"> ▪ Afghanistan ▪ Cote d'Ivoire
Build capacity for research and support country programs	Build research and data management capacity of HCI staff	<ul style="list-style-type: none"> ▪ All HCI teams and supported countries

Main Activities and Results

The R&E unit continued its work to strengthen the evidence base about health care improvement in peer-reviewed health literature and HCI publications. In FY12, HCI conducted 51 studies, completing 20. Eleven studies were dropped during the year. HCI will continue and complete the remaining twenty studies in FY13. Table 9 lists all HCI research and evaluation studies carried out in FY12.

Table 9. Research and evaluation studies carried out under HCI TO3 in FY12

Country	Study	Technical Area	Clinical Area	Status
Afghanistan	Hospital QI improvements in Kabul	CEA	MNCH	Continuing
Afghanistan	Kunduz household surveys 2010 – 2012	Community	MNCH	Complete
Afghanistan	Balkh household surveys 2010 – 2012	Community	MNCH	Continuing
Afghanistan	Evaluating Spread to three new provinces	Spread	MNCH	Complete
Afghanistan	QI for Community-level EONC	Community	MNCH	Complete
Afghanistan	Validity of patient records	Data Validity	MNCH	Continuing
Afghanistan	Evaluation of new medical records system	Other QI	MNCH	Dropped
Afghanistan	Hospital Acquired infection (joint MOPH)	Barriers	Other	Dropped
Cote d'Ivoire	Impact of OVC intervention	Other QI	OVC	Dropped
Cote d'Ivoire	Prevention dissemination strategies	Spread/CEA	HIV/AIDS	Continuing
Cote d'Ivoire	Factors influencing loss to follow up	Barriers	HIV/AIDS	Continuing
Cote d'Ivoire	Client satisfaction	Collaborative s	HIV/AIDS	Continuing
Cote d'Ivoire	Evaluation of cost of poor quality	CEA	HIV/AIDS	Continuing
Ecuador	Process of institutionalizing QI	Institutionaliz ation	MNCH	Continuing
Ecuador	Spreading EONC best practices	Spread	MNCH	Complete
Ecuador	Sustainability of EONC QI activities	Institutionaliz ation	MNCH	Complete
Ethiopia	Communities of Excellence	Community	MNCH	Continuing
Ethiopia	Community QI Model evaluation	Community	MNCH	Continuing
Global	Synthesis of learning on institutionalization	Institutional.	All	Complete
Guatemala	Collaborative vs. ISO certification	Comp./CEA/ Other QI	MNCH	Complete
Guatemala	Institutionalization of QI	Institutional.	MNCH	Complete
Guatemala	Case Study on San Pedro ISO implementation	Other QI	MNCH	Complete

Guatemala	Magnitude, speed, and maintenance of improvement	Spread	MNCH	Dropped
Guatemala	QI for community level services	Community	MNCH	Dropped
Guatemala	Spread of best practices to health posts	Spread	MNCH	Complete
Honduras	Referral system for pre-eclampsia	CEA	MNCH	Dropped
Kenya	Piloting of OVC standards	Other QI	OVC	Complete
Mali	Pre-eclampsia/eclampsia evaluation	CEA	MNCH	Continuing
Mali	Spread of best practices from Niger to Mali	Spread/CEA	MNCH	Continuing
Mali	Evaluation of community collaborative	Community	MNCH	Continuing
Uganda	Evaluation of CHW productivity (Study originally planned for Mali but location changed to Uganda due to unrest in Mali)	HR	MNCH	Continuing
Nicaragua	Kangaroo Care	CEA	MNCH	Complete
Nicaragua	CEA of HIV Care	CEA	HIV	Complete
Niger	Influence of QI on health worker perceptions	Collaboratives	MNCH	Dropped
Niger	Regional institutionalization of QI	Inst./CEA	MNCH	Continuing
Russia	Website for sharing innovations	CEA	MNCH	Complete
Russia	Facility-based mechanisms for sustainability	Institutional.	MNCH	Continuing
Russia	Cost effectiveness of HIV prevention	CEA	HIV/AIDS	Dropped
Tanzania	Assessment of 8 OVC standards	Other QI	OVC	Dropped
Tanzania	Evaluation of QI training on OVC implementation	Other QI	OVC	Continuing
Tanzania	Integration of PMTCT into RCH	Other QI	MNCH	Dropped
Tanzania	Evaluation of home-based care	Community	HIV/AIDS	Complete
Uganda	Comparative evaluation of MNCH collaborative	Coll./CEA	MNCH	Continuing
Uganda	Enrollment of HIV+ pregnant women	Other QI	HIV/AIDS	Continuing
Uganda	Patients' involvement in QI activities	Other QI	HIV/AIDS	Complete
Uganda	Sharing of innovations across teams	Spread	HIV/AIDS	Complete
Uganda	Integration of FP and HIV care	CEA	HIV/AIDS	Dropped
Uganda	Evaluation of chronic care model	CEA	HIV/AIDS	Continuing
Uganda	Adaptability of better care practices in spread	Spread	HIV/AIDS	Complete
Uganda	Evaluation of use of expert patients	HR	HIV/AIDS	Complete
Uganda	Health facility factors associated with improvement	Other QI	HIV/AIDS	Complete

Research on Institutionalization of QI Approaches and Results

HCI completed three studies on institutionalization in FY12. Three additional studies in progress in FY12 will be completed in FY13. Table 10 summarizes the results of the institutionalization studies.

Table 10. Institutionalization studies completed or in-process under HCI TO3 in FY12

<p>Sustainable scale-up of active management of the third stage of labor for prevention of postpartum hemorrhage in Ecuador</p> <p>The International Journal of Gynecology & Obstetrics published this HCI study in April 2012 (http://www.ijgo.org/article/S0020-7292%2812%2900098-7/abstract)</p> <p>Objective: To analyze the Ecuadorian experience regarding the adoption, scale-up, and institutionalization of active management of the third stage of labor (AMTSL) for prevention of postpartum hemorrhage via continuous quality improvement (CQI) processes.</p> <p>Methods: Average AMTSL implementation rates for women with vaginal deliveries were compared using unweighted provincial aggregate data from facilities participating in 3 phases of AMTSL programming. Months taken to implement AMTSL at 80% or more and 90% or more compliance were compared across phases.</p> <p>Results: Rate of oxytocin administration during the first 3 months was 5.0% in phase 1, 9.8% in phase 2, and 72.2% in phase 3 ($P \leq 0.001$ vs phases 1 and 2). The average number of months provinces took to increase oxytocin administration to 80% or more and 90% or in more women with vaginal deliveries was, respectively, 21.6 ± 18.7 and 30.6 ± 16.4 in phase 1, 23.5 ± 15.1 and 30.1 ± 14.9 in phase 2, and 4.7 ± 4.9 ($P \leq 0.01$ vs phase 1; $P \leq 0.001$ vs phase 2) and 4.0 ± 3.4 ($P \leq 0.001$ vs phases 1 and 2) in phase 3. By December 2009, AMTSL implementation was sustained at 90% or more in all provinces.</p> <p>Conclusion: CQI processes identified resistance and operational barriers, and developed mechanisms to overcome them.</p>
<p>The Process of Institutionalizing Quality Improvement in the Public Health System in Ecuador: An Anecdotal Qualitative Assessment</p> <p>In FY12, HCI prepared a draft of this study which will obtain anecdotal evidence to characterize the MOH QI process and the experiences over the past 10 years, during which the Quality Assurance Project (QAP) and USAID Health Care Improvement Project (HCI) assisted the Ministry of Health of Ecuador (MOH) to create a model of Continuous Quality Improvement (QI) in their health services. The study aims to characterize the process and achievements of QI institutionalization, which we define as “the means by which a health organization progressively establishes QI as an integral and sustainable part of its daily work routine.” The research questions/objectives of the study are: 1) How and to what extent QI management and its management structure have become institutionalized (at the Central, Provincial, and County Hospitals)? 2) In what principal functions (Management, Regulation, Assurance, Service Provision) has QI become institutionalized, in what tangible ways, and attaining what level of institutionalization? 3) How far has the status of institutionalization actually advanced? What have been the benefits, successes, failures? How much more improvement is still needed? What are the suggestions for achieving this? This study will be finalized in FY13. Study profile: http://www.hciproject.org/node/3509</p>
<p>Institutionalization of Improvement in 15 HCI-supported Countries</p> <p>This technical report presents the findings from a preliminary assessment of institutionalization across 15 HCI-supported countries, followed by a discussion of HCI’s recommendations for future research and implementation activities to promote sustained institutionalization of improvement at all levels of care in each assisted country. This assessment of the level and form of institutionalization across 15 HCI-assisted countries revealed how variable the presence of the elements of an institutionalization is both across and within countries. Additionally, this exercise showed that much has been done at the national and service delivery levels, where HCI has concentrated its efforts. However, there is less evidence of institutionalization at the middle levels of the health systems across countries.</p> <p>Based on these findings and the knowledge gained through carrying out this assessment, further research should be conducted to validate the elements of the framework as measures of institutionalization and to determine which characteristics of an improvement intervention are most conducive to institutionalization and sustainability of desirable improvement results. More deliberate efforts should be made to institutionalize improvement methods at the middle levels of the health systems to ensure a functioning, supportive, and cohesive system across all levels.</p> <p>To follow up on this study, HCI focused on the multiple ways in which HCI has supported 17 host countries institutionalization improvement at the national level see below). Study profile: http://www.hciproject.org/node/3770</p>
<p>Analysis of the level of Institutionalization of Quality Improvement in Guatemala with Emphasis on Maternal and Neonatal Health Care</p> <p>URC, with USAID funding, has provided support to the Guatemalan Ministry of Public Health and Social</p>

Assistance (MSPAS) for 13 years, the last four years of which have included intensive support in improving the quality of health services through improvement collaboratives and the certification of selected health facilities and management processes based on International Organization for Standardization (ISO) quality standards. This study aimed to learn how much of this support and quality improvement capacity have been appropriated, or institutionalized, by the Guatemalan MSPAS and could be sustained without URC's support, despite important changes in the Guatemalan political context (i.e., the new President taking office on January 2012 with subsequent changes in central level MSPAS authorities and Health Area Directors).

The study found that while all MSPAS levels showed commitment and ownership of quality, the districts and health facilities involved in collaboratives and certification according to International Organization for Standardization (ISO) criteria showed the most advanced stages of the institutionalization of quality. The Health Area level expressed commitment to quality, but expressed doubt about the central level's long-term commitment to quality. The central level MSPAS demonstrated a high level of ownership for quality, but also the least amount of certainty about the continuation of quality improvement (QI) without URC's support. Particular elements of the institutionalization model were highlighted at all levels as areas in need of further development, especially: financial resources for quality, recognition of QI work, capacity-building, and information and communication.

There was evidence of common facilitating factors across all levels of the MSPAS, including: leadership, support functions, team work and staff commitment, and technical capacity for implementation. Common barriers were also reported, including a lack of financial resources, weak information systems, and limited personnel and dedicated time. Study profile: <http://www.hciproject.org/node/2924>

Institutionalizing Quality in Three Regions in Niger

The objective of this study is to assess and compare the extent and drivers of institutionalization of quality in three regional health systems with varying experiences in terms of improvement effort in Niger. The specific objectives are: 1) Determine and compare the extent of institutionalization of quality improvement at site, district, and regional levels in the three regions using a modified version of the HCI institutionalization framework; 2) Determine and compare the level of support from the central Ministry of Health, regions, district and site managerial structures for improvement in each of the three regions; 3) Identify and compare factors that facilitate or hinder the process of institutionalization of improvement at site, district and regional levels in the three regions; 4) Describe the process through which sites, districts, and regions are able to transfer quality improvement skills and competencies to new technical domains, new professional groups, and new divisions/departments within a facility or to a new facility. HCI has collected data for this study and will finalize it in FY13.

Institutionalization of Quality Improvement Approaches and Results in Former HCI-assisted Regions in Russia

The objectives of the survey were to identify and evaluate evidence of QI institutionalization in former HCI/QAP-assisted regions of Russia, including creation of culture of quality, initiation of QI in areas different from the areas that QAP/HCI focused on, and incorporation of QI into training curricula of health care education facilities; identify sustainability of improved practices after discontinuation of QAP/HCI projects including use of and compliance with guidelines, methodological letters, orders, algorithms of care, etc. developed under QAP/HCI; evaluate further development/update/improvement of guidelines, methodological letters, orders, algorithms of care, etc. originally developed under QAP/HCI; identify enabling environment/factors for QI, and develop suggestions to facilitate implementation of QI methodology and its further institutionalization into routine practices in the Russian health system. HCI has drafted this report and will finalize it in FY13.

Research on the Design and Implementation of Improvement Collaboratives

Several studies on collaborative improvement were completed in Afghanistan, Ethiopia, Uganda, Tanzania and Niger, reflecting a mix of facility- and community-based research, described in Table 11. The Kunduz community health study was submitted to a peer-reviewed journal, and the Balkh community study will be submitted once it is completed.

Table 11. Studies about collaborative improvement either completed or in-process under HCI TO3 in FY12

<p>Qualitative Process Evaluation of the Implementation and Evolution of Community-Based Quality Improvement for EONC Afghanistan</p> <p>The HCI community collaborative in Kunduz province aimed to improve quality of services, access and coverage; to strengthen health system-community linkages; and to strengthen community health worker human resource support. Due to security concerns, the collaborative was not able to continue for its intended one-year duration. As a result, this study used qualitative methods to capture perceptions of community-based health care in Kunduz province, focusing on maternal and child health.</p> <p>The study found that services provided by CHWs included health promotion and education, referrals, and provision of some healthcare interventions like direct observation of tuberculosis treatment adherence and screening and identification of cases. Both CHWs and key informants agreed that the services CHWs provide improved the health of those in the communities where they work. CHWs expressed satisfaction and pride in their work because they viewed it as meaningful and contributing to positive health outcomes of their community members. However, CHWs also complained that coordinating with facility staff was often difficult and accessing more remote communities presented challenges and security risks. Female CHWs also commented on being limited in services they could provide if they were not paired with a male CHW who was a family member. Other obstacles to service delivery mentioned were insufficient supplies and the lack of compensation or incentives. Despite the relatively short duration of the HCI-supported intervention, CHWs were able to attribute improved service delivery to the trainings they received at the initiation of the community collaborative. During monthly meetings, CHWs were trained in community mapping, data collection, and health promotion and education. Key informants agreed that these trainings elevated the quality of the services provided by CHWs.</p> <p>While security concerns changed the implementation of the collaborative from what was intended, this exploration into CBHC provides insight into how services are delivered and valued by key stakeholders. Notably, both CHWs and other stakeholders found value in the services provided by CHWs which encouraged them to continue delivering services. However, important recommendations were made to improve the quality and continuity of services: 1) Provide regular and supportive supervision to CHWs; 2) Supply sufficient essential medicines and equipment to CHWs; 3) Offer regular refresher trainings to CHWs; 4) Furnish CHWs with salaries and/or other incentives; 5) Ensure that a male and female CHW are posted at each health post; 6) Encourage CHWs be selected from more remote villages; 7) Increase the number of CHWs; and 8) Encourage recruitment of literate CHWs. Study profile: http://www.hciproject.org/node/3035</p>
<p>Improvements in maternal and neonatal health in Kunduz province: Results from household surveys 2010 – 2012</p> <p>HCI implemented a community-based intervention to improve maternal services in Kunduz, Afghanistan to improve pregnancy and newborn care counseling, increase assessment and management of perinatal complications, and promote post-partum family planning services. The intervention included a strong community component focused on improving quality of public-sector community health worker (CHW) services with priority placed on building capacity among CHWs and their supervisors, and facility nurses and doctors. HCI staff instructed front-line CHWs on the basic quality improvement strategy of identifying barriers to optimal antenatal and post-partum services, identifying and testing changes to health delivery, assessing the effectiveness of the changes in improving health services, and either fully implementing successful changes or trying other changes and evaluating their impact. HCI staff also supported provincial public health officers and supervisors in conducting field visits to coach facility health workers and CHWs to ensure the process was being maintained in the various sites and that successful changes were being shared among different groups of health workers.</p> <p>This pre/post intervention household survey was used as part of the evaluation of the effectiveness of the intervention in terms of uptake of evidence-based practices. A baseline household survey was conducted in January 2010 to serve not only as a baseline with which to compare but also to help identify service delivery problems existing prior to implementation thereby informing the intervention design. End line data were collected in January 2012 at the end of the intervention period. The survey data was conducted at a sample of intervention sites and control sites. Linear regression was used to test for differences in outcomes between intervention and control groups from before to after the intervention controlling for confounders. We also determined overall differences between the baseline and intervention periods.</p> <p>Data were collected from 240 mothers in the control group in the baseline period, 299 in the intervention group in the baseline period, 241 in the control group in the end line period, and 299 in the intervention group in the end line period. We found improvements overall in the proportion receiving antenatal care, community health</p>

visits, tetanus prophylaxis and iron supplements, but few differences between improvements in control and intervention groups. However, against the research protocol, there was substantial transferring of health workers from interventions to control sites possibly explaining the province-wide improvements. There was substantial improvement in eight of the nine indicators of quality for the whole province but only for the number of birth preparedness actions cited and the proportion of husbands currently using a family planning method was there a significant degree of improvement between the intervention group compared to the control group. We cannot make definitive recommendations about implementing the intervention in other sites. However, given substantive province-wide improvements associated with the intervention, it suggests there is value in implementing it elsewhere.

Improvements in maternal and neonatal health in Balkh province: Results from household surveys 2010 – 2012

This study was conducted using the same household survey as in the above study in Kunduz province. HCI finalized the analysis of the Balkh data in FY12, and will finalize this study in FY13.

Comparative Study to Assess the Impact of Collaborative Improvement on Customer Satisfaction, Provider Satisfaction, and Services for PLWHA | Cote d'Ivoire

The National Program for Medical Management of People Living with HIV (PNPEC), the Ministry of Health and Public Hygiene, the USAID Health Care Improvement Project (HCI), and several other partners have been implementing a collaborative approach to improve the quality of HIV services in Cote d'Ivoire since 2009. This collaborative approach was conducted in two phases: a demonstration from January 2009 to March 2010 in 41 sites and an expansion phase which added an additional 80 sites and began in May 2010. Before the introduction of HCI project, a baseline assessment was conducted in pilot sites in 2008, which revealed significant opportunities to improve different components of HIV care, including in the areas of customer and provider satisfaction.

The overall objective of this cross-sectional study is to measure the effect of the HCI-supported collaborative to improve the quality of services for PLWHA on HIV services, provider and client experience and satisfaction. The study will include an exposed group and an unexposed group. Pilot sites that participated in the collaborative improvement effort will be included in the exposed group and sites that received no quality program will be counted among the non-exposed group. This study's final report was drafted in FY12 and will be completed in FY13. Study profile: <http://www.hciproject.org/node/3053>

Communities of Excellence in Ethiopia

This cross-sectional, mixed-methods study conducted in two regions in Ethiopia, Dire Dawa and Hawassa, seeks to inform the development a community-friendly standard framework to measure capacity within the community to coordinate care for orphans and vulnerable children. The study will assess community-based organization's capacity looking at the following dimensions: governance and legality, leadership and decision making, strategic planning, organizational structure, program planning and implementation, beneficiary selection and graduation, service delivery, monitoring and evaluation, networking, marketing and communication, community and resource mobilization, financial management, property management, infrastructure and office facilities, volunteer management, and sustainability. HCI has drafted this report and will finalize it in FY13. Study profile: <http://www.hciproject.org/node/4001>

Evaluation of a Community Health Worker Improvement Collaborative in Ethiopia

The HCI Community Health Worker Improvement Collaborative in Ethiopia is working to improve the competence and performance of HEWs; strengthen the linkage between the community and the health system; and improve the capacity of community groups to take ownership of health programs in their catchment areas and establish a community health system. With these program objectives in mind, this mixed-methods study aims to document and evaluate the process of strengthening a community health system and the impact this has on HEW activities. This study has been conducted in the southwest Shoa region of Ethiopia and will focus on HIV/AIDS, specifically referring pregnant women to the health center for HIV counseling and testing.

The specific study questions are: 1) How have quality improvement methods impacted the competence and performance of the HEWs in referring pregnant women for HIV counseling and testing? 2) Has the linkage between the community and the health system been strengthened? If so, how? 3) Has a community health system been established and/or strengthened? If so, how does it function? 4) How do improvement methods impact the function of the components and management of the community health system?

HCI drafted this report in FY12 and will finalize it in FY13. Study profile: <http://www.hciproject.org/node/3036>

Strengthening the application of quality improvement for community level services for EONC in Guatemala

This study was dropped due to the close-out of HCI activities in Guatemala in June 2012.

Evaluation of Community Health Worker Productivity in Uganda

This Health Workforce study is planned for FY13. The study was originally planned for Mali but location changed to Uganda due to the ongoing political unrest in Mali.

Influence of quality improvement on health worker perceptions in Niger

This study was dropped.

Cross-sectional examination of service delivery and costs of community- and home-based care in Tanzania

Background: HCI completed this study in FY12. It will be published online in early FY13.

In Tanzania, like many developing countries, the provision of HIV/AIDS home-based care (HBC) services is not standardized. Few standards exist to guide providers and managers to assess whether HBC services meet desired quality targets. It is for this reason that the Ministry of Health and Social Welfare (MOHSW) and HBC implementing partners are developing Standard Operating Procedures (SOP) to provide guidelines to providers and managers for the delivery of quality HBC services in Tanzania.

Objectives: The aim of this assessment was to evaluate the current scope of HBC services and associated roles and responsibilities among various stakeholders in Tanzania in order to inform the development of SOPs for HIV/AIDS HBC programs.

Methodology: HCI, in collaboration with the MOHSW and other HBC implementing partners, conducted a cross-sectional study in Tanga city to examine, describe and systematically analyze HIV/AIDS HBC practices from the perspective of patients, providers, supervisors, and implementing partners. Both quantitative and qualitative data collection methods were used. Quantitative data related to socio-demographic characteristics of patients, HBC providers and supervisors, and the details of the home visits. Qualitative data included expectations and perceptions of HBC services and perceived problems hindering HBC service delivery as identified by HBC clients, providers, supervisors, and implementing partners.

Results: The most commonly provided HBC services included: medicines, nutritional counseling, drug adherence counseling, hygiene and sanitation education, and psychological/emotional support. Referrals to facilities and community providers, education on prevention of new infections for both people living with HIV (PLHIV) and their families, counseling for adherence to treatment and formation of support groups for PLHIV were rarely provided. Interviewed clients expressed concern with the potential disclosure of their HIV status by the HBC providers and cited HIV logos as potential sources of disclosing their status to the public.

Overall, HBC providers and supervisors lacked guidance on how to provide and integrate most HBC services. HBC providers reported deficiencies in benchmark, training and supplies. Although HBC supervisors had adequate qualifications and a few years of experience, they supervise a large number of HBC providers and do not conduct supervisory visits very frequently. HBC stakeholders acknowledge the ground-shift in scope of HBC practices for PLHIV following the introduction of antiretroviral therapy (ART) from being predominantly medical and palliative towards prevention, linkage with other HIV/AIDS programs, health promotion and advocacy.

Conclusions and Recommendations: While important needs are being addressed by the HBC program, many needs are not being met due to a lack of practical guidance. Areas where further guidance would be beneficial include linking PLHIV with Income Generating Activities (IGA), referrals and linkages, food support and psychosocial services. Current HBC practices should be revised to embrace unmet needs.

Study profile: <http://www.hciproject.org/node/3054>

Evaluation of use of expert patients | Uganda

Uganda has both limited resources and an increased demand for health services due to the chronic care required to maintain antiretroviral therapy for people living with HIV/AIDS (PLHA). Over the past several years in Uganda, many health facilities have adopted strategies to shift some facility and community-based tasks to “expert patients,” clients who are recruited and trained to provide support services for other clients in facilities and in communities.

Although several non-government organizations (NGOs) and public health systems have integrated expert patients into HIV/AIDS care and support using a variety of models, there is a lack of knowledge about how and how well they contribute to improving access to and the quality of health care. Among the significant gaps in the current literature, limited documentation and robust evidence exist about the range of tasks expert patients perform; how they are recruited, trained and supervised; and how communities are involved in the selection and use of expert patients. In an effort to understand these issues from the Ugandan context, HCI carried out a qualitative study in May 2011 at six health facilities that were using expert patients. This study explores three main research questions: 1) How are expert patients being used? 2) What organizational support is provided to expert

patients?, and 3) What are the perceptions of actors most closely affected by the use of expert patients? The final report of the study was published in November 2011 and is available at: <http://www.hciproject.org/publications/task-shifting-hivaids-service-delivery-exploratory-study-expert-patients-uganda>.

Research on Spread

As described in Table 12, studies were completed in the spread of improvement interventions in MNCH in Mali, Ecuador, Guatemala, Afghanistan and in HIV/AIDS services in Cote d'Ivoire and Uganda. The study from Ecuador was submitted to a peer-review journal.

Table 12. Spread studies completed or in-process under HCI TO3 in FY12

Afghanistan: Evaluating Spread of an MNCH Improvement Collaborative to Bamiyan, Herat and Parwan Provinces

The aim of this mixed-methods study, completed in FY12, was to evaluate the uptake and implementation of a package of maternal and newborn care QI changes in the Bamiyan, Parwan and Herat provinces.

The key research questions examined in this study were:

- Which 'change ideas' were adopted, modified or rejected by health facilities in the three new provinces?
- How were the 'change ideas' communicated to the sites, and what were the reasons behind the uptake of each 'change idea'?
- Were there specific reasons that facilitated or hindered the uptake of change ideas? What were they and what are QI participants' perspectives on them?

Methodology

Data were collected in a total of 17 sites in the three regions data through semi-structured interviews with QI team members, provincial public health directors, representatives from a non-governmental organization (NGO) and an Afghan government official from July to September 2011.

Descriptive analyses were conducted for quantitative data to assess communication mechanisms used to expose and share change ideas, preferences for exchanging change ideas, and change ideas adopted by participating health facilities. Responses from the *General Spread Processes* interview tool were recorded in a text-based matrix. Thematic analysis was used to analyze the qualitative data. Findings from both the quantitative and qualitative components were jointly synthesized and interpreted.

Findings

QI teams adopted on average 7.2 QI changes related to maternal and newborn care (SD= 1.9) between November 2011 and February 2012. The most common change ideas adopted across health facilities included: using a checklist to conduct ANC and postnatal counseling; adding the three Active Management of the Third Stage of Labor (AMTSL) components to clinical practice; engaging community health workers in actively encouraging pregnant women to deliver in a health facility; accompanying pregnant women to the delivery room; and supplying revised partograph and training staff on how to fill it out. There was very limited communication between teams in the improvement collaborative to exchange information and share change ideas beyond official learning sessions and coaching.

External support, human and technical capacity available to effectively carry out QI changes, and staff engagement facilitated the adoption and implementation of QI change ideas. QI teams faced many barriers to adopting and implementing change ideas including: lack of commitment of community health workers, transportation, access to water, staff turnover, the unavailability of clinical staff for on-call duty after official clinic hours, and security issues. Other barriers to adopting change ideas and achieving desired results were geography and lack of health staff commitment to quality improvement efforts.

Despite barriers encountered in adopting and implementing change ideas, respondents generally had positive views of QI methods and the impact of change ideas on improving maternal and newborn health.

Conclusions and Recommendations

Findings from this study have important implications for the spread of QI methods for maternal and newborn health in Afghanistan. We recommend the following actions for spreading quality improvement changes for maternal and newborn health care through collaboratives throughout the rest of Afghanistan.

- Encourage communication between QI teams outside of formal learning sessions.
- Adopt a more comprehensive approach to QI that considers systemic and environmental barriers to spreading QI changes.

<ul style="list-style-type: none"> • Institutionalize QI into the existing health care system, including incorporating QI methods and approaches into training programs for health care providers and community health workers. <p>Study profile: http://www.hciproject.org/node/2470</p>
<p>Dissemination strategies for prevention of HIV/AIDS in Cote d'Ivoire</p> <p>The objective of this study is to compare the effectiveness of different spread strategies, which may vary based on the level of responsibility adopted by HCI counterparts at the district level. This study is planned for FY13.</p>
<p>Continuous Quality Improvement of Maternal and Newborn Care Practices in Ecuador: A Comparison of Demonstration and Spread Phases</p> <p>This study, completed in FY12, describes and evaluates the strategies developed and implemented by the Ministry of Public Health in Ecuador to spread continuous quality improvement (CQI) and best care practices for essential obstetric and neonatal care (EONC) throughout the country. The first phase of this initiative began in 2003 with 14 health care facilities ranging from health centers to hospitals; new facilities were added over time. Drawing on these experiences, the Ministry of Health with technical support from HCI compiled and published conclusions on best care practices in 2007-2008 in preparation a spread phase to 51 facilities with no prior formal involvement beginning in 2009. The study compares the demonstration and spread phases; and presents data collected to monitor, evaluate and stimulate improvement. This study investigated three questions:</p> <ol style="list-style-type: none"> 1) What processes were implemented to introduce and spread CQI and best care practices? 2) Did these processes lead to greater coverage, more rapid compliance (rates of spread) at lower costs (resources used) over time? 3) What was the effectiveness (best practices) and cost-effectiveness of spread compared with the demonstration phases? <p>This study has been submitted for publication in a peer reviewed journal and will be available when published. Study profile: http://www.hciproject.org/node/1285</p>
<p>Guatemala Magnitude, speed, and maintenance of improvement</p> <p>This study was dropped as it was redundant to other Guatemala spread studies.</p>
<p>Studying Spread of Best Practices for Maternal and Newborn Care from Health Centers to Health Posts in San Marcos Guatemala</p> <p>The Promotion and Essential Obstetric and Neonatal Care strategy (ProCONE) in Guatemala used a collaborative learning methodology to improve the quality of maternal and neonatal care in health units and includes a focus on prenatal, postpartum and newborn ambulatory care. During the demonstration phase of this strategy, 25 health units (health care centers, Permanent Health Care Centers [CAP], and one Comprehensive Maternal and Child Health Care Centers [CAIMI]) in the department of San Marcos worked together to improve care. After the demonstration phase, experiences and "best practices" were consolidated into a document and the process continued with a spread phase to 135 health posts and minimal community units.</p> <p>This cross sectional study sought to answer 1) how were health posts in the spread phase in San Marcos exposed to the ProCONE strategy, methodology, and interventions from the demonstration phase and 2) what interventions resulting from the collaborative in San Marcos were adopted or replicated by the health posts in the spread phase.</p> <p>The study found that none of the personnel representative of the health posts knew of the best practices document from the demonstration phase. According to health center directors, who coordinated the health districts, health posts were not exposed to the ProCONE strategy through this document, but instead through meetings and in an informal verbal manner from the coordinators or professional nurses of the centers to auxiliary nurses of health posts. The auxiliary nurses of health posts became part of quality improvement teams of the health centers. In health center meetings, the use of medical records and the monthly measurement of indicators were explained to personnel.</p> <p>Accordingly, of all the changes implemented by health posts, 13% (251) were replicas (identical or similar) of the changes implemented in the demonstration phase and 87% (1699) were new changes. The intervention replicated by most health posts (52%) was training in norms, procedures and/or clinical records of care for infants and young children. The second change most frequently replicated by health posts (48%) was home visits to increase the coverage of care for postpartum women. It is possible that home visits were also implemented in the case of neonates. Most new changes implemented by health posts related to content of care and information, and education and communication (IEC) activities. IEC activities were important to increase the coverage of care. The study concludes that the expansion of the Basic ProCONE strategy from health centers to health posts in San Marcos was informal and not based on proven and documented "change packages." The study recommends future spread activities make more deliberate use of existing documentation. However, the supposition that increased</p>

and more systematic use of best practices documentation leads to better implementation and more improvement in indicators could be the subject of another study. Further, the methodology used in collecting data for this study did not allow for a thorough understanding of the process of reception, adaptation and integration of "best practices" into the daily activities of health units. A complementary case study could gain a better understanding of these processes. Study profile: <http://www.hciproject.org/node/3114>

Evaluation of the Spread from Niger to Mali of better care practices for essential obstetric and neonatal care and the implementation of collaborative improvement

The USAID Health Care Improvement has demonstrated the efficiency of the dissemination of improved care practices to new regions within a country or health care system, there is little or no research on transferring quality improvement processes and improved health practices from one country to another. This retrospective study aims to analyze how a set of changes was transferred from the Niger in Mali, the methods used to reproduce the improved care and costs associated with its implementation. The specific research questions of this study are: 1) What changes are appropriate to Mali? What are the perceptions of improvement teams and coaches about the package of changes? How have the changes been adapted by sites in Mali to their local context? What has helped or hindered the ownership of changes by the sites? 2) What improvements have there been in the indicators at sites where the package of changes was introduced? 3) Have the indicators evolved the same way in Mali and Niger? 4) What is the cost of implementing the package of changes in Mali through the collaborative? 5) What is the cost of implementing the package of changes in Mali in terms of quality indicators and clinical outcomes (incidence of bleeding avoided)?

This retrospective study included quantitative assessment of results and qualitative assessment to better understand the process of implementation and adaptation of best practices. Key information was obtained through in-depth interviews of improvement teams in Mali. Focus group discussions with coaches from Mali were conducted to determine their perceptions and how they were affected by the collaborative.

HCI draft the final report in FY12; it will be finalized in FY13. Study profile: <http://www.hciproject.org/node/2480>

Diffusion and adaptation of innovations to improve care for HIV/AIDS patients in 14 health facilities in Uganda

The USAID Health Care Improvement (HCI) Project has been supporting the Ministry of Health in Uganda since 2009 to implement programs to improve HIV/AIDS services in the Northern, Eastern, Southwestern and Western regions of Uganda. During the first phase of this activity (November 2009 to May 2010) 39 sites tested various change ideas to improve clinical care. The change ideas that resulted in improvements in the initial sites were then documented, and, in the second phase of this activity (June 2010 to June 2011), these ideas were spread to a total of 96 sites in the four regions. The purpose of the study is to describe how these change ideas were adapted and modified as they spread across other health facilities participating in the collaborative improvement effort.

Two change ideas were selected to be studied - pre-packing of medicines to improve clinic efficiency and providing two to three months' supply of ARVs to adherent clients at one visit. Sites were chosen on the basis of being located in the northern region and having implemented either one or both of the two selected change ideas within the previous fourteen months. Fourteen of the 26 participating facilities from the Northern region met the criteria and were included in the study.

This retrospective case series used qualitative data on how change ideas were chosen, modified and implemented collected through interviews with members of quality improvement teams from participating health facilities.

Qualitative data were quantified for analysis.

Eleven of the 14 sites included reported pre-packing medicines and 13 reported providing two to three months' supply of ARV to clients. The most common way sites arrived at both these ideas was through brainstorming in a QI team meeting and learning sessions. Prior to implementing the change ideas all sites made some preparations. The average length of preparations for pre-packing medicines was 43.2 days (range 0.5 day to 168 days) and an average of 63.8 days (range one day to 168 days) to prepare for providing two to three months' supply of ARVs to clients. During implementation the sites faced challenges such as stock-outs of ARVs and co-trimoxazole, understaffing and loss of clients to follow-up. Sites were able to come up with solutions and adapt these changes to suit the needs of both the health providers and their clients.

Sites demonstrated the ability to adapt change ideas and sites also improved other areas of care such as pre-packaging drugs other than ARVs and co-trimoxazole, improving drug forecasting and management, and building the capacity of expert clients and nursing assistants to implement the changes. In addition to sharing change ideas, sites should continue to share their experiences implementing the changes as some of the challenges may be similar across the sites. This report also highlights the importance of not only spreading change ideas but also ensuring that new sites understand and apply iterative testing during implementation to enable effective adaptation

of changes at new sites. Study profile: <http://www.hciproject.org/node/3051>

Spread of Better Care Practices to Improve ART Care in Uganda

This descriptive study examined the spread of a package of robust and efficient better-care practices that resulted from a demonstration improvement collaborative run by the USAID Health Care Improvement Project (HCI) in Uganda between October 2009 and November 2010. These practices addressed aspects of an antiretroviral therapy (ART) framework aimed at ensuring all HIV patients who required ART services were receiving care (coverage), all those initiated on ART were retained in care (retention), and all those retained in care registered improvements in health status (better patient outcomes). The study sought to understand the factors that affect uptake and continuous application of better-care practices identified in demonstration collaboratives and how to introduce such practices to spread sites. The study focused on four research questions: 1) What processes need to be implemented to introduce and ensure spread of better care practices to new sites? How can these processes be improved? 2) Which best practices spread to new sites? 3) What factors (including resources) facilitated or hindered the uptake of the better care practices? 4) Did these practices lead to better coverage, retention, and outcomes for ART patients in the new sites?

The study found that most facility teams selected changes to test from periodic meetings with other teams known as learning sessions or from coaching visits, indicating that learning sessions, although costly, provide a preferred platform for health workers to meet with their colleagues struggling with similar challenges. This face-to-face interaction also provided an opportunity for sharing tacit knowledge which is otherwise difficult to document into a change package. Telephone calls and accessing websites were less successful methods for spreading improvement information. Health workers were reluctant to test a change they perceived to be too complex, that created a new process, or that might result in stigma towards patients. Changes that were accompanied by adequate detail and required few resources were easily adopted by other facilities.

Study profile: <http://www.hciproject.org/node/3039>

Research on Cost-effectiveness of QI Approaches

Two cost-effectiveness analyses from Nicaragua (one on ART services, the other on Kangaroo Mother Care) were submitted to the Journal of the Pan American Health Organization for consideration for publication. Other research from Russia and Afghanistan were also completed while two studies from Cote d'Ivoire are ongoing. The status of all HCI cost-effectiveness research conducted in FY12 is shown in Table 13.

Table 13. Cost-effectiveness studies completed or in-process under HCI TO3 in FY12

Cost-effectiveness of the improvement collaborative approach in the context of hospital-level maternity services in Kabul | Afghanistan

In 2010, the HCI Project began supporting implementation of a demonstration collaborative in four public and three private hospitals in Kabul, which serve 3.5 million of the city's 4 million residents, to increase the quality of maternal care to reduce maternal and infant mortality and morbidity. This study is an economic analysis of the intervention from the perspectives of the MoPH, private hospitals and USAID. The goals of questions are to: 1) Estimate the present cost of implementing the maternity hospital improvement collaborative in the three private and four public hospitals in Kabul ; 2) Determine the effectiveness of the Kabul maternity hospital collaborative in terms of quality improvement process and outcome indicators; 3) Estimate the costs of expanding the intervention to other health facilities within the city; 4) Determine the cost-effectiveness of the improvement collaborative compared to the level of performance and efficiency prior to implementation of the intervention. Effectiveness will be measured using the quality of care and outcome indicators monitored regularly by hospital teams participating in the collaborative. Data for these indicators will be extracted from clinical records.

Additional indicators of morality and post-partum events will be extracted from registry data, as well as the number of patients admitted to receive maternal services. Specific costs will be measured and divided into those borne by HCI and the incremental clinical costs borne by the MoPH and private hospitals. The total level of resources used to implement the program will be compared to the counterfactual of having no program.

HCI drafted this report in FY12 and will finalize it in FY13. Study profile: <http://www.hciproject.org/node/1635>

How Accurate are Medical Record Data in Afghanistan's Maternal Health Facilities?

Improvement activities, surveillance and research in maternal and neonatal health in Afghanistan rely heavily on medical record data. This observational cross-sectional study investigates accuracy in delivery care records from three hospitals across work-shifts.

The study was conducted in one maternity hospital, one general hospital maternity department and one provincial

hospital maternity department. Researchers observed vaginal deliveries and recorded observations to later check against data recorded in patient medical records and facility registers. We determined sensitivity, specificity, areas under the receiver operator characteristics curves (AUROC), proportions correctly classified and the tendency to make performance seem better than it actually was.

The study found high compliance with active management of the third stage of labor, measuring blood loss and uterine contraction at 30 minutes, cord care, drying and wrapping newborns and Apgar scores and low compliance with monitoring vital signs in six hundred observations across the three shifts and three hospitals. Compliance with quality indicators was high and specificity was lower than sensitivity. For adverse outcomes in birth registries, specificity was higher than sensitivity. Overall AUROCs were between 0.5 and 0.6. Of 17 variables that showed biased errors, 12 made performance or outcomes seem better than they were, and five made them look worse (71% versus 29%, $P = 0.143$). Compliance, sensitivity and specificity varied less among the three shifts than among hospitals.

The study concluded that medical records accuracy was generally poor. Errors by clinicians did not appear to follow a pattern of self-enhancement of performance. Because successful improvement activities, surveillance and research in these settings is heavily reliant on collecting accurate data on processes and outcomes of care, substantial improvement is needed in medical record accuracy. This study was completed in FY12 and will be published in FY13. Study profile: <http://www.hciproject.org/node/2471>

Evaluation of the Cost of Poor Quality | Cote d'Ivoire

Since 2007, HCI has been implementing QI interventions in facilities that provide HIV treatment services in Cote d'Ivoire. While previous HCI studies have linked the effect of those interventions to supply-side health outputs — such as improvements in patient chart documentation — and some patient-level process outcomes — such as reductions in patient loss to follow-up — the potential impact of HCI QI interventions on patient health outcomes has not been explored. Further, the costs of such quality of care improvements from HCI interventions remain unknown. Given the resource constraints on providing HIV services in Côte d'Ivoire, understanding the budget impact of QI interventions and/or their cost-effectiveness remains an important area of research. This study seeks to fill that gap to inform MOH policies towards HIV treatment. The study's primary research question is: What is the cost-effectiveness of HCI-implemented QI interventions to improve quality of HIV-related care in Cote d'Ivoire? This research question can be broken down into three distinct sub-questions: 1) What improvements in quality of HIV care and health outcomes are attributable to HCI QI interventions? 2) What are the costs of those QI interventions? 3) What is the incremental cost-effectiveness of those QI interventions compared to the status quo? It is expected that primary data collection will provide the basis for answering questions 1 and 2. If data availability and quality allow measurement of appropriate health outcomes (e.g., morbidity and/or mortality), the study will attempt to assess this impact of HCI interventions. However, the cost-effectiveness analyses (to address question 3) may be limited to process measures (e.g., compliance on drug regimens or prophylaxis) if there are limited data on health outcomes, thereby also limiting comparability of findings of this study to those of other cost-effectiveness analyses.

HCI is partnering with Harvard University on this study, which will be completed in FY13.

Referral system for pre-eclampsia in Honduras

Due to the end of the HCI program in Honduras, this study was dropped.

The cost-savings of implementing Kangaroo mother care in Nicaragua

Kangaroo mother care (KMC) for premature infants is defined as skin-to-skin contact between the mother and newborn, exclusive or near-exclusive breast feeding and early discharge home from the hospitals. This approach is simple enough to be implemented in remote facilities and reduces or eliminates the need for incubators and highly skilled personnel. Further, KMC has been shown to decrease severe infant morbidity and mortality by preventing infections and hypothermia and promoting weight gain through increased breastfeeding. It also helps parents and caregivers form an emotional bond with the infant.

This pre-/post-intervention study examined the costs of implementing KMC in the largest maternal and neonatal hospital in Managua, a 270-bed referral facility where just under 11,000 deliveries are performed annually with 18% of those premature and 14% low birth weight, and includes the costs of training the health providers as well as the ongoing operating costs of the intervention. Data were collected on premature infants, defined as those born before 37 weeks or with a birth weight lower than 2500 grams, born between January and September 2010 (pre-intervention) and October 2010 and June 2011 (post-intervention).

The study found that neonates after the implementation of KMC had lower lengths of hospitalization, a substantially higher proportion of mothers breastfeeding, and a correspondingly lower consumption of formula. The total average cost for care for a neonate was \$2,322 in the pre-KMC period and 1,808 in the KMC period.

The analysis of the costs comparing the KMC to no KMC showed that the amount of money saved on inpatient treatment of high-risk neonates in the KMC program would offset the cost of initial training and implementation of health workers and changes to the hospital system in 45 premature neonates or one to two months. After twelve months, implementing KMC in referral hospital is projected to save over \$250,000. The study also used the data from the referral hospital to estimate the economic impact on the Nicaraguan health system if KMC was implemented in other maternity hospitals in the country. Point estimates for the difference in cost between the KMC and no KMC strategies showed that even with a conservative estimate, implementing KMC is expected to begin to save money after fewer than 275 neonates are treated, or less than five months after full implementation, and almost 100% certain to produce cost savings within the first year of implementation.

Cost-effectiveness of Improving Services to People with HIV in Nicaragua

This study evaluated the effectiveness and efficiency of an intervention to improve HIV services in seven hospital outpatient departments and two health centers. A 2009 evaluation found 13% of HIV patients in Nicaragua were lost to follow-up, 16.5% died while on ART and only 45% reported good clinical outcomes. The intervention included organizational changes (improving medical records, reporting patients who missed appointments, extending clinic hours, caring for children of HIV+ mothers), inputs (medication availability, providing ambulance services) and psychosocial support (promoting self-help groups and family involvement and coordinating multidisciplinary care).

This pre/post intervention study examined the intervention's costs and effects in three of the seven participating facilities outside Managua. Three registered nurses and one doctor received training on patient data collection from clinical records. Hospital expenditure data were collected by an external auditor and the results confirmed by hospital administrators. Each hospital team kept a log of expenses incurred while following up non-compliant patients. For all patient outcomes between the pre- and post-intervention periods, we analyzed the group as a whole and, separately, patients who started ART prior to January 2008 using Fisher's exact tests and student t-tests.

Decision tree analysis was used to calculate incremental cost-effectiveness from the perspective of the implementers (USAID HCI), MINSA and health workers using opportunistic infections as the effectiveness outcome.

For the whole group, the opportunistic infection risk decreased by 24% (95% CI: 14% - 34%) from the pre-intervention to post-intervention periods and 11.3% improved in clinical stage according to the CDC classification system. Average per-patient costs decreased by \$133/patient/year (95% CI: \$29 - \$249). Coupled with decreased opportunistic infections, the intervention when compared to the business-as-usual strategy saved money while improving outcomes.

The intervention was associated with health improvements as measured by days in hospital, occurrence of opportunistic infections and CDC clinical stage, while saving money for the health system. This improvement in efficiency of services can allow more people with HIV eligible for ART to receive such therapy. It is recommended that the intervention be implemented in all HIV service facilities in Nicaragua.

Study profiles in English and Spanish: <http://www.hciproject.org/node/3743>, <http://www.hciproject.org/node/3678>

Sharing innovations across teams in a Maternal and Newborn Health collaborative improvement – effects of an interactive website in Russia

A major barrier to the improvement of quality of care in Russia is the size of the country and the limited opportunities within the health care and educational systems for sharing of experience and innovation. To overcome this barrier, the HCI sought effective ways to disseminate information and share experience among collaborating regions and health care facilities. HCI/Russia's "Improving Care for Mothers and Babies" project has built on traditional methods to share improvement experience and innovation, such learning sessions and distribution of documents, by developing an internet portal, www.healthquality.ru, through which participating quality improvement teams can document and share their implementation of changes and the results of that implementation. This strategy presents a challenge in a country where surveys indicate that less than a third of the population says they use the internet, and health facilities have few computers. The project assisted facilities in accessing and using the portal, which if successful should lead to rapid uptake of effective changes by other participating QI teams. Sharing this learning should not be limited just within the region or implementing partner where the change originated, but should spread to other regions supported by other partners as well: the ability to build on learning both within regions and partners, and across regions and partners is important for efficient and effective achievement of better care and outcomes in maternal, child and reproductive health.

Research questions/objectives:

1) *Spread of better care practices to new areas:* how well are "better care practices" (effective changes) emerging

from one collaborative effort shared and used in subsequent collaborative efforts, be they within the same region, the same partner (in a new region) or new partners.

2) *Best techniques for spreading practices:* Which of the several techniques used in the project (including the internet portal) were found to be most useful and effective in spreading changes. In particular, does the internet portal provide added benefit.

3) *Quality of documentation of innovation.* Conceptually, any tool can be used to spread innovation only if it adequately describes that innovation. How well are the changes teams report implementing documented on the portal.

Data for this study were collected from information on changes tested QI teams entered into “journals” on the web portal and from telephone interviews with QI team leaders. Additionally, the web portal software was programmed to automatically track logins to the system by users, allowing researchers to know who had accessed certain changes tested by other teams. These data were used to determine the number of facilities to which each change spread and the speed of that spread. Study profile: <http://www.hciproject.org/node/2488>

Cost Effectiveness of HIV Prevention in Russia

This study was dropped due to the cancellation of the USAID program in Russia.

CEA of integrated family planning and HIV Care in Uganda

This study was dropped.

Comparative Research on Cost-effectiveness of QI Approaches

Several reports, including an HCI evaluation summarizing the results of collaborative improvement in 12 countries by over 1300 teams during 1998-2008, have shown that teams were able to achieve large increases in compliance with health care standards and in some cases, in health outcomes, across all care areas addressed, regardless of the baseline level of quality. However, due to operational restrictions, most assessments of quality improvement collaboratives have been uncontrolled pretest/post-test designs that cannot rule out other plausible causes for observed improvements, such as secular trends. The two studies described in Table 14 were designed to address this issue.

Table 14. Comparative studies completed or in-process under HCI TO3 in FY12

A comparative evaluation and cost effectiveness analysis of an improvement collaborative for maternal and newborn care services in Uganda

In 2012, HCI implemented an improvement collaborative to improve maternal and newborn health services including AMTSL (active management of third stage of labor), PMTCT (prevention of mother to child transmission), essential newborn care, newborn resuscitation and post-natal care in 2 districts in the central region of Uganda. This study evaluates the impact and cost-effectiveness of this intervention by comparing pre- and post-implementation quality of care indicators on samples of patients from both participating sites and non-participating sites. This evaluation determined whether there was added value, above clinical content training alone (which was implemented in both control and intervention sites), of a quality improvement collaborative intervention in improving maternal and newborn health care quality. It also measured the relative efficiency of the two interventions.

The specific research questions of this cluster-randomized, controlled evaluation are: 1) In HC II and IIIs, did delivering mothers and newborns in intervention facilities (quality improvement + clinical training) achieve better results (quality of care indicators and patient outcomes) than delivering mothers and newborns in control facilities (clinical training only)? 2) What is the incremental cost-effectiveness of the quality improvement and clinical training intervention compared to the clinical training alone in terms of outcome indicators for mothers and their children? 3) Did the clinical training only facilities implement any change ideas that were carried out by the quality improvement facilities and how did these ideas spread to non-collaborative sites?

HCI completed data collection and began the analysis and writing of this evaluation in FY12, and will complete this evaluation in FY13.

An evaluation and cost-effectiveness analysis of an improvement collaborative for eclampsia /pre-eclampsia services in Mali

This study will compare costs and outcomes for clinical management of eclampsia and pre-eclampsia in quality improvement collaborative facilities to facilities with no collaborative improvement intervention in the first six months. Following the initial six months, the collaborative improvement methodology will be introduced to the control sites and changes in quality performance will be monitored over that time. Implementation by the HCI

Project of interventions to improve maternal and newborn health services including AMSTL and essential newborn care has been ongoing in 41 facilities in two health districts (Diema and Kayes) in the Kayes region since early 2010. Most facilities are above 80% compliance in active management of the third stage labor (AMSTL) and essential and newborn care (ENC) quality indicators and are currently working on maintaining or improving performance.

The HCI Mali / Niger team started implementing a second QIC phase aimed at improving clinical practice with regard to pre-eclampsia and eclampsia care at the end of February, 2011. This study will determine the costs and effects of this QIC intervention and compare them to the costs and effects of a basic clinical training (BCT) in the same type of health facilities in Mali that are not part of the collaborative.

This study will determine whether a QIC intervention has an added value in improving pre-eclampsia and eclampsia care quality above basic clinical training (BCT) alone. It will also measure the relative efficiency of the two interventions. The specific research questions are: 1. Do pregnant and delivering women in QIC intervention facilities receive better care (screening/diagnostic and treatment of pre-eclampsia/eclampsia) than those in BCT-only facilities? 2. Do pregnant and delivering women in QIC intervention facilities have better clinical outcomes, in terms of eclampsia incidence than those in BCT-only facilities? 3. What is the incremental cost-effectiveness of the QIC intervention compared to the BCT-only intervention in terms of process and outcome indicators for mothers? 4. Does adherence to eclampsia/pre-eclampsia norms become higher in BCT-only sites when clinicians are trained on the QIC methodology? 5. Does adherence to eclampsia/pre-eclampsia norms in the QIC intervention facilities change in the six months following the active intervention period?

This longitudinal study uses a controlled pre- and post-intervention design. The QIC sites will be those participating in the QIC intervention and the control sites will receive BCT only. BCT is also part of the QIC intervention. The implementation of this study was delayed by the political situation in Mali. It will be completed in FY13. Study profile: <http://www.hciproject.org/node/2477>

Research on Other QI Methods Distinct from Collaborative Improvement

One research paper on improvement of orphans and vulnerable children in Kenya was completed in FY12 and two on ISO certification in Guatemala. A study of the implementation of the chronic care model for patient management of people with HIV was also conducted and the results will be available in FY13. Studies on other QI methods conducted in FY12 are summarized in Table 15.

Table 15. Studies on other QI methods completed or in-process under HCI TO3 in FY12

Evaluation of the Patient Master Index in three Kabul hospitals, Afghanistan

HCI completed a protocol for this study and submitted it for Afghan IRB approval in FY12. However, this study was dropped due to the reduction in funding and narrowing of focus of HCI's work in Afghanistan.

Evaluation of a Collaborative Approach and of ISO Certification to Improve Quality of Maternal-Neonatal Health Care Services in Guatemala

Guatemala has been moving on two almost parallel paths of QI: the MNCH health improvement collaborative efforts (ProCONE) and ISO Certification (which also includes certification of health facilities). This evaluation looked at how these two approaches can be integrated to leverage each of their comparative advantages in improving and maintaining quality care. This study included an economic analysis of the improvement collaborative and ISO Certification, an evaluation of drivers of results in both methods, and an evaluation of an integrated application of both. It also examined the satisfaction of patient receiving services at participating facilities.

The study found that ISO certification in addition to the ProCONE approach showed clear benefit to compliance with best health care practices for children less than two years of age but equivocal benefit to delivery and neonatal care and no benefit to ANC over the ProCONE approach alone. The ISO process is reported to have improved documentation of practices that might account for some of the small observed decline in compliance. A similar decline was also observed in delivery and neonatal care in the ISO+ProCONE group. However, unlike the decline observed in ProCONE-only compliance, the ISO decline may be attributable to improving the validity of compliance reports.

The study found that the ISO process demonstrated clear benefit to compliance with best care practices for children under two years of age, with an incremental cost-effectiveness ratio of \$241 per additional child service delivered to compliance. However, the costs reflect those incurred from initial efforts to implement ISO certification. Initial costs are always considerably more expensive than costs associated with expansion of a process. In Ecuador, initial quality improvement cost-effectiveness was found to be 12-13 times greater and took twice as long to accomplish than expanding QI for maternal-neonatal health care. Current efforts to expand the

ISO certification to 6 Permanent Health Care Centers are being undertaken at one-third of the total cost of the initial efforts for ISO certification. Should similar benefit be encountered from expanding ISO certification in Guatemala, the incremental cost-effectiveness would be less than \$20 per additional child under the age of two service delivered to compliance.

The implications of the study results are unclear because ProCONE had not only been a well established process in the study area but was also an established process in the ISO+ProCONE facility where reported initial compliance was extremely high. Thus, the study compares a relatively new process (ISO) during an initial period when costs are greatest in a facility in which services had already greatly improved due to the facility's participation in ProCONE, with a well established (ProCONE) processes. The comparison is also challenged because of the restricted initial ISO certification period, one year—a very limited period in which to observe substantial improvement from a new process. The initial ISO process was intensive, and the substantially less expensive efforts to expand ISO certification merits further evaluation and consideration to determine whether expanding the process produces greater benefit at less cost in facilities where initial compliance is lower and better allows room for improvement. Such future evaluation may better determine which the components of the ISO certification process are most beneficial and provide added value, and which should be modified or excluded from future ISO certification efforts. As is common, the site selected for initial ISO certification was one felt most potentially responsive to the process that did not pose extreme challenges. Implementation of the ISO process in Guatemalan settings where ProCONE efforts are initiated separately and contemporaneously and comparison of processes when the ISO certification process has also attained some level of maturity, as well as selection of facilities with more room for improvement for ISO certification, are necessary to provide more objective evaluation of the processes relative merits and limitations.

Improving Quality of Maternal and Neonatal Care through ISO 9001:2008 Certification in San Pedro, San Marcos Guatemala

This case study details implementing and applying ISO standards to maternal and neonatal health (MNH) care processes, the challenges in certification, and its application to other types of care in San Pedro Sacatepéquez Health Center in the San Marcos Health Area. The aim of this case study is to describe and gain a deeper understanding of the ISO certification process at the service delivery level – the first effort in Guatemala to seek ISO certification at the health center level. Specific research questions include: 1) What is the process for applying ISO 9001:2008 standards to clinical settings? 2) What were the key components to achieve ISO certification? 3) What did the San Pedro Health Center learn through the ISO certification process? 4) What are the perceptions of facility staff of the ISO certification process and what specific areas were targeted for quality improvement interventions? How did they reach those achievements? 5) What were the challenges in applying ISO standards to MNH processes? 6) What is the future of facility-level ISO certification in Guatemala?

A draft of this study was completed in FY12 and will be finalized in FY13.

Evaluation of the impact of an OVC intervention in Cote d'Ivoire

This study was dropped.

Implementation of Standards of Service Delivery for Orphans and Vulnerable Children in Kenya: A Prospective Evaluation of Performance, Costs and Equity

This prospective cohort study examined the effectiveness, efficiency, and equity of the implementation of standards for services to vulnerable children by seven organizations in four districts of Kenya. New services standards were piloted starting in 2010 to improve the quality of services to vulnerable children. The study investigated whether there was a difference in the welfare of children receiving services from participating community-based organizations from baseline to end line and the incremental cost to implementing partners of using the standards. The study also examined if there were differences in effectiveness between girls and boys, and between younger and older children. Qualitative data were gathered from interviews with key implementing partners on the effects of using the new standards. It showed that significant positive changes were seen by the implementers in the overall quality of the services delivered to children affected by HIV/AIDS and their caregivers. By this measure, the standards piloting was a success. The improvement seen in the CSI scores was positive and encouraging, particularly given the drought in the area where implementation took place. It is unknown how much of the improvement was due to the new standards. Study profile: <http://www.hciproject.org/node/2964>

Assessment of the extent to which implementation of the 8 standards improves the quality of OVC care / &CEA (CEA of improvement collaborative for MVC in Bagamoyo)

This study was dropped.

Evaluation of the effectiveness of QI training in implementation of MVC service standards in Tanzania

The purpose of this assessment is to gather evidence on the effectiveness of the QI trainings and its impact on organizations and service provision to most vulnerable children (MVC) and households. We propose to gather evidence at the national, regional, district, community and household levels. The specific objectives of this evaluation are to: 1) examine the extent to which various stakeholders use and communicate information on national MVC guidelines, and quality improvement approach and methods; 2) To investigate the extent to which QI training and awareness of National Guidelines has improved provider skills and influenced the way they work.; 2) examine how NGOs and LGAs serving MVC have changed as a result of QI training and implementation of National Guidelines; 3) identify challenges and best practices encountered in implementing QI Intervention in service delivery to vulnerable children and households; 4) Gather Evidence on the impact of the program on clients. HCI completed a preliminary draft of this study in FY12. It will be completed in FY13.

Evaluation of the level, outcomes, and quality integration of PMTCT into RCH services in Manyara, Tanzania

This study was dropped because the program was discontinued.

Assessment of the introduction of the Chronic Care Model for HIV care in Uganda

This study was conducted in the Bulikwe District of Uganda and sought to address the following three questions: 1. Was there improvement in process indicators of care quality following implementation of the chronic care improvement intervention in participating sites; 2. Was there improvement in outcome indicators of care quality following implementation of the chronic care improvement intervention in participating sites; and 3 What is the cost-effectiveness of the chronic care intervention compared to the business-as-usual strategy for facilities delivering care to ART patients.

This was a longitudinal cohort study in which one cohort of patients starting ART treatment at the participating facilities was recruited between April and June 2010 and followed for six months. Data were collected from this same cohort in the period after the intervention for another six consecutive months from April to June 2011. Data were collected from a second cohort that began ART between April and June 2011. Analysis and write-up of the results are underway. A report will be available in FY13.

Improving enrolment of HIV+ pregnant women in chronic HIV care/ART units at health facilities in Uganda

HCI is working on improving the linkage of HIV+ pregnant women to chronic HIV/PMTCT services in 19 health facilities in the Eastern region of Uganda. Quality improvement teams at these sites will test changes aiming to improve these linkages. The effectiveness of these changes will be monitored by selected indicators. Changes that are found to be successful based on monitoring the indicators will then be shared across all 19 facilities. It is expected that by the end of the demonstration period there will be a list of effective changes that can then be spread to more facilities across Uganda.

This cross-sectional pre/post evaluation seeks to evaluate the scale of linkage problems, identify their causes, and inform health facility interventions to improve the linkages between ANC and chronic care for HIV+ mothers. The specific study questions are: 1) What proportion of HIV+ pregnant women registered in ANC units at health facilities are enrolled into chronic HIV care units? 2) What mechanisms do the health facilities use to ensure successful linkage of HIV+ pregnant women to HIV care clinic? 3) What factors do pregnant or recently (6 months) delivered women report that promoted their successful enrollment into chronic care from ANC units? HCI completed a preliminary draft of this study in FY12. It will be completed in FY13.

Study profile: <http://www.hciproject.org/node/3037>

Patients' involvement in quality improvement activities at HIV care clinics in Uganda

Quality improvement is becoming an important component of health care world over and there is growing recognition in the literature of the contribution patients can make to improving health outcomes (Coulter 2007, Groene 2005). Given the increasing prevalence of chronic illnesses, there is a need to have patients play an active role in their health care. This study will examine the extent to which selected interventions successfully engaged clients and providers together in quality improvement activities (problem identification, problem analysis, solution identification, and testing and implementing changes) in HIV/AIDS care clinics (in comparison to control clinics) in Uganda, and what health care providers' and clients perceptions are on clients' active participation in the process. Since 2007 the USAID Health Care Improvement (HCI) project and the Ministry of Health-Uganda have been implementing collaborative quality improvement activities in Uganda to improve the quality of service offered to clients attending HIV care clinics. Findings from a preliminary assessment revealed that clients are minimally involved in quality improvement activities at the facility-level. To address this, HCI is supporting an intervention to promote client involvement.

This pre/post qualitative evaluation will include six intervention and six control sites. HCI coaches will provide

feedback to the intervention sites and present to them a selection of interventions to increase client involvement. Sites will be invited to select the interventions that best suit their facility's needs and resources. HCI completed data collection and analysis for this report in FY12. HCI will prepare a manuscript for this study to submit for peer-review. Study profile: <http://www.hciproject.org/node/3038>

Health facility factors associated with improvements in the quality of HIV/AIDS care at health facilities in Uganda

Several factors are associated with HIV patient enrollment, retention in ART care and treatment outcomes. These factors can broadly be categorized into patient and health facility factors. To improve the quality of HIV care services at health units, there is need to account for the modifiable and fixed characteristics of the health units. This study investigated the relationship between characteristics of the facility and the changes in quality of care indicators in the context of an intervention to improve services delivered in the facilities.

Methodology

This was a quantitative pre/post intervention study to identify facility factors associated with improvements achieved at health facilities participating in quality improvement activities. Improvements in service delivery were measured by comparing performance on some indicators collected at the start of the intervention to the endline measures (six month later) on the same indicators. Data on health facility characteristics were collected using a standard questionnaire administered to health unit in-charges and heads of HIV clinics. Simple descriptive statistics were used to define characteristics of the health facilities while health facility factors associated with the quality of HIV/AIDS care were obtained through univariate linear and logistic regressions.

Results

A total of 45 health facilities were involved in improvement activities for at least six months and these were predominantly rural. Most facilities had separate HIV clinics but only a third had a dedicated HIV clinical team. At the outpatient department, the patient to staff ratio was 576:1 with an average 6.7 clinical staff members working on an HIV clinic day. There were no statistically significant associations between the region a facility was located in or the type of facility and any measure of performance in indicators. Health facilities located in rural areas perform slightly better than those in urban areas and clinics with more medical officers were worse at having patients adhere to clinic appointments (OR 0.38; P= 0.042). Other significant findings were that facilities with higher clinic staff members per clinic day did worse on indicator 1 (OR 0.79; P = 0.041) as did facilities with CD4 testing facilities (OR 0.32; P = 0.084).

Conclusions and Recommendations

The study found very few significant associations between characteristics of the participating facilities examined in this study and their performance in the improvement intervention. The variation in improvements seen in clinics may be due more to other characteristics of the facilities not measured, such as the types of patients they serve. Based on our findings, we recommend that facilities working to improve performance in service delivery focus on changing factors identified as causes of deficits in quality independent of considerations of the immutable characteristics of their facility. Any future study on this topic should take into account patient factors because patients with certain characteristics associated with HIV treatment indicators might be unevenly distributed among the facilities. Study profile: <http://www.hciproject.org/node/3109>

Mission-requested Research on Barriers to Implementation

HCI did work on two studies on barriers to the implementation of improvement activities that were requested by USAID missions. The first, a study on hospital-acquired infection in Afghanistan, was dropped due to the refocusing of HCI's role in Afghanistan. The second study, Identifying Factors Influencing Lost-To-Follow-Up (LTFU) Rates in ART Programs in Cote d'Ivoire, is underway. The objective of the LTFU study in Cote d'Ivoire is to identify factors that promote or inhibit losses to follow-up among ART patients based on information gathered from patients, providers, and members of PLWHA organizations. This retrospective nested case-control study design will sample HIV patients on ART from a sample of ART facilities. Data on social, individual, programmatic and structure factors will be collected through interviews with patients, interviews with providers and focus group discussions with community groups. HCI finalized a protocol and gained IRB approval for this study in FY12. It will be completed in FY13.

Build Capacity for Research and Support for Country Programs

During the year the R&E unit assisted HCI staff in several countries including Uganda, Tanzania, Kenya, Ethiopia, and Afghanistan to develop new project indicator databases. The project's R&E team also worked to strengthen the project's procedures for obtaining ethics approval for research studies. In addition to formalizing new systems for internal review, the R&E unit worked with country teams to increase their understanding of ethical research and worked with them to navigate local IRBs. Examples include that while in Cote d'Ivoire, Dr. Coly reviewed the importance and procedures for obtaining ethics approval for research studies with the Cote d'Ivoire technical team.

Directions for FY13

In FY13, the R&E unit will finalize the studies currently under way that began in previous years, which includes 20 studies (see tables above). The unit will also provide support to all HCI countries to report on activities to make the culture of improvement sustainable beyond the life of HCI involvement.

4.4 Technical Leadership and Communication

Overview of HCI's Program in FY12

Activities	What are we trying to accomplish at global scale?
Provide global technical leadership for USAID's worldwide efforts to improve health care in developing countries	<ul style="list-style-type: none"> ▪ Expand the use of modern QI approaches in USAID-assisted health care systems and by USAID cooperating agencies ▪ Demonstrate the results of USAID's investment in health care quality improvement
Advocate for adoption of QI approaches, policies, and programs by international, regional, and national health care organizations	<ul style="list-style-type: none"> ▪ Expand the use of QI approaches in USAID-assisted health care systems ▪ Expand awareness of the evidence for modern QI approaches through presentations at regional and international events
Produce technical reports and submit articles to peer-reviewed journals that describe QI interventions and measure their impact	<ul style="list-style-type: none"> ▪ Develop and disseminate evidence for the results, cost-effectiveness, and benefits of applying modern QI approaches in USAID-assisted health care systems
Facilitate articles and broadcasts in mass media that describe QI activities and results	<ul style="list-style-type: none"> ▪ Expand awareness among civil society and the general population about the value of QI programs and stimulate demand for health system interventions to continuously improve the quality of health care
Support the development of new graduate training programs in QI as applied to low- and middle-income countries	<ul style="list-style-type: none"> ▪ Develop QI capacity in the next generation of health care providers and help to standardize the teaching of modern QI approaches

Main Activities and Results

Provide global technical leadership for USAID's worldwide efforts to improve health care in developing countries

Salzburg Global Seminar on Making Health Care Better

During April 22-27, 2012, HCI Director M. Rashad Massoud, COR James Heiby, and HCI staff Mirwais Amiri, Dorcas Amolo, Victor Boguslavsky, Maina Boucar, Jorge Hermida, Humphrey Megere, Nana Mensah-Abrampah, and Jean Nguessan participated in the Salzburg Global Seminar on "Making Health Care Better in Low and Middle Income Countries: What are the next steps and how do we get there?", held in Schloss Leopoldskron in Salzburg, Austria. The Seminar brought together 58 health leaders from 33 countries in an intensive dialogue about how to improve the performance of health systems in even the most resource-constrained settings. Funding support for the Seminar came from The Bill and Melinda Gates Foundation, the United States Agency for International Development (USAID), Salzburg Scholarships, URC, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the World Health Organization Patient Safety Programme, the Institute for Healthcare Improvement (IHI), Atlantic

Philanthropies, Nippon Foundation, and the U.S. Centers for Disease Control and Prevention. The event was designed by a committee of experts from URC, USAID, IHI, University of North Carolina, WHO Patient Safety, HEALTHQUAL International, Heidelberg University, and Salzburg Global Seminar.

The product of the seminar was The Salzburg Statement, “Better Care for All, Every Time: A Call to Action,” which focuses on what strategies and policies can be implemented now and with available resources to make care better for all patients. The Call to Action was translated to French, Portuguese, Russian, and Spanish and publicized on the Salzburg Global Seminar and HCI websites. Outcomes from the seminar and its Call to Action were presented at the World Health Assembly in May 2012, and others in the global health community were invited to endorse the Call to Action by adding their signature on the webpage, <http://www.hciproject.org/salzburg-call-to-action>. As of the end of the FY12, the Call to Action had been endorsed by 737 individuals from 70 countries.

Africa Regional Meeting in Ghana in 2013

Early in FY12, the International Society for Quality in Health Care (ISQua) approached HCI to join with ISQua in convening a regional conference in Africa in 2013 on health care improvement. HCI Director Dr. Massoud and Communications Coordinator Ms. Feza Kikaya participated on the ISQua-led organizing committee throughout the year to plan the meeting, which will be held in Ghana in February 2013. A Call for Participation yielded 41 abstract submissions which the committee reviewed; 40 abstracts were accepted for the conference program.

Advocate for the adoption of QI approaches

Technical Assistance to the Government of Botswana

In February 2012, Project Director Dr. M. Rashad Massoud and East Africa Regional Director Dr. Nigel Livesley visited Botswana to conduct a rapid analysis on existing quality improvement initiatives being implemented within the Ministry of Health. The objective of the visit was to recommend to the Ministry modalities for integration and enhancement of existing initiatives to yield tangible results in line with the ministry strategy and to recommend ways to empower and enhance participation of senior management in quality improvement activities. The key finding of the rapid analysis was that despite Botswana’s serious investments in the health sector and in the development of multiple frameworks, plans and strategies to improve services, the country is not getting the results to which it aspires. This is primarily because of a gap between planning and implementation. Following this initial visit, HCI provided virtual follow-up and a second technical assistance visit in August to advise on implementation of activities to achieve the national goals of reducing maternal and early neonatal deaths.

Integrating Gender in Improvement

In February 2012, Ms. Emily Treleaven and Dr. Taroub Faramand traveled to Uganda to provide short-term technical assistance and lead a staff skills workshop in gender integration. During the visit, they presented on gender integration at the National Quality Improvement Conference, hosted by the MOH with support from HCI, at a session titled “Addressing the Different Needs of Men and Women through Quality Improvement.” A full day applied skills-building workshop was held for all HCI/Uganda technical staff, with participation from several USAID SUSTAIN Project technical staff, to further staff abilities to conduct a gender analysis, lead design of gender-related changes at the facility and community levels, analyze disaggregated data, and design appropriate indicators for these efforts. Additionally, they met with each technical team to identify areas for gender integration and design action plans for various project activities.

In September 2012, HCI published a gender integration guide, designed to help HCI field staff integrate gender considerations as part of improvement programs.

Mobilizing Africa Organizations for Improvement of Care and Protection for Vulnerable Children

During the quarter, HCI’s OVC team met in Kampala, Uganda in September 2012 with representatives

of three regional organizations in Africa to explore the potential of establishing an Alliance to support improvement of child protection and OVC programs. The organizations included: 1) Regional Psychosocial Support Initiative (REPSI), based in South Africa, operating in 13 countries; 2) Africa Child Policy Forum, based in Ethiopia, operating in eight countries; and 3) African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN), headquartered in Kenya, with chapters in 22 countries. A fourth organization, Regional Centre for Quality of Health Care, based in Uganda, operating in nine countries, was supposed to attend but sent regrets a few days before the meeting. During the meeting in September, participants defined desired child protection outcomes and contributing factor as a framework for defining priority areas of focus, specific objectives, strategies and inputs required to support local implementers to achieve these outcomes. HCI plans to convene a second meeting of the organization in Johannesburg, South Africa, in February 2013.

Conference Presentations

During FY12, HCI staff and partners made 67 presentations in various formats at five national and 14 international and regional conferences to share QI results to inform professional audiences of the effectiveness of QI approaches and advocate for their broader adoption. The conferences and presentation topics are detailed in Table 16.

Table 16. HCI participation in national, regional and international conferences in FY12

Conference	HCI Participation
CORE Group Fall Meeting, Oct. 13-14, 2011, Washington, DC	<ul style="list-style-type: none"> ▪ Kathleen Hill participated on a panel titled, “Child Survival and Health Grants Program: Highlights from Around the World,” organized by MCHIP. ▪ Lani Marquez led a Round Table discussion on “Quality is everybody’s business” ▪ Feza Kikaya staffed an HCI materials table and demonstrated the HCI Portal; CDs and hard copies of the CHW AIM Toolkit were also distributed
The Africa Regional Consultative Workshop for Health Care Improvement: Catalyzing and Institutionalizing Quality, Oct. 17-21, 2011, Kampala, Uganda	<ul style="list-style-type: none"> ▪ M. Rashad Massoud made the plenary presentation, “Improving Health Care and Health Systems: Towards a Common Understanding of Quality Improvement” ▪ Jim Heiby led a 3-hour workshop, “Key Steps in Improving Health Care” ▪ Tana Wuliji presented “Towards a competency based approach to QI education and training” ▪ Nicholas Leydon (IHI) presented “Models and methods for pre-service and in-service education and training on quality improvement best practices and lessons learnt” ▪ Martin Muhire presented the poster, “Improving records to better manage patients with hypertension. Buikwe district Uganda” ▪ Herbert Kisamba presented the poster, “Assessment of Quality Improvement Teams’ Performance of Key Tasks Essential for Team Learning in Quality Improvement” ▪ John Byabagambi presented the poster, “Functionality of Quality Improvement Teams at Multi-level Health Facilities: Experiences from Southwest Uganda”
American Public Health Association (APHA) Annual Meeting, Oct. 29-Nov. 2, 2011, Washington, DC	<ul style="list-style-type: none"> ▪ Ram Shrestha presented a 20-minute panel on experience with retention and motivation of CHWs at the CBPHC workshop. His presentation was titled, “Why did 50,000 Female Community Health Workers Volunteer for over 15 years? Ingredients for motivation and retention” ▪ Emily Treleaven presented the poster, “RotaTeq coverage and perceived barriers to vaccination in a rural health district in RAAN, Nicaragua” ▪ On behalf of Youssef Tawfik, Ram Shrestha presented the poster, “Applying QI models at the community level – experiences from Mali and Afghanistan” ▪ Annie Clark presented the poster, “Quality Improvement Approaches for Community Maternal and Newborn Care Services, Uganda Experience”
Bill & Melinda Gates Foundation consultative meeting “Achieving Lasting Impact at Scale” Nov. 1-2,	<ul style="list-style-type: none"> ▪ At the request of Don Berwick, M. Rashad Massoud presented the Mali and Niger slides to show real life examples of scale-up.

2011, Seattle, Washington	
Infection Prevention and Control Africa Network 2011, Nov. 1-3, 2011, Windhoek, Namibia	<ul style="list-style-type: none"> ▪ Aziz Abdallah made the oral presentation, “Institutionalizing A System For Safe Injections in Namibia”
American Evaluation Association Annual Meeting, Nov. 2-5, 2011, Anaheim, California	<ul style="list-style-type: none"> ▪ Edward Broughton presented the mini-course and expert lecture, “Is Not Killing Patients Cost-effective? The Economics of Quality Improvement in Health Care”
CUGH 2011 Global Health Conference, Nov. 13-15, 2011 Montreal, Canada	<ul style="list-style-type: none"> ▪ Suzanne Gaudreault made the oral presentation, “Improving care of chronic conditions in Uganda and Tanzania through health system redesign which emphasizes patient self-management support”
First National Quality Improvement Forum on Health Care, Nov. 16-18, 2011, Dar es Salaam, Tanzania	<ul style="list-style-type: none"> ▪ Nigel Livesley gave the keynote address, “Institutionalizing quality improvement” ▪ Davis Rumisha made the oral presentation, “Health Provider Self-Assessment – A Valid Approach to Quality Improvement in Tanzania” ▪ Stephen Hobokela made the oral presentation, “Partnership for Quality Improvement (PQI): A Strategy for Harmonization of QI Efforts in Tanzania” ▪ Yohana Mkiramweni made the oral presentation, “Improving Human Resource for Health productivity and engagement through collaborative Quality Improvement Methods; Experience from Tandahimba District, Mtwara Region” ▪ Flora Nyagawa made the oral presentation, “Use of Most Vulnerable Children Committees in Application of service Standards Experience of Bagamoyo” ▪ Joseph Kundy presented the poster, “Innovative Approaches to Improve Sustainability of Quality Improvement of Health services at Facility Level” ▪ Stella Mwita presented the poster, “The Level and Quality of Integration of PMTCT/RCH services in Manyara Region” ▪ Stephen Hobokela presented the poster, “Spread of PMTCT and ART Better Care Practices through Collaborative Learning in Tanzania” ▪ Monica Ngonyani presented the poster, “Applying Quality improvement Approach improves Infant Feeding Practices; Experience of Iringa Region” ▪ Stephen Hobokela presented the poster, “Standardizing delivery of HBC services in Tanzania” ▪ Elizabeth Hizza presented the poster, “Assessing Quality of PMTCT Services in Two Districts of Iringa: A Basis For QI”
ECSCA-HC Regional Forum on Best Practices, Nov. 21–25, 2011, Mombasa, Kenya	<ul style="list-style-type: none"> ▪ Stephen Kinoti presented the keynote address, “Improving institutional capacity for health research and use” ▪ Nigel Livesley and Humphrey Megere made the oral presentation, “Building on HIV Care to Strengthen Systems for Non-Communicable Disease Management in Rural Uganda”
Quality in Health Care Conference, Nov. 30-Dec. 1, 2011, Kuwait	<ul style="list-style-type: none"> ▪ M. Rashad Massoud made the oral presentation, “Safe, Quality Care: A Global Perspective”
LAC Regional meeting on implementation of Kangaroo Mother Care (KMC), Santo Domingo, Dominican Republic, Dec. 7-9, 2011	<ul style="list-style-type: none"> ▪ Jorge Hermida made the oral presentation, “Continuous Quality improvement methods to implement and assure the Quality of Kangaroo Mother Care” ▪ Emily Treleaven and Jorge Hermida led the interactive session, “Building a community of practice for KMC in Latin America”
New Frontiers in Global Health Leadership Forum, March 28-April 1, 2012 Tucson, Arizona	<ul style="list-style-type: none"> ▪ Ram Shrestha presented the case study, “Strengthening Community Health Systems to improve the Performance of Community Health Workers to provide quality care at the Community Level in Ethiopia” ▪ (Under URC funding, Neeraj Kak presented “Improving Quality of Services: Integrating NCDs with PHC Services to Improve Patient Outcomes”)
International Forum, April 17-20, 2012, Paris, France	<ul style="list-style-type: none"> ▪ M. Rashad Massoud led a three-hour policy seminar on national improvement strategies and infrastructure from improving health care at the national level

	<ul style="list-style-type: none"> ▪ Edward Broughton led a 45-minute session, “Is it cost-effective to save patients from harm?” ▪ Kathleen Hill and Tamar Chitashvili led a 45-minute session, “Burden of Non-Communicable Diseases in Eastern Europe: Quality Gaps & Opportunities” ▪ Humphrey Megere and Nigel Livesley led the 60-minute session, “Transforming Care for People with Chronic Conditions in Uganda” ▪ Robert Kyeyagalire made the 15-minute oral presentation, “Towards Saving Unborn Babies from HIV Infection by Improving Enrolment of HIV+ Pregnant Women into Chronic HIV Care Clinics at Rural Health Facilities in Uganda” ▪ Martin Muhire made the 15-minute oral presentation, “Leveraging improvements in HIV to improve management of hypertension” ▪ Jorge Hermida presented the poster, “Sustainable Scale-up of Active Management of the Third Stage of Labour for Prevention of Postpartum Hemorrhage in Ecuador” ▪ Edward Broughton presented two posters: “Implementation of standards of service delivery for orphans and vulnerable children in Kenya: A prospective evaluation of performance, costs and equity” and “Effectiveness and Cost-effectiveness of improving health services in areas served by Mi Familia Progresá in Guatemala.” He also presented the poster, “Investigation of the Sequential Validity of Quality Improvement Team Self-Assessments in a Health Facility HIV Improvement Collaborative in Tanzania” on behalf of Stephen Kinoti ▪ Emily Treleaven presented the poster, “What is the best way to convey improvement ideas to health workers in resource-limited settings?” ▪ Dorcas Amolo presented the poster, “Role of standards in quality improvement in Kenya” ▪ Mabel Namwabira presented the poster, “Engaging patients in improving HIV care in Uganda” ▪ Sarah Smith presented the poster, “Understanding the Spread Process: A Case Study from Guatemala”
<p>Geneva Health Forum April 18-20, 2012 Geneva, Switzerland</p>	<ul style="list-style-type: none"> ▪ Joseph Kundy made the oral presentation, “Health Care Improvement Project Self-management Support in Tanzania”
<p>CORE Group Spring Meeting April 30-May 4, 2012 Wilmington, Delaware</p>	<ul style="list-style-type: none"> ▪ Kathleen Hill and Evelyn Kamgang presented “Many Actors, One Goal: Tackling Anemia in Mothers & Children. A Country Case Study: Mali” ▪ Diana Chamrad, Ram Shrestha and Lani Marquez presented the session “Moving from “lack of resources” to “resourcefulness”: How to improve quality of programs amidst funding constraints” ▪ Sarah Smith presented on “The CHW AIM: Lessons from the Field”
<p>Regional Consultation on Maternal Health June 5-6, 2012 Mexico City, Mexico</p>	<ul style="list-style-type: none"> ▪ Jorge Hermida moderated the session, “Critical challenges in the prevention of maternal mortality in LAC: Indigenous women: Barriers to access to care”
<p>International AIDS Conference, July 22-27, 2012, Washington, DC</p>	<ul style="list-style-type: none"> ▪ HCI staff presented in URC’s mini-satellite reception, “Better HIV Services, Every Time”: - Tana Wuliji and Lauren Crigler led the learning station, “How can you improve the performance of health workers?” - Edward Broughton led the learning station, “What is the most efficient HIV program?” - Rhea Bright co-led the learning station, “Assuring all HIV-positive mothers and their exposed infants get all PMTCT services” - Suzanne Gaudreault led the learning station, “Achieving patient-centered chronic HIV care with limited resources” - Diana Chamrad led the learning station, “Child Protection Systems in Africa: A family approach” - Ram Shrestha led the learning station, “Mobilizing Community Health Systems

	<p>to support HIV care”</p> <ul style="list-style-type: none"> ▪ Suzanne Gaudreault presented two posters: “Palliative care, a human right and an achievable goal: introducing and spreading effective pain management for people with HIV in rural Uganda” and “Helping people with HIV help themselves: a comprehensive approach to improving chronic HIV care and treatment in Uganda and Tanzania” ▪ Fazila Shakir presented the poster, “Assuring infants and mothers get all PMTCT services (AIMGAPS): Best practices emerging from a collaborative quality improvement effort to increase PMTCT service uptake in Tanzania” ▪ Edward Broughton presented the poster, “Cost-effectiveness of improving services to people with HIV in Nicaragua” ▪ Lauren Crigler presented the poster, ““Helping others to live healthier lives”: The widening roles and responsibilities of Expert Patients in Uganda” ▪ Tana Wuliji presented the poster, ““Achieving better HIV care by combining performance management and quality improvement approaches” ▪ Diana Chamrad presented two posters: “Community-led Improvements in Quality of Services to Vulnerable Children in Bagamoyo District, Tanzania” and “Developing Standards of Care for Vulnerable Children in Nine Countries”
ECSCA Community Conference, August 14, 2012, Arusha, Tanzania	<ul style="list-style-type: none"> ▪ Carl Lyimo (Morogoro Regional AIDS Coordinator) presented the HCI-supported Tanzania patient self-management work, “Leveraging patient self-management program in addressing NCD among PLHIV attending CTC services in a low-resource setting”
Global Health Mini-University, September 30, 2012, Washington, DC	<ul style="list-style-type: none"> ▪ Kathleen Hill participated in a session on anemia led by Jessica Tilahun (USAID Nutrition) and presented HCI Mali’s anemia work

Briefings

Also, during FY12, HCI staff conducted briefings and presentations for 26 different groups as part of the project’s effort to promote awareness of QI approaches and results. These presentations are detailed in Table 17.

Table 17. HCI briefings and presentations for USAID, international donor, and cooperating agency staff in FY12

Date/Venue	Presenters and Topics
October 20, 2011, Scottish Patient Safety Fellows, URC, Bethesda, MD	<ul style="list-style-type: none"> ▪ URC hosted a visit from four Scottish Patient Safety Fellows: Dan Beckett, Ailsa Howie, Claire Gordon and Patrick Rafferty. HCI staff made the following presentations: ▪ Shawn Dick presented a briefing on URC-CHS and gave an overview on the HCI Project ▪ Amy Stern and Rhea Bright presented the Global Fund Quality Criteria ▪ Lani Marquez presented HCI’s Knowledge Management Component ▪ Emily Lanford presented HCI’s Health Workforce Development activities ▪ Youssef Tawfik presented HCI’s MNCH activities ▪ Suzanne Gaudreault presented HCI’s HIV/AIDS activities ▪ Diana Chamrad presented HCI’s OVC activities ▪ Ram Shrestha presented HCI’s Community and Nutrition activities ▪ Edward Broughton presented HCI’s Research & Evaluation work
October 31, 2011, OGAC, Washington, DC	<ul style="list-style-type: none"> ▪ M. Rashad Massoud and Suzanne Gaudreault presented an overview on HCI and on HCI’s HIV/AIDS activities and results
Nov. 3, 2011, Global Health Bureau Monitoring & Evaluation Working Group meeting, USAID, Washington, DC	<ul style="list-style-type: none"> ▪ Fazila Shakir presented the ART Gaps Analysis Framework Instructional Manual and ART Gap Calculator ▪ Amy Stern and Rhea Bright presented on the Global Fund Quality Criteria ▪ Sarah Smith presented the CHW AIM toolkit on behalf of Lauren Crigler
November 17, 2011, EPGAF, Washington, DC	<ul style="list-style-type: none"> ▪ M. Rashad Massoud presented on the work of HCI and highlighted achievements in HIV/AIDS work in HCI-supported facilities

Nov. 29, 2011, White Ribbon Alliance, Washington, DC	<ul style="list-style-type: none"> Annie Clark presented a brownbag on the work of HCI
December 8, 2011, USAID, Washington, DC	<ul style="list-style-type: none"> Mirwais Rahimzai presented, "HCI Accomplishments in Post-Conflict Afghanistan: 2010-2011" and described evidence of sustained improvements in the quality of MNH services, the results achieved, and the policy direction adopted by the Ministry of Public Health
December 13, 2011, IBP Initiative, Washington, DC	<ul style="list-style-type: none"> Luigi Jaramillo presented, "Scaling up Family Planning Services through the Guatemalan Ministry of Health," at the Implementing Best Practices Consortium semi-annual meeting
December 21, 2011, USAID, Washington, DC	<ul style="list-style-type: none"> Kathleen Hill presented on the HCI anemia work in Mali: "Implementing Best Practices for Anemia Control: Initial Design Steps"
January 10, 2012, USAID, Kampala, Uganda	<ul style="list-style-type: none"> Humphrey Megere and Annie Clark presented a briefing on HCI's MNCH work in Uganda
January 18, 2012, USAID, Jakarta, Indonesia	<ul style="list-style-type: none"> Neeraj Kak and Nurfini Bachtiar presented on the achievements of the tuberculosis CD-ROM/computer-based training activity completed in FY11
January 24, 2012, URC, Bethesda, MD	<ul style="list-style-type: none"> M. Rashad Massoud presented an overview of URC and HCI, Suzanne Gaudreault presented HCI's results supported by PEPFAR, and Lani Marquez presented HCI's knowledge management strategy to staff of the International AIDS Society
February 7, 2012, PEPFAR Partners Meeting, Washington DC	<ul style="list-style-type: none"> M. Rashad Massoud and Suzanne Gaudreault presented on HCI's health systems strengthening activities and results
February 8, 2012, USAID GH Bureau, Washington, DC	<ul style="list-style-type: none"> Amy Stern presented on how HCI's approach to improving health care promotes country ownership
February 10, 2012, URC, Bethesda, MD	<ul style="list-style-type: none"> Suzanne Gaudreault presented "AIMGAPS: Assuring Infants and Mothers Get All PMTCT Services" to Karin Lane of USAID OHA
February 12, 2012, HCI Project Launch Meeting, Tbilisi, Georgia	<ul style="list-style-type: none"> M. Rashad Massoud presented an overview of HCI and provided a few case examples illustrating HCI's QI work Tamar Chitashvili presented a briefing on HCI Georgia's activities and project objectives
February 14, 2012, Ministry of Health, Gaborone, Botswana	<ul style="list-style-type: none"> M. Rashad Massoud and Nigel Livesley presented a seminar on "Improving Health Care"
February 22-23, 2012, "Getting the Knack of NACS" organized by the CORE Group, FHI-360, Washington, DC	<ul style="list-style-type: none"> Amy Stern presented "Integrating monitoring and evaluation at the clinic level" Ram Shrestha presented "Kenya Nutrition Quality Improvement demonstration project: Rarieda, Bondo, Siaya & Ugenya districts" Margaret Kyenkyia presented, "The QA/QI Approach: Uganda's Experience"
February 29, 2012, USAID, Washington, DC	<ul style="list-style-type: none"> Annie Clark and Youssef Tawfik presented "Integrating Family Planning into HIV Care/ART Services in Uganda"
March 14, 2012, USAID, Addis Ababa, Ethiopia	<ul style="list-style-type: none"> M. Rashad Massoud and Nigel Livesley presented a seminar on "Improving Health Care"
March 14, 2012, Ministry of Health, Addis Ababa, Ethiopia	<ul style="list-style-type: none"> M. Rashad Massoud and Nigel Livesley presented a seminar on "Improving Health Care"
April 17, 2012, USAID, Washington, DC	<ul style="list-style-type: none"> Aziz Abdallah presented on, "Institutionalizing a system for waste management and safe injections in Namibia" at USAID
June 5, 2012, USAID, Washington, DC	<ul style="list-style-type: none"> Kathleen Hill met with staff of the Europe and Eurasia Bureau to review the updated MNH assessment report and to update them on the progress of HCI work in Georgia
July 17, 2012, Helping Babies Breathe Advisory Group	<ul style="list-style-type: none"> Annie Clark presented on experiences from Uganda in data-driven quality improvement: tracking processes and outcomes for newborn resuscitation
July 10, 2012, CORE, Washington, DC	<ul style="list-style-type: none"> Lani Marquez presented on <i>The Improvement Guide: A Practical Approach to Enhancing Organizational Performance</i> at the CORE SBC Working Group
August 16, 2012, USAID and	<ul style="list-style-type: none"> Tana Wuliji, Wondwossen Hailu, Melaku Muletam, and Fikreab Kebede

CDC Ethiopia, Addis Ababa	presented HCI's work and Health Workforce improvement activities
August 2012, USAID Mission, Kampala, Uganda	▪ Youssef Tawfik and Humphrey Megere presented, "HCI Project's Core Contributions to MNH in Uganda, 2010-2012" for USAID Uganda

Produce technical reports and submit articles to peer-reviewed journals that describe QI interventions and measure their impact

During FY12, HCI prepared and/or submitted 12 manuscripts for publication in peer-reviewed journals. In addition, two manuscripts were accepted for publication and one article was published. Also, HCI published two case studies, 14 technical reports, 13 research reports, one toolkit and 33 short flyers. These publications are listed in Table 18.

Table 18. HCI journal articles, reports and informational materials submitted or published in FY12

Articles Published or Submitted/Accepted for Publication in Peer-Reviewed Journals	
Broughton E, Ikram AN, Sahak I. "How Accurate Are Medical Record Data in Afghanistan's Maternal Health Facilities?" To be submitted to <i>BMJ Qual Safety</i> .	
Koegler E, Treleaven E, Faramand T, Massoud MR. "Even 'Non-Gender' Global Health Programs Can Contribute to Gender Equality". Submitted 30 October 2012 to the <i>American Journal of Public Health</i> .	
Broughton E, Gomez I, Sanchez N, Vindell C. "The cost-savings of implementing kangaroo mother care in Nicaragua." Submitted 11 October 2012 to the <i>Pan American Journal of Public Health</i> .	
Broughton, E, Ikram AN, Sahak I, Anwari MK, Majidi AJ. "Changes in maternal and neonatal health in Kunduz province, Afghanistan following an improvement intervention." Submitted 24 Sept 2012 to <i>Asia-Pacific Journal of Public Health</i> .	
Massoud MR, Mensah-Abrampah N, Sax S, Leatherman S, Agins B, Barker P, Kelley E, Heiby JR, Lotherington J. "Charting the way forward to better quality health care: how do we get there and what are the next steps? Recommendations from the Salzburg Global Seminar on making health care better in low- and middle-income economies." Accepted for publication 19 September 2012 in the <i>International Journal for Quality in Health Care</i> .	
Smith S, Hurtado E. "Expansionar mejoramiento de calidad de servicios materno-neonatales: Un estudio de caso de Guatemala." Submitted 30 March 2012 to <i>Revista Panamericana de Salud Pública/Pan American Journal of Public Health</i> . Manuscript number: 2012-00204.	
Tawfik Y, Boucar M, Clark A, Vaid S. "Moving from 'lack of resources' to 'resourcefulness': Improving the quality of maternal health care in three countries in sub-Saharan Africa by engaging health care workers in quality improvement." Submitted 30 March 2012 to <i>PLoS Medicine</i> . Manuscript number: PMEDICINE-D-12-00934.	
Broughton E, Nunez D, Moreno I. "Cost-effectiveness of improving health services to people with HIV in Nicaragua." Submitted 22 March 2012 to the <i>Journal of the International AIDS Society</i> . Manuscript number: 7201568586886740.	
Rahimzai, M. Amiri, M. Burhani, N. Leatherman, S. Hildebeitel, S. Rahmanzai, A. "Afghanistan's National Strategy for Improving Quality in Health Care." Submitted 21 March 2012 to the <i>Int J Quality in Health Care</i> for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-012-03-0144.	
Lopez S, Wong Y, Gomez I, Escobar F, Tinoco B, Parrales A. "Quality in Practice: Preventing and managing neonatal sepsis in Nicaragua." Submitted 13 March 2012 to the <i>Int J Quality in Health Care</i> for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-2012-03-0112.	
Tawfik Y. "Adapting quality improvement approaches to low-resource settings: Experience from maternal, newborn, and child health programs from four countries in sub-Saharan Africa." Submitted 13 March 2012 to the <i>Int J Quality in Health Care</i> for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-2012-03-0111.	
Hermida J, Salas B, Gonzalez D, Broughton E, Sloan N. "Effectiveness and Cost-effectiveness of Maternal and Newborn Health Quality Improvement in Ecuador." Submitted 13 March 2012 to the <i>Int J Quality in Health Care</i> for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-2012-03-0110.	
Hermida J, Salas B, Sloan NL. "Sustainable Scale-up of Active Management of the Third Stage of Labor for Prevention of Postpartum Hemorrhage in Ecuador." <i>Int J Gyn Obs</i> 2012;117(3):278-282. DOI: 10.1016/j.ijgo.2012.01.017. Accepted 5 March 2012. Available online 6 April 2012 and in print edition in June 2012	
Massoud MR, Mensah-Abrampah N, Barker P, Leatherman S, Kelly E, Agins B, Sax S, Heiby J. "Improving Health Care Quality and Safety in Low- and Middle- Income Countries: Where Do We Go from Here?" Published 14	

February 2012 in <i>BMJ Quality and Safety</i> .
Boucar MA, Franco LM, Saley Z, Sabou D, Jennings L, Mohan D. "Long term effects of a quality improvement collaborative: sustainability of the gains and institutionalization of quality improvement in Niger." Submitted 4 October 2011 to <i>Implementation Science</i> . Manuscript number: MS ID 1996988189613807.
Case Studies (Date Published)
Howell C. 2011. Implementing Standards-based Quality Improvement Processes at the Community Level for Orphans and Vulnerable Children: The Strengthening Community Safety Nets (SCSN) Project, Ethiopia. <i>Case Study</i> . (October 2011)
Amolo D, Were R, Masamo S, Kyeyagalire R, Kedenge O, Fatta K. 2012. Improving Care for Vulnerable Children in Kenya: Results from Piloting Service Standards. <i>Case Study</i> . (March 2012)
Technical and Research Reports (Date Published)
Mgunda F, Gaudreault S, Nzowa M, Shitima R, Shakir F. 2011. A Baseline Assessment of Self-management and Community Support for HIV/AIDS Patients at Four Facilities in Morogoro, Tanzania. <i>Technical Report</i> . (November 2011)
Crigler L, Wendo D, Guyer A, Nabwire J. 2011. Task Shifting in HIV/AIDS Service Delivery: An Exploratory Study of Expert Patients in Uganda. <i>Research and Evaluation Report</i> . (November 2011)
Broughton E, Were R, Amolo D. 2011. Implementation of Standards of Service Delivery for Orphans and Vulnerable Children in Kenya: A Prospective Evaluation of Performance, Costs, and Equity. <i>Research and Evaluation Report</i> . (November 2011)
Jaramillo, L. and Howell, C. 2012. USAID's Legacy of Family Planning Technical Assistance to the Guatemalan Public Health Sector: Over a decade of success through USAID's Calidad en Salud and Health Care Improvement Projects. <i>Technical Report</i> . (January 2012)
Tawfik Y, Thada B, Marquez L, Hermida J, Boucar M, Donohue K. 2012. Improving Maternal, Newborn, Child Health, and Family Planning Programs through the Application of Collaborative Improvement in Developing Countries: A Practical Orientation Guide. <i>Technical Report</i> . (March 2012)
Bosiak B, Broughton E, Kyayse AM. 2012. Comparison of Coaching Strategies for Improvement Collaboratives in Ugandan HIV/AIDS Health Centers. <i>Research and Evaluation Report</i> . (March 2012)
Hurtado E, Ramírez L. 2012. Expanding el aprendizaje en la mejora de la atención materno infantil de los centros de salud a los puestos de salud en San Marcos, Guatemala. <i>Informe de Investigación</i> . (March 2012)
Hurtado E, Ramírez L. 2012. Spreading learning from health centers to posts in the improvement of maternal and newborn care in San Marcos, Guatemala. <i>Research Report Summary</i> . (March 2012)
Broughton E, Moreno I, Nuñez D. 2012. Costo-efectividad en la calidad de la atención a las personas con VIH en Nicaragua. <i>Informe de Investigación</i> . (March 2012)
Sandino M, Gómez I, Smith S. 2012. Expanding las mejoras en la calidad de la atención materno-infantil. Fase de expansión de los Colaborativos de Mejoramiento de la Calidad, en Cuidados Obstétricos Esenciales y en Cuidados Pediátricos Hospitalarios, implementados por el Ministerio de Salud de Nicaragua. <i>Informe de Investigación</i> . (March 2012)
Sandino M, Gómez I, Smith S. 2012. Spreading Improvements in the Quality of Maternal and Child Care: Expansion Phases of the Essential Obstetric Care and Pediatric Hospital Care Collaboratives Implemented by the Ministry of Health of Nicaragua. <i>Research Report Summary</i> . (March 2012)
Smith S, Hurtado E. 2012. The Spread of ProCONE: A Case Study from Guatemala. <i>Technical Report Summary</i> . (March 2012)
Kak N, Bachtiar N. 2012. Tuberculosis Diagnosis and Treatment Computer-based Training Package for Indonesia. <i>Technical Report</i> . (March 2012)
Hill K, Chitashvili T, Trevitt J. 2012. Assessment of Non-communicable Disease Prevention, Screening, and Care Best Practices for Women of Reproductive Age in Albania, Armenia, Georgia, and Russia. <i>Technical Report</i> (April 2012)
Nsubuga-Nyombi T. 2012. Integrating Nutrition Interventions into Routine HIV/AIDS Care: Challenges, Solutions, and Lessons Learned from Uganda. <i>Technical Report</i> (co-published by NuLife) (May 2012)
Ikram AN, Sahak I, Anwari MK, Majidi AJ, Smith S, Broughton E. 2012. Qualitative Assessment of Community-based Services for Essential Obstetric and Newborn Care in Kunduz Province, Afghanistan <i>Research and Evaluation Report</i> (June 2012)
Smith S, Broughton E, Coly A. 2012. Institutionalization of Improvement in 15 HCI-supported countries. <i>Research and Evaluation Report</i> (June 2012)

Tawfik Y, Bongiovanni A, Vaid S, Hermida J, Boucar M, Hill K. 2012. Taking Every Opportunity to Save Lives: The Role of Modern Quality Improvement in Enhancing Maternal, Newborn, and Child Health Programs. A Synthesis of USAID Health Care Improvement Project Field Experience. <i>Technical Report</i> (June 2012)
Hill K, Chitashvili T, Trevitt J. 2012. Assessment of Selected Best Practices for Maternal and Newborn Care in Albania, Armenia, Georgia, and Russia. <i>Technical Report</i> (June 2012)
Furth R, Crigler L. 2012. Improving CHW Program Functionality, Performance, and Engagement: Operations Research Results from Zambia. <i>Research and Evaluation Report</i> (June 2012)
Bustamante R, Hurtado E, Zeribi KA. 2012. Improving the Quality of Guatemala's Public Health System: A View to Institutionalization. <i>Research and Evaluation Report</i> . (June 2012)
Muhire M, Megere H, Karamagi E, Livesley N. Improving the quality of care for people with chronic diseases in Uganda. Findings of a baseline cross-sectional study in Buikwe District. <i>Technical Report</i> . (July 2012)
Crigler L, Boucar M, Sani K, Abdou S, Djibrina S, Saley Z. The Human Resources Collaborative: Improving Maternal and Child Care in Niger. <i>Technical Report</i> . (September 2012)
Donna Bjerregaard, Lauren Crigler. CHW Regional Meeting. Addis Ababa, Ethiopia, June 19-21, 2012. <i>Proceedings</i> . (September 2012)
Haffey J, Lugo L, Bustamante R. Improving the Health System through Certification: Implementing ISO 9001:2008 in Guatemala. <i>Technical Report</i> . (September 2012)
Faramand TH, Treleaven E. 2012. Integrating Gender in Improvement Activities. <i>Implementation Guide</i> . (September 2012)
Hurtado E, Silva JE, Bustamante R, Sloan NL, Broughton E. Comparative Evaluation of Collaborative Improvement and ISO Certification to Improve Quality of Maternal and Neonatal Care in Guatemala. <i>Research and Evaluation Report</i> . (September 2012)
Toolkits (Date Published)
Matriz de Evaluación y Mejoramiento para Trabajadores de Salud Comunitaria (MEM TSC): Un Kit de Herramientas para Mejorar los Servicios y Programas de TSC (May 2012)
Short Report and Flyers (Date Published)
Le collaboratif d'amélioration: Une approche innovante pour sauver les vies des mères et des nouveau-nés au Mali (2 page flyer) (Octobre 2011)
Improving Tuberculosis Diagnosis and Treatment in Indonesia's Private Sector through Computer-based Training (2 page flyer) (October 2011)
The USAID Health Care Improvement Project. FY2012 Activities. (4-page flyer) (October 2011)
Cultural sensitivity builds confidence in maternal and neonatal health services in Huehuetenango, Guatemala (November 2011)
Improving outcomes of premature and low birth weight babies through Kangaroo Mother Care (4 page flyer) (November 2011)
Aplicación del Método Madre Canguro en Bebés Prematuros y de Bajo peso en 4 Países de América Latina (4 page flyer) (Noviembre 2011)
A Success Story in TB: Improving the Quality of Sputum Samples through Better Teaching & Models in Bolivia (2 page flyer) (November 2011)
Mejoramiento de la Calidad de las Muestras de Esputo a Través de la Enseñanza y Modelos Óptimos (2 page flyer) (Noviembre 2011)
Amélioration des soins communautaires pour les orphelins et enfants vulnérables à Travers un Processus d'Amélioration de la Qualité (2 page flyer) (Novembre 2011)
Effets du collaboratif d'amélioration sur les indicateurs PTME et ARV en Côte d'Ivoire : Etude Comparative (2 page flyer) (Novembre 2011)
Améliorer la documentation et le maintien des patients dans le programme de prise en charge du VIH en Côte d'Ivoire (2 page flyer) (Novembre 2011)
Amélioration de la Qualité des Soins et Services en Côte d'Ivoire (4 page flyer) (Novembre 2011)
Strengthening systems and improving health outcomes in Tanzania (4 page flyer) (November 2011)
Conference Summary. First Latin America and Caribbean Regional Kangaroo Mother Care Conference: December 7-9, 2011, Santo Domingo, Dominican Republic (4-page flyer) (January 2012)
Improving Iron and Folate Availability for Antenatal Care in Kenya (2-page flyer) (January 2012)
Improving Tuberculosis Outcomes in Bolivia (4-page flyer)(February 2012)
Improving Maternal and Newborn Health in Uganda by Combining Training, Quality Improvement, and Peer-to-

Peer Learning (2-page flyer) (February 2012)
Improving coverage, retention and clinical outcomes of HIV patients in Uganda using continuous quality improvement (2-page flyer) (February 2012)
Applying Quality Improvement to Integrate Family Planning in Maternal Health and HIV Services (4-page flyer) (April 2012)
Summary Points from the ISQua Knowledge Discussion Forum (4-page flyer) (April 2012)
Care that Counts Initiative: A Standards-Based Approach to Improving Quality of Programs for Vulnerable Children and Families (4-page flyer) (July 2012)
Improving Care for Patients with HIV in Uganda and Leveraging These Lessons to Strengthen Systems to Manage Chronic Conditions (4-page flyer) (July 2012)
A Comprehensive and Patient-centered Approach to Improving Chronic HIV Care and Treatment in Uganda (4-page flyer) (July 2012)
Supporting Patient Self-Management to Improve Chronic HIV Care and Treatment in Tanzania (4-page flyer) (July 2012)
Improving Pain Management for People with HIV in Rural Uganda (4-page flyer) (July 2012)
Assuring Infants and Mothers Get All PMTCT Services (AIMGAPS): Best Practices Emerging from a Collaborative Improvement Effort to Increase PMTCT Service Uptake in Tanzania (4-page flyer) (July 2012)
Improving the Prevention of Mother-to-Child Transmission of HIV in South Africa (2012, 4-page flyer) (July 2012)
A Global Improvement Framework for Health Worker In-service Training: Guidance for Improved Effectiveness, Efficiency and Sustainability (2-page flyer) (July 2012)
“Helping others to live healthier lives”: Roles, Responsibilities, and Challenges of Expert Patients in Uganda (2-page flyer) (July 2012)
Cost-effectiveness of improving services to people with HIV in Nicaragua (2-page flyer) (July 2012)
Improvements in quality of care and support services for vulnerable children in Bagamoyo District, Tanzania (2-page flyer) (July 2012)
Strengthening the Health Workforce in Tanzania (4-page flyer) (July 2012)
Innovating for Impact: HCI approaches that strengthen human resources for health (2-page flyer) (August 2012)

Facilitate Articles and Broadcasts in Mass Media that Describe QI Activities and Results

HCI partnered with the International Society for Quality in Health Care (ISQua) to sponsor two discussion forums on the ISQua Knowledge website. The first addressed economic analysis of health care improvements and was led by Dr. Edward Broughton. The second sought to gather insights from implementers on how to create health systems capable of continually improving, to feed into the discussions at the Salzburg Global Seminar and was led by HCI Director Dr. M. Rashad Massoud, Professor Sylvia Sax of Heidelberg University, and Dr. Edward Kelley of the World Health Organization.

In FY12, we documented nine new reports on QI activities supported by HCI, reaching a cumulative total of 26 articles and broadcasts in mass media under HCI TO3:

- TV broadcast on Moscow station of First Lady of Russia touring hospital with newborn resuscitation equipment provided by HCI (October 11, 2011)
- On Jan. 27, 2012, HCI posted a blog on the Healthy Newborn Network website about HCI’s work to scale up Kangaroo Mother Care in Central America, “Connecting Across Borders to Improve Kangaroo Mother Care”, at: <http://www.healthynewbornnetwork.org/blog/connecting-across-borders-improve-kangaroo-mother-care>.
- On March 14, 2012, “Meditinskaya Gazette” (Medical Gazette) published a full page article “Green light to discussions: crucial issues of quality and safety in healthcare in Russia” to feature the International Forum Remote Participation Session and highlight its role in disseminating modern approaches to quality improvement to the Russian healthcare community.
- The article “When Patients Become Experts” about patient self-management improvement work in Morogoro, Tanzania was published in the web magazine, *Global*, on 19 April 2012, based on a presentation by Joseph Kundy of HCI, one of 11 selected by conference organizers to be highlighted in coverage of the conference by the Global Journal – <http://theglobaljournal.net/article/view/753/>.

- Salzburg discussion forum and daily updates from Salzburg Global Seminar, “Making Health Care Better in Low and Middle Income Economies: What are the next steps and how do we get there?”, posted on the ISQua Knowledge website 20 March –30 April 2012.
- On April 15, 2012, a story was posted on the USAID Afghanistan website about HCI’s work to improve care for newborns in respiratory distress: http://afghanistan.usaid.gov/en/USAID/Article/2677/Helping_Afghan_Babies_Breathe.
- Blog about Salzburg posted on the K4Health website on 22 May 2012 at: <http://www.k4health.org/blog/post/we-can-make-health-care-better-salzburg-call-action>.
- On June 18, 2012, the Women Deliver website featured a story about HCI’s support for the scale-up of AMTSL in Ecuador: <http://www.womendeliver.org/updates/entry/celebrate-solutions-ecuadors-health-system-model-reduces-maternal-mortality>.
- On June 21, 2012, the second learning session of the Georgia non-communicable disease improvement collaborative was featured on three national and one regional TV channels in Georgia, highlighting USAID’s support for improving quality of care in Georgia. One of the clips can be viewed at: <http://www.youtube.com/watch?v=QoWX6NvN9Lw&feature=share>.

Support the development of QI training programs

People’s Open Access Education Initiative

In FY12, HCI began discussions with the People’s Open Access Education Initiative (Peoples-Uni) about mutual interest in contributing a module on health care quality improvement. Peoples-uni (<http://www.peoples-uni.org/>) is an initiative that aims to contribute to improvements in the health of populations in low- to middle-income countries by building Public Health capacity via e-learning. Peoples-Uni offers a series of modules for individual online learning, supported by online discussion, twice a year covering the foundations of public health. Volunteer international faculty develop the modules and guide online discussions. The Peoples-Uni programme is accredited by the UK Royal Society for Public Health. The Manchester Metropolitan University (MMU) has also validated the Peoples-Uni Programme and students successfully completing coursework can earn certificates from MMU and even enroll for the MPH award with MMU, once they have passed at least two modules in the Peoples-uni course at the Masters level. The second semester for 2012 has started with 283 students—the largest cohort to date in the program. After discussions with Professor Madhok, co-founder and trustee Peoples-Uni, in July and August 2012, it was agreed that Dr. Sonali Vaid will develop a quality improvement module with the Peoples-Uni team for their course in 2013.

Integrating Gender in Health Systems Strengthening e-Learning

In September, HCI was asked to join a planning meeting for an e-Learning course being developed by the CapacityPlus Project on integrating gender in health systems strengthening. HCI’s gender partner, Dr. Taroub Faramand, was asked to join the team developing the e-Learning course to develop the content on gender in health services delivery. The course is intended to enhance understanding about how gender is affected by and interacts with health systems and their components. The course will also discuss how gender integration can improve the process of health systems strengthening that in turn can become more responsive to the specific needs of clients.

Directions for FY13

HCI will mentor and develop the QI technical capacity of the REPPSI, ACPF, and ANPPCAN to incorporate QI approaches in their work. HCI will develop a QI module for the Peoples-Uni online MPH program. HCI will also lead the development of the service delivery component of the Gender and Health Systems Strengthening e-Learning course. Final reports on HCI-funded activities and studies will be completed.

5 Performance Tracking Plan

Cumulative progress in meeting HCI TO3 performance targets through the end of FY12 is summarized in Table 19 by task order objective.

Table 19. Performance Tracking Plan: HCI TO3 cumulative achievements and activities planned through FY12

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
Objective 1: Document the interventions supported by this task order to improve the quality of health care, how quality was measured, and the impact of these interventions	
<p>Performance target I.1: Within the first year of Task Order #3, the contractor is required to complete field-testing and analysis of results in the six countries from Task Order #1, finalize the design of the SES and implement the system for all major improvement activities supported by the contract.</p>	<p>Target has been met: The SES Endline Evaluation report was completed and submitted to the COR on September 30, 2010. The learning system standards were communicated to all HCI country teams through guidance issued by the HCI Director in September 2010; all HCI country offices reported on their application of the learning system standards for both the FY10 and FY11 TO3 self-evaluation reports and will do so again for the FY12 TO# self-evaluation report.</p>
<p>Performance target I.2: Within the first year of Task Order #3, the contractor must submit to the COTR a comprehensive report summarizing the development and ongoing implementation of the SES.</p>	<p>Target has been met: A report summarizing the learning system standards and how they are implemented in all countries was submitted to the COR on September 30, 2010.</p>
<p>Performance target I.3: Within the first year of Task Order #3, the contractor must submit for COTR approval a detailed plan for the analysis and dissemination of the content of the SES, including a quantitative summary of results in terms of % improvement of all indicators, specification of interventions and duration of observations of indicators</p>	<p>Target has been met: A plan for ongoing analysis and synthesis of quantitative results from the learning system was submitted to the COR on September 30, 2010. Beginning in FY11, HCI country and technical teams have placed more emphasis on developing knowledge products that convey key learning derived from improvement activities, including specification of effective interventions. Technical reports on HCI-supported work in Tanzania, Cote d'Ivoire, Nicaragua, Guatemala, Bolivia, Honduras, Uganda, and Niger have summarized such learning and provided follow-on recommendations. Comparisons of improvement in key indicators by country was reported in the HCI TO3 FY10 and FY11 TO3 self-evaluation reports and will be reported in the FY12 TO3 self-evaluation report.</p>
<p>Performance target I.4: Beginning with the submission of the Year One annual report for Task Order #3, the contractor will provide a comprehensive summary of supported QI activities and the quantitative results of these activities, including analysis with follow-on</p>	<p>Target has been met: The TO3 FY10 and FY11 Annual Project Reports include a comprehensive summary of supported QI activities and quantitative results with analysis and next steps for implementation. At the country level, HCI teams present recommendations for follow-on actions to host country officials through regular briefings and at workshops and conferences marking the conclusion of specific improvement activities. Recommendations for follow-on actions are also presented to each funding Mission and USAID Washington office through country- and activity-specific end-of-year reporting, Country Operational</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
recommendations.	Plans, and Headquarters Operational Plans. Summary description of supported QI activities and quantitative results by country will be reported in the FY12 Annual Project Report.
Objective 2: Institutionalize modern quality improvement approaches as an integral part of health care in USAID-assisted countries	
<p>Performance target 2.1: Starting with the Year Two annual report for Task Order #3 (due December 2011), the contractor's annual report will include, for each major country program, a summary of steps taken to support or measure the institutionalization of QI.</p>	<p>Target has been met:</p> <p>Drawing on project-supported studies of institutionalization, in FY11 HCI developed a framework with the key elements that contribute to the institutionalization of QI at the national, regional, and service delivery levels. To determine the level and type of institutionalization that has occurred, data were collected in the last quarter of FY11 from 15 countries that had been receiving HCI assistance for at least 12 months prior to data collection: Afghanistan, Bolivia, Cote d'Ivoire, Ecuador, Guatemala, Honduras, Mali, Namibia, Nicaragua, Niger, Russia, South Africa, Swaziland, Tanzania, and Uganda. HCI country teams interviewed individuals involved in improvement activities at each level (national, regional, district, and facility). The summary results of this assessment of progress to date in institutionalizing QI approaches were summarized in the HCI TO1 FY11 and TO3 FY11 self-evaluation reports in sections addressing "Progress toward Achieving Task Order Objective 2, Institutionalization" and reported in a separate research report, available at http://www.hciproject.org/publications/institutionalization-improvement-15-hci-supported-countries.</p> <p>In FY12, to complement the FY11 findings about level and type of institutionalization, HCI conducted a qualitative study to better understand the activities and support HCI field offices provided to 17 HCI-assisted countries to facilitate the institutionalization of improvement at the national level. We also explored the facilitating factors and barriers to institutionalization. A review of quarterly and annual reports from each participating country was conducted. Based on these reports, tailored guides were developed for interviewing HCI Chiefs of Party. The findings from this study will be summarized in the FY12 HCI TO3 self-evaluation report and published as a research report.</p>
Objective 3: Expand the evidence base for the application of QI to human resources (HR) planning and management	
<p>Performance target 3.1: The contractor will support the Niger HR collaborative, including introduction of the standardized evaluation system, and provide USAID with detailed progress reports at six-month intervals beginning six months from the beginning of Task Order #3.</p>	<p>Target has been met:</p> <p>Six-month progress reports on the Niger HR collaborative were submitted to the COTR on March 31, 2010; September 30, 2010; June 10, 2011; September 29, 2011; and March 30, 2012.</p> <p>This collaborative was completed in December 2011; the final report was published in September 2012 (available at: http://www.hciproject.org/publications/human-resources-collaborativeimproving-maternal-and-child-care-niger-final-report)</p>
<p>Performance target 3.2: During the first year of Task Order #3, the contractor will complete field-testing the current tool for monitoring community health worker performance in</p>	<p>Target has been met:</p> <p>The FY10 TO3 Self-Evaluation Report included (in section 2.2.3.2) a discussion of the formal field testing of the CHW Assessment and Improvement Matrix (AIM) tool in Nepal, Benin, Ethiopia, and Zambia in FY09 and FY10. A revised version of the tool was published in April 2010 on the</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
<p>maternal-child health services in at least two programs. On the basis of these field tests, the contractor will make indicated revisions to the tool.</p>	<p>HCI Portal and disseminated among members of the CORE Group. Further revisions were made to the tool following its fourth application in Zambia in September 2010; the final version of the tool was published on the HCI Portal in March 2011 and disseminated at CORE Group meetings in May and October 2011 and at the GHC Conference in June 2011, where it was disseminated in conjunction with the launch of the CHW Central community of practice website.</p> <p>The French version of the CHW AIM toolkit, <i>Matrice d'évaluation et d'amélioration de la performance des agents de santé communautaires (MEAP ASC): Une boîte à outils pour l'amélioration des programmes et services des agents de santé communautaires</i>, was published by HCI in September 2012.</p> <p>The Spanish version of the CHW AIM toolkit, <i>Matriz de Evaluación y Mejoramiento para Trabajadores de Salud Comunitaria (MEM TSC): Un Kit de Herramientas para mejorar los Programas y Servicios de Trabajadores de Salud Comunitaria</i>, was published by HCI in September 2012.</p>
<p>Performance target 3.3: During the first year of the Task Order, the contractor will develop a plan for introducing the community health worker performance evaluation tool into participating USAID mission programs, including a strategy for providing distance technical support for implementing partners.</p>	<p>Target has been met:</p> <p>During FY10, the CHW AIM tool was disseminated widely, and HCI was advised by the MCH Group at USAID that they no longer want a plan for introducing the tool to Missions.</p>
<p>Performance target 3.4: During the course of Task Order #3, the contractor will develop at least three additional human resources collaboratives in high-burden AIDS countries, incorporating findings from the Niger HR collaborative cited above.</p>	<p>Target has been met:</p> <p>Under TO3, HCI has initiated four human resources collaboratives in three high-burden AIDS countries, drawing tools and lessons developed in Niger:</p> <ol style="list-style-type: none"> 1) HR Collaborative in Tandahimba District, Mtwara Region, Tanzania 2) CHW Collaborative in Oromia, Ethiopia 3) District health management performance collaborative in Lindi Region, Tanzania (with all six Council Health Management Teams and the Regional Health Management Team) 4) Pharmaceutical workforce management collaborative in Uganda
<p>Performance target 3.5: During the course of Task Order #3, the contractor will carry out at least five field studies addressing the impact of human resources interventions on the quality of care, including the task-shifting strategy.</p>	<p>Target has been met:</p> <p>As of the end of FY12, under TO3, HCI has completed five studies on the impact of human resources interventions on quality of care:</p> <ol style="list-style-type: none"> 1) Evaluation of the Scale-up of the PMTCT Infant Feeding Counseling Training Program in Tanzania. HIV Training Evaluation. This study was completed in FY10 and its final report published in September 2010: http://www.hciproject.org/node/1769. 2) The findings of the Uganda expert patient study were published in November 2011 in the report, <i>Task Shifting in HIV/AIDS Service Delivery: An Exploratory Study of Expert Patients in Uganda</i>, available at: http://www.hciproject.org/publications/task-shifting-hiv-aids-service-delivery-

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	<p>exploratory-study-expert-patients-uganda.</p> <p>3) The findings of the assessment of the effectiveness of the CHW AIM tool for improving CHW program functionality in Zambia was published as the technical report, <i>Improving CHW Program Functionality, Performance, and Engagement: Operations Research Results from Zambia</i>, in June 2012. Available at: http://www.hciproject.org/publications/improving-chw-program-functionality-performance-and-engagement-operations-research-resu.</p> <p>4) Documentation of the Niger HR collaborative's impact on quality of care is described in the final report, <i>The Human Resources Collaborative: Improving Maternal and Child Care in Niger</i>, published in September 2012. Available at: http://www.hciproject.org/publications/human-resources-collaborativeimproving-maternal-and-child-care-niger-final-report.</p> <p>5) Documentation of the Tanzania HR collaborative's impact on quality of care. Final report is in review by the COR and is expected to be published in the 2nd quarter of FY13).</p>
Objective 4: Expand experience with the improvement collaborative approach in USAID-assisted countries	
<p>Performance target 4.1: During the course of Task Order #3, the contractor will develop and support 20 Phase I (improvement) collaboratives, including those begun under Task Order #1, for an average of two and a half years. These collaboratives will document an average level of improvement in the selected quality indicators of greater than 10% within 18 months.</p>	<p>Target has been met:</p> <p>This performance target was exceeded in FY10: 33 phase I improvement collaboratives were launched or completed under TO1 by the end of FY11. By the end of FY12, 23 additional phase I improvement collaboratives were launched under TO3, for a total of 56 phase I collaboratives supported under HCI. The phase I collaboratives supported under HCI TO3 are:</p> <ol style="list-style-type: none"> 1. Afghanistan maternal and newborn health community demonstration collaborative in Balkh and Kunduz provinces 2. Afghanistan Kabul maternity hospital demonstration collaborative 3. Uganda maternal-newborn care demonstration collaborative 4. Uganda palliative care demonstration collaborative 5. Uganda chronic care demonstration collaborative 6. Uganda maternal-newborn care community demonstration collaborative 7. Senegal community case management demonstration collaborative with ChildFund 8. Human resources collaborative in Tandahimba District, Mtwara Region, Tanzania 9. Tanzania Most Vulnerable Children Programs demonstration collaborative in Bagamoyo District in Pwani Region 10. Russia TB demonstration collaborative in Bryansk and Saratov oblasts 11. Kenya antenatal care-PMTCT demonstration collaborative (Kwale District) 12. Ethiopia CHW demonstration collaborative in Oromia 13. Afghanistan post-partum family planning demonstration collaborative 14. Mali post-partum family planning demonstration collaborative (Kayes province) 15. Honduras obstetric referrals demonstration collaborative (Comayagua Region) 16. District Health Management Collaborative in Lindi, Tanzania

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	<p>17. Pharmaceutical workforce management collaborative in Uganda 18. Georgia Imereti Region NCD collaborative 19. Uganda FP-HIV collaborative in 1 district 20. Manyara, Tanzania PMTCT-RCH integration demonstration collaborative 21. Cote d'Ivoire Pharmacy Collaborative in 15 sites 22. Community Support to CHWs Collaborative in Uganda 23. 23. Mali anemia prevention and control demonstration collaborative (Bougouni District, Sikasso Region)</p> <p>Level of improvement achieved in these collaboratives through the end of FY12 will be presented in the TO3 FY12 self-evaluation report. Collaborative profiles on these phase I collaboratives have been posted on the HCI Portal.</p>
<p>Performance target 4.2: The collaboratives supported under Task Order #3 will include at least one that addresses the current management processes of the district health team (or the local equivalent).</p>	<p>Target has been met:</p> <p>The human resources collaborative launched in Tandahimba District of Morogoro Region in Tanzania at the end of FY10 with TO3 funding addressed district-level health program management. The Regional and District Health Management Team collaborative started in Lindi, Tanzania in FY12 also focuses on improving health management processes at the district level.</p>
<p>Performance target 4.3: At least four of the 20 collaboratives developed under Task Order #3 will be implemented by a partner organization, with the role of the contractor limited to providing training and support to the partner organization.</p>	<p>Target has been met:</p> <p>Four of the demonstration collaboratives supported under TO3 are implemented by a partner organization:</p> <ol style="list-style-type: none"> 1) Tanzania AIDS Relief Tanga Region ART/PMTCT collaborative 2) Tanzania Clinton Foundation/EGPAF Mtwara ART/PMTCT collaborative 3) Tanzania FHI 360 Morogoro ART/PMTCT collaborative 4) Tanzania EngenderHealth Infant Feeding Collaborative in Iringa
<p>Performance target 4.4: At least four of the collaboratives developed under Task Order #3 will address the chronic care of HIV/AIDS across the continuum of care, from the level of self-care to referral hospital care. At least three of these collaboratives will be in Africa. Before the end of Task Order #3, the contractor will submit a report summarizing the improvement of the application of the chronic care model to AIDS in African countries.</p>	<p>Target will be met in FY13:</p> <p>Four collaboratives developed under TO3 address the chronic care of HIV across the continuum of care, three of which are in Africa:</p> <ol style="list-style-type: none"> 1) Nicaragua ART 2) Uganda palliative care 3) Uganda chronic care 4) Tanzania patient-self management activity with the Morogoro ART/PMTCT collaborative <p>After the Tanzania Patient Self-management Activity and Uganda Chronic Care Collaborative final reports are completed (early in 2013), HCI will prepare a report summarizing the application of the chronic care model to AIDS in African countries. Preliminary conclusions from the application of the chronic care model to HIV care in Uganda and Tanzania will be included in the HCI TO3 FY12 self-evaluation report.</p>
<p>Performance target 4.5: During the course of Task Order #3, the contractor will carry out at least six descriptive or intervention studies focused on</p>	<p>Target has been met:</p> <p>Six studies have been completed as of the end of FY12, and a seventh study will be completed early in FY13:</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
<p>the design and implementation of improvement collaboratives.</p>	<p>1) Tanzania: Evaluation of the Partnership for Quality Improvement (partner collaborative) strategy was completed in FY10 and the report, <i>The Partnership for Quality Improvement to Improve PMTCT and ART Services in Tanzania: Assessment of Results, Capacity, and Potential for Institutionalization</i>, was published in June 2011.</p> <p>2) Ecuador: Sustainable scale-up of AMTSL (completed in FY11 and published in <i>Int J Gyn Obst</i> in June 2012.</p> <p>3) Uganda: Effectiveness of different coaching strategies on QI team performance (study completed in FY11; the report, <i>Comparison of Coaching Strategies for Improvement Collaboratives in Ugandan HIV/AIDS Health Centers</i>, was published in March 2012)</p> <p>4) Guatemala: Descriptive study of QI team performance (completed in FY11 and the summary report, <i>Quality improvement team performance in Guatemala</i>, was published in September 2011 along with the full study report in Spanish)</p> <p>5) Afghanistan: <i>Qualitative assessment of community-based services for EONC in Kunduz Province</i> (published in June 2012)</p> <p>6) Afghanistan: <i>Changes in maternal and neonatal health in Kunduz Province as a result of a community-based collaborative improvement intervention</i> (report was prepared as a manuscript and submitted for peer-reviewed publication in September 2012)</p> <p>7) Afghanistan: Strengthening the application of quality improvement for community level services for EONC in Balkh Province (underway—endline to be collected in the first quarter of FY13)</p>
<p>Objective 5: Expand experience with the spread collaborative approach in USAID-assisted countries</p>	
<p>Performance target 5.1: The contractor will develop 20 spread collaboratives adapted to the needs of the involved health system, including those developed under Task Order #1, and support them for an average of two and a half years. In reporting on these collaboratives, the contractor will provide an estimate of the total population in catchment area of the participating facilities, with a target of at least 100,000 for the average population served. The contractor will also provide a count of the number of facilities reached by the spread collaborative, with a target average number of facilities of at least 50. Reports will also summarize the level of quality attained for each collaborative indicator, with comparison values from the corresponding Phase I</p>	<p>Target has been met:</p> <p>HCI supported 10 phase II spread collaboratives under TO1; 12 new phase II (spread) improvement collaboratives were initiated under TO3 through the end of FY12:</p> <ol style="list-style-type: none"> 1. Bolivia TB DOTS spread collaborative in El Alto, La Paz Province, including 46 facilities and 19 laboratories serving a population of 900,000 2. Bolivia TB spread collaborative in the city of Cochabamba, including 38 facilities and 16 laboratories serving a population of 620,000 3. Afghanistan maternal and newborn health facility spread collaborative in Parwan, Bamyan and Herat provinces, involving 26 facilities serving a population of over 570,000 4. Uganda HIV spread collaborative (96 sites, serving a population of 14 million) 5. Russia prevention of hypothermia among newborns spread collaborative in 129 facilities in Kostroma, Yaroslavl, Ivanovo, Tambov, Tula, and Tver oblasts 6. Russia breastfeeding spread collaborative in 16 facilities in Ivanovo, Tula, Tambov, and Kostroma oblasts 7. Russia spread collaborative on optimizing labor management through use of the partograph in 21 facilities in Kostroma, Yaroslavl, Ivanovo, Tambov, and Tula oblasts

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
(improvement) collaborative.	<p>8. Russia spread collaborative on prevention of unwanted pregnancies, abortions, and sexually transmitted diseases among teenagers in 10 facilities in Kostroma, Tambov, Ivanovo, and Tula oblasts</p> <p>9. Russia spread collaborative on primary neonatal resuscitation in 19 facilities in Ivanovo, Tver, Tula, Tambov, Yaroslavl, and Kostroma oblasts</p> <p>10. Afghanistan maternal and newborn health facility spread collaborative in Samangan, Sari Pul, Wardak, and Logar provinces, including 28 facilities serving a population of over 330,000</p> <p>11. Partner PMTCT spread collaborative in EGPAF-supported Kilimanjaro Region in Tanzania (EGPAF demonstration region: Mtwara), including 13 facilities serving an estimated population of over 100,000</p> <p>12. Facility essential obstetric and newborn care spread collaborative in Mali (Segou and Koulikoro regions).</p>
<p>Performance target 5.2: The contractor will conduct at least 18 descriptive or intervention studies addressing the design or implementation of spread activities, including those developed under Task Order #1. Studies of the spread process within improvement collaboratives may be counted toward achievement of this target.</p>	<p>Target will be met in FY13:</p> <p>HCI supported 6 studies on spread under TO1, has completed 10 more under TO3 through FY12, and will complete the remaining 2 studies in FY13:</p> <ol style="list-style-type: none"> 1) Tanzania: Evaluation of the Partnership for Quality Improvement, the strategy for developing regional partner collaboratives (completed in FY10) 2) Towards more effective spread of improvement methods (completed in FY11) 3) Ecuador: Spread of EONC better care practices and CQI in 51 sites (completed in FY12) 4) Russia: Spread of innovations in MCH collaboratives through a web portal (completed in FY12) 5) Uganda: Spread of better care practices to improve coverage, retention, and outcomes of patients receiving ART (completed in FY12) 6) Afghanistan: Evaluation of spread strategy to 3 new provinces (to be completed by the second quarter of FY13) 7) Guatemala: Spread of ProCONE best practices from health centers to health posts in San Marcos (completed in FY12) 8) Guatemala: Case study of spread from San Lorenzo health center to three peripheral facilities (completed in FY12) 9) Evaluation of the spread of EONC best practices from Niger to Mali (to be completed early in FY13) 10) Nicaragua: Spread of innovations in MNCH to new teams (completed in FY12) 11) Bolivia: Evaluation of methods used to spread learning from the El Alto TB collaborative to new sites in Cochabamba (completed in FY12) 12) Uganda: Diffusion and adaptation of innovations to improve care for HIV/AIDS patients in 14 health facilities in Uganda (completed in FY12)
<p>Performance target 5.3: By the end of the second year of Task Order #3 (September 2011), the contractor will submit a report summarizing the status of spread activities to date,</p>	<p>Target has been met:</p> <p>Drawing on the findings of the spread studies carried out by HCI, we commissioned an analytical report synthesizing our findings on spread by Dr. John Ovreteit. The final report was submitted to the COTR on September 29, 2011 and approved for publication on November 7, 2011.</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
including the findings of studies and evaluations and major knowledge gaps	
Objective 6: Expand the experience base for other specific QI approaches	
<p>Performance target 6.1: Under Task Order #3, the contractor will carry out 15 descriptive or intervention studies of QI methodologies distinct from the overall collaborative approach, including those begun under Task Order #1. These studies may address well-defined QI methodologies used within the framework of an improvement or spread collaborative.</p>	<p>Target has been met:</p> <p>Six applications or evaluations of other QI approaches were completed by the end of FY10 under TO1; 11 additional studies and applications have been completed by the end of FY12, and another two will be completed in FY13:</p> <ol style="list-style-type: none"> 1) Field testing of the Framework for improving care and outcomes of patients on ART led to the development in FY11 of an instructional manual on how to apply the framework. The tool was published on the HCI Portal in August 2011. 2) Malawi HIV/AIDS quality of care assessment (report published in FY11) 3) Documentation of impact of OVC standards in Strengthening Community Safety Nets Project in Ethiopia with ChildFund (report published in November 2011) 4) Assessment of selected maternal newborn care practices in women of reproductive age in the Europe and Eurasia Region: This four-country assessment (data were collected in Albania, Armenia, Georgia, and Russia) was new in HCI's FY11 scope of work and was completed in September 2011. The final report was published in June 2012. 5) Assessment of the non-communicable disease screening and care practices in women of reproductive age in the Europe and Eurasia Region: This four-country assessment (data were collected in Albania, Armenia, Georgia, and Russia), implemented in conjunction with the maternal newborn care practices study, was designed and completed in FY11. The final report was published in April 2012. 6) Application of the Community Health Worker Assessment and Improvement Matrix (CHW AIM) in Madagascar: Data were collected in August 2011. The written report on the qualitative assessment conducted by HCI was published in November 2012. 7) Documentation of the ISO 9001:2008 certification for administrative, financial, and clinical services in Guatemala: A technical report describing the application of ISO 9001:2008 standards in the Ministry of Health of Guatemala was drafted and approved by the USAID Mission and the COTR. However, as a result of new certifications of compliance with ISO standards that took place in September, the Mission has request that HCI revise the report to include the new certification results. The revised report was published in September 2012. 8) Cost-effectiveness analysis of ISO 9001:2008 certification vs. collaboratives in Guatemala: Data collection for this study was completed in FY11, and the final report was published in June 2012. 9) Cost-effectiveness analysis of OVC standards development and piloting in Kenya: This study was carried out in FY11, and the final report was published in November 2011. 10) Application of the CHW Assessment and Improvement Matrix (CHW AIM) in Zambia: This application of the CHW AIM tool began in September 2010, with the participation of four NGOs and the Ministry of Health.

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	<p>Endline data collection took place in the first quarter of FY12. The report was published in June 2012.</p> <p>11) Case Study on Piloting Standards in Kenya. Published in March 2012.</p> <p>12) Case Study of ISO Certification in San Marcos. Study was completed in FY12 and the report is in editing.</p> <p>13) Documentation of impact of OVC standards in Tanzania with Pact: The development of this case study was drafted in FY11 and revised further in FY12. The final case study is in editing.</p>
<p>Performance target 6.2: Under Task Order #3, the contractor will carry out at least two comparative evaluations of the performance of providers participating in a collaborative, and that of a similar group, receiving traditional supervision for the same quality indicators.</p>	<p>Two studies are underway and will be completed in FY13:</p> <p>Mali comparison study for eclampsia / pre-eclampsia, comparing cost-effectiveness of a quality improvement collaborative with training alone</p> <p>Comparison study on effects of a QI intervention on maternal and newborn outcomes in collaborative and non-collaborative sites in Uganda</p>
<p>Objective 7: Improve the cost-effectiveness of QI in USAID-assisted countries</p>	
<p>Performance target 7.1: During the first year of Task Order #3, the contractor will submit to the USAID COTR a report summarizing the design of the knowledge management system, addressing at a minimum, certain features and capabilities.</p>	<p>Target has been met:</p> <p>A report summarizing the design, features, and capabilities of the HCI KM system was submitted to the COTR on 30 September 30, 2010.</p>
<p>Performance target 7.2: During the course of Task Order #3, the contractor will carry out 20 evaluations and studies addressing the design of the knowledge management system, user applications of system content for QI and validation of submissions, including those carried out under Task Order #1.</p>	<p>Target has been met:</p> <p>In addition to the 15 KM studies that were completed under TO1, five additional KM studies were completed in FY12:</p> <ol style="list-style-type: none"> 1) Bolivia: Evaluation of methods used to spread learning from the El Alto TB collaborative to new sites in Cochabamba (study completed in FY12; final report is in editing) 2) Survey of users of the CHW Central site (completed by Initiatives Inc. in November 2011) 3) Design of a Spanish-language community of practice for implementers of Kangaroo Mother Care (completed in June 2012) 4) Evaluation of a links to and referring websites for the HCI Portal, completed by CCP in June 2012 5) Best improvement report contest to increase outside submissions to HCI Improvement Database held in February 2012. Interviews with finalists were conducted in April 2012 to validate their submissions.
<p>Performance target 7.3: During the course of Task Order #3, the contractor will carry out 15 studies and evaluations related to improving the cost-effectiveness of specific QI</p>	<p>Target has been met:</p> <p>Ten cost-effectiveness studies were carried out under TO1, and seven more studies have been completed through the end of FY12 under TO3. In addition, six more cost-effectiveness studies are underway and will be completed in FY13:</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
<p>approaches or methodologies, including those carried out under Task Order #1.</p>	<ol style="list-style-type: none"> 1) Cost-effectiveness of the conditional cash transfer intervention in Guatemala (completed in FY11) 2) Kenya: CEA of piloting OVC standards (completed in FY11 and report published in November 2011) 3) Uganda: Cost-effectiveness of central level vs. District coaching strategy (completed and report published in March 2012) 4) Ecuador: Cost implications of spread strategy (study completed in FY12; report in editing) 5) Guatemala CEA of ISO versus collaboratives (report published in June 2012) 6) Nicaragua: Cost-effectiveness analysis of Kangaroo Mother Care interventions (study completed in FY12; report submitted for publication in peer-reviewed journal in October 2012) 7) Nicaragua: Cost-effectiveness analysis of QI interventions for HIV (completed: article in English submitted for publication and Spanish report published in March 2012) 8) Afghanistan: Cost-effectiveness of quality improvement in the context of EONC collaboratives in Balkh and Kunduz (underway; to be completed in the first quarter of FY13) 9) Afghanistan: Cost-effectiveness of quality improvement in the context of hospital level improvement in Kabul (underway; to be completed in the first quarter of FY13) 10) Cost-effectiveness of intergrated family planning and HIV care in Uganda (underway; to be completed in the first quarter of FY13) 11) Cost-effectiveness of improvement collaboratrive for MNCH services in Uganda (underway; to be completed in the first quarter of FY13) 12) Cote d'Ivoire: Evaluating the cost of poor quality (underway; to be completed in the third quarter of FY13) 13) Mali: Cost-effectiveness of an improvement collaborative for pre-eclampsia/eclampsia (underway; to be completed in the third quarter of FY13)
<p>Performance target 7.4: By the end of Task Order #3, the KM system has been accessed by at least 2000 users, 75 acceptable submissions from outside the Task Order have been received and posted and the contractor has responded to 400 requests for information or assistance.</p>	<p>Target has been mainly met:</p> <p>By the end of FY12, the HCI Portal had been accessed by 140,579 unique visitors, with an average daily visits of about 200.</p> <p>The Spanish maternal and child health web site (www.maternoinfantil.org) has had over 200,000 visits since its launch in FY09, with an average over 400 daily visits in 2012.</p> <p>As of the end of FY12, the KM system has received 122 acceptable submissions from outside the Task Order that have been posted in the Improvement Database.</p> <p>By the end of FY12, HCI had received and responded to 288 substantive requests for assistance through the various knowledge management websites supported by the project (excluding requests for password or login help). The target of 400 requests was not reached in FY12 due to lack of</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	spontaneous requests.
Performance target 7.5: By the end of Task Order #3, the contractor has prepared a paper summarizing the KM system and its performance and submitted the paper to a peer-reviewed professional journal.	This is a task will be completed in FY13, drawing on the results of KM studies and analysis of usage patterns of different sections of the HCI Portal.
Objective 8: Provide global technical leadership for QI in USAID-assisted countries	
Performance target 8.1: By the end of Task Order #3 received written confirmation from no fewer than five international organizations with objectives in health systems strengthening that they will incorporate language that explicitly endorses QI as a strategy for achieving these objectives.	<p>By the end of FY12 under TO3, we had written confirmation from three international organization:</p> <ol style="list-style-type: none"> 1) The Directors' Joint Consultative and East, Central, and Southern Africa Community (ECSA) Health Ministers' mechanisms (the highest technical and policy making organs of ECSA countries). 2) International Society for Quality in Health Care, which has signed a written agreement with URC to collaborative on promotion of quality and patient safety approaches through regional workshops and other events 3) Salzburg Global Seminar, which convened the Salzburg Seminar “Making Health Care Better in Low and Middle Income Economies” in April 2012. The Salzburg Statement issued by the participants in the seminar explicitly endorses QI as a strategy, and representatives from some 25 government ministries and international organizations signed it. <p>In FY12, we held discussions related to adoption of QI policies with three new organizations:</p> <ol style="list-style-type: none"> 1) REPPSI (Regional Psychosocial Support Initiative) in 2) African Center for Policy in South Africa 3) African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN), in Nairobi, Kenya <p>HCI has begun an alliance with these three organizations, aimed at spreading the adoption of improvement methods to improve outcomes for vulnerable children. As a result of activities planned in FY13, we expect to fully meet this performance target in FY13.</p>
Performance target 8.2: By the end of Task Order #3, the contractor will produce 20 technical reports and papers related to describing QI interventions and measuring their results, including seven papers published in peer-reviewed journals, as well as those produced under Task Order # 1.	<p>Target has been met:</p> <p>By the end of FY11, under TO1, HCI had published seven articles in peer-reviewed journals and 15 technical reports describing QI interventions and results. Under TO3 through FY12, HCI has published two articles in peer-reviewed journals and 23 technical and research reports describing the interventions and results of QI. In addition, five more articles on the results of QI developed under HCI TO3 are under consideration for publication:</p> <ol style="list-style-type: none"> 1) A Rapid Evaluation of the Uganda MoH Training Program on Use of HIV Monitoring Tools (June 2010) 2) Evaluation of the Scale-up of the PMTCT Infant Feeding Counseling Program in Tanzania (September 2010) 3) A Summary of Results and Lessons from HIV Training Evaluations (September 2010) 4) Sustaining Better Maternal and Newborn Care and Quality Improvement in Niger: Challenges and Successes (March 2011)

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	<p>5) Sustainability of Improvements in Maternal and Child Care and Institutionalization of Continuous Quality Improvement in Nicaragua (May 2011)</p> <p>6) Institutionalization of Continuous Quality Improvement in AMOCSA, a Private Health Care Provider in Chinandega, Nicaragua (May 2011)</p> <p>7) The Partnership for Quality Improvement to Improve PMTCT and ART Services in Tanzania: Assessment of Results, Capacity, and Potential for Institutionalization (June 2011)</p> <p>8) Aligning and Clarifying Health Worker Tasks to Improve Maternal Care in Niger (August 2011)</p> <p>9) Post-partum Family Planning Intervention for At-risk Women in Masaya and Rivas, Nicaragua (August 2011)</p> <p>10) Results from the Pilot Phase of an ART/PMTCT Improvement Collaborative in Cote d'Ivoire (September 2011)</p> <p>11) Expanding TB-HIV Integration and Public-Private Mix Interventions to Nam Dinh and Hai Duong Provinces, Vietnam (September 2011)</p> <p>12) How do quality improvement teams function after an improvement intervention ends? A description of team performance after the end of an obstetric and newborn care QI initiative in Niger (September 2011)</p> <p>13) Institutionalization of continuous quality improvement interventions on maternal and child health in Honduras (September 2011)</p> <p>14) Spreading best practices in maternal and newborn care in Guatemala (September 2011)</p> <p>15) Implementing Standards-based Quality Improvement Processes at the Community Level for Orphans and Vulnerable Children: The Strengthening Community Safety Nets (SCSN) Project, Ethiopia (October 2011)</p> <p>16) Implementation of Standards of Service Delivery for Orphans and Vulnerable Children in Kenya: A Prospective Evaluation of Performance, Costs, and Equity (November 2011)</p> <p>17) USAID's Legacy of Family Planning Technical Assistance to the Guatemalan Public Health Sector: Over a decade of success through USAID's Calidad en Salud and Health Care Improvement Projects (January 2012)</p> <p>18) Improving Care for Vulnerable Children in Kenya: Results from Piloting Service Standards (March 2012)</p> <p>19) Integrating Nutrition Interventions into Routine HIV/AIDS Care: Challenges, Solutions, and Lessons Learned from Uganda (May 2012)</p> <p>20) Taking Every Opportunity to Save Lives: The Role of Modern Quality Improvement in Enhancing Maternal, Newborn, and Child Health Programs. A Synthesis of USAID Health Care Improvement Project Field Experience (June 2012)</p> <p>21) Comparative Evaluation of Collaborative Improvement and ISO Certification to Improve Quality of Maternal and Neonatal Care in Guatemala (June 2012)</p> <p>22) The Human Resources Collaborative: Improving Maternal and Child Care in Niger (September 2012)</p> <p>23) Improving the Health System through Certification: Implementing ISO 9001:2008 in Guatemala (September 2012)</p> <p>Seven journal articles on QI results developed under TO3 that have been</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	<p>published in or are under consideration for publication in peer-reviewed journals:</p> <ol style="list-style-type: none"> 1) Broughton E. How & Why of CEA (<i>Int J Clinical Pathways</i>, published in September 2011) 2) Hermida J et al. Sustainable scale-up of AMTSL in Ecuador (<i>Int J Gyn. Obs.</i>, published in June 2012) 3) Broughton E, Nunez D, Moreno I. Cost-effectiveness of improving health services to people with HIV in Nicaragua. Submitted 22 March 2012 to the Journal of the International AIDS Society but rejected 14 September 2012. The article will be revised and submitted to another journal. 4) Rahimzai M, Amiri M, Burhani N, Leatherman S, Hildebeitel S, Rahimzai A. Afghanistan's National Strategy for Improving Quality in Health Care. Submitted 21 March 2012 to the Int J Quality in Health Care for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-012-03-0144. 5) Lopez S. Wong Y. Gomez I. Escobar F. Tinoco B. Parrales A. Quality in Practice: Preventing and managing neonatal sepsis in Nicaragua." Submitted 13 March 2012 to the Int J Quality in Health Care for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-2012-03-0112. 6) Hermida J, Salas B, Gonzalez D, Broughton E, Sloan N. Effectiveness and Cost-effectiveness of Maternal and Newborn Health Quality Improvement in Ecuador. Submitted 13 March 2012 to the Int J Quality in Health Care for its Special Issue on Low-income and Middle-income Countries. Manuscript number: INTQHC-2012-03-0110. 7) Southgate R, Kyeyagalire R, Broughton E. Increasing efficiency in Ugandan HIV clinics through improved data management: an evaluation of a quality improvement intervention. <i>Journal for Healthcare Quality</i> Revised manuscript submitted in April 2012: Manuscript ID: JHQ--Jan-2012-0372.R1
<p>Performance target 8.3: By the end of Task Order #3, the contractor will facilitate at least 15 articles or broadcasts in mass media that address the nature of QI activities and their results, including those facilitated under Task Order #1.</p>	<p>Target has been met.</p> <p>HCI facilitated nine articles and broadcasts in mass media addressing the nature of QI activities and their results under TO1 by the end of FY11. To date, we have facilitated 17 new mass media articles and broadcasts under TO3:</p> <ol style="list-style-type: none"> 1. Article in the Guatemalan newspaper <i>Prensa Libre</i> on Helping Babies Breathe (February 2011) 2. Article in the Tver newsweekly <i>Rzhevsky Vestnik</i> on QI in obstetric care supported by HCI (February 2011) 3. In March 2011, a conversation between the CSIS panel moderator (Judith Twigg), Victor Boguslavsky, and former Senator Bill Frist was posted on the CSIS website, at: http://csis.org/multimedia/interview-senator-bill-frist-and-dr-victor-boguslavsky-us-russia-collaboration-health. 4. In Afghanistan, three episodes of the "Families Health" television show highlighted quality improvement efforts supported by HCI (episodes aired in May, August, and September 2011) 5. HCI's Health Workforce team contributed a short piece on applying QI to human resources management and a Niger case for the State of the World's Midwifery Report, which was launched in June 2011 in Johannesburg. The piece on application of QI to human resources for health is on p. 116 of the

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	<p>main report. The Niger country profile prepared by HCI is available at: http://www.unfpa.org/sowmy/resources/docs/country_info/short_summary/Niger_SoWMyShortSummary.PDF.</p> <p>6. HCI/Russia staff and project federal-level experts were interviewed by the Ren-TV Bryansk regional channel, a local TV channel, about tuberculosis project activities in Bryansk oblast, in July 2011.</p> <p>7. Many Afghani television stations highlighted the launch ceremony of the National Strategy for Improving Quality in Health Care in news segments on August 8, 2011.</p> <p>8. ISQua Talk, “Heal Me But Don’t Kill My Culture” delivered by Dr. Jorge Hermida and videotaped at the ISQua conference in Hong Kong in September 2011 and posted on the ISQua Knowledge web portal at: http://www.isquaknowledge.org/activities/isqua-talks/jorge-hermida.html.</p> <p>9. TV broadcast on Moscow station of First Lady of Russia touring hospital with newborn resuscitation equipment provided by HCI (October 11, 2011)</p> <p>10. On Jan. 27, 2012, HCI staff member Emily Treleven posted a blog on the Healthy Newborn Network website about HCI’s work to scale up Kangaroo Mother Care in Central America, “Connecting Across Borders to Improve Kangaroo Mother Care”, at: http://www.healthynewbornnetwork.org/blog/connecting-across-borders-improve-kangaroo-mother-care</p> <p>11. On March 14, 2012, “Meditsinskaya Gazette” (Medical Gazette) published a full page article “Green light to discussions: crucial issues of quality and safety in healthcare in Russia” to feature the International Forum Remote Participation Session and highlight its role in disseminating modern approaches to quality improvement to the Russian healthcare community.</p> <p>12. Article “When Patients Become Experts” about patient self-management improvement work in Morogoro, Tanzania published on the web magazine, <i>Global</i>, on 19 April 2012.</p> <p>13. Salzburg discussion forum and daily updates from Salzburg Global Seminar, “Making Health Care Better in Low and Middle Income Economies: What are the next steps and how do we get there?”, posted on the ISQua Knowledge website 20 March –30 April 2012</p> <p>14. On April 15, 2012, a story was posted on the USAID Afghanistan website about HCI’s work to improve care for newborns in respiratory distress: http://afghanistan.usaid.gov/en/USAID/Article/2677/Helping_Afghan_Babies_Breathe</p> <p>15. Blog about Salzburg posted on the K4Health website on 22 May 2012 at: http://www.k4health.org/blog/post/we-can-make-health-care-better-salzburg-call-action.</p> <p>16. On June 18, 2012, the Women Deliver website featured a story about HCI’s support for the scale-up of AMTSL in Ecuador: http://www.womendeliver.org/updates/entry/celebrate-solutions-ecuadors-health-system-model-reduces-maternal-mortality.</p> <p>17. On June 21, 2012, the second learning session of the Georgia non-communicable disease improvement collaborative was featured on three national and 1 regional TV channels in Georgia, highlighting the USAID-support for improving quality of care in Georgia. One of the clips can be viewed at:</p>

HCI TO3 Performance Target	Status of achievement of the targets at the end of FY12
	http://www.youtube.com/watch?v=QoWX6NvN9Lw&feature=share.
<p>Performance target 8.4: By the end of Task Order #3, the contractor will support the development of new graduate-level training programs in QI as applied in low- and middle-income countries, or the revision of established programs in three training institutions located in these countries.</p>	<p>Target has been met:</p> <p>Through the end of FY12 under TO3, we developed three graduate level training programs in QI:</p> <ol style="list-style-type: none"> 1) QI curriculum developed by Dr. Stephen Kinoti for the new medical school in Kenya: the Kenya Methodist University Medical School. This new medical school opened in 2011. 2) In Nicaragua, the HCI team developed in FY12 a national curriculum for pre-service and in-service training with the Ministry of Health and with the National Universities in Managua and Leon. During FY13, HCI will support the expansion of the curriculum to six public and private universities. 3) In South Africa, Dr. Donna Jacobs developed a one-week QI course with the School of Public Health of the University of Witwatersrand in Johannesburg. The course, aimed at MPH students, is offered annually. It was first offered in August 2010 and again in August 2011, with instruction led by HCI staff and with support from the Director of the Quality Assurance Department of the National Department of Health. <p>A fourth graduate-level training program on QI will be completed in FY13. In FY12, HCI began planning to develop an online QI module for the People's Uni. After discussions in July and August 2012, it was agreed that Dr. Sonali Vaid will work with the People's Uni team to finalize the QI module by the second quarter of FY13.</p>

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