



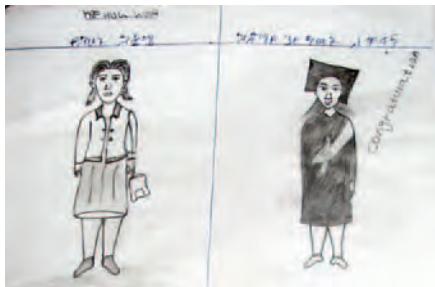
USAID
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HEALTH CARE
IMPROVEMENT
PROJECT



USAID HEALTH CARE IMPROVEMENT PROJECT TASK ORDER 3

FYII ANNUAL PROJECT REPORT



Contract Number GHN-I-03-07-00003-00
Performance Period:
October 1, 2010 – September 30, 2011

DECEMBER 22, 2011

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, Office of Health, Infectious Diseases and Nutrition.

Front cover (from top):

First gaze between a mother and her newborn at Malalai Hospital in Kabul. The birth attendant for this successful outcome was trained by HCI in essential newborn care as part of efforts to improve the quality of essential obstetric and newborn care in 10 provinces of Afghanistan. *Photo by Annie Clark, URC.*

Health provider in Uganda and HCI staff discuss how to overcome barriers to providing comprehensive care for patients with chronic conditions like HIV. *Photo by Suzanne Gaudreault, URC.*

Before and after pictures by a girl in Debre Zeit, Ethiopia showing how she believes her life will improve as a result of efforts to improve programs serving vulnerable children affected by HIV. In FY11, HCI collaborated with the Strengthening Community Safety Nets Project in Ethiopia to develop a case study on implementing standards-based quality improvement processes at the community level. *Photo by Nancy Newton, URC.*

Nurse Nelly Orellana Céspedes of the Maternal and Child Hospital in Cochabamba, Bolivia, sits with the models she uses to teach patients how to provide a proper sputum sample for tuberculosis testing. HCI is assisting the National TB Program to spread improved TB care practices tested in El Alto, Bolivia in FY10 to facilities in Cochabamba. *Photo by Emily Treleaven, URC.*

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Abbreviations

AAP	American Academy of Pediatrics
AAU	Addis Ababa University (Ethiopia)
ABC	Abstinence-Be Faithful-Condoms
ACIPH	Addis Continental Institute of Public Health (Ethiopia)
ACNM	American College of Nurse-Midwives
AED	Academy for Educational Development
AFGA	Afghan Family Guidance Association
AIDS	Acquired immunodeficiency syndrome
AIM	Assessment and improvement matrix
AIMGAPS	All Infants and Mothers Get All PMTCT Services
AME	Annual medical examination
AMOCSA	<i>Asociacion Medica de Occidente, S.A.</i> (Nicaragua)
AMTSL	Active management of the third stage of labor
ANC	Antenatal care
AONN	Association of OVC NGOs in Nigeria
APHI	Afghanistan Public Health Institute
APHIA	AIDS, Population and Health Integrated Assistance
APR	Annual performance report
ART	Antiretroviral therapy
ARV	Antiretroviral
ATN	Assistance Technique National Plus (Mali)
AZT	Zidovudine
BGH	Bureau for Global Health
BHC	Basic health center
BPHS	Basic Package of Health Services (Afghanistan)
C&T	Counseling and testing
CAP	<i>Centro de atención médica permanente</i> (24-hour health care center – Guatemala)
CBO	Community-based organization
CBT	Computer-based training
CCI	Charitable Children's Institution (Kenya)
CCP	Center for Communication Programs
CCT	Clinical content training
CCTP	Conditional Cash Transfer Program
CD4	Human T helper cells expressing CD4 antigen (T helper cell)
CD-ROM	Compact disk read-only memory
CDC	Centers for Disease Control and Prevention
CEA	Cost-effectiveness analysis
CHAI	Clinton HIV/AIDS Initiative
CHAZ	Churches Health Association of Zambia
CHBC	Community home-based care
CHC	Comprehensive health center
CHMT	Council Health Management Team (Tanzania)
CHR	<i>Centre Hospitalier Régional</i> (Regional Hospital Center – Niger)
CHW	Community health worker
CIC	Community improvement collaborative
CME	Continuing Medical Education
CoE	Communities of Excellence
COP	Chief of Party
COPD	Chronic obstructive pulmonary disease

COPs	Country Operational Plans
COTR	Contracting Officer's Technical Representative
CPT	Cotrimoxazole preventive therapy
CQI	Continuous quality improvement
CRESAC	Regional Health Accreditation and Assessment Center
CRS	Catholic Relief Services
CSI	Centre de santé intégré (Health center – Niger)
CSI	Child Status Indexm,
CSIS	Center for Strategic and International Studies
CSO	Civil society organization
CSSD	Central Sterilization Services Department (Namibia)
CT	Counseling and testing for HIV
CTC	Care and treatment center
CTX	Cotrimoxazole
CVD	Cardiovascular disease
DALY	Disability-adjusted life year
DCS	Department of Children Services
DGC	Department of Quality Assurance (Honduras)
DH	District hospital
DHIS	District Health Information System (South Africa)
DHMT	District Health Management Team
DM	Diabetes mellitus
DOH	Department of Health (South Africa)
DOTS	Directly observed therapy, short course
DQA	Division of Quality Assurance
DRSP	<i>Direction régionale de la santé publique</i> (Regional directorate of public health - Niger)
DSW	Department of Social Welfare (Tanzania)
E&E	Europe and Eurasia
EBF	Exclusive breastfeeding
ECSA	East, Central and Southern Africa Community
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
ENC	Essential newborn care
EONC	Essential obstetric and newborn care
EP	Expert patient
ETAT	Emergency triage, assessment and treatment
ETR	Electronic Tuberculosis Register (South Africa)
FBO	Faith-based organization
FGD	Focus group discussion
FHI	Family Health International
FMWA	Federal Ministry of Women Affairs and Social Development
FP	Family planning
FY	Fiscal year
GBH	Global Health Bureau
GF	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHC	Global Health Council
GHWA	Global Health Workforce Alliance
GIS	Geographic information system
HAI	HIV/AIDS Alliance
HBB	Helping Babies Breathe
HBC	Home-based care

HBC	Bertha Calderon Hospital (Nicaragua)
HBV	Hepatitis B vaccination
HCI	USAID Health Care Improvement Project
HCT	HIV counseling and testing
HCW	Health care worker
HCWM	Health care waste management
HIV	Human immunodeficiency virus
HMIS	Health management information system
HOPs	HIV/AIDS Operational Plans
HP	Health post
HQ	Headquarters
HR	Human resource
HRH	Human resources for health
HSSP	Health Services Support Project (Afghanistan)
HTC	HIV testing and counseling
HW	Health worker
IC	Improvement collaborative
IC	Infection control
ICAP	International Center for AIDS Care and Treatment Programs at Columbia University
ICD	International Classification of Diseases
ICE	Incremental cost-effectiveness
ICONTEC	Colombian Technical Norms and Certification Institute (Guatemala)
ICU	Intensive care unit
ID	Infectious disease
IDI	In-depth interview
IDU	Injecting drug user
IEC	Information, education, and communication
IF	Infant feeding
IHI	Institute for Healthcare Improvement
IMCI	Integrated management of childhood illness
INGO	International non-governmental organization
IP	Implementing partner
IPC	Infection prevention and control
IPT	Isoniazid preventive therapy
IQC	Indefinite Quantity Contract
IQHC	Improving Quality in Health Care unit (Afghanistan)
IS	Injection safety
IS-HCWM	Injection safety-health care waste management
ISO	International Organization for Standardization
ISQua	International Society for Quality in Health Care
IST	In-service training
ITN	Insecticide-treated nets
IUD	Intrauterine device
IYCN	Infant and Young Child Nutrition project
JHUSPH	Johns Hopkins University School of Public Health
JSI	John Snow Inc.
KC	Kangaroo care
KM	Knowledge management
KMC	Kangaroo Mother Care
KMS	Kaominina Mendrika Salama project (Madagascar)

LAC	Latin American and Caribbean
LBW	Low birth weight
LQAS	Lot Quality Assessment Sampling
LRP	Learning resource package (Afghanistan)
LS	Learning session
M&E	Monitoring and evaluation
MaNHEP	Maternal and Newborn Health in Ethiopia Partnership
MARPs	Most at risk populations
MCH	Maternal and child health
MCHIP	Maternal and Child Health Integrated Program
MCWH	Maternal, child and women's Health
MDG	Millennium Development Goal
MDR	Multidrug-resistant
MDR-TB	Multidrug-resistant Tuberculosis
MINSA	Ministry of Health (Nicaragua)
MLS	Ministry of HIV/AIDS (Cote d'Ivoire)
MMAS	Ministry of Women and Social Action (Mozambique)
MNC	Maternal newborn care
MNCH	Maternal, newborn, and child health
MNH	Maternal and newborn health
MOGCCD	Ministry of Gender, Children and Community Development (Malawi)
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
MOU	Memorandum of understanding
MSH	Management Sciences for Health
MSM	Men who have sex with men
MSPAS	Ministry of Public Health and Social Assistance (Guatemala)
MUHAS	Muhimbili University of Health and Allied Sciences (Tanzania)
MVC	Most vulnerable children
NARTIS	Nurse-led ART Initiation in Swaziland
NCCS	National Council for Children Services (Kenya)
NCD	Non-communicable disease
NDOH	National Department of Health (South Africa)
NGO	Nongovernmental organization
NHS	National Health Service (Scotland)
NHTC	National Health Training Centers (Namibia)
NICU	Neonatal intensive care unit
NIMR	National Institute for Medical Research (Tanzania)
NISG	National Injection Safety Group (Namibia)
NRP	US Neonatal Resuscitation Program (Russia)
NTBCP	National Tuberculosis Control Program (Bolivia)
NTCP	National Tuberculosis Control Program (Swaziland)
NTP	National Tuberculosis Program
NVP	Nevirapine
OB/GYN	Obstetrician-gynecologist
OGAC	Office of the Global AIDS Coordinator (Department of State)

OHA	Office of HIV/AIDS
OI	Opportunistic Infections
OPD	Outpatient department
OR	Operations research
OVC	Orphans and vulnerable children
OVC&Y	Orphans, vulnerable children and youth
PAC	Provincial AIDS Center (Vietnam)
PAHO	Pan American Health Organization
PCR	Polymerase chain reaction (early infant diagnosis)
PDSA	Plan-do-study-act cycle
PEE	Pre-eclampsia and eclampsia
PEP	Post-exposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary Health Care
PHI	Pediatric hospital improvement
PHTB&RD	Provincial Hospital of TB and Respiratory Disease (Vietnam)
PICU	Pediatric intensive care unit
PISAF	<i>Projet Intégré de la Santé Familiale</i> (Integrated Family Health Project) (Benin)
PKCII	Project Kénéya Ciwara II (Mali)
PLHA	Persons living with HIV and AIDS
PLHIV	Persons living with HIV
PLWH	Persons living with HIV
PLWHA	Persons living with HIV and AIDS
PMI	Patient Master Index
PMTCT	Prevention of mother-to-child transmission of HIV
PNC	Post-natal care
PN-OEV	National Program for the Care of OVC (Cote d'Ivoire)
PPD	Tuberculosis skin test
PPFP	Post-partum family planning
PPH	Post-partum hemorrhage
PPHD	Provincial Public Health Department (Afghanistan)
PPM	Public-private mix
ProCONE	Promotion of essential obstetric and newborn care (Guatemala)
PSI	Population Services International
PSM	Patient self-management
PSMS	Patient self-management support
QA	Quality assurance
QAD	Quality Assurance Department (Honduras)
QAP	Quality Assurance Project
QI	Quality improvement
QIC	Quality improvement collaborative
QIP	Quality improvement project
QIT	Quality improvement team
QMS	Quality management system
QOC	Quality of care
QRM	Quarterly review meeting
R&E	Research and Evaluation
RAAN	North Atlantic Autonomous Region (Nicaragua)
RAAS	South Atlantic Autonomous Region (Nicaragua)
RCH	Reproductive and child health

RCQHC	Regional Center for Quality of Health Care (Uganda)
REPSSI	Regional Psychosocial Support Initiative (East and Southern Africa)
RH	Regional hospital (Afghanistan)
RH	Reproductive health
RHD	Reproductive Health Department (Afghanistan)
RHMT	Regional Health Management Team
RHTC	Regional Health Training Centers (Namibia)
RI	Research Institute
SADC	Southern African Development Community
SBA	Skilled birth attendant
SES	Standard Evaluation System
SILAIS	Local Integrated Health Care System (Nicaragua)
SMS	Short message service (text message)
SMIWA	State Ministry of Women Affairs (Nigeria)
SOP	Standard operating procedure
SOTA	African Health Officers State-of-the-Art meeting
SSD	Sterilization Services Department (Namibia)
SSH	Secretariat of Health (Honduras)
STAR	USAID Sustainable Tourism in the Albertine Rift Program (Uganda)
STAR-E	USAID STAR-Eastern Region (Uganda)
STAR-EC	USAID STAR-East Central Uganda
STAR-SW	USAID STAR-South Western Uganda
STD	Sexually transmitted disease
STI	Sexually transmitted infection
SUSTAIN	USAID Strengthening Uganda's Systems for Treating AIDS Nationally Project
SWAGAA	Swaziland Action Group Against Abuse
TA	Technical assistance
TAG	Technical Advisory Group
TB	Tuberculosis
TBA	Traditional birth attendant
TBD	To be determined
TFR	Total fertility rate
TOI	Task Order 1
TO3	Task Order 3
TOF	Training of facilitators
TOR	Terms of reference
TOT	Training of trainers
TWG	Technical working group
UN	United Nations
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Emergency Fund
URC	University Research Co., LLC
USAID	United States Agency for International Development
USG	United States Government
VAP	Ventilator-associated pneumonia
VCT	Voluntary Counseling and Testing
VHT	Village Health Team
WASH	Water, Sanitation and Hygiene
WG	Working Group
WHO	World Health Organization

WRA
WVI
YSMA

Women of reproductive age
World Vision International
Yaroslavl State Medical Academy (Russia)

Executive Summary

University Research Co., LLC (URC) and its subcontractor team completed the second year of implementation of the USAID Health Care Improvement (HCI) Project Task Order 3 on September 30, 2011.

The HCI Task Order 3 (TO3) contract is one of two global HCI Task Orders implemented by URC during FY11, both sharing the same objectives as the overall HCI Indefinite Quantity Contract: HCI Task Order I (TOI), the original global task order, ran concurrently with HCI TO3 throughout FY11, but with only a small number of activities. With the exception of short-term technical assistance in Indonesia, all countries that had been funded through HCI TOI in FY10 moved entirely into funding through HCI TO3 in FY11.

During FY11, HCI provided technical assistance with field support funding through Task Order 3 in 17 countries: Afghanistan, Bolivia, Cote d'Ivoire, Georgia, Guatemala, Honduras, Kenya, Madagascar, Mozambique, Namibia, Nicaragua, Nigeria, Russia, South Africa, Swaziland, Tanzania, and Uganda. HCI assistance in Albania, Armenia, Ethiopia, Haiti, Malawi, Mali, Niger, Senegal, Vietnam, and Zambia during FY11 was supported through core funds from USAID, and research activities in Ecuador were supported through the project's common agenda funds. In all, HCI worked in 28 countries under TO3 in FY11.

Most of the country assistance programs implemented through HCI Task Order 3 represented a continuation of work or carried out under either TOI or TO3 in FY10. However, new activities were started in Albania, Armenia, Georgia, and Madagascar in FY11, and planning began for new work in Pakistan and Zambia. All HCI work closed out in Vietnam in March 2011.

Many of HCI's field programs expanded their activities in FY11 under TO3. In Afghanistan, HCI began to spread the maternal and newborn health improvements activities to four new provinces, having expanded the work to cover 10 of Afghanistan's 34 provinces. This expansion at the provincial level was linked with support for the Ministry of Public Health of Afghanistan to develop a national policy for health care quality, which was launched in August 2011. In Kenya, pilot testing of standards for services for vulnerable children by multiple implementing partners led to a national endorsement of the standards and a commitment to now roll them out nationwide. In Uganda, a new national collaborative on HIV coverage, retention in care, and clinical outcomes was started with 96 sites in over half the districts in the country, applying best practices developed in smaller demonstration collaboratives in FY10. In Russia, the HIV care model which HCI developed with the city of St. Petersburg was introduced in the neighboring oblasts of Leningrad and Sverdlovsk, and we began new improvement efforts aimed at tuberculosis (TB) diagnosis and treatment at the primary care level in two new oblasts, Saratov and Bryansk. In Bolivia, we spread change ideas for TB services that had been tested in one city (El Alto) to another, Cochabamba, through a new TB spread collaborative.

New HCI activities in FY11 included an improvement collaborative aimed at strengthening the performance of community health workers (CHW), was started at the end of the year in Ethiopia, and the four-country assessment of maternal and newborn care practices and care of non-communicable diseases in women of reproductive age completed in Albania, Armenia, Georgia, and Russia. HCI's applications of the Chronic Care Model expanded in Uganda and Tanzania, with a new emphasis on strengthening systems to respond to chronic conditions, patient self-management, and community support. New efforts to eliminate gaps in the continuum of care for prevention of mother-to-child transmission (PMTCT) were launched in Tanzania. In Kenya, we launched a new improvement collaborative to strengthen the linkages between antenatal care and PMTCT. In Guatemala, building on HCI work in FY10, we intensified our work to reduce maternal and child malnutrition through building capacity for cost-effective essential nutrition actions at the community and facility levels.

During the year, HCI carried out 54 research and evaluation studies under TO3, completing 10 and with plans to finalize the others in FY12. In November 2010, Dr. Edward Broughton, who has served as the

project's economic analyst since fall 2009, took over as Research Director. Under his leadership, the unit has worked to design studies with control or comparison groups to strengthen the case for attribution and has instituted a systematic Institutional Review Board process—both as part of the unit's larger goal to strengthen the evidence base about quality improvement in peer-reviewed health literature. Also in FY11, Dr. Astou Coly, a French-speaking epidemiologist, and Dr. Sarah Smith, a Spanish-speaking anthropologist who works on the project through a subcontract with EnCompass LLC, joined the research team.

A new technical leadership activity for HCI in FY11 was the development and implementation of a gender strategy for the project that integrates gender considerations into our approach to improving health care in assisted countries. HCI developed a gender framework for guiding consideration of gender issues in QI intervention planning, implementation, and reporting and began organizing trainings led by local gender experts to build staff skills in gender considerations within the QI process.

During the year, HCI continued collaboration with many international organizations and partnerships, including the WHO Patient Safety Program, the Global Health Workforce Alliance, the Global Development Alliance for Helping Babies Breathe, and the International Society for Quality in Health Care. HCI staff made 53 presentations in various formats at 19 international, regional, and national conferences, to share QI results to inform professional audiences of the effectiveness of QI approaches and advocate for their broader adoption, and 26 presentations on project results and approaches to USAID, host country, and cooperating agency staff, as part of the project's efforts to promote awareness of QI approaches and results. During FY11, one article on HCI TO3 results was published in a peer-reviewed journal, and a second article was submitted for publication. The project published 14 technical reports, 13 research and evaluation reports, 11 short reports and one toolkit describing QI interventions and their results from work implemented under Task Order 3.

1 Introduction

This FY11 Annual Project Report for Task Order 3 of the USAID Health Care Improvement Project summarizes the project's key activities and results during the second year of implementation: October 1, 2010 through September 30, 2011.

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 support 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 second 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 are highlighted in our annual work plans and quarterly reporting to the Contracting Officer's Technical Representative (COTR). Table 1 summarizes how our field activities in FY11 contributed to attainment of each relevant MDG by country.

Table 1. Contribution of HCI TO3 field activities to the Millennium Development Goals

MDG	How HCI country activities contribute to MDG attainment
MDG 1: Eradicate Extreme Poverty and Hunger	Cote d'Ivoire: Improve quality of programs targeting orphans and vulnerable children, 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 Kenya: Improve quality of services targeting orphans and vulnerable children in the areas of food and nutrition, shelter and care, and 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
MDG 2: Achieve Universal Primary Education	Cote d'Ivoire: Improve quality of programs targeting orphans and vulnerable children, including access to primary education Ethiopia: Identify characteristics of sustainable community support to meet the primary education needs of vulnerable children Kenya: Increase school enrollment for vulnerable children affected by HIV through improved quality of coordinated care Mozambique: Increase school enrollment for vulnerable children affected by HIV through introduction of evidence-based education standards Nigeria: Improve standards for OVC services in education
MDG 4: Reduce Child Mortality	Afghanistan: Reduce neonatal deaths by improving quality of care at public and private health facilities, as well as community-based health services Cote d'Ivoire: Improve quality of programs targeting orphans and vulnerable children, including health care 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 Honduras: Improve essential newborn care services through institutionalization of continuous quality improvement; 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>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>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>Russia: Reduce neonatal mortality through improved quality of care for newborn complications, improved management of pre-term births, prevention of hypothermia, and increased breastfeeding</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 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>
MDG 5: Improve Maternal Health	<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>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 EONC services by institutionalizing continuous quality improvement 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>Russia: Promote appropriate referral of high-risk pregnancies; decreasing unwanted pregnancies among teens and women at high medical and social risk; increase family planning counseling of these groups and post-abortion counseling</p> <p>Tanzania: Apply QI for increased screening of TB in pregnant HIV+ women; improve retention in care and outcomes for HIV+ 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>

MDG 6: Combat HIV/AIDS, Malaria and Other Diseases	<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</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</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> <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>Russia: Improve system of detection, referrals, and medical follow-up of HIV-positive patients to improve retention and increase enrollment in 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 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>Vietnam: Increase access to TB/HIV services by integrating TB and HIV services at district and facility levels; increase referral linkages with ART service providers; and increase TB case detection and treatment success rates by involving private providers</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>
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2 Country and Regional Technical Assistance

AFRICA

2.1 Cote d'Ivoire

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
HIV Care and Treatment: ART and PMTCT Collaborative	<ul style="list-style-type: none"> ▪ Extend the quality improvement project from 41 sites to 120 sites ▪ Train the four PEPFAR implementing partners: ACONDA-VS-CI, EGPAF, HAI, ICAP ▪ Improve documentation, retention, and integration in care for PLHIV. 	The 120 sites are located in 50 out of 83 districts in the country, in 17 out of 19 regions. HCI's program in FY11 reaches 16 million population in Cote d'Ivoire 3 university hospitals, 9 regional hospitals, 33 general hospital, and 71 medical centers

OVC Care	<ul style="list-style-type: none"> ▪ Improve quality of programs targeting orphans and vulnerable children ▪ Develop outcome-based standards that define quality services for vulnerable children ▪ Gather evidence that these standards are feasible at the point of service delivery and are actually making a difference in children's lives ▪ Improve quality in OVC support on four site ▪ To prepare a concept paper on OVC standards phase of extension ▪ Building capacity of five social centers and integrate QI in their daily activities. 	<p>Piloting of standards is conducted in four sites or platforms in different regions (Abidjan, Bouaké, Yamoussoukro, San Pédro).</p> <p>61 NGOs are engaged in QI process with QI team constitution.</p>
HIV Prevention: Abstinence, Other	<ul style="list-style-type: none"> ▪ Evidence that applying standards for peer education improves quality in program design ▪ Evidence that applying standards for peer education makes a change in behavior and in clinical outcomes. ▪ Develop national standards and indicators for peer education programs in prevention activities; ▪ Building capacity of QI coaches in the four regions (MLS, CTAIL and Technical Partners) 	<p>Standard pilot is conducted in four regions (Abidjan, Bouaké, Yamoussoukro, San Pédro)</p> <p>28 NGOs and CBOs are engaged in the standard development process.</p> <p>The standard will be spread in 10 more regions.</p>
Laboratory Accreditation	<ul style="list-style-type: none"> ▪ Support WHO/CDC laboratory accreditation process in country with 25 Labs involved in HIV testing. ▪ Improve the quality of laboratory services in HIV sites ▪ Develop tools to implement the accreditation process 	<p>25 labs in 14 regions are involved in the project.</p> <p>10 national labs assessors and 2 regional assessors are supporting the labs work in site.</p>

Main Activities and Results

ART and PMTCT Collaborative

In September-October 2010, HCI organized the first learning session for the spread phase of the antiretroviral therapy (ART) and prevention of mother-to-child transmission (PMTCT) collaborative, which added 80 new sites, for a total of 120 sites participating in the spread phase. Of the sites, 116 are working on improving ART care and 96 on PMTCT, with many working on both services. Learning sessions were organized by region, with regional coaches from the Ministry of Health (MOH) and implementing partners playing a key role in facilitating learning sessions. In the first learning sessions, best practices developed by the pilot sites were shared with spread sites. These gatherings were followed by coaching visits. In October and November, HCI worked with implementing partners funded by the U.S. President's Emergency Plan for AIDS (PEPFAR)—including ACONDA, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), International Center (ICAP), and the HIV/AIDS Alliance (HAI)—to develop new strategies for regional coaching support.

HCI assistance to the Ministry of Health and implementing partners was suspended by USAID in March 2011 due to the political crisis, but activities resumed in June 2011. In September 2011, HCI organized the second learning session as six regional meetings in Bouake, Daloa, Yamoussoukro, Abidjan, San Pedro, and Abengourou. Most (101 out of 120 sites) teams were able to participate in this session. Data presented by teams at the learning session showed that despite the disruption caused by the

political crisis, the pilot PMTCT sites have been able to increase the percent of infants born to HIV-positive women who are tested, from 17% in October 2008 to 88% in June 2011. For spread sites, this percentage increased from 50% in June 2010 to 67% in June 2011. At the ART sites, the percentage of patients with complete medical records increased from 12% in July 2008 to 83% in June 2011 for pilot sites, and from 33% in June 2010 to 43% in June 2011 for the spread sites. For all sites, the percentages of those lost-to-follow-up has decreased and remains under 20% as last reported in June 2011.

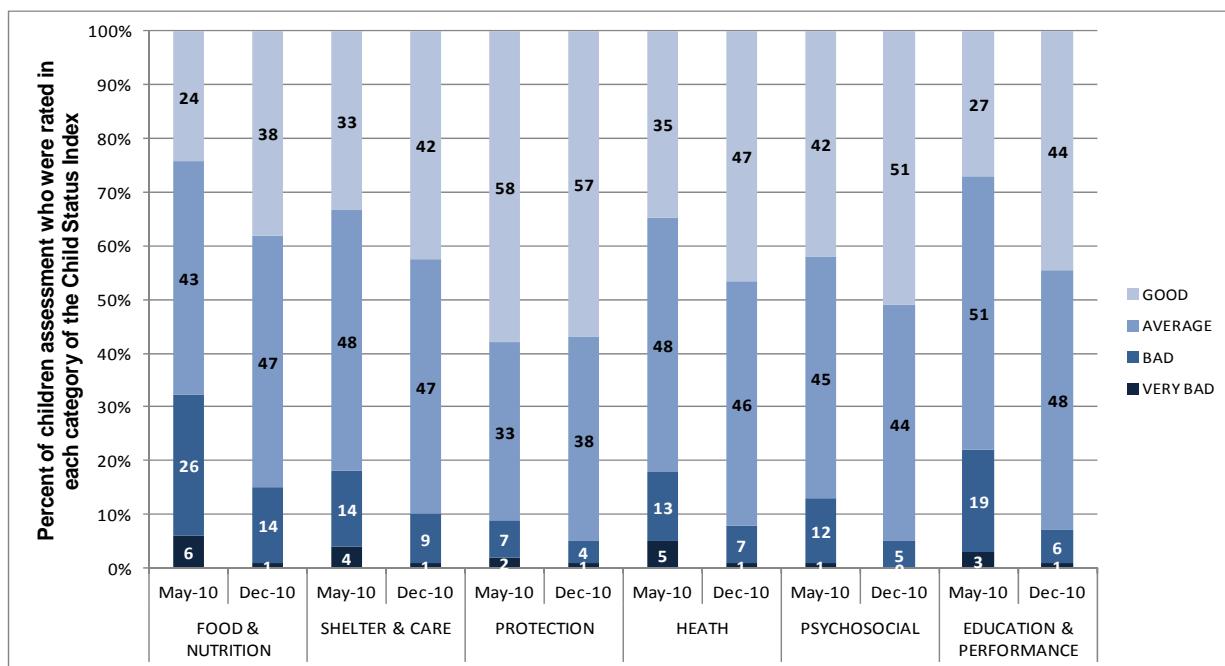
Care for Orphans and Vulnerable Children

During FY11, HCI provided support to some 61 non-governmental organizations (NGOs) to pilot quality standards for programs serving orphans and vulnerable children (OVC) in four sites (*plateformes*). The standards had been developed with HCI support in 2009. The NGOs involved in the piloting re-assessed the well-being of a sample of children they served in December 2010, using the Child Status Index to score how well children fared on six service domains. The results, presented in

Figure 1 for 48 NGOs for the first measurement (n=374 children) and 34 for the second (n=457), show a marked increase in the proportion of children whose well-being was rated as adequate or good. The standards piloting phase ended in February 2011 with a national validation workshop to review the results of piloting and finalize the standards. HCI printed the standards document for the National OVC Program (PN-OEV) for distribution to all NGOs and other partners. HCI also developed a strategy to distribute and communicate the standards and submitted it to PN-OEV and PEPFAR for review.

Following the resumption of technical assistance in June, HCI adapted tools that had been used in the piloting phase for use in national spread. In August 2011, HCI began a series of orientation meetings with the government social services centers and NGOs in 16 new *plateformes* or sites that would be involved in the spread phase. The spread phase of the OVC standards roll-out will involve approximately 140 local NGOs. HCI provided training for 18 regional staff of the Ministry of Women and Social Affairs who will serve as quality improvement coaches to assist NGOs to implement standards. In all, some 100 coaches from the Ministry, NGOs and prime implementing partners will be training to support the nationwide implementation of OVC standards.

Figure 1. Cote d'Ivoire: Improvement in well-being of vulnerable children served by NGOs piloting quality standards



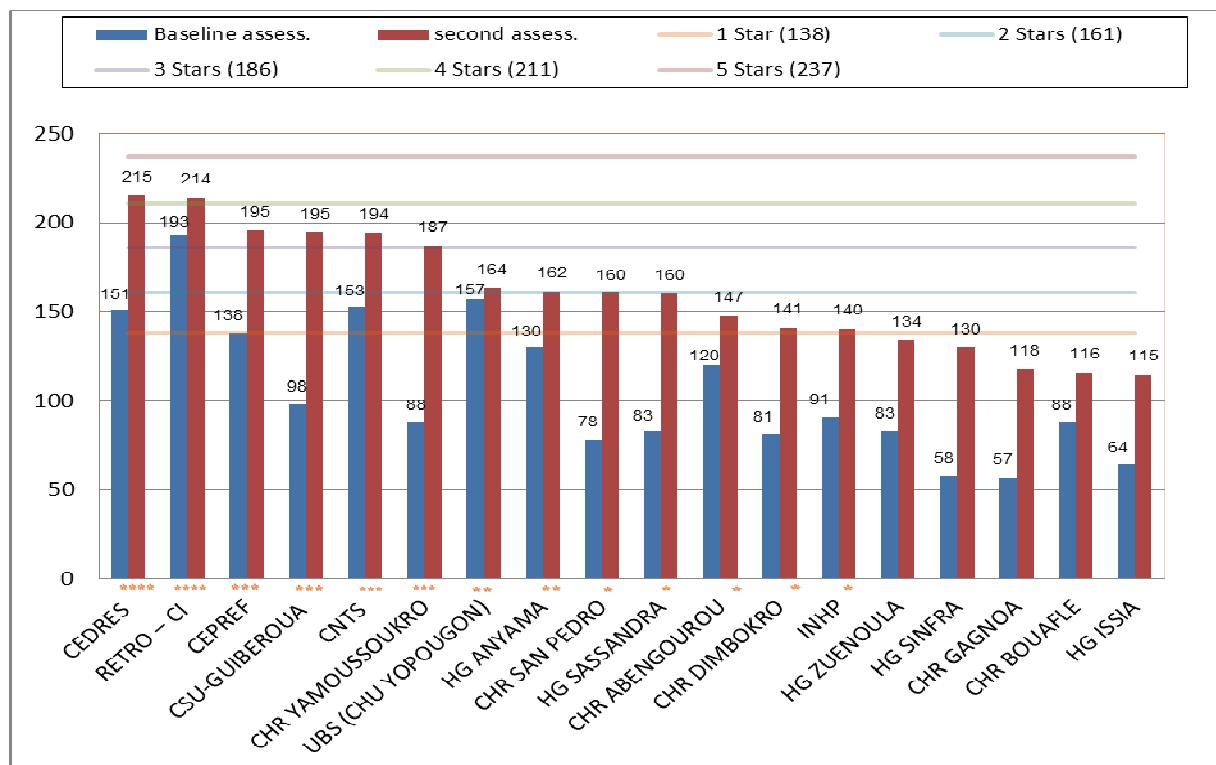
HIV Prevention

During the first quarter of FY11, HCI assisted some 28 local NGOs working in four plateformes (Bouaké, Yamoussoukro, San Pedro, and Abidjan) to pilot standards for HIV prevention through peer-to-peer counseling. HCI trained staff of the Ministry of HIV/AIDS and NGOs in improvement, to serve as coaches for the implementation of standards, and accompanied them on coaching visits to monitor the testing of the standards by individual NGOs. By December 2010, 22 of the 28 NGOs participating in the piloting of HIV prevention standards had assessed their current performance against the standards. In February 2011, HCI organized a national workshop to validate the standards for a peer education program. Following the resumption of technical assistance, HCI developed tools to support the national roll-out of the peer prevention standards, including tools for peer education program performance evaluation, tools for supervision, and tools for individual self-assessment. The tools were pre-tested from August to October 2011 with one NGO that had been involved in the piloting process.

Laboratory Accreditation

Following on an assessment of 25 national laboratories in June 2010, in FY11, HCI worked with the WHO Africa Regional Office to provide support to labs to develop their capacity to provide quality lab services to support HIV/AIDS services, as part of a WHO-sponsored laboratory accreditation program. In October 2010, HCI developed tools to guide coaching visits and applied these tools during site visits to 22 of the 25 laboratories from October 2010 to March 2011. Key areas of technical support provided by HCI included the following: on-site training in bio-safety, documenting standard operating procedures, record keeping, preventive maintenance of equipment, and customer satisfaction, and developing plans for corrective actions. In January 2011, HCI organized a workshop to train lab managers in organization of effective lab processes. From March-September 2011, HCI supported the second pre-accreditation assessment in 18 out of 25 labs. As shown in Figure 2, a higher proportion of labs scored two stars or higher at the second assessment (56% versus 6% in the first assessment).

Figure 2. Côte d'Ivoire: Comparative results of first and second quality assessments in 18 laboratories evaluated for accreditation



Directions for FY12

In addition to continuing current activities, HCI will work with MEASURE Evaluation to support the national institution in charge of the health and management information systems (H/MIS) design national standards for the H/MIS and monitoring and evaluation activities. HCI will also support broader institutionalization of QI process in support of Health Systems Strengthening.

2.2 Kenya

Overview of HCI's programs in FY11

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Support the Technical Working Group (TWG) to develop draft standards for OVC programs	<ul style="list-style-type: none"> ▪ Finalize the draft standards by incorporating all stakeholder views 	The service standards are to be used at the service delivery point by all stakeholders in the country
Gather evidence that standards make a difference in children's lives through piloting	<ul style="list-style-type: none"> ▪ The piloting will try to answer four main questions: <ol style="list-style-type: none"> 1) Are the standards doable at the point of service delivery? 2) Are they actually making a difference in organizational practices (based on the dimensions of quality)? 3) Are they making a difference in children's well being? and 4) What are the best practices to implement the standards? 	4 provinces have been identified with 7 districts participating as follows; Nairobi – Kasarani (492 children) and Westlands (3187 children) Eastern – Meru North (4806 children) Nyanza –Homa Bay (5241 children) and Nyando (2813 children) North Eastern – Garissa (4800 children)
Assist the Ministry of Gender, Children and Social Development to finalize OVC quality standards	<ul style="list-style-type: none"> ▪ Incorporate feedback from the evidence gathered during piloting 	National level
Develop harmonize and disseminate QI materials for Implementing partners	<ul style="list-style-type: none"> ▪ Review and finalize QI tools for use by IPs at the point of service delivery 	The QI materials will be used at the point of service delivery mainly by community volunteers. They will be available for use nationwide.
Communicate standards across partners	<ul style="list-style-type: none"> ▪ Organize for service standards dissemination workshops at National and Provincial level 	The activity will target service providers nationwide
Engage APHIA Plus implementing partners in OVC QI practice	<ul style="list-style-type: none"> ▪ Communicate standards across APHIA Plus Partners ▪ Conduct provincial level dissemination of QI Standards and job Aids and Communication strategy ▪ Support Implementing partners in the development and implementation of step down work plans ▪ Promote documentation and sharing of best practices 	Nationwide focusing on the APHIA project sites i.e. Coast/Nairobi, Central/Eastern, Western Nyanza, Rift Valley and North Eastern provinces
Scale up evidenced-based QI methods to other organizations and regions	<ul style="list-style-type: none"> ▪ Develop scale up plans for QI in OVC programs in other Organization and regions in the country 	Nationwide with a focus to organizations and regions that did not participate

Main Activities and Results

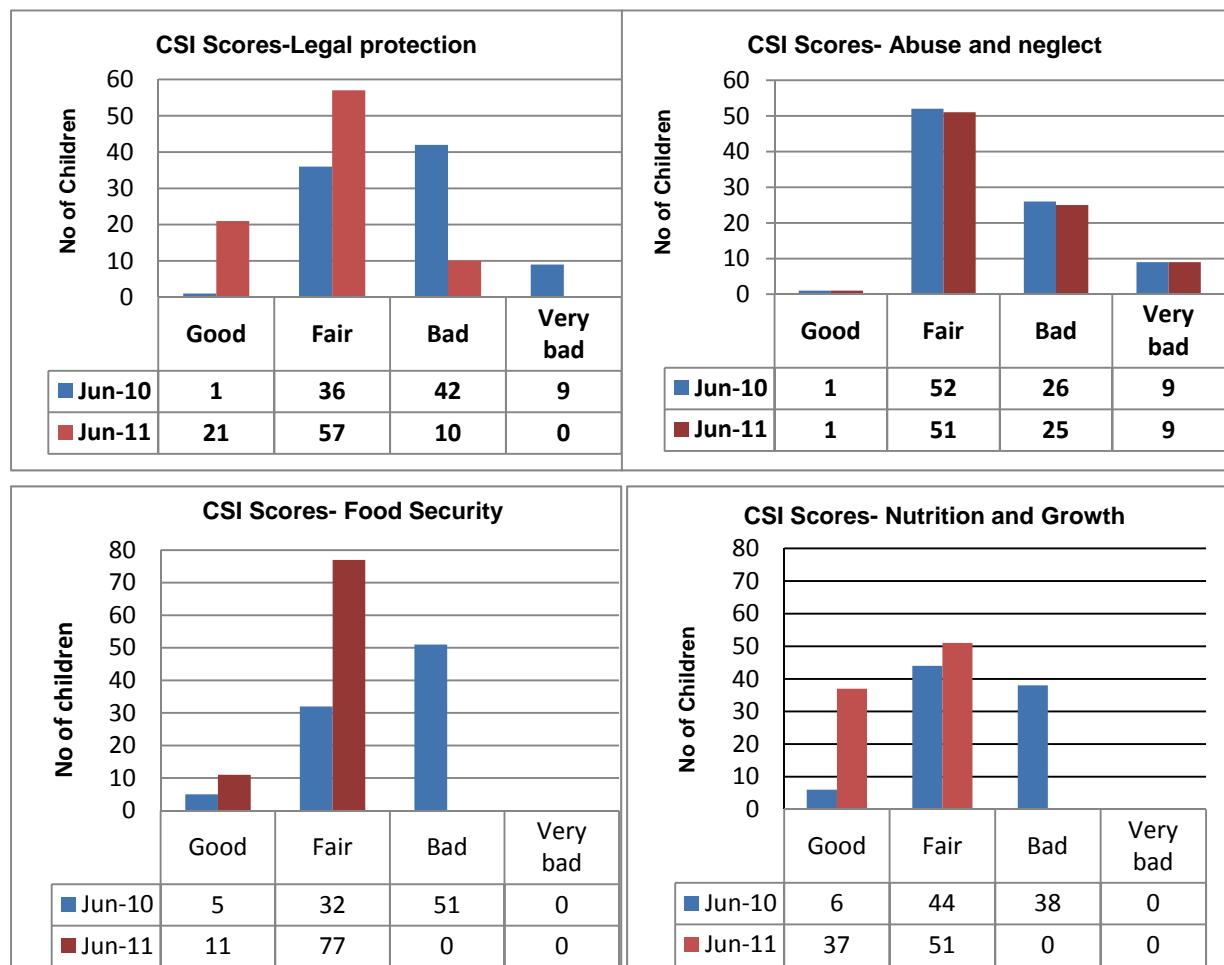
Support the Technical Working Group to Develop Draft Standards for OVC Programs

HCI supported the national OVC QI Technical Working Group (TWG) throughout the year in achieving its activities, including the following: the organization of regional learning sessions and the national learning and validation session; consolidation of results from the regional validation meetings into the draft standards; and planning for the finalization of the draft.

Gather Evidence that Standards Make a Difference in Children's Lives through Piloting

During FY11, HCI worked with piloting teams in seven districts to test how applying the quality standards drafted in FY10 has affected the quality of services for vulnerable children. Data gathered through repeat measurements of the Child Status Index (CSI) was used by helped improve the quality of care by; Enhancing community responses to OVC household needs; Promoting referrals and linkages thus promoting the leveraging of resources among partners; And promoting effective service delivery. From the piloting, it was also evident that achievement of desired outcomes varied per service based on the socio cultural environment. This information was critical in informing the implementation strategy for OVC service providers across the country. Outcome data was measured using the CSI tool and results helped inform QI intervention progress. The Maua Methodist Hospital tested worked on two service areas, child protection and food and nutrition. Figure 3 shows their performance for four factors in the two service areas.

Figure 3. Kenya: Maua Methodist Hospital CSI scores



This activity will be implemented once the service standards are finalized, however plans are underway to have Populations Service International (PSI) assist in developing job aids and popular versions of the standards to use in dissemination.

Communicate Standards across Partners

In the past year, Kenya held four regional learning sessions and one national one. The regional meetings were coordinated by the provincial directors of children services with support from HCI and the OVC Secretariat. The national meeting on the other hand was organized by the QI technical working group and coordinated by HCI and the OVC Secretariat. At the regional level, piloting teams shared their experiences with both government and implementers from the civil society organizations. Through these meetings, all present were oriented on the standards and taken through the rationale for QI. As a result of these efforts, HCI has been able to communicate standards in their draft form in all regions of the country. The national learning session in July 2011 brought together over 100 implementers from across the country and was officially opened by the Secretary in the Department of Children Services. The government reiterated its commitment to serving vulnerable children across the country and belief that the standards will help improve the quality of OVC care.



Ms Mbuga, OVC Secretariat speech.
Photo by URC staff.



National learning session forum.
Photo by URC staff.

Engage APHIA Plus IPs in OVC QI Practice

This year saw the roll-out of QI methodology across the country through the APHIA Plus mechanism. HCI organized a QI orientation meeting for APHIA Plus Chiefs of Party in March 2011 to promote buy-in at the decision making level. The APHIA Plus projects participating in roll-out of the standards include:

- APHIA Plus Nairobi/ Coast (Nairobi and Coast province)
- APHIA Plus Kamili(Central and Eastern province),
- APHIA Plus North Arid Lands (North Eastern Province, Eastern Province and Rift Valley),
- APHIA Plus Western Kenya(Western and Nyanza Province)
- APHIA Plus Rift Valley (covering the agricultural part of Rift valley province)
- AMPATH (Rift Valley and Western province)

HCI trained coaches drawn from the APHIA Plus project staff, implementing partners (CBOs, NGOs and FBOs), Ministry of Gender Children and Social Development, and the Ministry of Public Health and Sanitation. The programs have since initiated implementation activities in the counties. One major challenge that has affected the engagement has been the delay in the finalization of funding and partnership arrangements between the APHIA Plus projects, USAID, and the implementing civil society organizations.

Scale Up Evidenced-based QI Methods to Other Organizations and Regions

The APHIA Plus mechanism provided an ideal opportunity for the scale-up exercise. This year saw the expansion of HCI OVC QI interventions to all corners of the country. The involvement of the Department of Children Services staff in the project level interventions has also led to government-led scale-up efforts in some districts. HCI hopes that the training of government District Children Officers will help further strengthen the scale-up efforts.

Directions for FY12

In FY12, HCI will support the Ministry of Gender, Children, and Social Development to launch and disseminate the approved quality standards across all eight regions of Kenya. HCI will also build the capacity of Ministry staff in quality improvement and develop with them mechanisms for developing that capacity among implementing partners throughout the country. HCI will continue providing technical support to the APHIA Plus implementers on OVC care quality improvement and facilitate the institutionalization of QI in their programming.

2.3 Madagascar

Overview of HCI's Program in FY11

Key activities	What are we trying to accomplish?	How will we know?	Geographic scale
Madagascar CHW Assessment	<ul style="list-style-type: none">▪ Assess functionality of CHW programs in Madagascar with a focus on SantéNet2 and UNICEF-supported CHW activities▪ Utilize the CHW AIM tool to analyze current services provided by CHWs▪ Conduct focus groups to review supervision practices & tools▪ 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	<ul style="list-style-type: none">▪ Functionality scores in each of the 15 components of the CHW AIM tool, document review and validation site visits of the CHW programs▪ Analysis of focus group discussions on supervision practices & tools▪ Participation of key stakeholders in a Training of Facilitators (TOF) workshop▪ Participation of key stakeholders in a final assessment findings dissemination meeting	<ul style="list-style-type: none">▪ 3 Regions total: Analamanga, Atsinanana, Androy▪ 3 SanteNet2 regions out of 16 currently supported by SanteNet2/ USAID▪ 1 UNICEF region out of 5 regions supported by UNICEF

Main Activities and Results

HCI led the qualitative component of a community health worker (CHW) program assessment in Madagascar. The CHW Assessment and Improvement Matrix (CHW AIM) methodology developed by HCI was used to assess the functionality of the Kaominina Mendrika Salama (KMS) / USAID SantéNet2 (SN2) Project in three regions and the PCIMEC approach (supported by UNICEF) in one region.

Additionally, a series of focus groups and interviews were held to gather feedback on current supervision practices and tools. The assessment activities were conducted in three regions: Analamanga, which is in the center of the country surrounding the country's capital; Atsinanana, a rural region in the eastern region; and Androy, a rural region in the south. Assessment activities included the following: building capacity of in-country facilitators on the CHW AIM methodology, a document review, a one-day multi-stakeholder assessment workshop, and validation visits in two communities that were not represented in the workshops. The supervision component was undertaken with participants who were not present during the workshop or validation visits.

In all, 130 participants were involved in the assessment activities, which included individuals from varying professions, functions and hierarchical levels. Preliminary findings (see Table 2) indicate differences in results across regions, which could have resulted from variations in organizational implementation approaches, differences in the socio-economic situation within the three selected regions, and cultural barriers to behavior change. All of the aforementioned factors likely influenced outcomes.

Table 2. Madagascar: Overview of functionality scores of 15 programmatic components across three regions

No.	Component	KMS Analamanga (1 NGO)	KMS Atsinanana (4 NGOs)	KMS Androy (2 NGOs)
1	Recruitment	3	3	3
2	CHW Role	2	3	2
3	Initial Training	2	2-3	3
4	Continuing Training	2	3	2
5	Equipment and Supplies	1	2-3	1
6	Supervision	2	3	2
7	Individual Performance Evaluation	2	1-3	1
8	Incentives	2	2	2
9	Community Involvement	3	3	2
10	Referral System	2	3	2
11	Opportunities for Advancement	3	3	2
12	Documentation and Information Management	3	3	2
13	Linkages to Health Systems	2	2	2
14	Program Performance Evaluation	3	3	1
15	Country Ownership	2	2	1
		34	38-42	28

Prior to the assessment, the CHW AIM toolkit was adapted to the country-specific context within Madagascar, which included the development of two new intervention matrices: Family Planning, and Water, Sanitation and Hygiene. In August 2011, a stakeholder meeting was held to review the assessment tools and to obtain recommendations concerning the supervision component. All relevant materials were made available in French (CHW AIM toolkit) and key tools (functionality matrix, intervention matrices and various assessment tools) were translated into Malagasy.

Overall, the scores indicate a positive result with regard to the functionality of the KMS/SN2 program, since the majority of components achieved functionality scores of level 2 (functional) or level 3 (best practice). The review of the intervention lists displayed discrepancies across regions in the provision of services provided by CHWs. Focus groups and semi-structured interviews were conducted with three target groups (supervisors, CHW and community representatives) to examine the existing supervision practices and tools. Preliminary findings indicated a consistent understanding across groups in all regions on the approach of supervision, which was viewed as being a useful element for ensuring. Supervision improves the quality of service delivery by capacity building and by providing support to CHWs in problem solving.

Directions for FY12

HCI will be leading the development of a synthesis report in the second quarter of FY12, which will triangulate the qualitative and quantitative findings of the CHW program assessment. This will be translated, along with the qualitative and quantitative reports, into French, published and disseminated in a stakeholders' forum in April or May 2012.

2.4 Mozambique

Overview of HCI's Program in FY11

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Strengthen national capacity to improve programming for orphans and vulnerable children	<ul style="list-style-type: none"> ▪ Institutionalize the science of improvement within the Ministry of Women and Social Action (MMAS) and implementing partners ▪ Develop a commitment, vision, allocation of resources toward improvement for OVC services within the QI Task Force which is housed in the Ministry of Women and Social Affairs (MMAS) 	National, across regions, in collaboration with UNICEF, many partners and their sub-partner NGOs and CBOs
Gather evidence on draft service standards	<ul style="list-style-type: none"> ▪ The piloting of the draft service standards will try to answer four main questions: Are the standards doable are the point of service delivery? Are they actually making a difference in organizational practices (based on the dimensions of quality), are they making a difference in children's wellbeing? What are the best practices to implement the standards 	Three regions with key implementing partners as identified by USAID/MOZ and the Ministry: Zambézia, Gaza and Cabo Delgado
Home-based care situational analysis	<ul style="list-style-type: none"> ▪ Document best practices and identify barriers to quality care 	National

Main Activities and Results

Strengthen National Capacity for Improving OVC Programs

Following on the development of draft standards for minimum care of vulnerable children in FY10, HCI provided technical assistance to the Ministry of Women and Social Affairs (MMAS), the national QI Task Force, and other stakeholders in the piloting of those standards in three provinces in FY11: Cabo Delgado, Zambezia, and Gaza. The QI Task Force selected seven different implementing partners working in the three provinces to participate in the piloting. In March and April 2011, HCI supported learning sessions with provincial authorities and piloting teams in Cabo Delgado and Gaza. Challenges in piloting have included coordination between national and provincial ministries in scheduling activities; technical issues around use of the Child Status Index as an outcome measure (an issue with the tool, not unique to Mozambique); and delays in activities due to problems with URC's registration in Mozambique, which led to a temporary suspension of HCI activities in June 2011.

Gather Evidence on Draft Service Standards

HCI introduced team journals to collect data on the four questions addressed by the piloting. Because of the suspension of URC activities, no evidence could be collected during the year.

Home-based Care Situational Analysis

HCI was asked by USAID to assist the Government of Mozambique to develop standards for home-based care (HBC) services, according to a similar model as has been used in the development of the standards for vulnerable children. In June 2011, HCI carried out a situational analysis on the current state of home-based care in Mozambique in order to: (1) describe how HBC is implemented in Mozambique, (2) highlight critical barriers to effective HBC in Mozambique, and (3) review standards and guidelines for HBC. A literature review was conducted to get an overview of HBC in Mozambique throughout the years and to learn some regional and international approaches to HBC. Two questionnaires were developed to capture the current state of HBC in the country and sent out in person and electronically to 113 stakeholders in all eleven provinces. Preliminary results were shared and discussed with 53 stakeholders during interviews conducted to gain stakeholders' inputs on the findings and to probe them on barriers to HBC. Finally, a list of 18 barriers was produced from the

interviews and it was sent out electronically to 71 stakeholders including the 53 interviewees and 18 others to select the top 10 critical barriers. The report was submitted to USAID for review.

Directions for FY12

In FY12, HCI will continue to build the capacity of the MMAS and main stakeholders in integrating the OVC minimum standards within the national strategy and in gathering and communicating evidence of how to operationalize the standards. We will also work with the government, implementing partners, and advocacy groups for persons living with HIV (PLWH) to develop quality standards for home-based care services.

2.5 Namibia

Overview of HCI's Program in FY11

QI interventions	What are we trying to accomplish?	Scale of intervention
To promote best practices in injection safety and waste management	<ul style="list-style-type: none"> ▪ Conduct quarterly meeting of the National Injection Safety Group ▪ Strengthening of the district infection prevention and control committees ▪ Strengthen integration of injection safety-health care waste management (IS-HCWM) in pre- and in-service training institutions ▪ Explore the development a postgraduate course on waste management ▪ Register the IS-HCWM trainings with the Namibia Health Professional Council ▪ Jointly with the MOHSS and other stakeholders, develop a waste collection and waste treatment strategy ▪ Review, print and distribute policies and guidelines on waste management ▪ Build capacity of health care workers on IS-HCWM activities ▪ Conduct joint supportive supervision with the regional and district trainers and/or supervisors ▪ Develop/adapt, print and distribute IEC materials on IS-HCWM ▪ Strengthen M&E systems for IS-HCWM activities 	13 regions (Total population of Namibia: 2.1 million)
To improve health worker knowledge on infection control and occupational safety	<ul style="list-style-type: none"> ▪ Strengthen infection control committees at regional, district and facility level ▪ Print and distribute guidelines on infection control and prevention (IPC) and post-exposure prophylaxis (PEP) ▪ Build capacity of health care workers on infection control and occupational safety ▪ In collaboration with University of Stellenbosch Department of Infection Prevention and Control conduct trainings for staff from the Central Sterilization Services Department (CSSD) ▪ Register the IPC and PEP trainings with the Namibia Health Professional Council ▪ Develop/adapt, print and distribute IEC materials on IPC and PEP ▪ Conduct joint supportive supervision with the regional and district trainers and/or supervisors 	13 regions

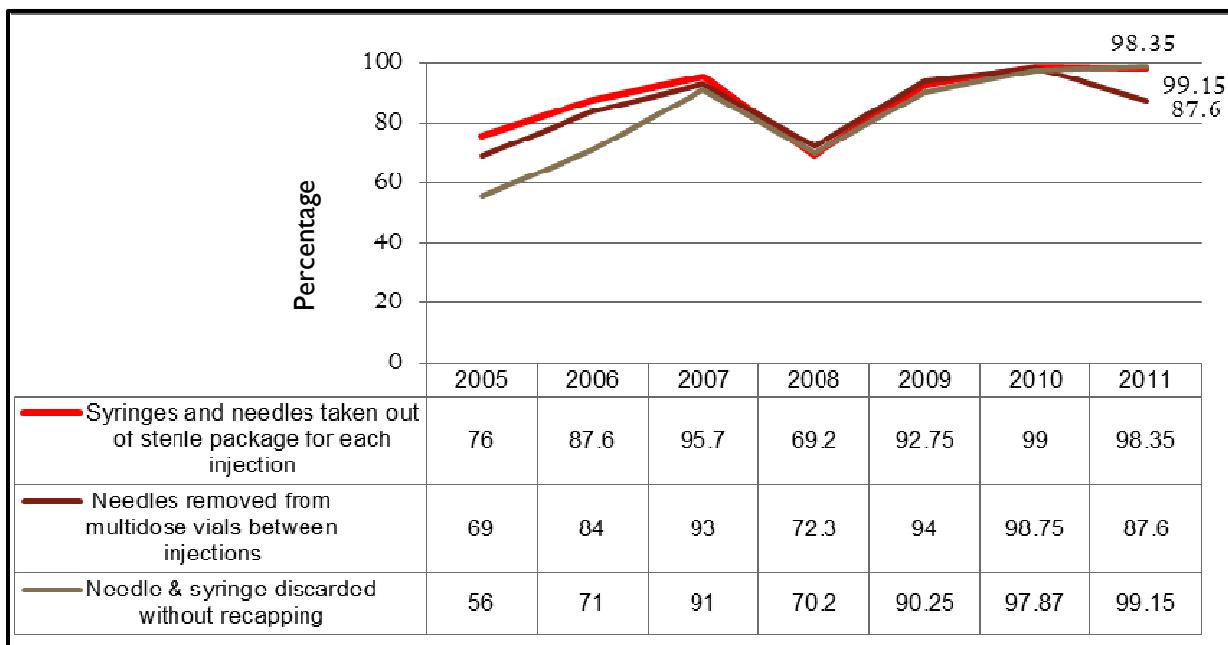
Main Activities and Results

Promotion of Best Practices in Injection Safety

HCI assistance in Namibia supports the Ministry of Health and Social Services (MOHSS) in institutionalizing best practices in injection safety, infection prevention and control, and waste

management, building on assistance that URC has provided since 2005. In FY11, over 90% of facilities nationwide report compliance with patient safety guidelines. For example, for each injection provided in the facilities, over 98% are done using a needle and syringe just taken out of a sterile package. Recapping of needles is hardly seen in any of the facilities. The practice of not recapping has been reinforced by the requirement to discard the syringe and needle into a sharps box after every injection and/or procedure. Even though still a challenge, the project has made improvements in injection safety by encouraging the use of single-dose vials and assignment of multi-dose vials to only one patient whenever possible; reinforcing the practices such as accessing the vial using a sterile syringe and needle for each injection, never leaving needles on top of vials, and never combining contents of left over vials for later use. Figure 4 shows the overall progress in improving the injection process in all 13 regions of the country.

Figure 4. Namibia: Sustained practice of safe injection techniques, 2005-2011



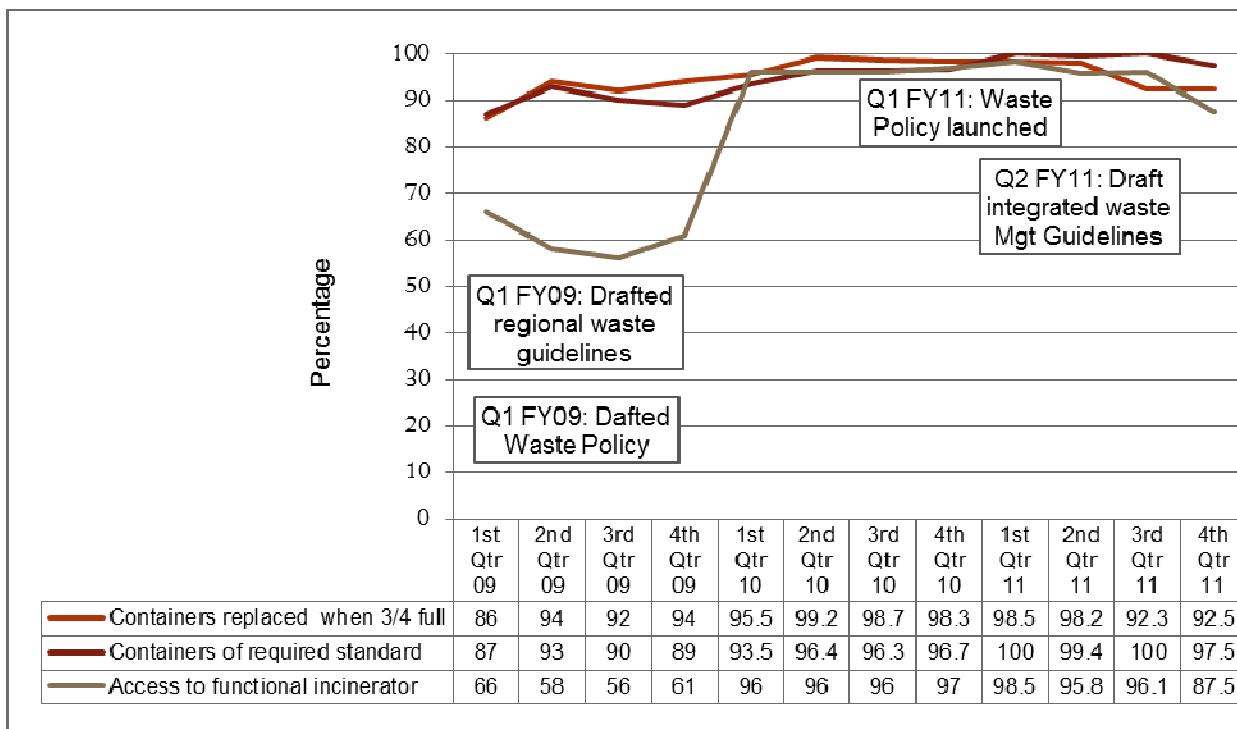
Facility audits completed by the end of FY11 showed that the average number of injections administered per patient remains fewer than 3 as opposed to 14.5 at the beginning of the project. HCI has been asked to now focus assistance on the 34 district hospitals identified as those that are responsible for over 70% of the injections in the country. In collaboration with the hospitals' infection control committees, HCI has implemented in-service refresher trainings for prescribers, pharmacists, and members of the therapeutic committee. The pharmacy and therapeutic committees in each hospital are also tasked with monitoring the appropriate use of medication.

Promotion of Best Practices in Health Care Waste Management

Waste segregation is widely now practiced in all facilities, with over 90% of facilities instituting the color coded system for waste segregation. The major challenge remains the occasional lack of color-coded bags used for waste segregation; HCI is collaborating with the Supply Chain Management Project to improve the procurement process for these commodities. The MOHSS Central Medical Stores continues to procure standard sharps boxes. The facility audit reports and spot checks conducted by HCI show that 90% of facilities have sharps boxes that are replaced when they are three-quarters full. Access to a functional incinerator has also been greatly improved by the procurement of more incinerators by the MOHSS. However, it's still possible to find old incinerators that frequently break down in a number of

districts. The MOHSS plans to replace most of the old incinerators by end of 2012. Figure 5 shows the trend for improved waste management since the beginning of HCI assistance.

Figure 5. Namibia: Improved waste management practices, 2009-2011



Policy Development and Implementation

The Division of Quality Assurance in collaboration with HCI and other stakeholders is currently assessing the national quality management system used to monitor and improve quality in health service provision nationwide, and use the information obtained to establish an improved national quality management program through development of Quality management policy and strategic plan. The draft Integrated Waste Management guideline developed in FY11 is still undergoing review by multiple stakeholders. The review is expected to be completed by FY12 Q1, thereafter printed and distributed. The guideline outlines the principles essential for environmentally friendly management of health care waste and provides guidance for the next five years. HCI provided support to 34 district IPC teams to establish standardized hepatitis B registers and quarterly reporting forms. Table 3 summarizes the status of hepatitis B immunization in public hospitals and Figure 6 shows the percentage of health workers who

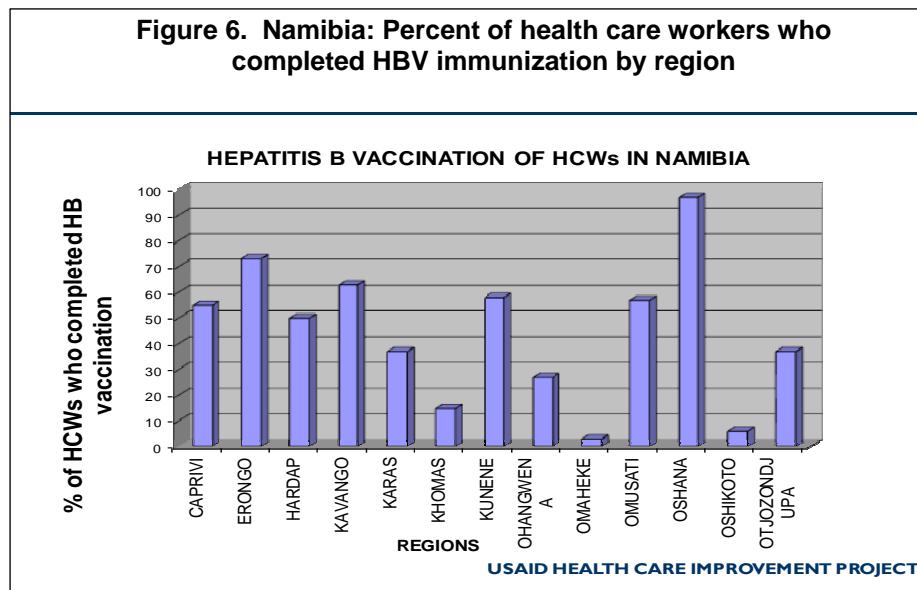
Table 3. Namibia: Hepatitis B immunization status among health care workers in public hospitals

	Number	%
Total hospital employees	7565	
No. of employees exposed to HBV	6954	92% of hospital employees
No. exposed with 3 doses of HB vaccine or immune (full protection)	2787	40% of exposed employees
No. exposed with partial vaccination (< 3 HB vaccine doses)	1537	22% of exposed employees
No. who refused vaccine	40	0.01% of exposed employees

completed HBV immunizations by region.

By end of FY11 Q2, only 40% of the health care workers exposed to potentially infectious blood and body fluids had completed the primary series of hepatitis B immunization. Since the review of the hepatitis B policy, regions have been actively immunizing health care workers.

Figure 6. Namibia: Percent of health care workers who completed HBV immunization by region



Improvement of Health Worker Knowledge on Infection Control and Occupational Safety

Training on infection control has been institutionalized in all the pre-service institutions. In FY11, the district infection prevention and control teams and trainers conducted in-service training for a total of 1087 personnel. HCI-sponsored trainings have been registered by the Health Professional Council in Namibia. The registration has brought the advantage of attracting more participants in the trainings, especially private providers, since attending such trainings is required for renewal of registration by the medical and nursing councils. In collaboration with the University of Stellenbosch, HCI trained 40 MOHSS staff in a basic course in sterilization and decontamination in October 2010, which was part of a larger effort to improve infection control practices related to blood-borne pathogens.

Capacity Building and Integration of Training into Pre-service Training Institution Curricula

Training on infection control has been institutionalized in all the pre-service institutions. These include the University of Namibia, Polytechnic of Namibia, the National Health Training Centre (NHTC), and the five Regional Health Training Centres (RHTCs). At the School of Medicine, infection control training is offered as an introductory course for all third year students before beginning clerkship at the health facilities. For the nursing curriculum, components were specifically integrated in the General Nursing, Midwifery, and Community Health Units.

Directions for FY12

The focus for HCI in FY12 is to develop with the MOHSS a transition plan to transfer all support for the injection safety, waste management, and infection prevention program from URC to the MOHSS by September 2012. The aim is to ensure gains made by the program such as the reduction in average number of injections per person per year, reduction in needle stick injuries, absence of occupationally acquired blood-borne infections among healthcare workers and waste segregation are maintained. Technical assistance shall be provided to the DQA in staff recruitment, QA assessments and policy development, and monitoring and evaluation systems. HCI will ensure districts have incorporated waste management activities and budgets in the overall district plan and will assist the MOHSS to finalize the Integrated Waste Management guidelines. HCI will also support the development of strategies for effective environmental friendly disposal of pharmaceutical glass vial and will collaborate with SCMS to

ensure continuous availability of commodities and supplies. Pre-service training institutions will be supported to provide infection control training to targeted number of health care professionals.

2.6 Nigeria

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
Build capacity of the Federal Ministry of Women Affairs and Social Development (FMWA) and of local and international implementing partners in quality improvement for orphans and vulnerable children	<ul style="list-style-type: none"> ▪ Establish a functional QI team in the technical working groups ▪ Support the country-leadership in improving quality care for OVC Programs ▪ Strengthen the capacity of local and international partners to organize for improvement 	National level activity to be cascaded down to the different states
Integrate OVC standards of care within the national strategy response	<ul style="list-style-type: none"> ▪ Strengthen integration of OVC Standards of Care within a national strategy response ▪ Review standards with stakeholders, including children, and incorporate inputs into revised standards 	National level and in the six geopolitical zones of the country: <ul style="list-style-type: none"> - South- south (Cross rivers and Akwa Ibom states) - South-Eastern (Ebonyi and Enugu states) - South-West (Lagos and Ekiti states) - North-Western (Kaduna, and Kano states) - North East (Bauchi and Taraba states) - Central (FCT and Benue state)
Gather evidence for QI through piloting of standards	<ul style="list-style-type: none"> ▪ Organize OVC QI in six zones to apply the standards, gather evidence of their impact, and make measurable improvements in services for vulnerable children 	Six zones, encompassing the twelve states in the country: Lagos ,Ekiti FCT,Benue, Bauchi, Taraba, Kaduna, Kano, Ebonyi, Enugu, Cross rivers and Akwa Ibom. Approximately 200 children in each state will be reached by the pilot
Institutionalizing QI	<ul style="list-style-type: none"> ▪ Create a community of learning across OVC stakeholders 	Sharing at the zonal and national levels

Main Activities and Results

Build Capacity of the FMWA and Stakeholders in Quality Improvement for OVC and Integrate OVC Standards of Care within a National Strategy Response

In FY11, HCI supported and facilitated the national OVC Technical Working Group (TWG) and the Federal Ministry of Women Affairs (FMWA) to review and finalize the Draft OVC Standards of Care. In March 2011, HCI's Regional OVC Advisor traveled to Abuja, Nigeria to assist the OVC Technical Working Group to convene a workshop to review with children selected from four States (Bauchi, Cross River, Lagos and Kaduna), the draft quality standards for OVC services. Also participating as facilitators were personnel from Save the Children and Hope Worldwide Nigeria. The purpose of the two-day workshop was to bring together youth who are recipients of programs providing OVC services to provide them with an opportunity to share their thoughts on the services they are receiving, inform providers on what children's real needs and concerns are, and to tell these partners what can be done to better help children achieve their full potential.

In August, HCI was invited by the Federal Ministry of Women Affairs (FMWA) to participate in a review of the country's National Plan of Action for OVC in Lagos. During this meeting, HCI presented the

feedback from the children's workshop that had been held in March. HCI provided technical support to the FMWA and the OVC Technical Working Group to finalize the document on the quality standards that will be piloting across the country. HCI then developed with the OVC Technical Working Group a strategy for piloting the draft standards and gathering evidence on their acceptability and feasibility. HCI also developed tools to support the process of piloting of the Draft OVC Standards of Care to ensure their acceptance, usability at all, levels and ease of integration into the national response.

Gathering Evidence for QI

In August 2011, HCI led a QI coaches training for the FMWA and other stakeholders (including USG implementing partners, UNICEF, and AONN representatives). In September 2011, a hands-on training was also conducted to provide an opportunity for FMWA staff and other stakeholders trained during the coaches training to gain practical experience around what they had learned and to enable them adapt to their own local context and situation.

At the state level, the TWG and participating implementing partners were supported to choose states where each will be lead agencies supporting the pilot process. The implementing partners and local organization were supported to facilitate the formation and strengthening of OVC state technical working groups and QI teams by the State Ministries of Women Affairs in the various pilot states. These groups will serve to provide oversight for the implementation and coordination of care and support programs for vulnerable children in each state while also providing support and oversight for the piloting of standards at the state level.

Directions for FY12

In the coming year HCI will continue to support the QI process started in FY11 in the six geopolitical zones in the country. HCI will support the completion of baseline assessments of the current status of vulnerable children using the CSI and other national tools across the states. Continuous support will also be provided to the government implementing partners and local organizations throughout the duration of the pilot of the service standards to document progress and channel results to the TWG and FMWA. HCI will facilitate learning sessions at the state and community levels for the partners and local organizations to provide technical support on provision of quality care and support to vulnerable children using the draft standards of care. Support will also be provided for the completion of the draft national standard operating guidelines for care of vulnerable children.

2.7 South Africa

Overview of HCI's Program in FY11

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Increase 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 Health services for HIV-infected individuals ▪ Increase number of facilities providing high quality TB/HIV services ▪ Increase number of facilities providing high quality ART services ▪ Increase compliance with guidelines in PMTCT and ART services 	<ul style="list-style-type: none"> ▪ 750,000 total population served by these facilities ▪ 250,000 HIV patients covered ▪ Five out of nine provinces in the country, serving 80 facilities (4% of all Primary Health Care facilities in the five provinces)

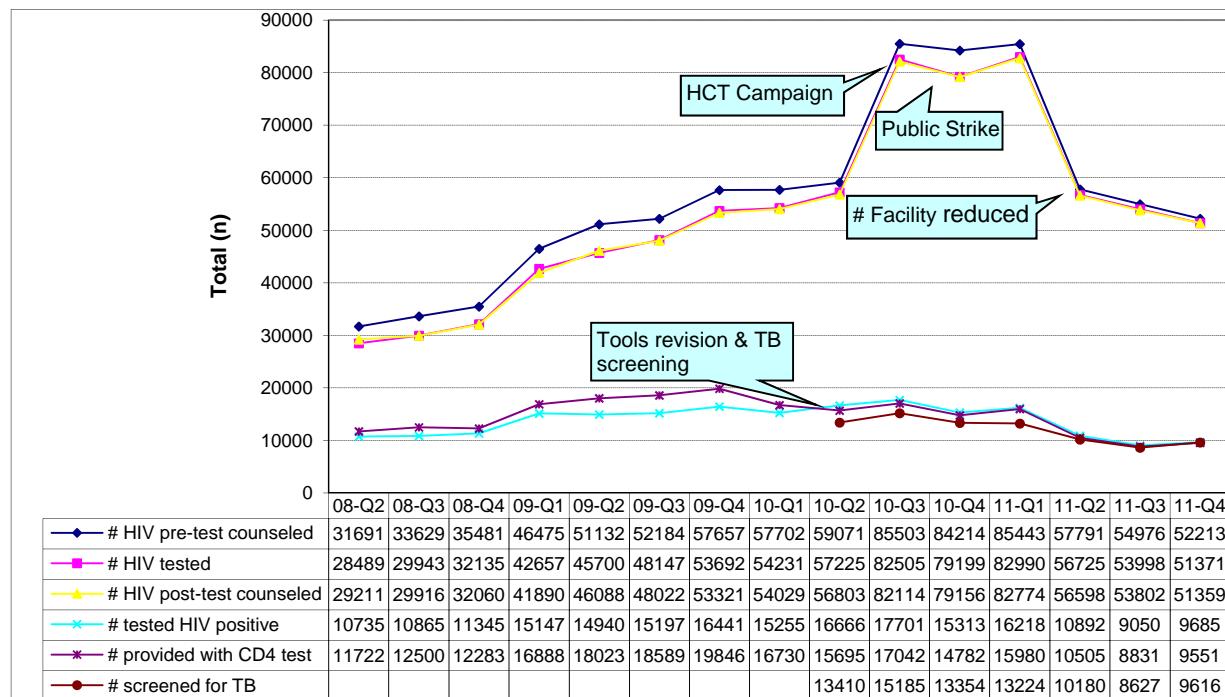
Main Activities and Results

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

The main objectives of HCI technical assistance in South Africa are 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 provides support to the Department of Health (DOH) at the national and provincial levels, providing mentorship and coaching support to district and facility level staff in Eastern Cape, Limpopo, North West, KwaZulu-Natal, and Mpumalanga provinces. HCI initially commenced FY11 supporting 170 health facilities in five provinces. However, by the end of the year support was being provided to 80 sites providing HIV prevention and care services, six of which provided ART services, in seven districts within the five provinces. The reason for the marked decline in facility level support was due to transitioning of sites to other partners, in line with the PEPFAR realignment process in South Africa.

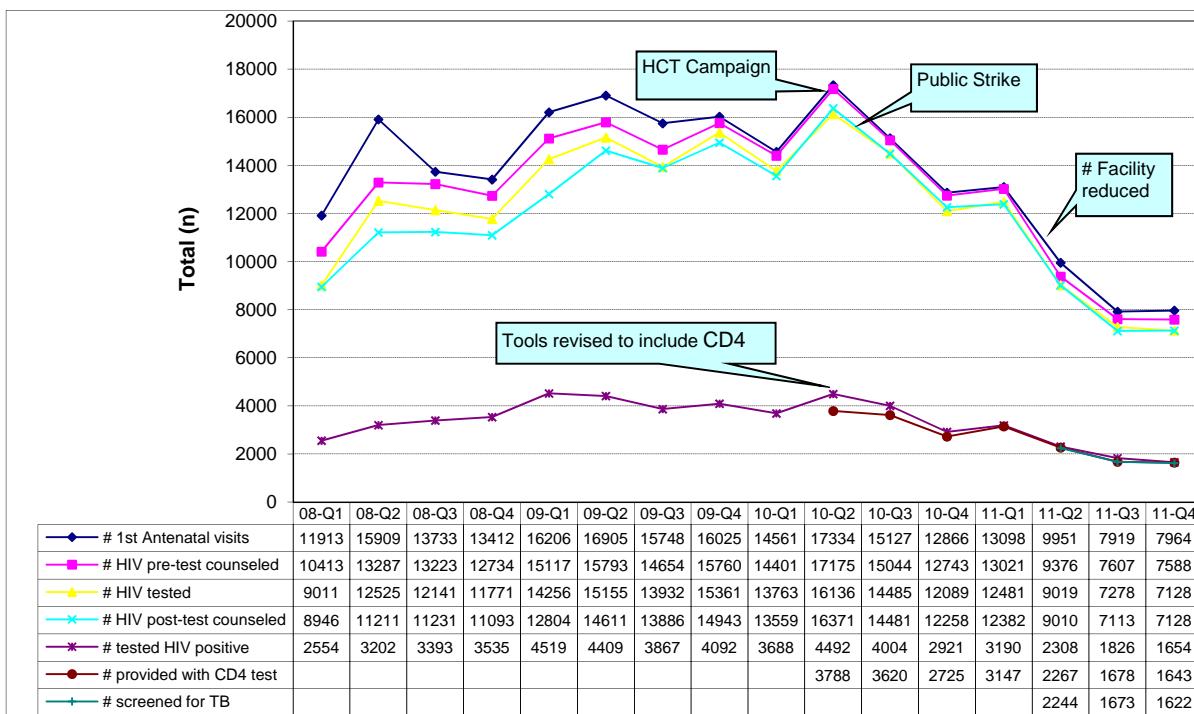
The project has progressed towards meeting many of its output and component-objective targets for FY11. More than 95% of clients seen were counseled and tested for HIV, approximately 35% of whom were males and 65% were females. Among the first antenatal clients, more than 96% of pregnant women were counseled and tested for HIV. Furthermore, about 77% of newly diagnosed TB patients were counseled and tested for HIV, resulting in a HIV testing pattern of 52% and 48% among males and females respectively (see Figures 7-9). HCI also did important work to strengthen compliance with NDOH guidelines, leading to the following results: CD4 testing rates among PMTCT clients improved from 84% (Q2 FY10) to 99% (Q4 FY11); CD4 testing rate among co-infected TB/HIV patients improved from 83% (Q2 FY10) to 95% (Q4 FY11); and, TB screening among HIV infected clients improved from 80% (Q2 FY10) to 96% (Q4 FY11). On the ART treatment program, 3890 patients were initiated on ART at the six supported sites, with more than 12,838 patients cumulatively on the ART program.

Figure 7. South Africa: Number of clients receiving HIV counseling and testing services, FY08 Q2-FY11 Q4



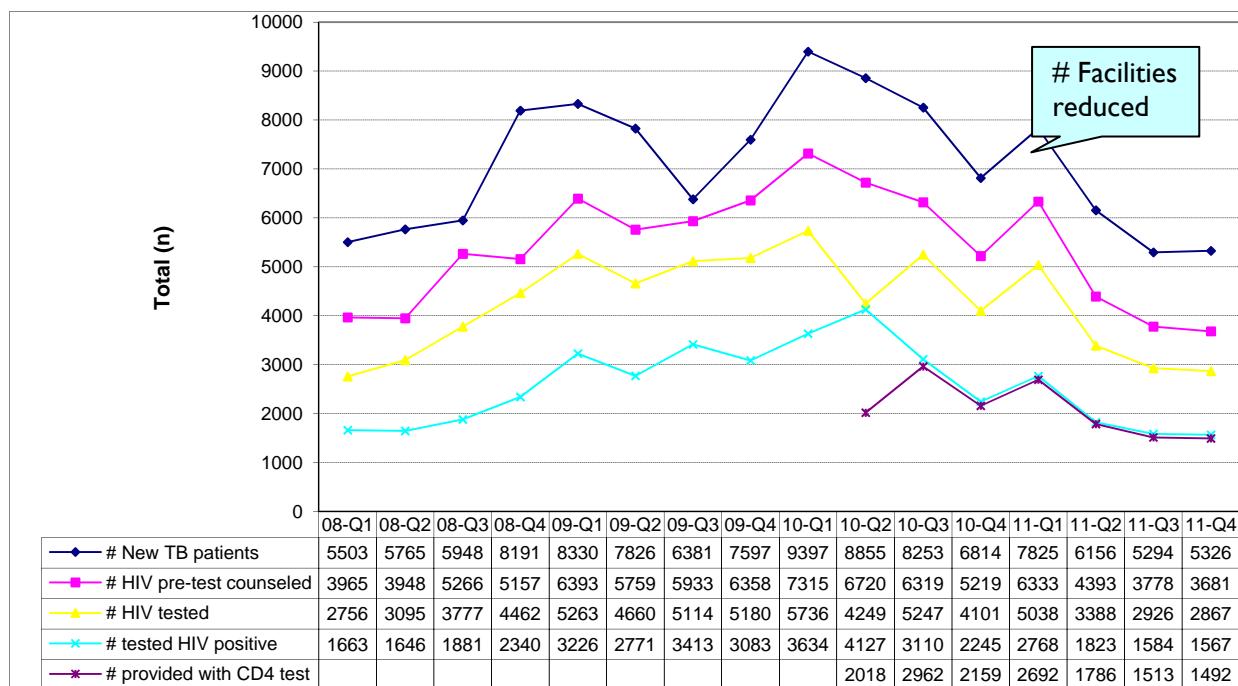
*Please note that towards the end Q2 2011, the HCI project lost a significant number of facilities (≈ 90) due funding shortfalls. By the end of Q4- 2011, there were 80 facilities HCI supported from 170 during Q1 -2011.

Figure 8. South Africa: Number of pregnant women receiving HIV counseling and testing services, FY08-FY11



*Please note that towards the end Q2 2011, the HCI project lost a significant number of facilities (≈ 90) due funding shortfalls. By the end of Q4- 2011, there were 79 facilities HCI supported from 168 during Q1 -2011.

Figure 9. South Africa: Number of TB patients received HIV counseling and testing services, FY08-FY11



Please note that towards the end Q2 2011, the HCI project lost a significant number of facilities (≈ 80) due funding shortfalls. By the end of Q4- 2011, there were 80 facilities HCI supported from 163 during Q1 -2011.

Other Activities

During the year HCI, staff worked with the Office of Standards Compliance within the National DOH to finalize the assessment tool for facilities, as well as participate in piloting of the draft assessment tool in various provinces. HCI staff also worked with supported facilities to develop quality improvement plans in line with the six Ministerial priorities for quality, namely: patient safety, infection prevention and control, reducing waiting times, cleanliness, staff attitudes and motivation, and medication availability. HCI staff were also a part of policy discussions regarding Primary Health Re-engineering at the National DOH level and are currently part of implementation teams at provincial and district level. HCI also worked with the Department of Social Development to develop guidelines for Child-Headed Households, in response to the huge numbers of orphans and vulnerable children in South Africa. HCI consultants also assisted with the development of an implementation strategy and job aids.

Directions for FY12

In FY12, HCI will take on a new role as a specialized provincial support partner, providing technical assistance to provincial, district and sub-district management teams through capacity building of provincial and district management teams in quality improvement (training/mentoring), management strengthening, decentralization and accountability frameworks and integration of stakeholder efforts (QI, supervision, PHC re-engineering). In addition, HCI will help to build the capacity of other PEPFAR partners regarding quality improvement, compliance with guidelines, and development of QI initiatives where gaps are identified. Other work for FY12 will include joint strategic planning to improve district health plan submissions and capacity building for district level strategic operational evaluations (MCH, HIV, and TB programs). This work will be supported by the strengthening of information management and use to establish a better understanding of program indicators and use of registers and will include level 1,2,3 Tier.net support (ART), DHIS, and ETR.net instruction. HCI will also collaborate with provincial managers to provide strategic leadership for key quality initiatives such as assessments of National Core Standards and achievements with respect to the six Ministerial priorities.

2.8 Swaziland

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
Strengthen and scale up integrated TB/HIV services including MDR-TB care, treatment and quality HIV care (including ART Services) and support for TB co-infected patients	<ul style="list-style-type: none">▪ Increasing the number of peripheral clinics involved in TB/HIV (including MDR-TB) diagnosis and treatment▪ Increase TB treatment enrolment and success▪ Increase MDR-TB treatment enrolment/ success▪ Strengthen capacity of MOH Tuberculosis control and AIDS programs to lead and manage TB/HIV care and treatment services▪ Strengthen recording and report for MDR-TB▪ Increase the percentage of TB suspects and patients that know their HIV status▪ Increase number of HIV- infected people receiving comprehensive care package (Cotrimoxazole prophylaxis, TB screening, IPT)▪ Increase number of TB patients receiving high quality ART services within TB clinical settings▪ Strengthen referral and linkages into HIV and TB treatment and care services for TB patients co-infected with HIV	<p>There are an estimated 15,000 TB patients out of a total population of 1,018,000; it is estimated that 12,000 TB patients (80%) are co-infected with HIV; all TB-HIV co-infected patients require ART; this is a subset of the 100,000 patients in the country in need of ART</p> <p>It is estimated that 7.7% and 33.4% of the new and re-treatment TB cases have multi-drug resistant TB</p> <p>HCI activities cover all four regions of Swaziland (100%), serving 60 TB treatment units and 60 primary health care (PHC) clinics; HCI also supports all 7 hospitals in the country, 20 of 60 TB treatment facilities, and 10 out of 162 (6%) clinics to provide ART</p>

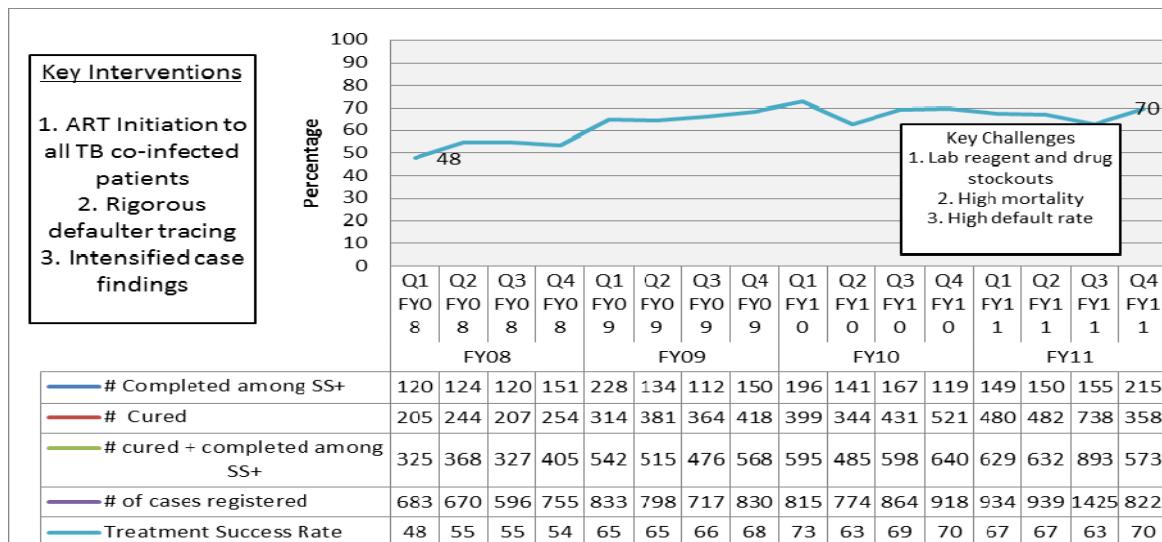
Strengthen national capacity to lead and manage roll out of adequate HIV and TB care and treatment services	<ul style="list-style-type: none"> ▪ Reduce impact of TB and HIV epidemics ▪ Strengthen M&E systems at National level ▪ Strengthen drug management/procurement to ensure uninterrupted drug supply ▪ Contribute to health systems strengthening ▪ Provide technical assistance to build capacity for implementation of Global Fund grants 	National scale (estimated total population 1,370,424)
Contribute to health systems strengthening and institutionalization of modern QI methods and conduct operational research to inform clinical practice	<ul style="list-style-type: none"> ▪ Establish clinical systems mentoring and supervision for TB/HIV ▪ Improve health care workers capacity in provision of TB/HIV and MDR-TB services ▪ Provision of job aids and work tools to ease the carrying out of activities ▪ Improve quality of patient care ▪ Strengthen documentation of QI activities 	National scale (estimated total population 1,370,424)

Main Activities and Results

Strengthen and Scale up Integrated TB/HIV Services

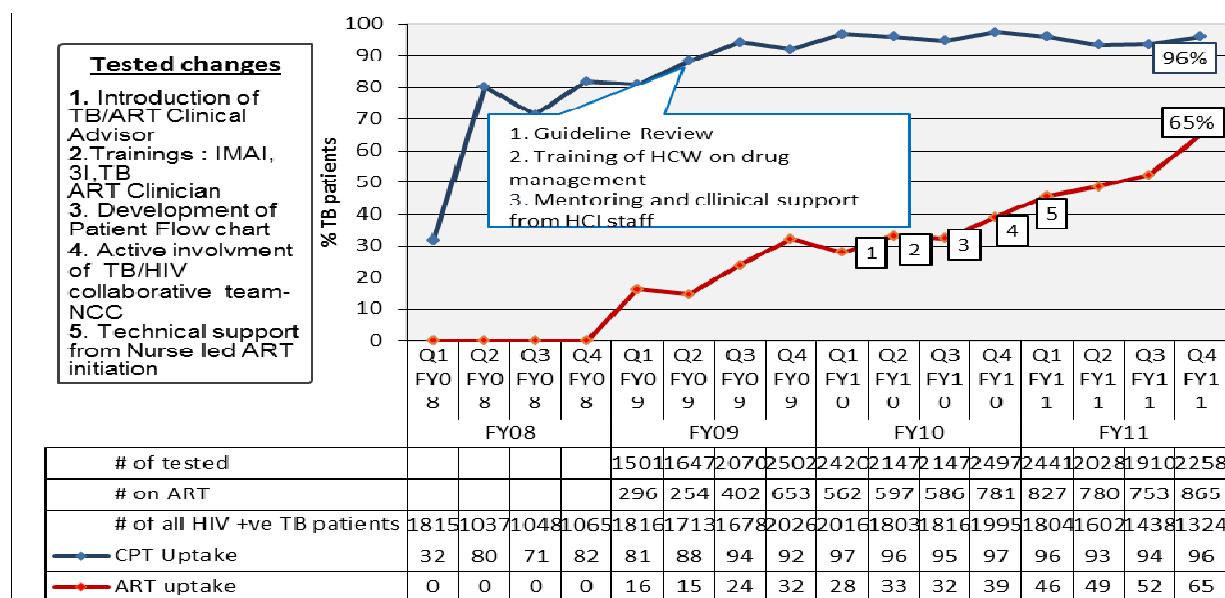
In FY11, HCI worked with an array of service providers in Swaziland to strengthen and expand TB/HIV services. HCI worked with the National TB Control Program (NTCP) to increase the number of peripheral clinics involved in sputum collection, TB treatment initiation, and treatment follow-up, from 34 in September 2010 to 60 by the end of FY11. HCI worked with clinic health care workers to strengthen the referral between peripheral clinics and community TB treatment supporters and assisted the NTCP to develop draft standard operating procedures for enrollment, training, and support of community treatment supporters. HCI's work in FY11 also contributed to the increase of TB enrollment and treatment success in the military, police, and prison populations through training for managers and providers, including the formation of Master Trainers among prison health personnel and training of permanent staff as peer educators. Because of these efforts and intensified case finding, 34,000 patients with HIV were screened for TB in the last quarter of FY11 alone. While case finding has improved in FY11, TB treatment success has reached a plateau of about 70% (Figure 10). In order to scale up the initiation of ART in TB/HIV co-infected patients, HCI provided training on ART initiation for the Nurse-led ART Initiation in Swaziland (NARTIS) program in five clinics, and HCI coaches are providing ongoing mentoring and support to the clinics.

Figure 10. Swaziland: Treatment successes, cure rate and treatment completion rates (2008-2011)



The percentage of TB/HIV co-infected patients on ART is now about 65% while the percentage of co-infected patients receiving Cotrimoxazole is 96% (see Figure 11). This represents a 19% increase in the HIV testing and counseling (HTC) rate among TB patients in HCI-supported sites. These achievements are the result of the scale-up of the QI intervention and the introduction of lay counselors in 2009. Currently about 93% of registered TB cases receive TB-HIV services.

Figure 11. Swaziland: Trends in ART and Cotrimoxazole preventive therapy uptake among HIV-positive TB patients in HCI-supported sites, FY09-FY11



In an effort to mainstream gender issues into the HCI activities, an ongoing partnership with the Swaziland Action Group Against Abuse (SWAGAA) has been formed. Through this collaboration, HCI staff were trained on the gender mainstreaming approach in order integrate gender concerns into their daily work to account for the fact that women and men have different life experiences, needs, and priorities and are affected differently by policies and programs.

Strengthen National Capacity to Lead and Manage Roll-out of Adequate HIV and TB Care and Treatment Services

HCI continued to advocate for increased political commitment and community awareness for TB. In conjunction with other partners, HCI participated in preparations to declare TB as an emergency and funded the main event, where the Prime Minister declared TB as a National Emergency. HCI also supported the Director of Health Services, the Deputy Chief Nursing Officer, and the NTCP Program Manager to visit and learn from the Lesotho multidrug-resistant TB (MDR-TB) program. The goal of the study tour was to increase commitment of the Ministry of Health and Social Welfare (MOHSW) to MDR-TB care and empower the MOHSW to lead MDR-TB response efforts.

Contribute to Strengthening the Health System and Conduct Operational Research to Inform Clinical Practice

During FY11, HCI supported the NTCP to conduct TB knowledge, attitudes and practices survey to assess the knowledge, attitudes, and practices regarding TB among TB patients and communities to find out possible barriers to desirable TB health-seeking behavior. About 83% of the population was found to have adequate knowledge about modes of TB transmission. About 97% of the population has adequate knowledge about the curability of TB; 94% had adequate knowledge of length of TB treatment; and 96% has adequate knowledge about signs and symptoms of TB. Males were found to have slightly more knowledge on TB than females, approximately 84% and 65%, respectively. A significant proportion

of patients present to health clinics a month or more after recognizing TB symptoms, and 85% of those reporting indicate that the initial point of care would be the health clinic; 5% would go to a traditional healer; and 5% to a pharmacy and other self-treatment options (2.8%). As a key component to institutionalizing QA and QI work at the national level, HCI supported the MOHSW to create and review the strategic plan for national QA and QI integration.

During FY11, HCI also assisted the NTCP to adopt geographic information system (GIS) mapping linked to Google Earth® software to improve patient follow-up and to store, analyze, manage, and present patient data with reference to geographic location (see Figure 12). This system provides information regarding spatial distribution of patients, treatment supporters, and contact screening. The HCI team helped the Hhohho Region to use GIS mapping to support and coordinate with 24 treatment supporters for MDR-TB patients and home assessments for infection control at the household level. This process assisted in identifying symptomatic contacts; community treatment supporter attachments; tracking of patients who are lost to follow up; and the assessment of the spatial distribution of patients for establishing potential MDR-TB outbreaks.

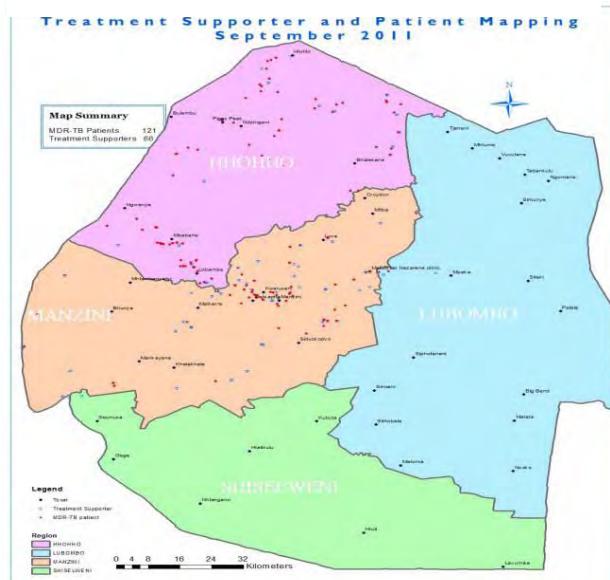
In addition, project staff continue to work with national reference TB labs to improve timeliness of dispatch of patients TB culture and Drug Susceptibility Testing results from the national laboratory for MDR-TB suspected cases and to improve the percent of patients receiving their results and treatment initiation in a timely manner. As a result, the turn-around-time for positive culture, which previously was 6-10 weeks, has now been reduced to 3-4 weeks, and culture conversion has improved from about 50% a year ago to 74.4% now.

HCI also participated in a data quality assessment conducted by USAID in preparation for the upcoming USAID audit. The objective of the assessment was to look at various dimensions of data quality, such as accuracy, reliability, completeness, precision, timeliness, integrity.

Directions for FY12

In FY12, HCI will work on the development and implementation of a down referral tool for TB and MDR-TB patients to peripheral clinics and the community. Other work will be to strengthen the processes for the validation of data at the facility level and to make data quality audits routine. HCI will also support operational research and develop best practices to improve MDR-TB diagnostic pathways, including the evaluation of the usefulness of the mucus extractors in aiding the diagnosis of TB in children. Along with these activities, HCI will work to strengthen its partnership with gender-oriented NGOs like SWAGGA to institutionalize gender mainstreaming in TB/HIV programs and will look for ways to integrate TB/HIV activities with care for other chronic conditions, like diabetes.

Figure 12. Swaziland: GIS treatment support and patient mapping



2.9 Tanzania

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
Provide support to implementing partners (IP) and MOHSW to strengthen and scale up ART/PMTCT QI through regional collaborative	▪ Spread of innovations from Tanga ART/ PMTCT collaborative to reach health center (HCs) levels.	Tanga Region – 2010 pop. - 1.9 million, # of (Care and Treatment Centers) CTCs – 35, Adult HIV prevalence - 3.8%, PLHA enrolled in care – 30,266, # of PLHA on ART - 17,128
	▪ Expand the ART/PMTCT improvement collaborative in Tanga to include improvement of home-based care (HBC) for PLHA	Tanga Region – 2010 pop. - 1.9 million, # of (Care and Treatment Centers) CTCs – 36, Adult HIV prevalence - 3.8%, PLHA enrolled in care – 30,266, # of PLHA on ART - 17,128
	▪ Expand the scope of the Morogoro ART/PMTCT collaborative through spreading the ART Framework to cover more districts	Morogoro Region Six district with pop. - 2.1 million will be reached. # of CTCs - 34, Adult HIV prevalence - 4.2%, PLHA enrolled in care – 28,386, # of PLHA on ART – 16,327
	▪ Integrate improvement in provider engagement and productivity into the Mtwara ART/PMTCT collaborative	In FY2011, a 12 sites HR demonstration collaborative will be started in Tandahimba district of Mtwara to cover a pop of 200,000 with Adult HIV prevalence – 3.6%. Synthesis of Best practices for spread will be conducted. Mtwara Region – 2010 pop. - 1.3 million, Number of CTCs – 60, Adult HIV prevalence - 3%, PLHA enrolled in care – 19,091, # of PLHA on ART – 9,668
	▪ Expand the ART/PMTCT improvement collaborative in Lindi	Lindi Region — 2010 population is 0.9 million with 53 CTCs, Adult HIV prevalence of 3.9%, PLHA enrolled in care – 15,221 and 6,640 are on ART
Improve infant feeding counseling for HIV-infected women and apply the 2010 WHO PMTCT guidelines	▪ In collaboration with EngenderHealth implement a demonstration infant feeding improvement collaborative in Iringa urban and rural districts and roll out best practices to cover the whole region ▪ Prototype the new PMTCT guidelines in one district of Iringa Region ▪ Update infant feeding guidelines, training package and job aids ▪ Conduct refresher training on infant feeding counseling for regional trainers	Iringa Rural and Urban District: Six sites with pop – 350,000 will be covered. Adult HIV prevalence – 14.7% Iringa Region: PLHA enrolled in care are 82,039, Number on ART – 44,595 # of CTCs - 45 Njombe District – a district of Iringa with pop of 400,000,
Provide TA to DSW and MVC Partners to roll out and document QI standard for MVC services	▪ Support capacity building in QI for MVC partners	Ten IPs - FHI/Tunajali, CRS, Africare, PACT, UNICEF, Save the Child, Balm Gilead, Water reed and Pathfinder
	▪ Support IPs in rolling MVC service standards and training	CRS, Africare, Save the Children, Balm Gilead, Walter Reed and Pathfinder
	▪ Work with DSW and UNICEF and implement a MVC demonstration QI collaborative in Bagamoyo district	Pwani: pop 1 million, Adult HIV prevalence 5.3% , estimated PLHA – 55,636, # of MVC in Bagamoyo district is 4,887 of which 2,648 are males & 2,239 are females
Research and Evaluation	▪ Baseline assessment to determine gaps in patient self-management and engagement leading to setting up chronic care services in Morogoro	Interviews and documents review from participating health facilities, HCI, PharmAccess and FHI/TUNAJALI staff, Morogoro RHMT and CHMT facility-based staff

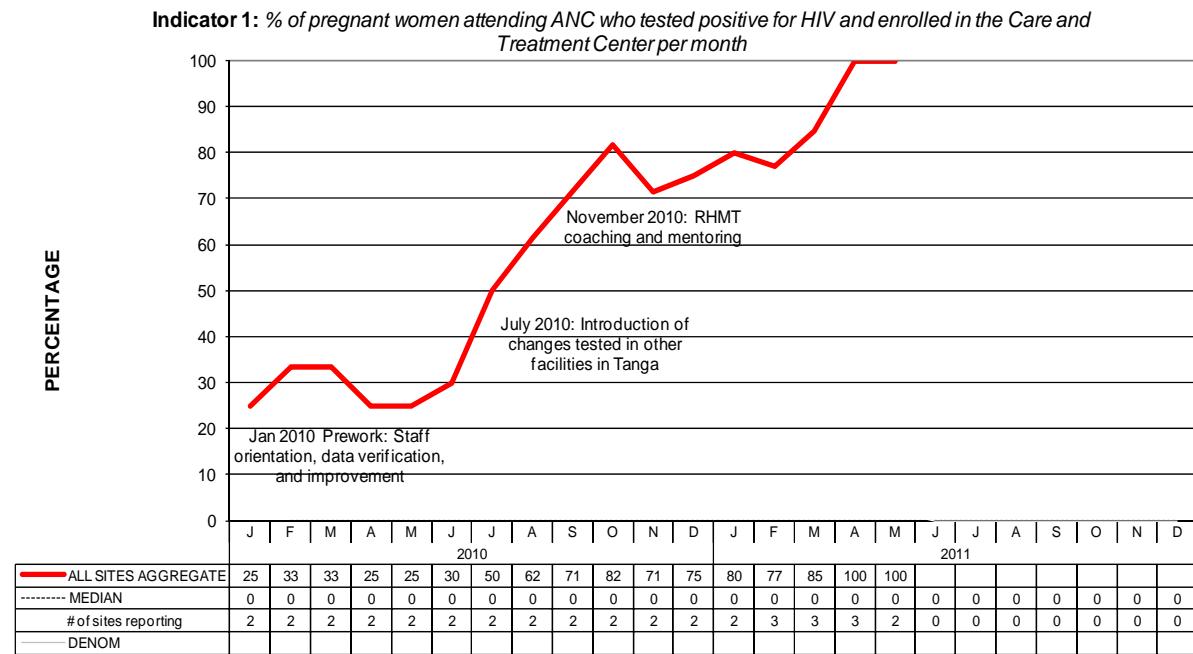
Activities	What are we trying to accomplish?	Scale of intervention
	▪ Determine ART healthcare provider engagement and productivity	Review of performance in 11 sites in Tandahimba District.
	▪ Determine effective QI methods at community level	Tanga region
	▪ Determine the enabling factors to reduce attrition among PMTCT-I mothers	Iringa Region
	▪ Assessment of the extent to which implementation of the 8 MVC standards improve the quality of MVC care	Bagamoyo district
	▪ Assess and measure the quality of integrated PMTCT/RCH programs	Manyara Region

Main Activities and Results

Tanga ART/PMTCT Collaborative

HCI continued to provide technical support to the Regional Health Management Team (RHMT) and the Council Health Management Teams (CHMTs) in Tanga to strengthen the QI efforts, focus on new technical areas (home-based care), and spread innovations to the health center level. The project supported the development of National Standard Operating Procedures (SOP) to operationalize the National HBC guideline. The SOPs were piloted in Tanga, and the findings from the field test were incorporated into draft zero of the national HBC SOPs. The drafted SOPs were then shared among stakeholders for inputs and later submitted to the MOHSW for approval. In regards to ongoing ART/PMTCT collaborative QI activities. In regards to ongoing ART/PMTCT quality improvement efforts, in FY11, the region managed to scale up the QI program to six more health centers, making total of 14 facilities engaged in QI efforts in all districts of Tanga. A key result is presented in Figure 13.

Figure 13. Tanzania: Percent of pregnant women attending ANC testing positive for HIV and are enrolled in care and treatment, Tanga region



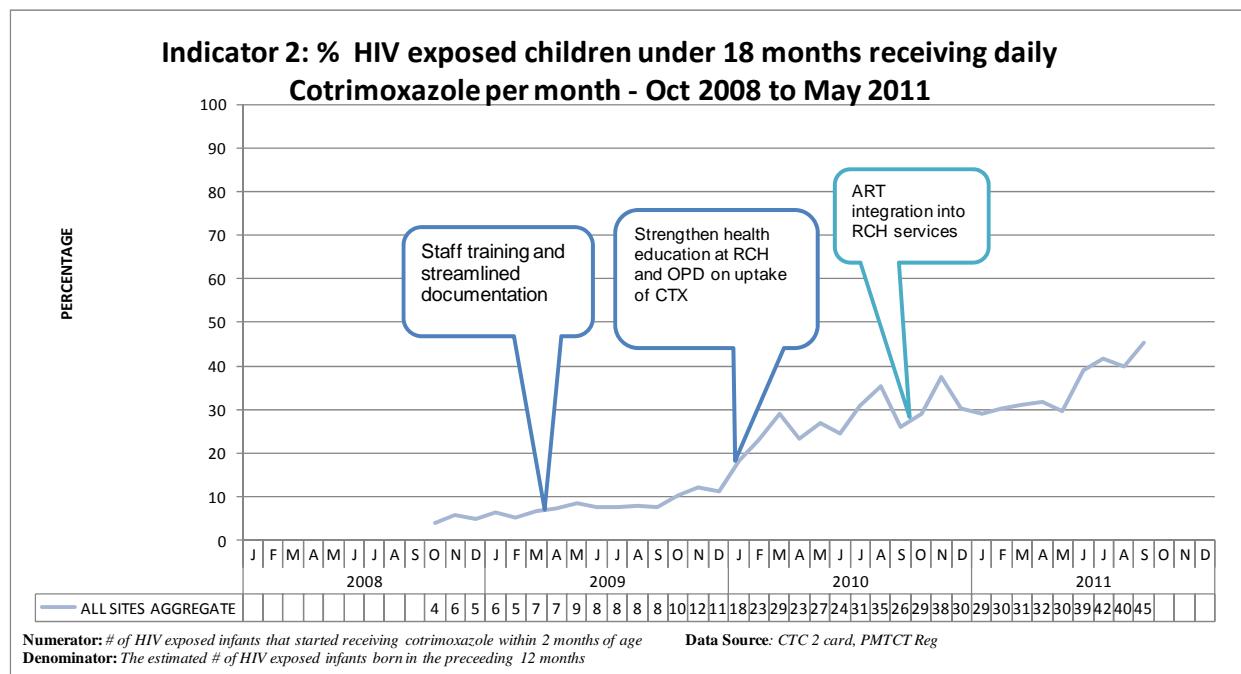
Numerator: # of HIV positive pregnant women enrolled at CTC in a month
Denominator: Total # of HIV+ pregnant women tested at RCH in a month

Data Source/Sampling: ANC register
Any important changes in measurement: List out any changes

Morogoro ART/PMTCT Collaborative

In the 11 facilities across Morogoro Region where the ART/PMTCT Improvement Collaborative was established in 2009, QI activities have remained active. In general, even the lower-performing sites have seen significant improvements. Figure 14 show gains in the proportion of HIV-exposed infants receiving daily Cotrimoxazole. Under the leadership of the RHMT and in collaboration with the regional HIV/AIDS implementing partner (TUNAJALI/FHI), QI interventions were introduced to five more sites, mainly health centers in the region.

Figure 14. Tanzania: Percent of HIV-exposed infant receiving daily Cotrimoxazole (2008-2011)



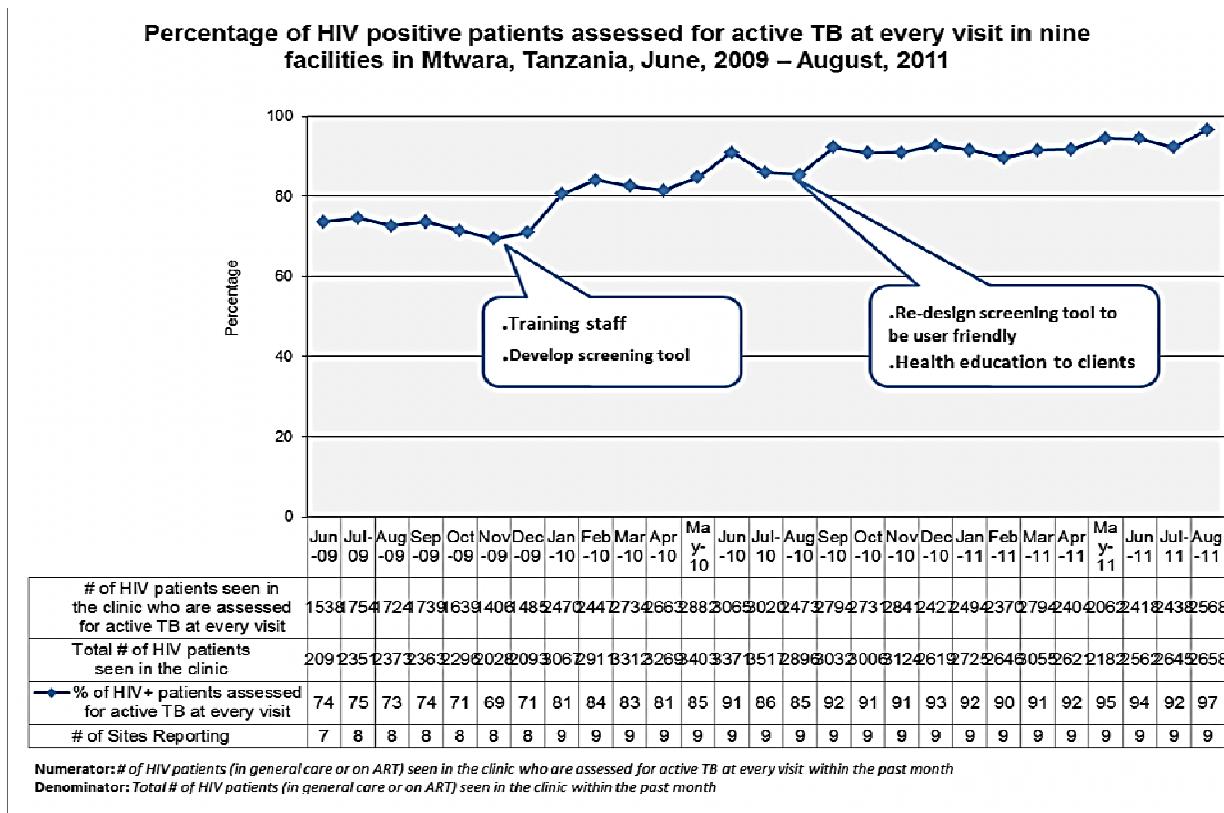
In order to strengthen the existing efforts to improving quality of ART/PMTCT care, HCI introduced patient self-management in 14 health facilities in Morogoro. The intervention involved orientation of health providers in supporting and partnering with patients in managing their care supported by expert patients, referred to as peer mentors. Throughout this fiscal year, the program has concentrated on building the capacity of health care workers in patient self-management (PSM) and strengthening skills of peer mentors in PSM so that they support other patients to develop goals and action plans to improve their care. Currently, peer mentors are providing individual and group education using standardized job aids developed by HCI to prepare patient-centered health education sessions as well as share their personal experiences in HIV/AIDS care to help other patients overcome life challenges associated with HIV infection. Expert patients are also collaborating with health care providers in tracking patients who were lost to follow-up.

Mtwara ART/PMTCT Collaborative

During FY11, HCI, in collaboration with Clinton HIV and AIDS Initiative (CHAI), Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), and the RHMT, worked with nine QI teams participating in the Mtwara ART/PMTCT improvement collaborative. Three coaching visits were made and one learning session was held to review results and the use of team journals to record data and changes. Coaching visits emphasized improving documentation, understanding of indicators, data interpretation, and team building. The learning session served to allow teams to share experiences and learning and develop new work plans for the next action period. One common challenge was, frequent staff rotation in health

facilities which brought in health care providers who were new to the principles of quality improvement. Figure 15 shows progress during the year in the assessment of HIV-positive patients for TB.

Figure 15. Tanzania: Percentage of HIV-positive patients assessed for active TB at every visit June 2009-August 2011



Lindi ART/PMTCT Collaborative

HCI also work in collaboration with CHAI, EGPAF and the RHMT in Lindi Region. During this reporting year, two coaching visits and two learning sessions were conducted. This support resulted in improved understanding and application of principles of QI, better understanding of the analysis and redesign of processes of care as well as of documentation, record keeping and data management for decision making. Furthermore, QI teams shared several changes tested in strengthening the linkages between Care and Treatment Centers (CTC) and community and home-based care, including use of mobile phones to track patients and offering HIV services in Reproductive and Child Health (RCH) clinics and labor and delivery wards. Figure 16 shows improvements made in the Lindi collaborative during the year for testing of HIV-exposed infants at two months of age. To ensure sustainability of the program, collaborating QI teams discussed and agreed on various strategies to ensure allocation of funds for expert patients conducting community work as well as creation of a budget line for initiation of QI in new sites and for improving the availability of reagents and Cotrimoxazole.

Iringa Infant Feeding Collaborative

HCI continued to work with EngenderHealth, the RHMT, and CHMTs in the six sites of Iringa Region to improve the quality of infant feeding (IF) practices using collaborative approach. The project supported two learning sessions and three coaching visits. The QI teams established a “one-stop shop” for IF counseling, HIV testing, and provision of Cotrimoxazole. A dedicated staff was identified in each facility to guide and follow up with mothers. At the same time HCI continued to provide technical assistance to implementing partners in training trainers and PMTCT counselors in infant feeding counseling. HCI

also worked with partners to update IF guidelines, job aids, and IF training manuals in line with the 2010 WHO recommendations on PMTCT. Figure 17 shows improvement in the practice of exclusive breastfeeding by HIV-positive mothers in seen at site participating in the collaborative in Iringa.

Figure 16. Percent of HIV-exposed infants tested for HIV within two months of age, May 2009-August 2011

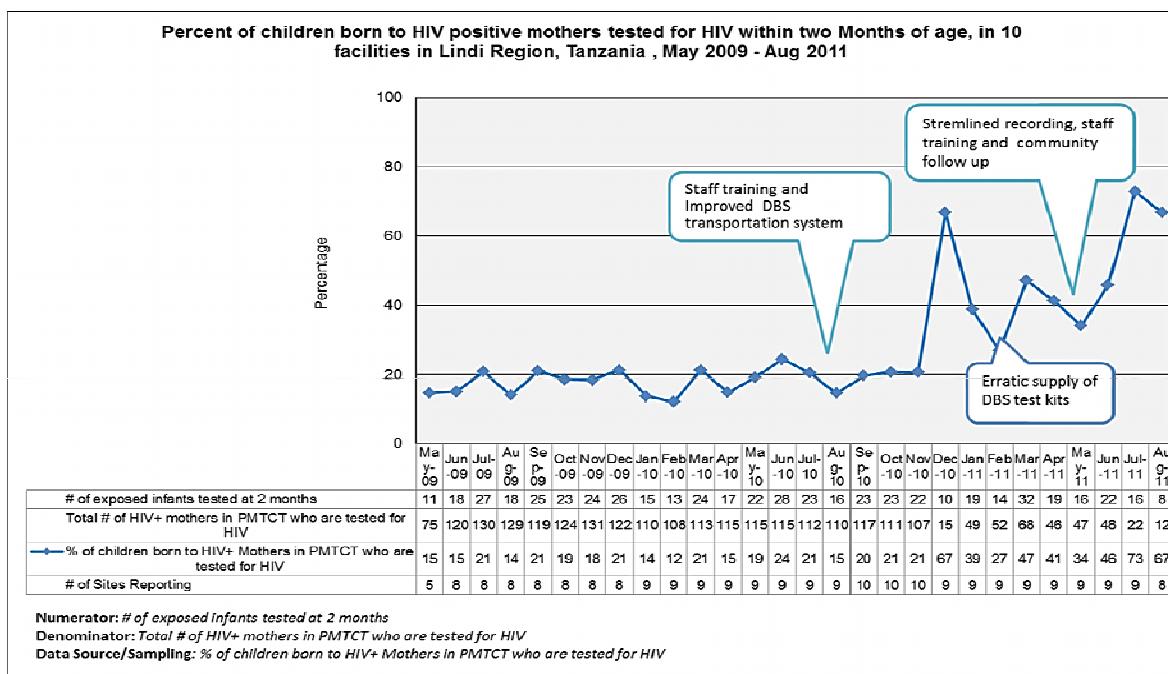
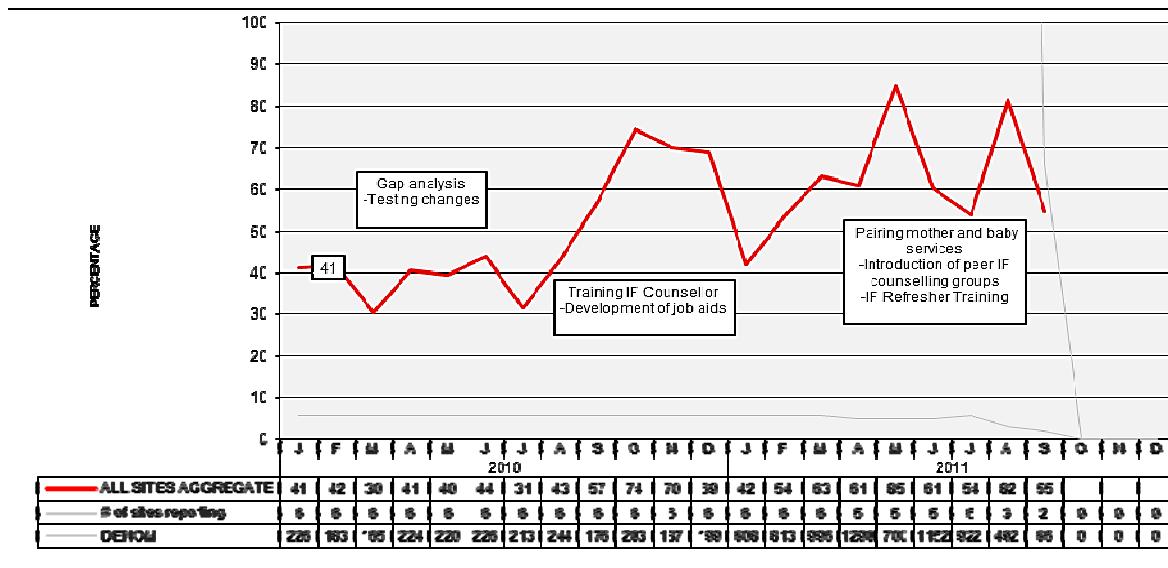


Figure 17. Tanzania: Percent of HIV-positive mothers seen at RCH services practicing EBF



All Infants and Mothers Get All PMTCT Services (AIMGAPS)

In FY11, HCI conducted a rapid assessment to define levels and factors influencing PMTCT attrition in Iringa and used the findings to test changes for “All Infants and Mothers Get All PMTCT Service” (AIMGAPS). The assessment was conducted in four Iringa districts and documented: high rates of counseling and testing for HIV (97%), modest enrollment in PMTCT care (61%), poor CD4 testing (15%), and poor ART uptake (5%). The new emphasis on AIMGAPS was incorporated into the Iringa

Infant Feeding Collaborative. QI teams are testing changes that include: prioritizing pregnant women for CD4 testing; accompanied referral to CTC; drawing blood for CD4 count at the RCH; weekly checks of registers for proper documentation; sensitizing pregnant women to come with partners to the clinic; use of cost sharing funds to purchase Cotrimoxazole; and conducting clinical staging on same day as testing.

Prototyping of the WHO 2010 PMTCT Guidelines

A baseline assessment was conducted in three facilities (one hospital, one health center, and one dispensary) in Njombe district of Iringa ahead of the introduction of the WHO 2010 guidelines. Several challenges that might influence the implementation of the 2010 guidelines were observed, including: potential shortage of storage space at the labor ward and pharmacy due to the increased stock of the ARVs; inadequate stocks of CD4 reagents at all times; increased clients who would require ARV prophylaxis at one time; poor adherence of the clients due to longer periods of taking ARV prophylaxis from 14 weeks for mothers to the whole period of breastfeeding for children; and the need for all health care providers to be trained in the 2010 WHO Guidelines, as only one or two had been trained at each site. Other observations were that the registers available do not meet the documentation requirements of the 2010 WHO guidelines; inadequate AZT and NVP syrup at ANC due to frequent stock-outs; poor linkage to CTC; early booking to ANC; and inadequate knowledge for calculating dosage of NVP syrup as this will be changing monthly.

Improving the Quality of Care for Most Vulnerable Children

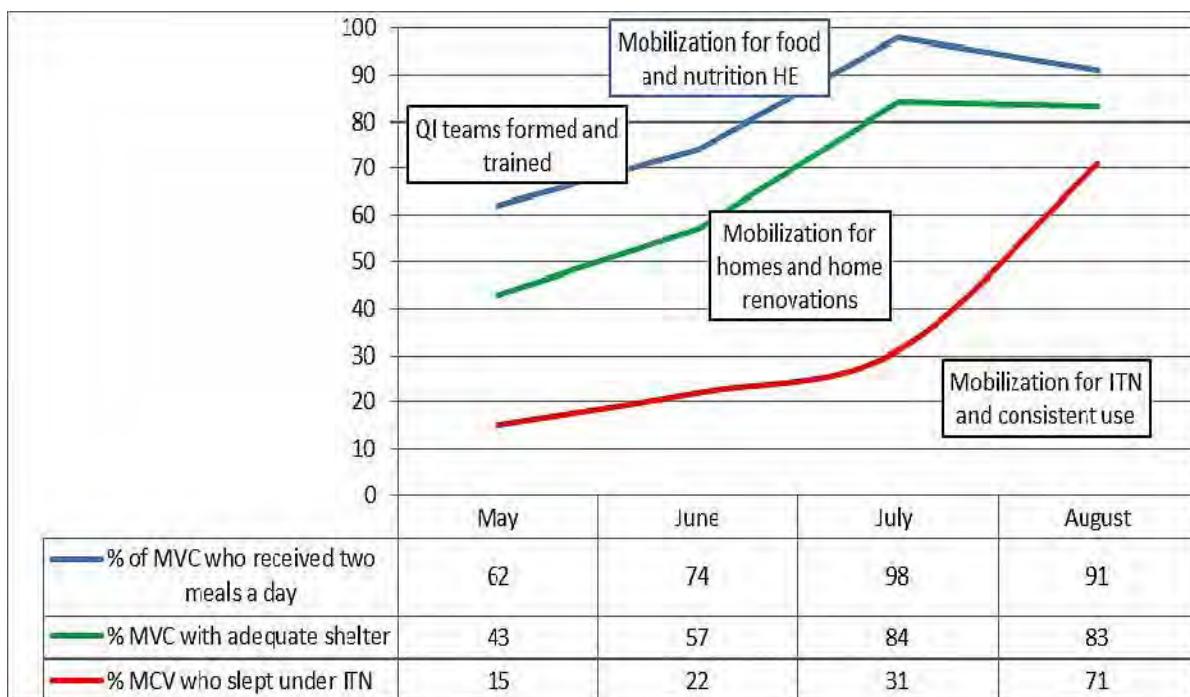
In 2011, HCI supported the MOHSW to finalize most vulnerable children (MVC) program QI training package. The Department of Social Welfare (DSW) and MVC implementing partners received technical support to scale up QI trainings at regional and primary levels. As a result, more implementing partners (including World Education Inc., Save the Children, Balm in Gilead/Tanzania Interfaith Partnership, FHI and Pact-Pamoja Tuwalee Program) have organized QI trainings for district facilitators, training a total of 261 facilitators (153 government staff and 108 local implementing partners). A simplified version of OVC QI training package, job aid, and documentation tool were developed by HCI with the DSW to strengthen the capacity of coaches and MVC committees so as to communicate standards at community level.



Learning session in the MVC collaborative in Bagamoyo. Photo by URC staff.

QI teams in three wards implementing the MVC QI teams have been able to document and implement changes and monitor indicators which are tracked and facilitate the teams to provide different services to MVC. There has been significant improvement both in process and data gathering. For example, teams have been regularly conducting meetings to plan, analyze and document implemented changes and activities. Teams have used data collected to mobilize resources to support vulnerable children in accessing different services, including mobilizing village and ward structures for food support and facilitating access to insecticide-treated bednets (ITNs) and birth certificates. In only a few months, teams have documented gains in coverage of vulnerable children with key services (see Figure 18).

Figure 18. Tanzania: Improvement in service coverage for most vulnerable children, Bagamoyo demonstration collaborative, May-August 2011



Research and Evaluation

HCI's team in Tanzania supported a large number of research and evaluation activities during FYII. Achievements in FYII are summarized in Table 4.

Table 4. Tanzania: Research and evaluation activities and achievements

Research Activity	Achievements
Baseline assessment to determine gaps in patient self-management and engagement leading to setting up chronic care services in Morogoro	Rapid assessment to define the level of provider –patient partnership, patient's empowerment for self-care and community support was conducted in 6 facilities in Morogoro Urban and Rural district. The key findings are included in a report that highlighted the absence of structured self-care and community support systems. Since then a Patients Self-Management program has been initiated in 14 facilities where a total of 54 expert patients have been empowered to support patient self-management. They have assisted ART patients develop goals and action plans to address their personal challenges in self-management. Expert patients have also adopted other tasks, including triaging patients, taking patients' weight, and sorting files, thereby reducing provider workload and shortening waiting times.
Determine ART health care provider engagement and productivity	Following a baseline study investigating the level of engagement and productivity of ART providers in 11 facilities in Tandahimba, health facility personnel were supported to develop individual work plans, job descriptions, and competency models. They also received regular mentoring and feedback from supervisors. After almost one year of implementation, some results are evident; the percent of HIV + pregnant women enrolled in CTC rose from 83% to 100%; infants exposed to HIV who receive co-trimoxazole has risen from 12% to 70% etc.
Determine effective QI methods at community level	The advent of ART transformed HIV/AIDS to chronic disease and a baseline assessment was conducted to determine the extent to which best practices of the time were being observed. The key findings were; the program is medical oriented, the practice provided poor prevention, referral and support opportunities as well as low gender equality and service integration. Since then, HCI has assisted the MOHSW to develop HBC SOP to guide efforts to bridge the gap.

Research Activity	Achievements
Determine the enabling factors to reduce attrition among PMTCT-enrolled mothers	Baseline assessment was conducted in Iringa to determine the levels and factors affecting attrition in the PMTCT program. The key findings were, while 96% of HIV+ pregnant women received counseling and testing, only 61% enrolled to PMTCT care. Additionally, 46% were counseled for IF and 16 % received CD4 test. During delivery, 21% of mothers and 24% of HIV-exposed children received ARV prophylaxis. HCI is applying QI method to bridge the access gap.
Assessment of the extent to which implementation of the 8 MVC standards improve the quality of MVC care	Baseline assessment was conducted in 2 wards in Bagamoyo district to determine the level of implementation and the effect of the MVC standards on child wellbeing. HCI is now applying QI improvement techniques to improve service delivery. To date the efforts have demonstrated changes on MVC wellbeing. Access to adequate shelter improved from 43 to 85%, provision of ITN improved from 15 to 64% and the proportion of MVC whose growth curve on the growth monitoring card was considered as normal improved from 35 to 96%.
Assess and measure the quality of integrated PMTCT/RCH programs	A baseline assessment conducted in all districts of Manyara found that 71% of facilities provide integrated RCH and PMTCT services; however, there were a number of provider and system level challenges that HCI is applying QI techniques to address them.
Health Care Workers Engagement Study	HCI is implementing the Health Worker Engagement Study to gain insight on effective strategies for improving health worker engagement in a sustainable manner. The study aims at exploring relationship between engagement, performance, productivity and retention. In FY11, the study protocol the study team was identified, study protocol and data collection tools were developed while and ethical clearance was sought.

Directions for FY12

In FY12, the project focus on selected program areas that can produce additional improvement. In Mtwara, QI techniques will be applied to enhance provider performance management while in Tanga and Morogoro, Standard Operating Procedures (SOPs) for home-based care will be prototyped in preparation for national spread. In Morogoro, testing the feasibility of Patient Self-Management in chronic disease will continue, while in Iringa, efforts will be directed to reducing attrition along the PMTCT cascade through AIMGAPS. In Lindi, HCI will apply performance management interventions to strengthen the effectiveness of district health management teams. HCI will assist the MOHSW to benchmark and improve the quality of MVC services countrywide as well as strengthen the quality of PMTCT and RCH services in Manyara region through service integration. Efforts will be made to mainstream gender into all HCI activities while knowledge management will be strengthened to support evidence-based decision-making.

2.10 Uganda

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
Improving HIV care	<ul style="list-style-type: none"> ▪ Increased number in care ▪ Improved retention ▪ Improved outcomes 	96 sites located in 49 districts
Improving palliative care	<ul style="list-style-type: none"> ▪ Improve pain management 	2 districts: Mayuge and Namutumba (13 sites)
Improving maternal and neonatal care	<ul style="list-style-type: none"> ▪ Improve maternal and neonatal care 	2 districts: Masaka and Luwero (34 sites)
Improving chronic care for HIV patients	<ul style="list-style-type: none"> ▪ Improve chronic care 	1 district: Buikwe (14 sites)
Strengthening MoH QI systems	<ul style="list-style-type: none"> ▪ Integrate QI into national systems 	National system, all regions, 39 districts; total population covered by improved systems: 14,231,379

Main Activities and Results

In FY11 HCI placed greater emphasis on building QI capacity in Uganda by supporting the Ministry of Health, USG-funded partners, the district quality improvement teams, and selected sites to implement QI activities. We also worked closely with the Ministry of Health to institutionalize QI activities into the existing health structures. Forty-four sites were handed over to the STAR projects (STAR SW, STAR EC, STAR E, and SUSTAIN) to avoid duplication of effort. In addition to improving HIV care we demonstrated the use of QI approaches to improve palliative care for HIV patient in pain, management of chronic conditions, and improvement in maternal and newborn health.

Improving HIV Care

A good ART program is one that provides ART to all who need it, retains all patients in care and leads to good clinical outcomes for the patient. Having learned lessons from FY10 where sites chose one of the three components of care to focus on, depending on the gaps found, in the spread phase in FY11 sites were requested to analyze their data and to understand how well they were performing in providing ART. Facilities were then supported to set up a system that would help them see each month how well they were doing in enrolling patients and retaining them in care and how many patients were getting the desired clinical outcomes. The facility QI teams then decided which component of the ART framework they would focus on in their improvement projects, guided by the identified priority gaps.

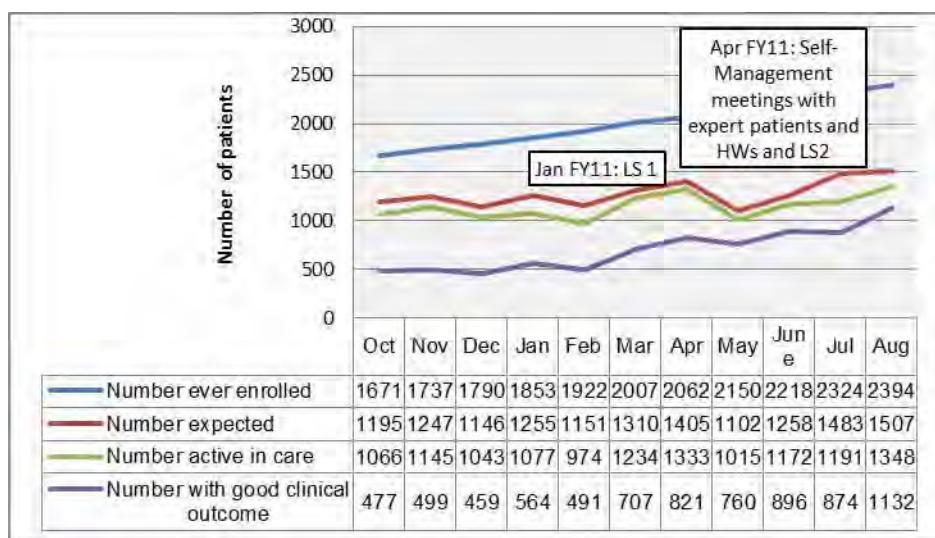
Some facilities identified a gap in linking HIV-positive pregnant women attending ANC to HIV clinics, so they focused on improving the linkage of HIV-positive mothers attending the ANC/PMTCT clinics to the HIV/ART clinic.

Over the year, efforts to strengthen this referral link have resulted in an increase in the percentage of HIV-positive mothers from ANC/PMTCT that were enrolled into HIV care, from 33.5% in October 2010 to 77.1% in August 2011. A number of changes were made to make this increase possible, including:

engaging male

partners and encouraging them to test for HIV, escorting mothers to the HIV clinic, writing referral notes, assigning staff to link the two clinics and following up pregnant women at home. Since the start of the collaborative, the gap between patients who are active in care and those with better outcome has been reduced. Figure 19 shows data on improved clinical outcomes from four sites.

Figure 19. Uganda: ART coverage, retention, and outcome at 4 sites, Oct. 2010-Aug. 2011

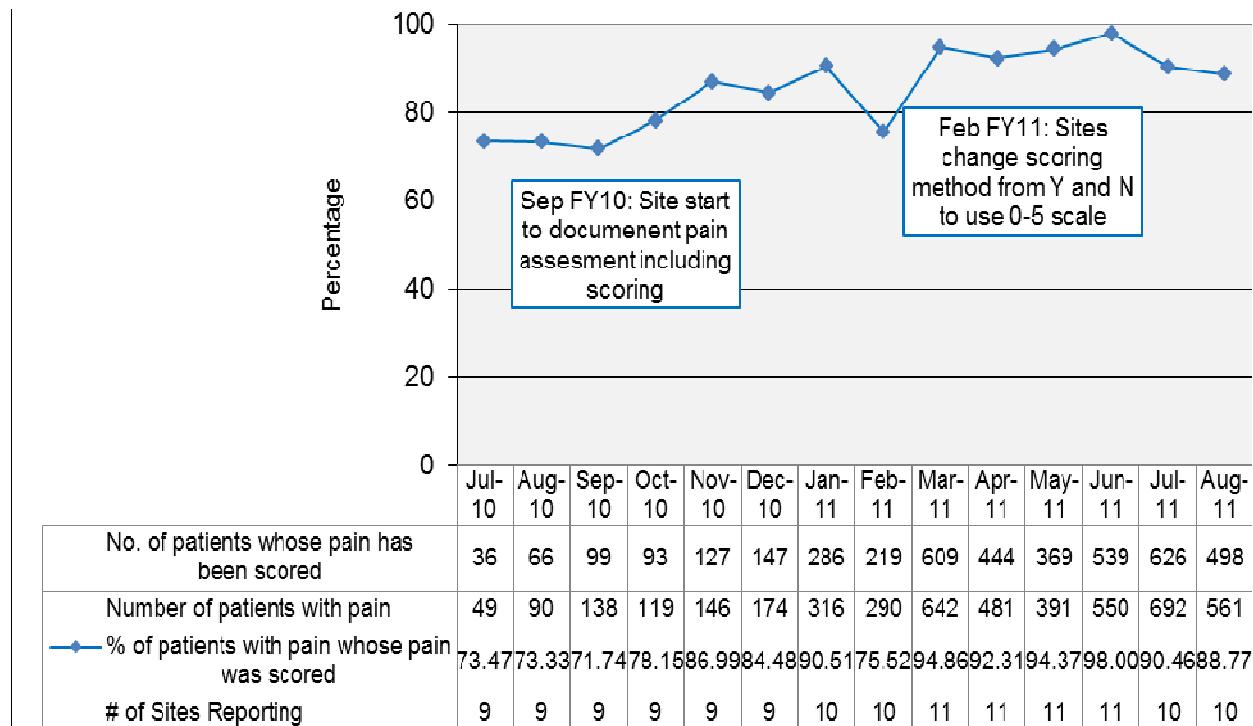


Improving Palliative Care

The palliative care collaborative implemented this year was intended to improve the quality of life of patients and families facing life-long illness through prevention and relief of suffering by early identification and treatment of pain and other physical, psychosocial, and spiritual problems. To improve palliative care, HCI supported the MOH to implement a demonstration collaborative to improve palliative care for patients with HIV/AIDS in Namutumba and Mayuge districts, with a focus on better

pain and symptom management at HIV/AIDS treatment facilities and in the community through facility-linked volunteers. Data from health facilities shows that around 90% of patients attending HIV clinics are now asked about pain and prescribed pain medications (see Figure 20). In addition, HCI supported the two districts to identify one clinical officer each to undergo a training course in pain management.

Figure 20. Uganda: Percentage of HIV+ patients with pain whose pain was scored (2010 –2011)



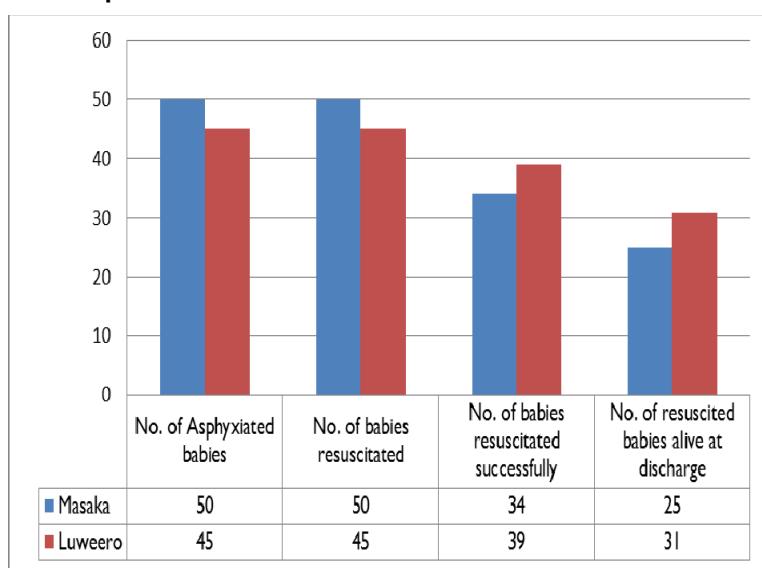
Improving Maternal and Neonatal Care

The facility maternal and newborn care collaborative was introduced in August 2010 with the objectives of contributing to the reduction of both neonatal and maternal mortality in Uganda. Together with the Ministry of Health, two districts in central Uganda were selected for the demonstration collaborative: Masaka and Luwero. Facility teams have put in place general and specific changes to address the identified challenges to improving maternal and newborn health. District MNCH coaches trained by HCI in turn trained 82 health care workers in all facilities that conduct deliveries in the two districts in Helping Babies Breathe (HBB), with support from the central coaches. To be able to reach out to more care providers, coaches have conducted refresher skills training for all MNCH care providers at the 34 health facilities participating in the collaborative during coaching visits sessions. MNCH care providers at the health units are first assessed for resuscitation skills using a checklist to be able to identify their ability to correctly follow the seven steps of resuscitation and also to identify individuals that can train others. This has increased the number of MNCH care providers that can correctly carry out all the steps of resuscitation using the HBB mannequin from 51% to 65% in Masaka and from 16% to 62% in Luwero facilities.

Data from seven participating facilities (four in Masaka and three in Luwero) out of the 34 sites show that a total of 95 babies asphyxiated at birth were all resuscitated; 81% of them were successfully resuscitated by the health care workers, with 76% of those successfully resuscitated being discharged alive (see Figure 21).

Baseline data collection and analysis were carried out for the community MNCH collaborative which will complement the facility collaborative in the same two districts. Village health team registers were adapted to support a community component.

Figure 21. Uganda: Outcome of newborn resuscitation in September 2011 at 7 newborn collaborative facilities



Improving Chronic Care

In FY11 the MOH and HCI facilitated the development and testing of the principles of chronic conditions care using HIV as an example in order to determine how to provide excellent care for patients with chronic conditions. These principles are being tested in 14 facilities in one district, with an emphasis on empowering patients in self-management, improving the delivery system, providing tools for decision support, strengthening the clinical information system, reorganizing the health care system, and developing community support for patients with chronic diseases. With the improvement changes, we are beginning to see more informed and activated patients positively interacting with a prepared and proactive health team. The number of patients enrolled in care for hypertension and diabetes care has also increased. Enrollment of patients has increased from 62 to 482 for diabetes and from 136 to 930 in a period of six months. The percentage of those who keeps appointment and have met their targets has improved. The percentage of patients with stable and controlled blood pressure (110/60-140/90mmHg) has increased from 5% to 66% and diabetic patients with stable fasting blood sugar have increased from 15% to 74% (4-7.5mmmol/L) between February and August 2011.

Strengthening QI Systems

In supporting the MOH to build capacity and take ownership and leadership of institutionalizing QI in the health sector, HCI has continued to support the ministry through the secondment of staff to the Quality Assurance Department. HCI supported the ministry to successfully hold a national quality improvement strategy meeting which was convened in Kampala in March 2011. The meeting provided a forum for various departments within the MOH, selected partners, and international experts to share experiences. From this meeting the quality assurance department was tasked with the development of the national quality improvement framework and strategy, with support from HCI. This has been developed and the second draft has been shared with the various stakeholders for their input before presenting it to the top management of the ministry for approval. A national QI coordination committee has been set up in the Ministry of Health to spearhead the institutionalization of QI, comprised of 43 members drawn from all the departments of the ministry and QI implementing partners. To build capacity at the regional level, HCI supported the ministry to train 19 regional coordinators who will support the district QI teams in joint district coaching visits and mentorship.

Directions for FY12

HCI will continue to provide QI technical support to the other USG-funded partners through joint work planning, capacity development in QI, and joint coaching and learning sessions. HCI will support the Ministry of Health to finalize and disseminate the National QI Framework. This strategy will be tested in 10 districts, and the lessons learned from the testing will be used to refine the strategy and to scale it up to the rest of the country. HCI will also support the National QI Coordination Committee of the Ministry to meet regularly and to provide leadership for the process of institutionalizing QI in the health sector. In addition, HCI will work with the Ministry of Health and the Regional Center for Quality of Health Care (RCQHC) to host a Regional QI conference in Uganda. HCI will continue work with the Ministry of Health to support regional coordinators and district coaches in conducting coaching and mentoring visits to health facilities. HCI will also continue to provide direct support to 96 sites to improve the coverage, retention, and patient outcomes for HIV-positive clients, and continue to document and disseminate best practices to other implementing partners. HCI will seek to work with the MOH and the SURE project to introduce QI in addressing gaps identified in the availability and use of HIV medicines and pharmacy workforce performance. In all these activities, HCI will strive to document the processes and the outcomes with the intention of sharing our experiences with the Ministry of Health and other partners, collaborating with them for adaption and scale-up of the best practices.

ASIA

2.11 Afghanistan

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
Maternal and Newborn Health (MNH) Facility Demonstration Collaborative	<ul style="list-style-type: none">▪ 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 two phases of the collaborative, each with a unique focus on the following interventions topics:<ul style="list-style-type: none">▪ <u>Phase 1:</u> Reducing post-partum hemorrhage (PPH); improving management of birth asphyxia; improving postnatal care; and improving medical records for maternity hospitals▪ <u>Phase 2:</u> Improving management of pre/eclampsia; reducing sepsis	<p>In the demonstration phase, two provinces out of 34 in Afghanistan. The collaborative began in 2009 in Balkh and Kunduz.</p> <p>In Kunduz Province, one regional hospital (RH), four comprehensive health centers (CHC), eight basic health centers (BHC), and two Sub Centers); Total estimated catchment area 477,677 out of 882,900 total population.</p> <p>In Balkh Province, one RH, three district hospitals (DH), four comprehensive health centers (CHC), and nine basic health centers (BHC). Total estimated catchment area is 533,518 out of 1,144,800 total population.</p>
MNH Facility Spread Collaborative (First wave Spread)	<ul style="list-style-type: none">▪ 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.	<p>In Herat Province, one RH, one district hospital (DH), three comprehensive health centers (CHC), five basic health centers (BHC), and two private hospitals. Total estimated catchment area is 390,260 out of total population of 1,642,700.</p> <p>In Bamyan Province, one provincial hospital, one district hospital (DH), five comprehensive health centers (CHC), and three basic health centers (BHC). Total estimated catchment area is 161,970 out of total population of 398,000.</p> <p>In Parwan Province, one public hospital, five</p>

		comprehensive health centers (CHC), and four basic health centers (BHC). Total estimated catchment area is 242,876 out of total population of 589,700.
MNH Facility Spread Collaborative (Second Wave Spread)	<ul style="list-style-type: none"> ▪ 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. The change package that developed by QI teams of Balkh, Kunduz, Herat, Parwan and Bamyan provinces spread in Saripul, Samangan, Wardak and Logar provinces. 	<p>In Sarepol province, one district hospital, 5 comprehensive health centers, 2 basic health centers and one sub-center. Total estimated catchment area population is 172,823.</p> <p>In Samangan province, one district hospital, 4 comprehensive health centers, 4 basic health centers and one sub-center. Total estimated catchment area population is 121,237.</p> <p>In Wardak province, one district hospital, 2 comprehensive health centers and 6 basic health centers. Total estimated catchment area population is 167,249.</p> <p>In Logar province, 2 district hospital, 2 comprehensive health centers and 4 basic health centers. Total estimated catchment area population is 102,921.</p>
MNH Community Demonstration Collaborative	<ul style="list-style-type: none"> ▪ The overall objective of this activity is to reduce maternal and newborn mortality and morbidity through improved quality of care at community level using the improvement Collaborative approach. 	Five provinces out of 34 in Afghanistan. The collaborative began in 2009 in Balkh and Kunduz and extended to three more provinces, Herat, Parwan and Bamyan in 2010. In these five provinces, the collaborative focuses on health posts of 17 HFs (one-two CHWs per health post), Total estimated catchment area is 379,097 for the 5 aforementioned provinces.
Kabul Maternity Hospital Demonstration Collaborative	<ul style="list-style-type: none"> ▪ The overall objective of this activity is to improve outcomes for women and newborns in participating 6 Kabul hospitals through improved prevention and treatment of the major causes of direct maternal and neonatal mortality using the Improvement Collaborative approach. 	Three maternity hospitals within Kabul plus three private hospitals. Total estimated catchment area is 3,449,800 out of approximately 4,000,000 residents of Kabul.
Support the MOPH in building capacity for improvement nationwide	<ul style="list-style-type: none"> ▪ The purpose of this activity is to adapt and institutionalize the science of improvement in Afghanistan. 	Nationwide, initially focused on strengthening the MOPH at the central level through establishment of a Unit within the MoPH and supporting development of national strategy for quality in health care in Afghanistan.
Hospital Medical Records	<ul style="list-style-type: none"> ▪ To furnish documentary evidence of care provided in the HF, create means of communication among health professional; serve as informative document to assist in quality review of patient care and produce valid, accurate and on time reports. 	Medical record committee at MOPH Pilot at Malalai , Isteqlal and Khair Khana hospitals in Kabul

Helping Babies Breathe	<ul style="list-style-type: none"> To train birth attendants in the essential skills of newborn resuscitation, with the goal of having at least one person who is skilled in neonatal resuscitation at the birth of every baby. 	HCI has conducted total of 21 training sessions (3 batches of TOT and 18 batches for first line health care providers) since 28 Sep 2010. Total of 374 first line providers and 60 Masters Trainers are trained. The mentioned trainings conducted in Kabul, Balkh, Bamyan, Parwan, and Herat Provinces. The main audiences of the trainings are ObGyn doctors and midwives.
Post-partum Family Planning (PPFP) Improvement Collaborative	<ul style="list-style-type: none"> To provide family planning systematic counseling for recently delivered women and their male partners and ensure that the post-partum women leave the hospital with their preferred family planning methods. 	5 hospitals in Kabul namely Malalai Maternity, and Estiqlal (government hospitals), Mehdi, Afghan and Shinozada private hospitals. Target group is all the delivered women and their male partners at the mentioned hospitals

Main Activities and Results

Maternal and Newborn Health Facility Demonstration Collaborative

During FY11, activities scaled up to new sites and preparations began for introducing the phase 2 content in this demonstration collaborative. Learning session 4 was conducted in Balkh in January 2011 and in Kunduz in February. During learning session 5, held in Balkh in June 2011 and in Kunduz in July, phase 2 interventions (addressing pre-eclampsia/eclampsia and maternal and neonatal sepsis) were introduced. Six new health facilities were added in Balkh in coordination with the Provincial Public Health Department (PPHD) and partners. Due to insecurity and poor commitment of implementing partners, no scale-up was possible in Kunduz Province. Gains have been achieved in many areas, as shown in Figure 22 and Figure 23 for the use of the partograph and compliance with postnatal care. The HCI technical team from Kabul regularly visited QI sites in the two provinces to provide support, especially for the new challenging area of delivery by skilled birth attendants, which requires more involvement and coordination with implementer NGOs and communities.

Figure 22. Afghanistan: Proportion of vaginal deliveries for which the partogram was completed, November 2009-October 2011, 12 health facilities, Kunduz Province

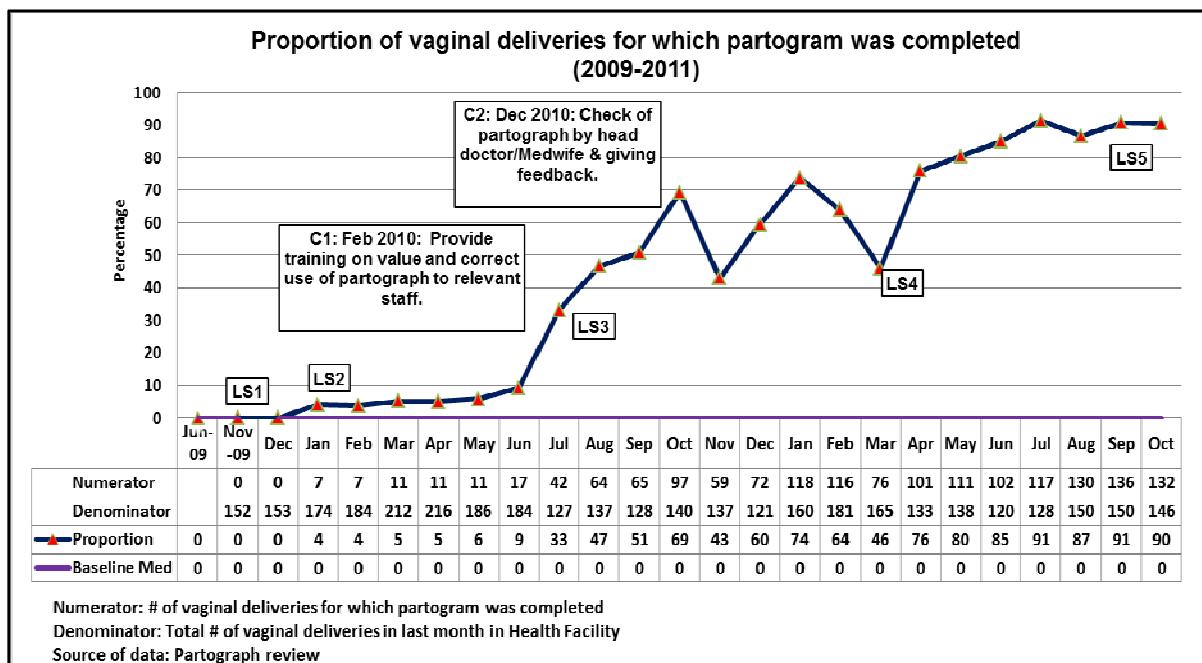
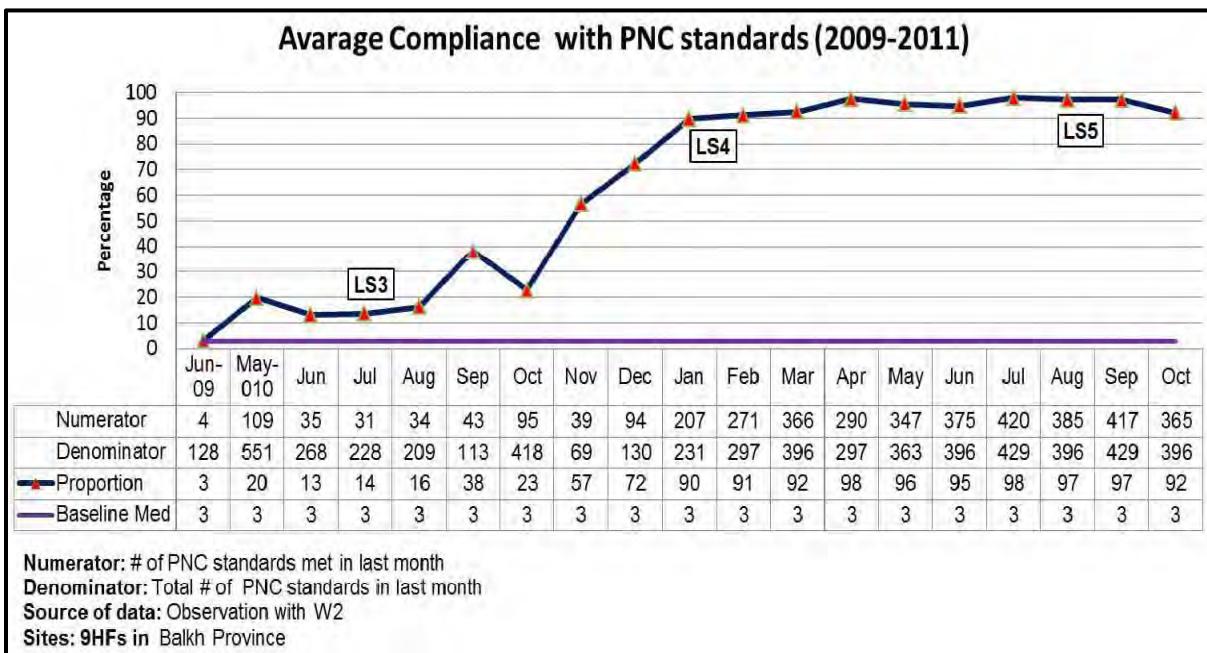


Figure 23. Afghanistan: Average compliance with postnatal care standards, May 2010-October 2011, Nine health facilities, Balkh Province



MNH Facility Spread (Wave I) Collaborative

The QI experiences (successful change ideas, methodology and lessons learned) gained in the Kunduz and Balkh health facility demonstration collaborative were spread to three new provinces in FYII: Parwan, Herat, and Bamyan. To facilitate the transfer of learning, provincial improvement coordinators from the new provinces spent a week in one of the demonstration provinces to see firsthand how changes were implemented. Provincial advisors from both the demonstration and wave I spread provinces attended a joint learning session in Kabul.

The first health facility collaborative learning sessions were conducted in October 2010, for two days in each province, with participation of QI team representatives from Parwan, Bamyan, and Herat, respectively. At this first session, teams reviewed the results of their baseline assessments, developed aims based on the selected indicators of the baseline, and were introduced to the Model for Improvement and tools for critical review of systems, cause analysis, and generating change ideas for improvement. ANC counseling, immediate breast feeding, active management of third stage of labor (AMTS), and tetanus immunization (TT2) were selected as areas to be improved at the first phase of QI activities. Following the first learning session, follow-up coaching visits were made by HCI staff to all participating health facilities in Parwan, Bamyan, and Herat.

The second learning sessions was conducted in Bamyan and in Parwan in February 2011 and in Herat in March. Teams shared their initial improvement results and discussed common challenges in the selected areas and possible new change ideas. The third learning session was conducted in June in Bamyan and in July in Parwan and Herat. Figures 24 and 25 present results for maternal counseling and AMTS.

MNH Facility Spread (Wave II) Collaborative

HCI's work with the maternity hospitals and close coordination with the Reproductive Health Department at the Ministry of Public Health (MOPH) contributed to the development by the MOPH of standard protocols for the management of normal and complicated maternal and newborn cases.

Figure 24. Afghanistan: Proportion of mothers who know at least two maternal and two newborn danger signs, Parwan, Bamyan, and Herat provinces

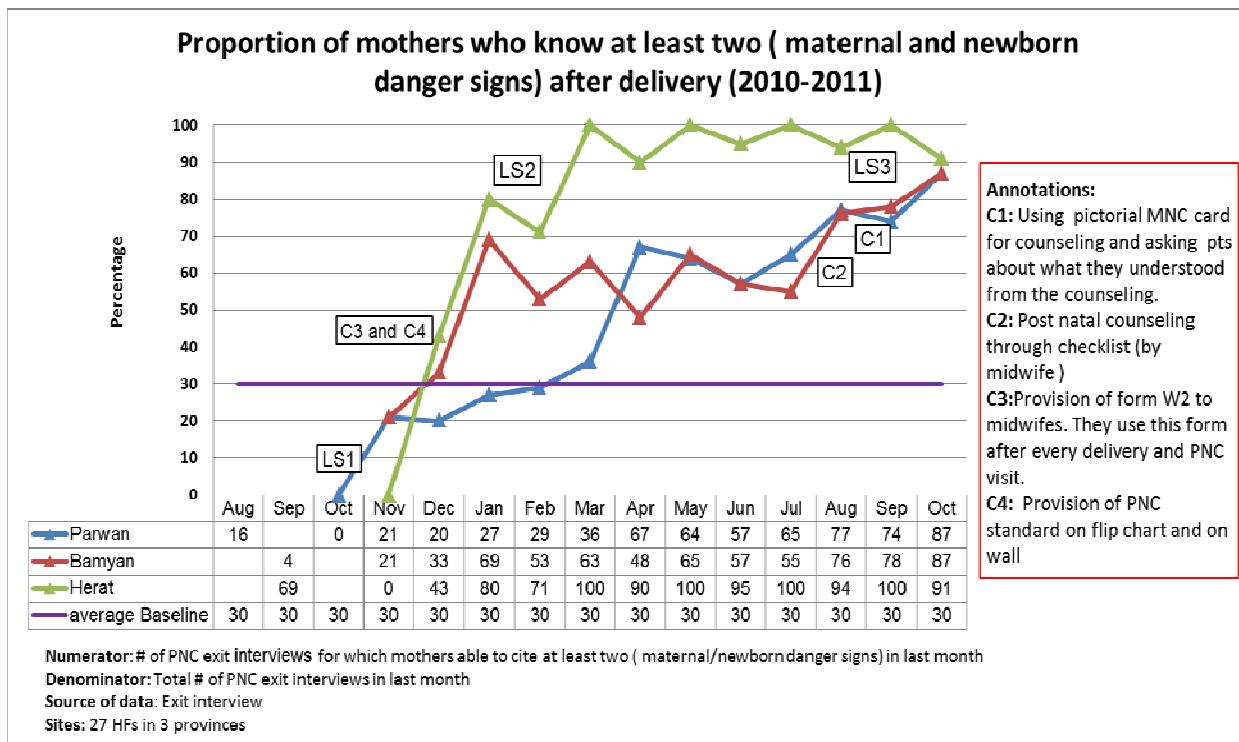
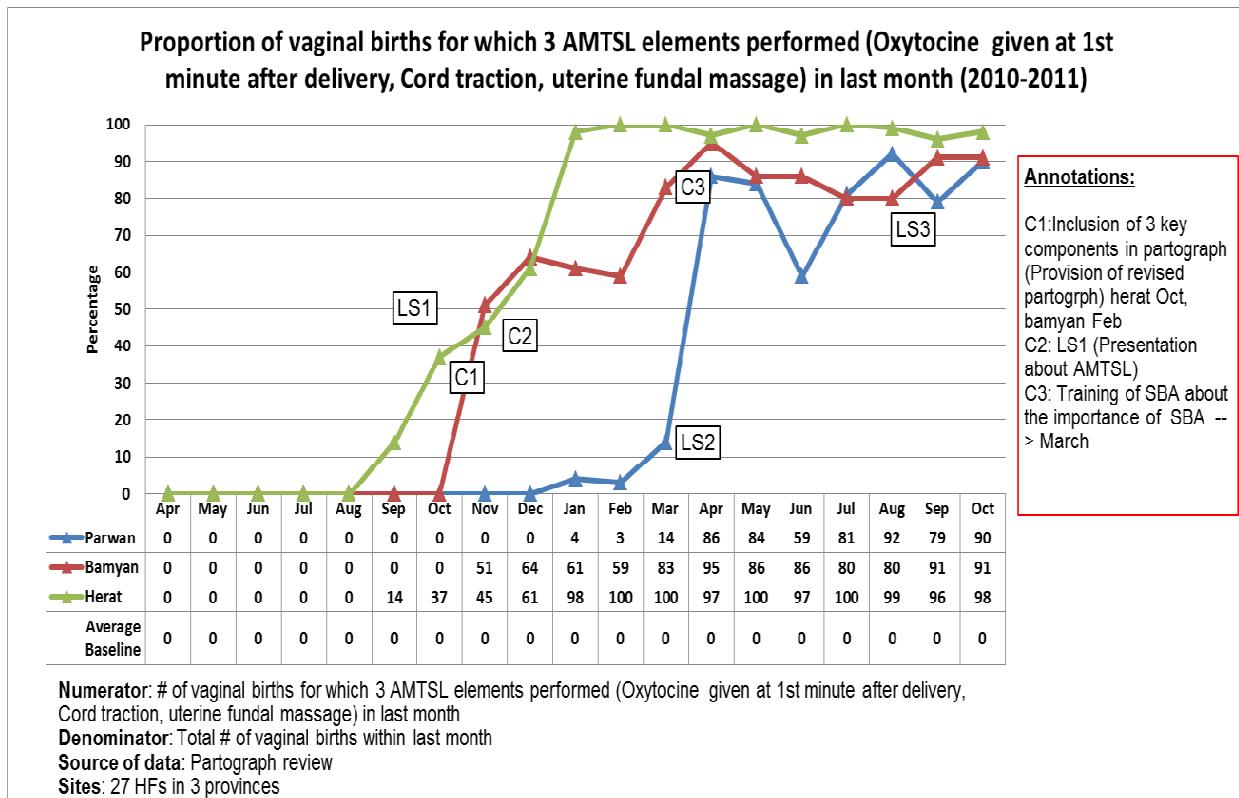


Figure 25. Afghanistan: Proportion of vaginal births for which three elements of AMTSL were performed, Parwan, Bamyan, and Herat provinces



Gaining extensive experiences on QI methodology and tools, significant improvement of QI common indicators in HCI demonstration collaborative (Balkh and Kunduz provinces) and first wave spread sites, and the development of a change package of evidence-based best practices enabled HCI to spread the QI activities to an additional four provinces (Samangan, Saripul, Wardak and Logar), beginning in July 2011. The above-mentioned provinces were selected in close coordination with MOPH and USAID Mission in Afghanistan. Separate coordination meetings were held with implementing NGOs and Provincial Public Health Offices in each province to familiarize them with the QI methodology and activities and to select the participating health facilities to start the first phase of QI interventions.

Separate orientation sessions were conducted in Wardak (July 2011), Logar (September 2011), Saripul (August 2011), and Samangan (September 2011) for the QI team representatives of the selected health facilities. After baseline assessments were carried out, the first learning session was held in Wardak and Saripul provinces in September. The participating QI teams developed their own QI projects based on the results of baseline assessment. The refined change package of practices from the demonstration and wave I sites served as an important reference for developing change ideas and implementation of QI interventions. Feedback sessions were conducted for the first-line providers of the Regional Hospitals of Balkh, Bamyan, Herat, Kunduz, and Parwan.

MNH Community Demonstration Collaborative

The MNH community demonstration collaborative was started in Kunduz and Balkh provinces in 2010. The preparatory phase work for this collaborative included advocacy, national/provincial level consensus building, orientation workshops, learning sessions for different stakeholders, and baseline assessments.

Due to high demand from provincial health authorities, the demonstration phase was extended to Herat, Parwan, and Bamyan provinces in 2011. The same preparatory activities took place in each province (including a baseline assessment of health care at the community level and household survey in the catchment of targeted health facilities). The community health posts (HPs) of three health centers or district hospitals in each province were selected for this phase, which makes the total number of health facilities that are covered under the community demonstrative collaborative 17 in all five provinces. The total number of health posts that are covered under this collaborative is 275 health posts.

An intervention package was developed that is being applied uniformly in each province. The interventions, listed in Figure 26, aim to boost the performance of individual community health workers in making antenatal and postnatal home visit and improve their counseling skills. The data collection process also revealed some important areas which need specific attention to improve.

Figure 26. Afghanistan: Interventions-Community Health Workforce Capacity Building Support

- Training and support to CHWs to make and update community maps
- Job aids and training for CHWs regarding high quality counseling skills
- Needs-based trainings and orientations for birth planning, recognition of maternal and newborn danger signs, essential newborn care, provision of ANC and PNC cares, etc.
- Regular monthly meeting with CHWs to provide feedback on monthly performance, motivate and help prepare for the next month activities
- Regular sessions of counseling simulations with CHWs in monthly meetings to enhance and maintain high quality of counseling, to monitor progress, provide feedback and recognize those who are successful.
- Joint health post coaching visits with CHS to supervise data collection, updated community maps and discuss local barrier for optimal performance
- Visit and interview women in communities who received counseling recently from CHWs to assess their understanding, quality of CHWs' counseling and provide feedback to CHWs
- Communicate stock-outs with suppliers (NGOs) for adequately and timely supply of essential medicine to CHWs
- Follow-up with CHS and CHWs
- Supervision plan with CHS developed at beginning of the month. Review the plan with supervision results with CHS in the end of the month. Identify the gaps and provide feedback
- Meetings with Shura-e-Sehi (Health Councils) to support CHWs' performance

The first community collaborative orientation session was held in Bamyan in March 2011. A learning session was also conducted in Balkh in March to share community QI experiences and major learning among participating teams, refresh participants on the Model for Improvement, introduce key elements of the community strategy developed by HCI and the MOPH, and to discuss common challenges in collecting community MNH indicators. A joint community-based maternal and newborn care training of trainers was also conducted in cooperation with BASICS and the MOPH in Kabul in March.

Training community health workers in each of the five provinces in the proper use of counseling cards has taken more time and energy than expected and was not completed until September 2011. At present, community collaborative teams are focusing on making improvements in the referral of pregnant women to health facilities for antenatal care and to skilled birth attendants for delivery and in referral of women for tetanus vaccination. In May 2011, a technical review meeting was held to review the progress, share challenges and lessons learned, and identify next steps for the community collaborative.

After the provision of training, job aids, and monthly simulation sessions, results showed that CHWs' compliance with postnatal care and counseling standards has improved from about 60% to over 90% from December 2010 to October 2011 (see Figure 27 for results from 19 health posts in Kunduz). In the community, the improvement in counseling skills also translated to the improvement in the proportion of pregnant women who were able to cite at least two danger signs in pregnancy or post-partum, which increased from 50% in May 2010 to 89% in October 2011, and the proportion of mothers who could report at least two danger signs in the newborn, which increased from 20% in May 2011 to 92% in October 2011. Additional interventions that contributed to this increase in knowledge were the ongoing monitoring and interviews with pregnant women post-counseling to provide the CHWs with constructive feedback. Figure 28 shows the increase in coverage of women in the catchment areas of 47 health posts in Parwan Province with at least one antenatal home visit.

Figure 27. Afghanistan: Proportion of postnatal visits provided to delivered women within 48 hours of delivery by CHWs, Kunduz Province, Dec. 2010-Oct. 2011

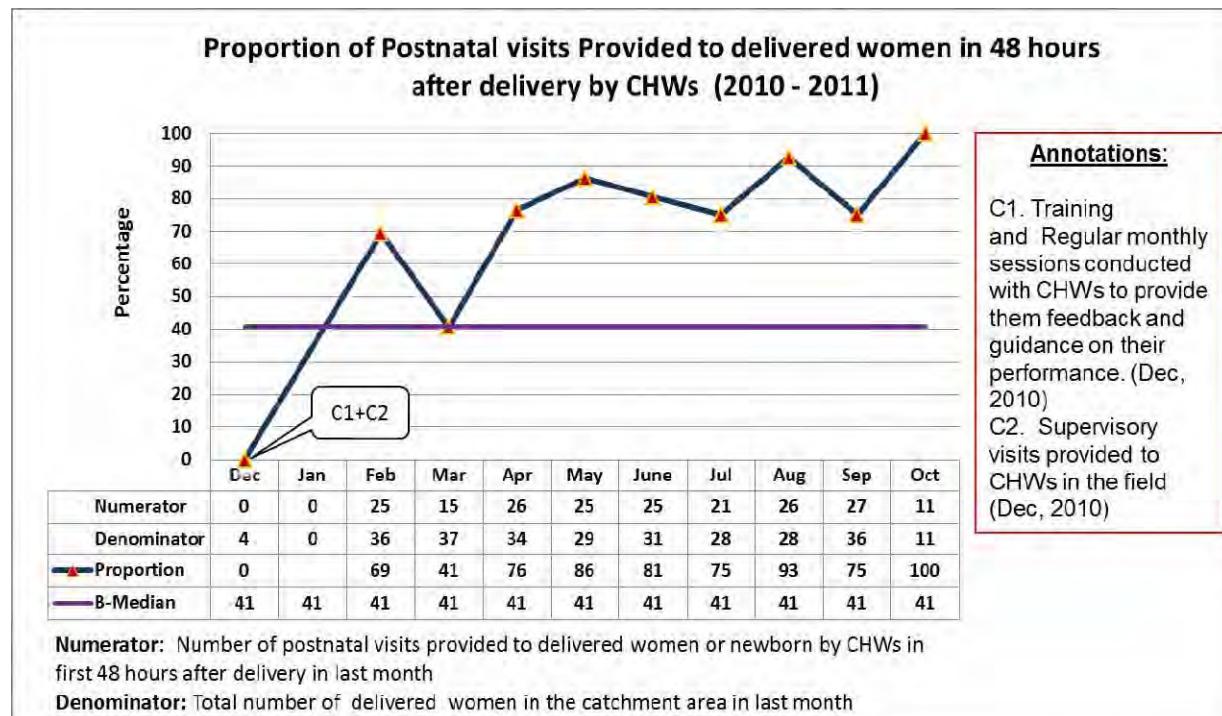
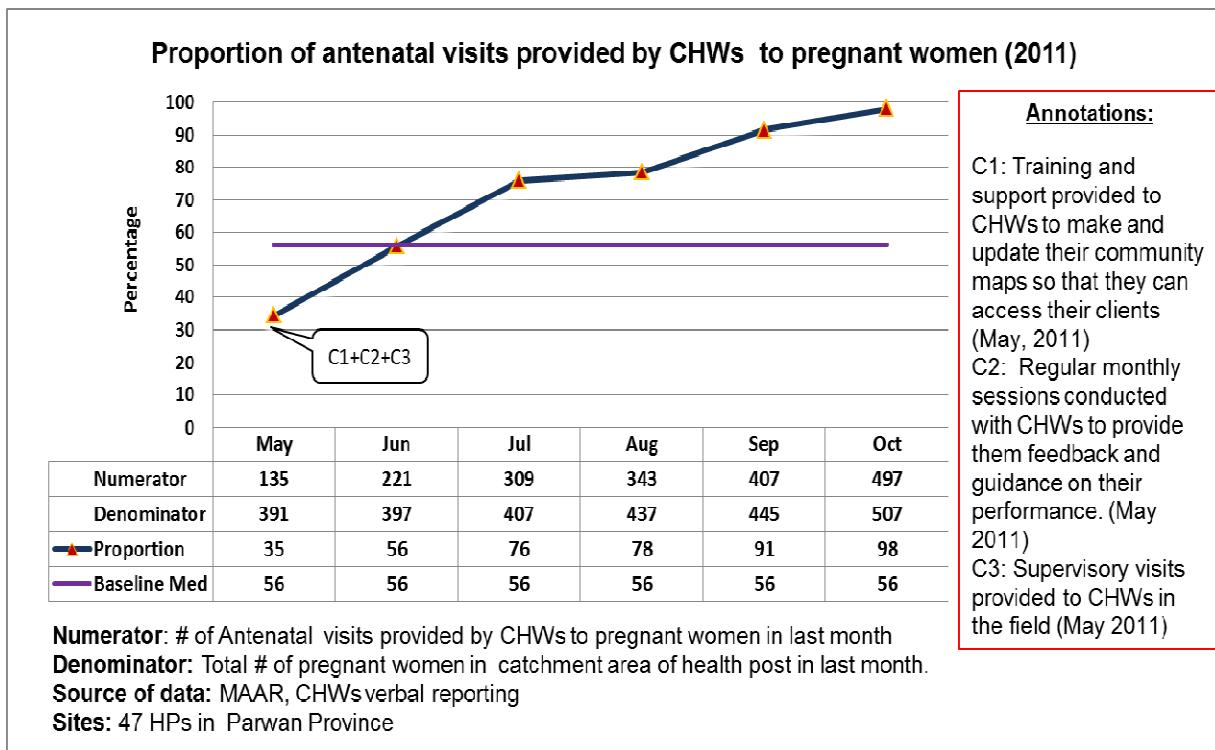


Figure 28. Afghanistan: Proportion of pregnant women visited by a CHW for antenatal care, Parwan Province, May-October 2011



Kabul Maternity Hospital Demonstration Collaborative

The Kabul Maternity Hospitals demonstration collaborative involving three large public and three large private maternity hospitals in Kabul held its second (November 2010) and third (May 2011) learning sessions during FY11. Hospital teams from provincial hospitals in Parwan, Bamyan, Balkh, and Herat and from two private hospitals (Saidi Rahmani and Luqman Hakim) in Herat were invited to participate in the learning sessions given the overlap in improvement aims between the Kabul hospitals and the provincial hospitals. During the learning sessions, each of the participating hospitals presented their achievements, lesson learned, challenges, and progress, and exchanged best practices with each other. The areas selected by hospitals for the initial improvement activities were labor monitoring, postnatal monitoring, immediate breastfeeding, and essential newborn care. Because inadequate knowledge and skills are often a cause of poor performance in hospitals, HCI conducted a number of trainings in the maternity hospitals, based on the felt needs of the QI team in each hospital. HCI staff also carried out weekly coaching visits to the maternity hospitals in Kabul in order to assist the QI teams in reviewing their changes, collecting and analyzing data, and developing charts for their improvement activities, which were displayed on the hospital QI notice board. At the third learning session, hospitals agreed to move to the second phase of interventions, including improvement in the early detection, prevention and management of pre-eclampsia and eclampsia.

HCI also conducted a two-day training on Leading Performance Improvement for the leadership of targeted hospitals in Kabul and provinces in January 2011. The objectives of the training were to make senior hospital leadership aware of a range of highly effective methods and tools to help improve performance, understand the role of the senior leaders in enabling improvements, understand how to get more out of the current resources, understand the impact of culture on performance outcomes, be aware of improvements already achieved as part of HCI's, and feel confident in interpreting performance data over time in support of decision-making. Additionally, HCI supported the establishment (rehabilitation of the office space, furniture, and equipment) of QI departments in Isteqlal and Malalai

hospitals to serve as an official working space for the QI activities in each hospital. HCI is mentoring these teams to assume overall responsibility for leading QI processes in their hospitals in the future. Figures 29 and 30 provide examples of the results being achieved in Kabul maternity hospitals.

Figure 29. Afghanistan: Proportion of births in which the newborn was put to breast within first hour after birth, April 2010-October 2011, Kabul Province

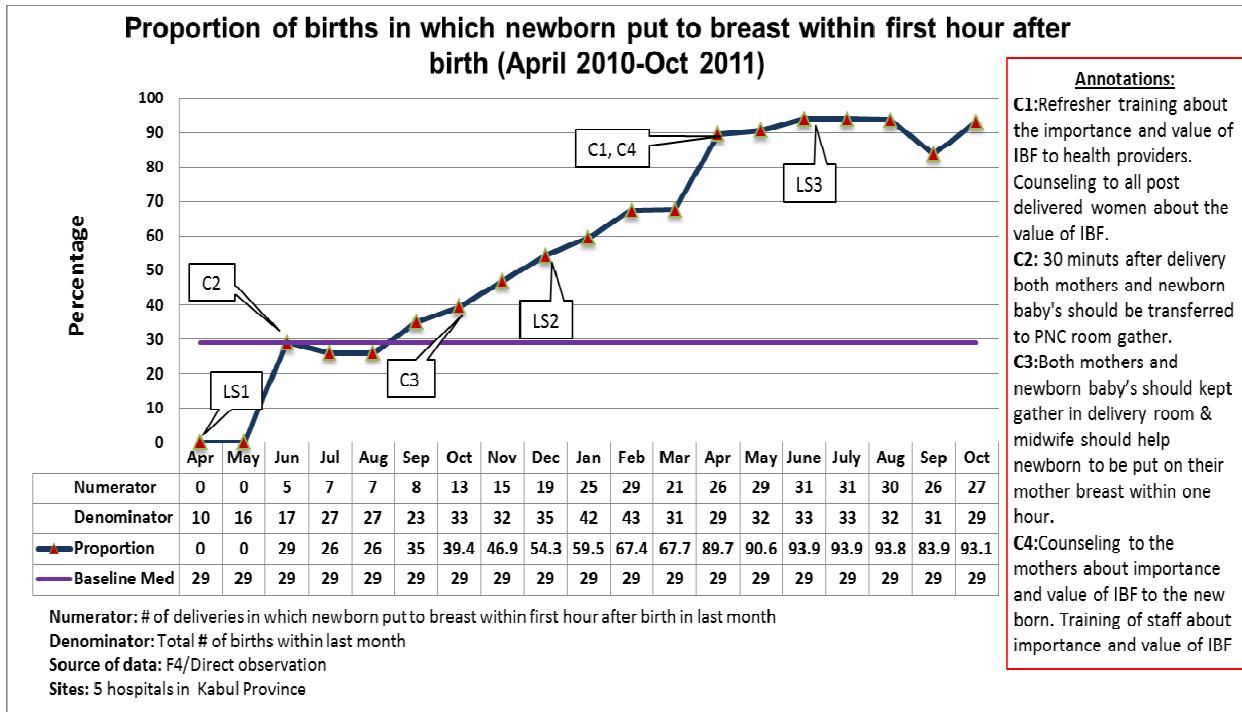
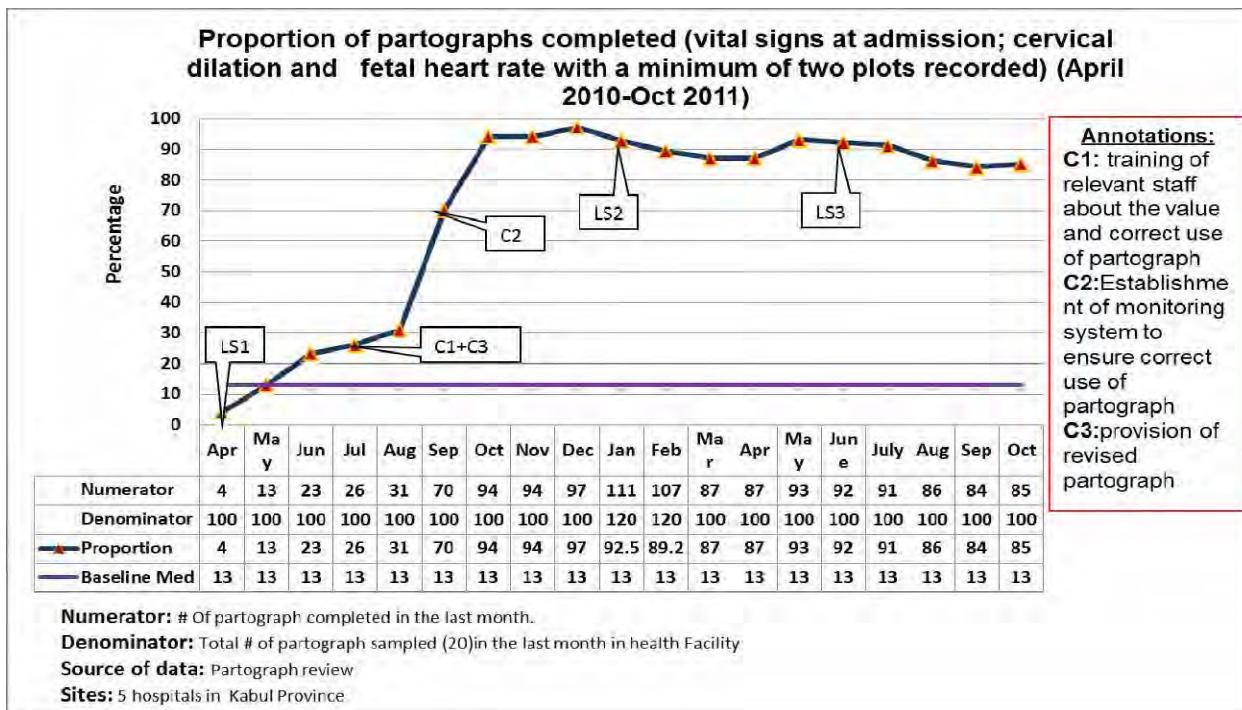


Figure 30. Afghanistan: Proportion of births in which the partograph was completed, April 2010-October 2011, Kabul Province



Supporting the MOPH in Building Capacity for Improvement Nationwide

In FY10, HCI supported the MOPH to assist in the establishment of a unit to lead health care quality improvement activities within the MoPH and develop a National Strategy for Health Care Quality. During FY11, HCI assisted the Improving Quality in Health Care (IQHC) Unit to undertake a consultative process for the development of the national quality strategy. While the Unit retained overall responsibility for the document development, a Task Force and Core Group (including HCI staff) were formed to provide support. The Task Force included about 30 representatives of key MOPH departments, partnering organizations, and hospitals. The Task Force met regularly and provided inputs into the development of the strategy. The Core Group compiled these inputs, reviewed documents, and prepared drafts of the strategy for review by the Task Force. The IQHC Strategy was approved on June 26, 2011 and officially launched at the National Strategy for Improving Quality in Health Care in Kabul Serena Hotel on August 8, 2011, with the participation of around 100 stakeholders from the MOPH, Parliament, UN agencies, donors, and health sector implementing partners.

USAID Afghanistan tasked HCI with working with other partners as the lead agency on developing the Improving Quality in Health Care Strategy. Additionally, the IQHC Strategy Implementation Framework (2011-2015), and detailed operational plan were developed, with the next steps for costing the IQHC Strategy which is planned to be finished in December 2011.

Hospital Medical Records

Another key intervention by HCI in FY11 was to assist in the design of a new Medical Records (MR) package, including patient files, logs, and registers. HCI provided technical and financial support to the Health Management Information System (HMIS) Department of the MOPH to establish a Medical Records Committee at national level. The Committee consisted of 14 members from different MOPH departments and maternity hospitals. The Committee assigned a core team to assess and evaluate the current medical records system in the maternity hospitals. The assigned core team recommended revising and redesigning the maternity hospitals medical records system.

In order to build the capacity of the Medical Record Committee, HCI supported a Medical Records Management Training in Hyderabad, India, in March 2011 in which 19 participants (MOPH staff, Medical Record unit staff of hospitals) participated. In consultation with the HMIS and other relevant departments, HCI redesigned the medical records package (including 31 separate items, from patient files, logbooks, registers, folders, ID cards, to individual forms, referral sheets, discharge sheets, and consultation sheets) and the Patient Master Index, a computerized database which stores basic demographic information and outcome data of individual patients and produce timely and accurate reports on the key indicators prioritized by the MOPH. The system will assign each patient a unique, six-digit medical record number upon admission, which becomes the ID of patient and makes the retrieval of the patient files possible in the future. In the last quarter of FY11, HCI helped to introduce the computerized PMI and medical records package in Malalai Maternity, Isteqlal and Khair Khana hospitals in Kabul. The medical records staff in the three hospitals was trained. The system will be piloted for the next six months and then is expected to be extended to all maternity hospitals in HCI-assisted provinces and nationwide by MOPH. Eventually, the PMI will be linked to a cell phone application (through a project implemented by the Ministry of Information and Technology of Afghanistan) to send bulk text messages to mothers and educate them about the danger signs of pregnancy, due date of their children's vaccination, feeding recommendations, etc.

Helping Babies Breathe

Helping Babies Breathe (HBB) is an evidence-based educational program to teach neonatal resuscitation techniques in resource-limited areas. The initiative emphasizes skilled attendance at birth, assessment of every baby, temperature support, stimulation to breathe, and assisted ventilation as needed, all within "The Golden Minute" after birth. HCI introduced this initiative for the first time in Afghanistan. The

HBB training and informational and counseling materials were translated into local languages and distributed in designated HCI hospitals. The Reproductive Health Department (RHD) of the MOPH approved and included HBB training materials in its Learning Resource Package (LRP). During the year, HCI conducted a total of 21 training sessions (3 trainings of trainers and 18 trainings of first line health care providers), training a total of 374 front line providers (female doctors and midwives) in the 10 HCI-assisted provinces. In Malalai Hospital in Kabul, HCI installed seven HBB resuscitation tables and equipped them with resuscitation kits. Other essential items for successful implementation of HBB, AMTSI and essential newborn care, including cloth for wrapping and drying the baby, gauze, gloves, baby blankets, and delivery instruments, were supplied to Malalai Maternity, Isteqlal, Balkh Regional, Wardak District, Logar District, Parwan Provincial, and Bamyan Provincial hospitals.

Post-partum Family Planning

In light of Afghanistan's high total fertility rate of 6.8 births, HCI started in FY11 a post-partum family planning (PPFP) demonstration improvement collaborative at Malalai, Isteqlal, Afghan, Shenozada, and Mehdi hospitals in Kabul to improve the quality of post-partum family planning services and establish a system which includes good quality counseling, accessibility of use of family planning (FP) methods, and empowering women to select a FP method during the post-partum period. HCI led a PPFP introductory workshop in Malalai Maternity Hospital Training Center in April 2011 with separate orientation workshops for doctors and midwives. PPFP baseline assessments were carried out in Malalai, Isteqlal, Khair-Khana, Mehdi, Shinozada and Afghan hospitals. HCI reviewed and redesigned PPFP counseling tools (registration book, indicators, questionnaire, and client cards) and recruited two female counselors to provide peer systematic counseling. To ensure the privacy during peer counseling, the counseling rooms in Malalai and Isteqlal hospitals were redesigned.

Research and Evaluation

In addition to a very large technical assistance program, HCI's team in Afghanistan is also implementing a large research agenda focused on cost-effectiveness of QI strategies. Studies initiated in FY11 include a study on the cost-effectiveness of the Kabul maternity hospital collaborative in increasing uptake and quality of high-impact maternal newborn services; a study examining the cost-effectiveness of the MNH demonstration collaborative in Balkh and Kunduz provinces in increasing uptake and quality of high-impact maternal newborn services; a qualitative study on the community-level maternal and newborn care collaborative; a study on the spread of improvements from the demonstration phase of the MNCH Facility collaborative in Balkh and Kunduz to three new provinces of Parwan, Herat, and Bamyan; a study on the validity of data collected by QI teams, comparing self-reported and directly observed data in three maternity hospitals; a study on the effectiveness, efficiency, acceptability and feasibility of the new medical records system in Malalai, Khair Khana and Isteqlal hospitals; and a study on the overall rate of surgical site infection in Kabul hospitals.

Directions for FY12

In FY12, HCI will continue working with the currently engaged provinces to vertically spread evidence-based best practices, conduct HBB training for health facility, continue with the post-partum family planning collaborative in Kabul, and convene learning session 4, 5 and 6 for maternity hospitals in Kabul and the provinces. HCI will also initiate new activities at the national level to conduct a national workshop to finalize the one and five-year implementation plans for the IQHC Strategy and subsequently will provide support to the MOPH to implement the IQHC strategy. HCI will support quality improvement trainings for students of Kabul Medical University and will build leadership capabilities of the MOPH and implementing NGOs. Following the completion of the pilot of the Patient Master Index platform, HCI will scale up the Medical Rerecords system to 12 other Regional and Provincial hospitals. HCI will also test and implement interventions to improve early detection, prevention and management of pre-eclampsia and eclampsia and improve C-section safety.

EUROPE

2.12 Europe & Eurasia Bureau Maternal Health and Non-communicable Diseases

Overview of HCI's Program in FY11

Key Activities	What are we trying to accomplish?	Geographic scale
Assessment of non-communicable disease (NCD) screening and care practices in women of reproductive age (WRA) in the Europe and Eurasia (E&E) Region	<ul style="list-style-type: none"> ▪ Contribute to increased knowledge of NCD screening and care practices in WRA, including client and provider NCD knowledge, practices and attitudes ▪ Identify opportunities and constraints for improving prevention, screening and management of NCDs in WRA in the E&E Region 	<p>4-country assessment of NCD screening & care practices in Albania, Armenia, Georgia, and Russia</p> <p>10 clinics each country in range of regions and facility types</p>
Assessment of selected maternal newborn care (MNC) practices in women of reproductive age in the E&E Region	<ul style="list-style-type: none"> ▪ Contribute to increased understanding of selected maternal newborn health service practices, including provider and client attitudes, knowledge and practices related to priority MNC practices ▪ Identify opportunities and constraints for strengthening MNC services, including client and family-centered maternal newborn care in the E&E Region 	<p>4-country assessment of NCD screening and case management practices in Albania, Armenia, Georgia, and Russia</p> <p>10 clinics each country in range of regions and facility types</p>

Main Activities and Results

Assessment of NCD Services for Women of Reproductive Age in Albania, Armenia, Georgia, and Russia

Between October 2010 and August 2011, HCI conducted an assessment of non-communicable disease (NCD) prevention, screening and care practices for women of reproductive age in Albania, Armenia, Georgia, and Russia at the request of the USAID Europe and Eurasia (E&E) Bureau. The overarching objective of the assessment was to describe the status of high-impact cost-effective ambulatory prevention, screening and care practices for high burden NCDs in women of reproductive age, including status of essential supporting health system functions, and provider and client attitudes, practice and knowledge. High-burden NCDs were selected for assessment based on their mortality and morbidity rank among all-cause mortality and morbidity for women of reproductive age in the region. Prioritized NCDs include cardiovascular disease, breast and cervical cancer, chronic respiratory conditions (asthma/chronic obstructive pulmonary disease), diabetes and depression, and their associated risk factors, many of which overlap.

Assessment methods, standardized across the four countries, included semi-structured interviews with key informants (at national and regional level) and an assessment of NCD services in a representative sample of ambulatory health centers in each country. Quantitative data sources used in the facility assessment included a chart review, structured questionnaires with clients, managers, and providers and an inventory of health center inputs and organizational processes. A total of 69 expert stakeholders were interviewed across the four countries from a range of institutions, including Ministry of Health, in-service and post-service medical training institutions, health information officials, and partners. The facility assessment was conducted in 47 ambulatory centers across the four countries, selected for a representative sample of urban, rural, primary care and polyclinic health centers. A total of 658 charts were reviewed; 397 clients, 269 providers, and 47 managers were surveyed using a structured quantitative questionnaire. Individual country assessment dates and total number of facilities assessed in each country are summarized in Table 5.

Table 5. Dates and number of facilities assessed in individual countries as part of the four-country NCD and MNH service delivery assessments

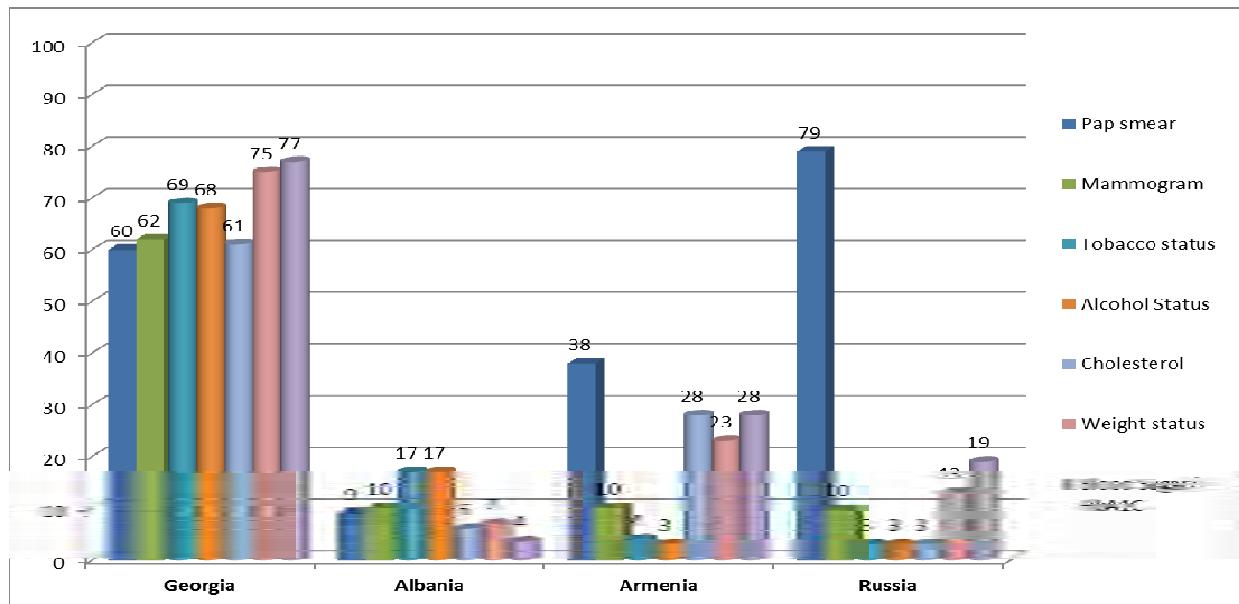
Individual Country	Assessment Date	Ambulatory Health Centers Assessed	Maternities Assessed
Albania	February 2011	13	10
Armenia	April 2011	11	10
Georgia	Oct. – Nov. 2010	11	12
Russia	August 2011	12	10
Total	--	47	42

(n=47 ambulatory health centers and 42 maternities in 4 countries)

Assessment results demonstrated variable but generally weak delivery of high impact NCD prevention, screening and treatment interventions for CVD, diabetes, chronic respiratory conditions, high-burden cancers and mental health and highlight many missed opportunities to deliver low-cost high-impact NCD interventions characterized as “best buys” by WHO. Provider self-reported practice and chart results revealed low rates of screening and follow-up interventions for tobacco use, obesity, physical inactivity, and alcohol use. Shows variation across the four countries for having a standard place in the patient medical chart to record NCD screening.

Figure 31 shows variation across the four countries for having a standard place in the patient medical chart to record NCD screening.

Figure 31. E&E NCD assessment: Percent of charts with standard place for recording high-impact NCD screening test (n=653 charts)

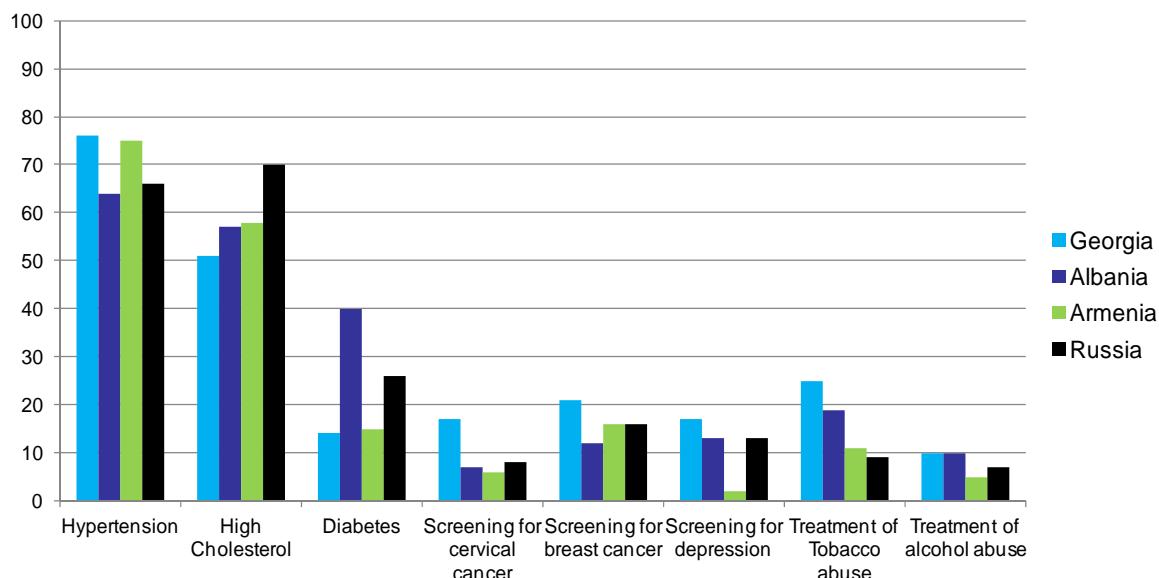


For most interventions, provider self-reported confidence, access to evidence and knowledge results correlated strongly with chart results. As shown in Figure 32, providers reported lowest levels of confidence for screening and treating tobacco and alcohol use, diabetes, depression, cervical and breast cancer, with higher confidence levels reported for treatment of high blood pressure and cholesterol. Provider self-reported confidence levels to manage specific NCDs correlated to a high extent between all four countries, highlighting specific priority areas for future provider capacity building.

Assessment client results demonstrated a solid understanding of tobacco risks among surveyed clients but a weaker understanding of CV disease and diabetes risk factors. Only 55-65% of clients answered

correctly that diabetes, physical inactivity and high cholesterol each increase the risk of cardiovascular disease.

Figure 32. E&E NCD assessment: % of providers self-reporting to be “very confident” screening and treating specific NCDs (n=269 providers, four countries)



Client awareness of high impact screening interventions, such as cholesterol, cervical and breast cancer screening was variable across the countries. Clients identified depression as a common problem for women (81%) and self-reported high rates of current or prior depression (37%) despite low levels of depression diagnosis and treatment in medical charts and low levels of provider self-reported confidence to diagnose and treat depression. Client results suggest a poor understanding of the chronicity of NCDs such as high blood pressure, including the need for continuous health care. Only two-thirds of clients across all four countries cited a provider as the single most important influence on their medication selection in a region where medications are generally under-regulated and freely available over the counter.

Final assessment recommendations include immediate- and medium-term recommendations, many of which coincide with the action framework articulated in the United Nations High Level NCD Meeting outcomes document. Immediate-term recommendations focus on rapid implementation of demonstrated poorly-performing “best buy” simple NCD interventions combined with client behavior change support. Mid-term recommendations focus on national and regional strengthening of essential NCD health system functions and implementation of more complex NCD interventions.

Assessment of Selected Maternal Newborn and Client-centered Services in Maternities in Albania, Armenia, Georgia and Russia

Between October 2010 and August 2011, concurrent with the NCD assessment in the same countries, HCI implemented an assessment of selected high-impact maternal and newborn labor, delivery and post-partum practices. Despite impressive gains in recent decades, maternal and newborn mortality and morbidity rates in the Europe and Eurasia (EE) region continue to exceed rates in Western Europe; maternal mortality rates are eight times higher and infant mortality rates five times higher in the EE region than in the European Union-15 countries. The overarching objective of the four-country MNH assessment was to describe the status of high-impact labor, delivery and early post-partum services and client-centered practices for women and newborns, including the status of essential supporting health system functions, and provider and client attitudes, practices and knowledge. Evidence-based intra- and

post-partum interventions proven to reduce leading direct causes of maternal and newborn mortality were assessed, with an emphasis on best practices for routine care (every delivery) and best practices for prompt detection and evidence-based treatment of the major maternal and newborn complications that cause most deaths, including: post-partum hemorrhage, eclampsia, maternal and newborn sepsis, newborn asphyxia, and low-birth weight and premature newborns.

The assessment of MNH services included a representative sample of maternities in each country. Quantitative data sources used in the facility assessment included a chart review, structured questionnaires with clients, managers, and providers and an inventory of health center inputs and organizational processes. A total of 32 expert stakeholders were interviewed across the four countries from a range of institutions, including Ministry of Health, in-service and post-service medical training institutions, health information officials, and partners. As shown in Table 5, the facility assessment was conducted in 42 maternities across the four countries, selected for a representative sample of urban, rural, primary, secondary and tertiary referral maternities. A total of 592 charts were reviewed; 292 clients, 239 providers, and 42 managers were surveyed in maternities using a structured quantitative questionnaire.

Assessment results demonstrate many important gains and several areas of continued weakness. In general, chart, client and provider results demonstrate moderately strong delivery of best routine practices during labor and delivery and the immediate post-partum period. For many specific best practices, however, results varied considerably between countries. Several areas of general strength were noted across all countries, including generally strong availability of essential maternal newborn care inputs and protocols; generally high rates of provider-reported continuing medical education for many MNH topics; generally high rates of early newborn care best practices including early initiation of breastfeeding, thermal protection, eye care and vaccination; and generally high rates of client-reported privacy and satisfaction with services. Areas of weakness observed across all countries included a lack of standardized medical records and systematic chart documentation to promote, record and track best practices; weak systematic post-partum monitoring and counseling of mother and post-partum monitoring of newborn for early detection of complications; weak chart documentation of and provider-reported confidence for best treatment practices for pre-eclampsia/eclampsia, maternal and newborn sepsis, and premature infant care; weak performance-based management practices; persistent use of episiotomy; and lack of regular birth companion and informed patient consent practices.

Despite strong provider knowledge of normal labor progression across the four countries, chart documentation of labor progress and regular measures of maternal and fetal wellbeing during labor were variable. Chart and provider results suggest low rates of routine administration of AMTSL, including immediate post-partum administration of oxytocin, a best practice for preventing post-partum hemorrhage. Initiation of early breast feeding and other best newborn early care practices including thermal protection, routine eye care, and vaccination was strong in all four countries. Exclusive breastfeeding as reported by mothers was less strong, however, and systematic monitoring of mother and newborn during the early post-partum period to facilitate recognition of common early post-partum complications for mother and newborn was generally weak across all four countries.

In general, maternities demonstrated good availability of essential laboratory, medication, equipment and infrastructure inputs for providing high-quality maternal newborn care services. Post-partum and pre-discharge counseling of mothers to promote best practices at home and to teach women to recognize early danger signs (indicating a possible complication) for themselves and their newborn was variable across countries as reported by mothers and documented in charts. With the exception of Russia, less than a third of charts in all countries documented any pre-discharge counseling.

Client-centered best practice results demonstrated several common trends and many inter-country differences. The majority of clients in all four countries reported that they felt that their physical privacy and confidentiality of personal information had been respected since their admission to the maternity.

However the practice of regular informed client consent for clinical interventions was weaker, with less than 40% of mothers in all countries except Russia reporting to have signed a consent form of any kind at any time, despite the high priority accorded to consent procedures by most clients (see Table 6).

Table 6. E&E MNH assessment: Client-centered care: Rooming-in and breastfeeding (n=292 clients and 239 providers in 42 maternities in four countries)

Client-centered practice	Four-country average
Breastfeeding Best Practice:	50%
% charts record initiation of breastfeeding within first hour	(29% ARM, 72% GEO)
% clients report breastfeeding within first hour after delivery	35% (18% ALB, 48% RUS)
% patients report exclusive breastfeeding since delivery	37% (23% ARM, 48% RUS)
% providers agree that “if a mother has a cesarean it is best to encourage mixed bottle and breast feeding so mother can recuperate”	26% (19% RUS, 36% ARM)
% clients who report being counseled on what baby needs to drink/eat first 6 months	37%
% client's agree that Newborn/baby needs only breast milk or formula until age 6 months	95%
Rooming In Baby & Mother	71%
% mothers report rooming-in of baby since delivery	(58% RUS, 87% GEO)
% providers agree “if no medical problems for newborn, mother should decide whether her newborn stays with her (at bedside) until discharge.”	56%
% mothers report that baby’s location has been determined by maternity staff	79% (61% GEO, 98% ARM)

Provider results suggest that providers may not systematically discuss labor care management decisions with women, especially in the event of a complication. Presence of a birth companion of choice and choice of birth position were reported by less than a fifth of mothers in every country except Georgia (51% and 37% in Georgia respectively), with provider results mirroring client results. Almost a fifth of women reported an episiotomy, and provider results suggest that many providers continue to perform episiotomies under specific circumstances, although not routinely. A majority of mothers in all countries reported immediate physical contact with their infant and “rooming in” of their newborn (in their room) since delivery, with highest rates of rooming-in observed in Georgia and Albania.

Specific assessment recommendations include: strengthening delivery of routine best care practices for mother and newborn during labor, delivery and the early post-partum period, as well as strengthening complications care. In particular recommendations for routine care highlight the need to improve systematic monitoring during childbirth phases to improve early detection of complications; to improve administration of immediate post-partum oxytocin to reduce occurrence of PPH; to improve birth companion practices and exclusive breastfeeding; and to improve post-partum counseling and discharge processes. Complications care recommendations focus on improving prevention and management of maternal and newborn sepsis; improving detection and management of pre-eclampsia to prevent progression to eclampsia, and improving management of premature/low birth weight specialized newborn care. Client-centered practice recommendations focus on improving provider-patient communication and consent practices, choice of birth companion and birth position, and reducing rates of episiotomy, shaving, and enemas.

Directions for FY12

In FY12 HCI will issue the final report of both the NCD and the MNH assessments, incorporating USAID feedback. HCI will collaborate with the E&E Bureau and other stakeholders as appropriate to

promote dissemination of both reports. Discussions are underway with the USAID Mission in Russia regarding possible preparation of a Russia-specific NCD assessment report, including a dissemination event in Russia and possible modest follow-on implementation work in Russia. Given the general lack of NCD service delivery assessment tools appropriate to middle- and low-income settings, HCI will refine and publish the NCD service assessment tools along with a simple “how to guide”.

2.13 Georgia

Overview of HCI's Programs in FY11

Key activities	What are we trying to accomplish?	Geographic scale
Project design and start-up activities	<ul style="list-style-type: none"> ▪ Demonstrate improvement in quality, consistency and continuity of medical care in a selected region of Georgia ▪ Improve access and use of evidence-based medical information by Georgian physicians and the availability of modern evidence-based treatments. 	Dissemination of evidence for priority conditions to all physicians countrywide Demonstration of QI intervention (CI) to improve quality, consistency and continuity of care in one region

Main Activities and Results

Project Design and Start-up Activities

In August 2011, the USAID Mission asked HCI to work with the Ministry of Labor, Health and Social Affairs (MoLHSA) of Georgia and other stakeholders to address quality, consistency, and continuity of medical care and to improve access and use of evidence-based medical information by Georgian physicians, including evidence-based treatments. With these overarching goals, HCI developed the initial design of the project, with inputs from HCI technical experts in maternal and child health, knowledge management, research and evaluation, and finance and management. Based on the suggestions and comments at the project design meeting, the detailed implementation plan for FY12 was developed in September. The work plan proposes applying state-of-the-art QI methods to rapidly improve quality of care for selected high burden diseases in ambulatory care and hospital services in one region, to be determined with Georgian authorities.

Clinical focus areas of the project were selected based on the known disease burden in Georgia, demonstrated poor quality of care and potential for dramatic improved quality of care due to strong evidence for high-impact cost-effective clinical interventions for the clinical condition. HCI's Chief of Party in Georgia held initial meetings with the USAID Mission and national stakeholders at the School of Public Health at Tbilisi State Medical University and the Georgia Primary Health Care Association. Registration of URC's representative office in Georgia was completed, and recruitment begun for key technical and administrative positions. A concept note and potential research questions were defined for a proposed study on the role of QI on health workers perceptions and attitudes in Georgia.

Directions for FY12

In FY12, HCI will begin project implementation, including meetings with the USAID mission, MoLHSA and other key stakeholders to finalize the project design. We will form a QI Technical Working Group (or incorporate the function in an existing group) at the national level to guide the development of a regional improvement collaborative in a region to be determined. For the improvement collaborative, we will design and deliver QI training modules, organize learning sessions, lead coaching visits at participating facilities, and develop a competency-based clinical change package. For activities relating to the use of evidence-based medical information, we will map Georgian teaching institutions that deliver continuous medical education, develop a database of Georgian physicians in the US, and support collaboration between Georgian key stakeholders and US physicians.

2.14 Russia

Overview of HCI's Program in FY11

In FY11, HCI's program in Russia encompassed three technical components: 1) improving HIV treatment, care and support in the City of St. Petersburg and in Leningrad and Sverdlovsk oblasts; 2) sustaining gains in maternal and newborn care and reproductive health services achieved in FY10 in three oblasts of the Central District surrounding Moscow (Kostroma, Tambov and Yaroslavl) and spreading the best practices developed to three new oblasts: Tver, Ivanovo and Tula; and 3) improving the early detection and treatment of TB in Bryansk and Saratov oblasts. While the first two components built on work conducted by HCI in prior fiscal years, the TB component was new for FY11. The HIV component also included close coordination with federal level institutions to institutionalize best practices in HIV care organization that were developed in St. Petersburg for promulgation at the national level. Similarly, the maternal and child health work this year also involved close coordination with federal level authorities to institutionalize as national policy better care practices advocated by the project.

Component 1: HIV Treatment, Care and Support

What are we trying to accomplish?	Activities	Scale of intervention
Improve access to basic HIV/AIDS care and ART and improve the detection, prevention and treatment of TB/HIV co-infection	<ul style="list-style-type: none"> ▪ Develop a Practical Manual on Organization of HIV Care in St. Petersburg based on the Framework for Engagement into HIV Care developed during FY10 ▪ Provide periodic support to Russian partners in implementation of algorithms for HIV patient medical follow up in polyclinics based on practical recommendation for medical follow-up of HIV patients developed during FY10 in St. Petersburg 	All 18 districts in St. Petersburg plus two districts of Leningrad Oblast; 100% of AIDS and TB facilities and 64% of polyclinics with a total of about 26,785 PLWHA registered for follow up in St. Petersburg; and 100% of AIDS and TB facilities and 100% of polyclinics with about 2,276 PLWHA registered for follow up in two districts of Leningrad Oblast combined. In total, this represents 204 state health facilities, social service organizations, and NGOs in St. Petersburg and 3 such facilities in Leningrad Oblast.
Improve social support for HIV-infected mothers and their children	<ul style="list-style-type: none"> ▪ In partnership with the City Committee on Social Policy, develop standards for social care delivery for HIV positive mothers and their children ▪ Provide ongoing support to teams of social services providers in implementing methodological guidelines for delivery of social support services to HIV infected mothers and their children in St. Petersburg 	All 18 districts of St. Petersburg; 100% of state centers for individuals' social services
Develop capacity for improved delivery of HIV care	<ul style="list-style-type: none"> ▪ Provide technical assistance to Leningrad oblast with the organization of HIV care, applying the best practices and approaches developed in St. Petersburg 	All 18 rayons of Leningrad oblast, including the Oblast AIDS Center, 18 Central Rayon Hospitals, 19 (all) TB facilities, 19 (all) substance abuse treatment facilities, and 5 rayon social rehabilitation centers; total number of PLWH registered in care is 10,985 (September 2011). Thought representatives of all 18 rayons participated in all educational

		events, in FYII we closely worked with 6 rayons including 5 rayons focused on social follow-up and inter-service collaboration, one rayon focused on quality of medical follow-up and one rayon focused on both topics: social follow-up - Vsevolozhsk (population is 217 400), Gatchina (population is 220 900), Vyborg (population is 189 300), and Priozersk (population is 61 300), Tosno (111 700); quality of medical follow-up - Lomonosov (population is 64 400) and Tosno (population is 111 700).
Develop capacity for improved delivery of HIV care	<ul style="list-style-type: none"> ▪ Provide technical assistance to Sverdlovsk oblast with the organization of HIV care, applying the best practices and approaches developed in St. Petersburg 	All 73 municipal rayons of Sverdlovsk oblast and all seven rayons of Yekaterinburg, including the Sverdlovsk Oblast AIDS Center and 5 sub-oblast AIDS Centers, 73 Central Rayon hospitals, 100% of the TB facilities; total number of PLWH registered for care is 35,275 (September 2011) Sverdlovsk Oblast population (including Yekaterinburg) is 4,297,510 (January 2011). The Oblast AIDS Center covers all 7 rayons of Yekaterinburg and five sub-oblast AIDS Centers cover all 72 municipal rayons of Sverdlovsk Oblast. Yekateringurg is the 73d municipal rayon of Sverdlovsk Oblast.
Institutionalize best practices on HIV care organization at the federal level	<ul style="list-style-type: none"> ▪ Complete development of Federal guidelines on provision of social support services for HIV infected families ▪ Complete development of federal guidelines on organization of TB screening among HIV patients ▪ Complete development of national guidelines on Isoniazid Preventive Therapy (IPT) 	Nationwide; total number of PLWH registered in care in the Russian Federation (83 regions) is 372,893 (January 2011)
Subcontract with the Eurasia Medical Education Program	<ul style="list-style-type: none"> ▪ Improve clinical knowledge of care providers in the area of HIV-related opportunistic infections and TB, and prevention and management of non-communicable diseases in relation to HIV/AIDS 	Four Russian oblasts (Irkutsk, Yekaterinburg, Novosibirsk, Kazan)

HIV/AIDS—Main Activities and Results

HIV/AIDS Treatment, Care and Support in St. Petersburg

This spread collaborative was officially wrapped up by with the HCI presentation of “Improving access to medical and social services to HIV patients and most-at-risk populations as a response to HIV epidemic in St. Petersburg- Results of six-year cooperation” at an international conference “HIV-infection and immune suppressions” in St. Petersburg on October 21-22, 2010. The conference, organized by the City’s AIDS Center to mark 20th anniversary of the AIDS Center and was attended by 250 health care practitioners and experts from St. Petersburg, neighboring regions of the North-Western Federal District, Moscow, Ukraine, Kazakhstan, and the United States. HCI sponsored attendance at the conference of Dr. Bruce Agins, Medical Director of the New York AIDS Institute who

has contributed to discussions on organization of HIV care with a presentation “HIV/AIDS in the City 2010: From New York to St. Petersburg”. HCI provided technical and financial support to produce the first issue of the international journal “HIV-infection and immune suppressions” in 2011 that features presentations of models and approaches for improved delivery of HIV prevention, care and treatment in Russia.

HCI assisted the City AIDS Center in publishing organizational guidelines on the organization of medical follow up for HIV patients in polyclinics. The guidelines were prepared in FY10 by the working group of infectious disease (ID) specialists with technical assistance provided by HCI and supervision and guidance provided by the Chief ID Specialist of Saint Petersburg. The guidelines were published as an appendix to the first issue of the international journal “HIV-infection and immune suppressions”. The guidelines were also presented to and distributed at the “Woman, Child and HIV” International Scientific Symposium that took place in St. Petersburg on June 28-29. A practical manual “HIV: Medico-Social Care” was finalized by the City’s AIDS Center staff and printed under HCI support. The manual was distributed among partners in Leningrad and Sverdlovsk oblasts and presented to and distributed among the participants of the International conference “HIV infection and immune suppressions” in St. Petersburg in October 2011.

Social Support for HIV-infected Mothers and their Children in St. Petersburg

The collaborative ended at the end of FY10 and officially wrapped up on the AIDS World Day by a city-wide conference. On December 1, 2010, the City Committee on Social Policy of St. Petersburg organized a city-wide conference to feature key results of a four-year cooperation between the Government of St. Petersburg and USAID in the area of development of social support services for HIV-affected families. The event took place in Smolny, St. Petersburg and brought together over 115 representatives from the City’s Health Care Committee, City’s AIDS Center, district departments of healthcare and social protection, social service and health care providers, and representatives of key non-governmental organizations to discuss achievements in developing social services for HIV-affected families. The event was chaired by Head of the Committee on Social Policy and was welcomed by Vice-Governor of St. Petersburg and US Consular General in St. Petersburg.

To institutionalize best practices developed under the Social Support collaborative, HCI assisted the Committee on Social Policy in developing standards for social support services for HIV-affected families. The standards are a new set of requirements in addition to the methodological guidelines on the social support follow-up services (case management) and will regulate the scope of the “rational package” of services to be offered for a client with HIV, time associated with a particular service provision, and quantity of such services to be delivered during a year. By the end of September 2011, a list of 133 HIV-related services was elaborated within a standard package of social support services for HIV-affected families. The Committee on Social Policy initiated a costing assessment of each HIV service at the Committee on Economic Development for further inclusion to the standard package.

Develop Capacity for Improved Delivery of HIV Care

Based on successes in St. Petersburg, HCI developed a Framework for “Engagement into HIV care”. This document has become the basis for FY11 project activities aimed at developing capacity for more effective delivery of HIV care in two new targeted regions, Leningrad and Sverdlovsk oblasts. Both programs aim to strengthen health care and social support systems to adequately respond to the needs of HIV-positive people. Leningrad and Sverdlovsk oblasts were selected as targeted areas due to the following reasons: 1) the leadership in both oblasts demonstrated commitment to fight HIV infection and to improve HIV care system, and have formally expressed interests in cooperation with HCI; 2) both oblasts are among those with highest HIV prevalence rate in Russia; 3) work in St. Petersburg is closely related to activities in Leningrad oblast (joint trainings for city and oblast specialists, etc.).

Improving HIV Care in Leningrad Oblast

In December 2010, HCI received official invitations from the Leningrad Oblast Committees on Health Care and Social Protection for cooperation in the area of improving medical and social services for HIV-infected patients. During February-March, technical and coordinating meetings were held with health and social protection authorities, including the Oblast AIDS Center and municipal level health and social services organizations to analyze and discuss coverage gaps in HIV care continuum according to the Framework and to develop strategies for covering these gaps. Relying on the gap analysis, priorities for cooperation were discussed and resulted in the development of a joint action plan, which includes key objectives, expected results, and major activities. The plan was approved by the oblast government on June 7 and served as the basis for a Memorandum of Understanding between URC and the Committee on Social Protection and Health Care Committee. In 2011 it was decided to organize a joint initiative in developing a municipal model of social support for HIV-affected families in five pilot rayons (Vsevolozhsk, Gatchina, Vyborg, Priozersk, and Tosno). HCI provided technical support in training social service specialists and supervising their skills for further work with the target group including a study tour to St. Petersburg to the City AIDS Center, Infectious Disease Hospital, and rayon polyclinics and centers for social services in several rayons of St. Petersburg. The social services now provided include: material (financial and nutrition) support, psychological counseling, and referrals to substance abuse counseling and treatment.

Major achievements of the five rayons were presented at a meeting of coaches hosted by the Oblast Committee on Social Protection in June 2011. These achievements included development of rayon orders on establishing interdisciplinary teams, provision of trainings on social follow-up of HIV-affected families, on-site trainings of social care providers at the Oblast AIDS Center, and organization of referrals from healthcare facilities to social support services.

Another focus of work was quality improvement of medical follow-up. In late June 2011, HCI organized a workshop on medical documentation audit for representatives of the Oblast AIDS Center. The aim of the workshop was to assist the Oblast AIDS Center in implementing quality assessment of medical follow-up of HIV-affected patients at municipal health care facilities in Leningrad Oblast. HCI provided technical assistance in designing a template for data collection for the audit of HIV medical documentation, establishing an algorithm for audit implementation, and developing schedule of audit visits to municipal health care facilities.. In the last quarter of FY11, HCI assisted the two rayons chosen by the AIDS Center (Tosno and Lomonosov) to carry out a patient chart audit (random sample study) to assess quality of clinical follow-up for HIV patients in general health care facilities. The results of Tosno's audit ($n=260$) indicated gaps in quality of follow-up clinical care. Only 57% of HIV patients (both IDU and non-IDU) visited an ID specialist two or more times, 27% had two or more CD4 counts, and 9% had two or more viral load tests during the 12-month period since their first visit in 2010. The proportion of HIV-infected IDUs who came for follow-up clinical care in 2010 was disproportionately low. Figure 33 shows gaps in care for most at-risk populations in Leningrad Oblast.

Improving HIV Care in Sverdlovsk

In October 2010, HCI received an invitation for cooperation in the area of improving HIV care from the Sverdlovsk Oblast AIDS Center. An initial visit to the region was made by HCI in January and resulted in a round table discussion with key local stakeholders on developing project objectives and implementation strategy. In March, a Memorandum of Understanding between URC and the Oblast Ministry of Health was signed. The proposed approach to assisting Sverdlovsk Oblast is depicted in Figure 34.

Figure 33. Russia: Baseline gaps in engagement of MARPs into HIV care, Leningrad Oblast, 2010

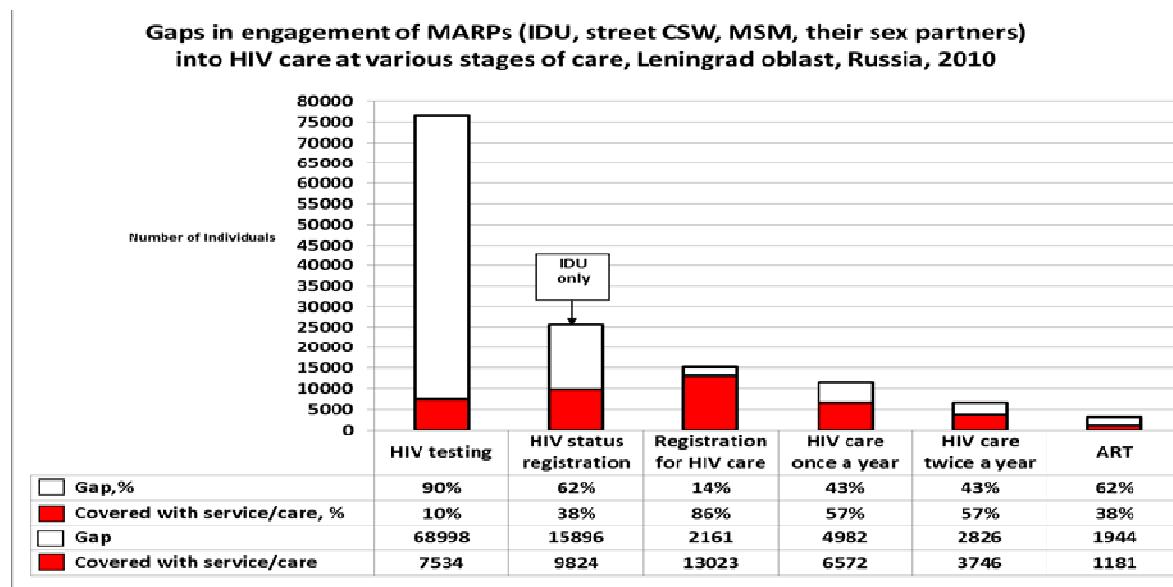
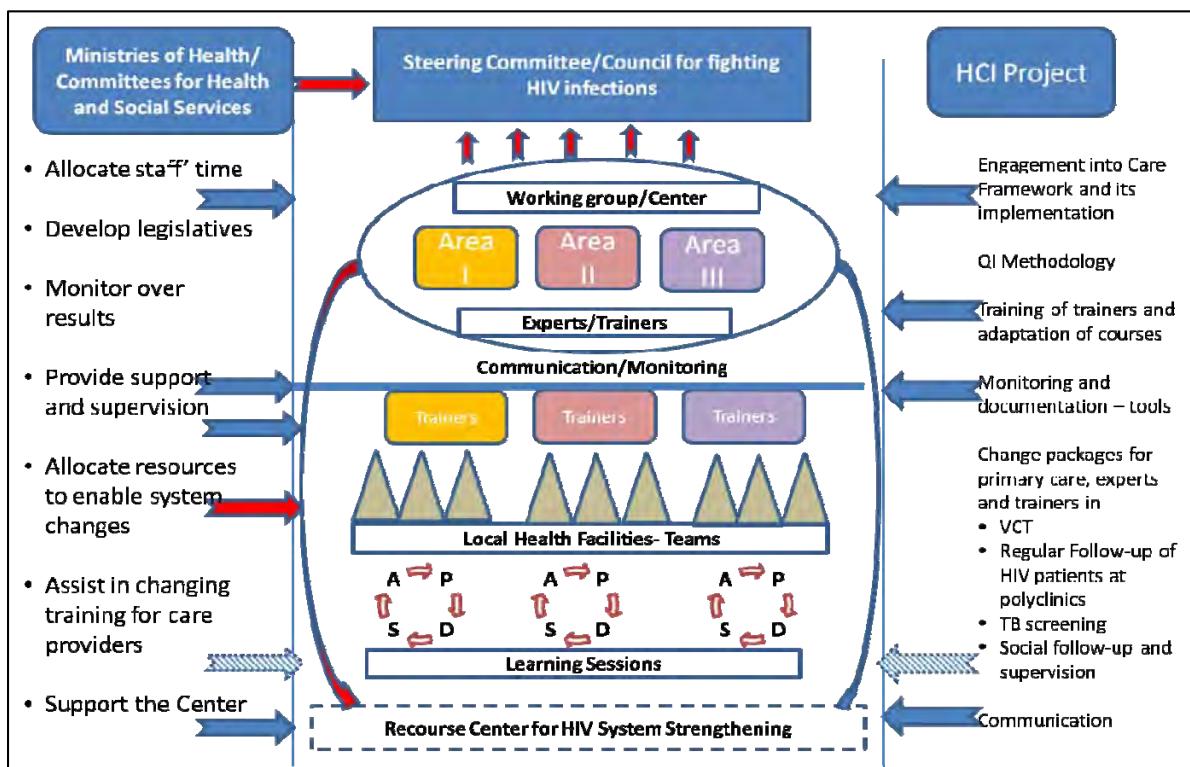


Figure 34. Russia: HCI approach to assistance in Sverdlovsk Oblast



On April 18, HCI conducted QI training for the oblast leaders followed by a study tour to St. Petersburg in May 2011. Both the Framework and best practices in comprehensive care delivery for HIV-infected patients that were developed in St. Petersburg, especially in organizing social follow-up of HIV-affected families, were accepted for implementation in Sverdlovsk. Oblast authorities proposed the creation of an interdisciplinary team to develop steps aimed at improving drug rehabilitation services and expanding access to HIV-related services for people suspected in drug abuse (counseling, HIV-express testing, follow-up if needed). HCI facilitated analysis of care delivery to substance users and identification of

gaps in care in Sverdlovsk oblast (see Figure 35). A team of representatives of the AIDS center, Drug Abuse and TB Dispensaries drew a flowchart, collected basic data, and identified key problems and priority steps to address those problems (shown in Table 7).

On September 30, 2011, at a working session of the Oblast Coordination Committee to Fight HIV/AIDS a decision was made to draft Order on collaboration of all health and non-health related services to facilitate HIV prevention and viral hepatitis among IDUs. In late August, a first learning session was conducted for 47 health and social services specialists from 9 municipal rayons (municipalities) to focus on improving HIV care continuum. The session was conducted by the regional partners with technical assistance by HCI. On September 22, the Order on collaboration of health care and social support services for provision of care to HIV-infected patients was distributed among oblast heads of respected departments at a meeting of Ministries of Health and Social Development. This Order is based on a Framework for Engagement into HIV care and knowledge gained during the study tour of Sverdlovsk health care and social support specialists to St. Petersburg. The Order requires: 1) identification of the social needs of HIV patients and referral to social services; 2) building capacity for and providing pre- and post-testing counseling at every level of care provision; 3) provide knowledge on HIV infection to health and non-health related specialists.

Figure 35. Russia: Baseline-Gaps in Engagement of MARPs into HIV Care, Sverdlovsk Oblast 2010

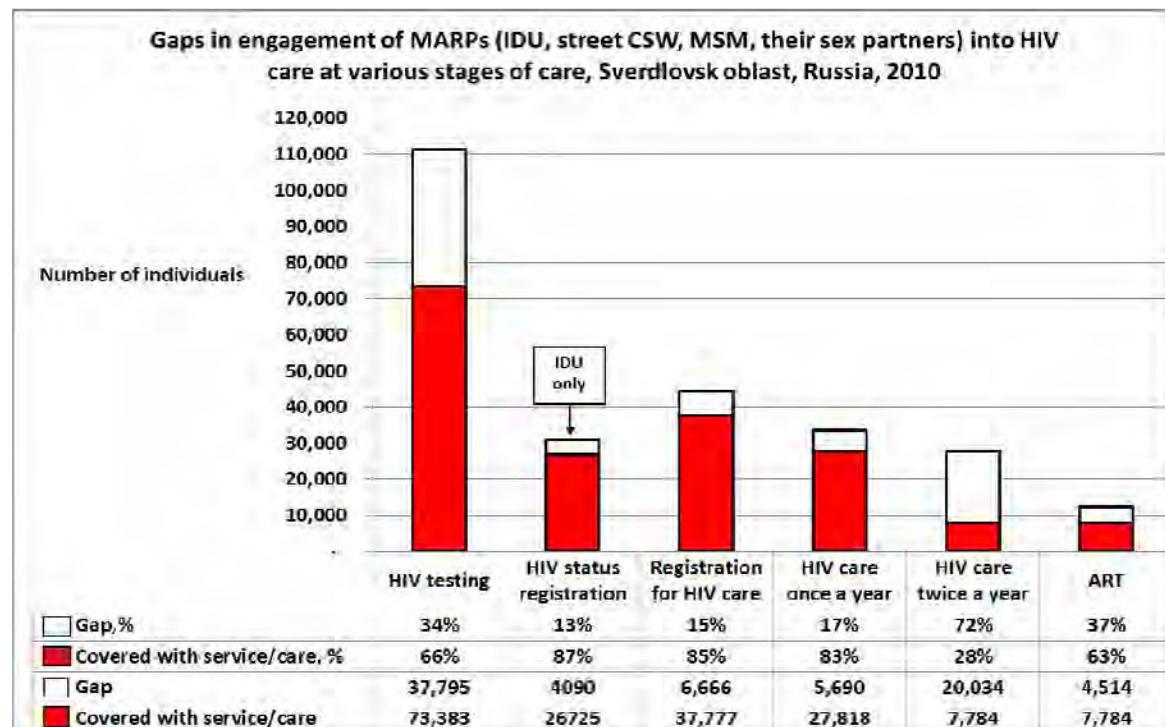


Table 7. Russia: Problems and priority steps for care delivery to substance users in Sverdlovsk Oblast

Problems identified	Priority steps proposed
Most clients who receive IDU testing, care and treatment at narcological facilities (including on anonymous basis) are not covered by HIV counseling, testing and prevention.	Organize HIV counseling and testing of all clients including those receiving IDU-related care and treatment on a anonymous basis in narcological facilities Set up an team of narcologists, psychologists, ID specialists and peer consultants to initiate HIV counseling and testing Provide the narcological facilities with express HIV tests
Lack of continuity of HIV-related care	Set up an Oblast-level department for care delivery to patients with

Problems identified	Priority steps proposed
between the AIDS Center, narcological dispensaries, TB dispensaries, infectious disease hospitals and polyclinics	HIV/TB/IDU including provision of intensive care, HIV/TB care and long-term drug rehabilitation care
Lack of comprehensive drug rehabilitation services both for HIV-infected and not-infected IDUs;	Open an inpatient drug rehabilitation department
Primary care specialists are not detecting signs of drug abuse	Develop a training curricula to primary care specialists to ensure early detection on drug abuse Train primary care providers

Institutionalize Best Practices on HIV Care Organization at the Federal Level

On October 13, 2010 HCI jointly with the Federal AIDS Center, organized a second round table in Moscow to review the FY10 federal guidelines on provision of social support services for HIV-affected families. Following the round table, a draft Order on organization of social follow-up of HIV-infected patients was developed and reviewed by the Federal AIDS Center. In June 2011, Interregional NGO of PLWH submitted the draft Order to the Ministry of Health and Social Development (MOHSD) of the Russian Federation for consideration. Because of other pending legislation on the Social Protection of Populations, the MOHSD proposed instead to issue Practical Recommendations that later be presented as a federal document. HCI is collaborating with the Federal AIDS Center to develop National practical recommendations on administration and provision of Isoniazid preventive treatment (IPT) to prevent TB in HIV patients.

HIV/AIDS—Directions for FY12

HCI will cooperate with the Oblast health care authorities and leading specialists to develop an Oblast program for HIV prevention among most at risk populations for the period of 2013-2015. The draft program is expected to be presented by May 2012. HCI will assist Sverdlovsk Oblast to develop a regional program for prevention of HIV-infection and viral hepatitis among IDU and to develop regional practical recommendations on design and organization of HIV-patient chart audit in primary health care facilities. Practical recommendations on organization of social care to HIV patients and their family members in Leningrad oblast are expected to be issued by September 2012. HCI will also explore interest in Tatarstan Oblast in HCI support for capacity development for more effective delivery of HIV care.

Component 2: Improving Care for Mothers and Babies

Activities	What are we trying to accomplish?	Scale of intervention
Manage six MCH/Reproductive Health Collaboratives as a Regional Project on “Improving Care for Mothers and Babies”	<ul style="list-style-type: none"> ▪ Train providers of maternal and infant care and reproductive health care and leadership at the oblast level in basic quality improvement methods and move them toward completion of graduate-level courses in quality improvement ▪ Complete adaptation of our Russian “Communicator” web portal, to the real-time reporting, collection and monitoring of data on reproductive health and maternal and child health care processes and outcomes, and to provide a public, Russian-language library of key materials for quality improvement in these areas ▪ Test methods of institutionalizing quality improvement methodology within Russian 	Direct, onsite assistance to five regions (Kostroma, Tambov, Tver, Ivanovo, and Tula) and long-distance support to one region, Yaroslavl oblast, out of 83 Regions in Russia, with a total population of women of reproductive age of 1.8 million, including approximately 1 million women in service areas of facilities where we will

	institutes, regions and health care facilities	
Prevention of hypothermia among newborns collaborative	<ul style="list-style-type: none"> ▪ Decrease hypothermia among newborns ▪ Measurably improve care for prevention of hypothermia among newborns 	provide intensive assistance. These regions have about 70,000 births a year; we estimate we will work at facilities where 75%, or 52,000 of these births occur. Long-distance assistance through the internet and telemedicine conferences.
Breastfeeding collaborative	<ul style="list-style-type: none"> ▪ Increase exclusive breastfeeding at discharge from the maternity ward and 3 and 6 months of age 	
Optimizing labor management collaborative	<ul style="list-style-type: none"> ▪ Increase use of the WHO partograph to manage birth ▪ Decrease incidence of neonatal hypoxia/asphyxia 	
Collaborative on prevention of unwanted pregnancies, abortion and sexually transmitted diseases among teenagers	<ul style="list-style-type: none"> ▪ Decrease unwanted pregnancies, abortions and births among teens ▪ Increase STD screening among teens ▪ Increase pre- and post-abortion counseling 	
Improvement of primary neonatal resuscitation collaborative	<ul style="list-style-type: none"> ▪ Support implementation of new national protocol for primary neonatal resuscitation ▪ Develop regional training programs on primary neonatal resuscitation 	
Collaborative on regionalization of perinatal care	<ul style="list-style-type: none"> ▪ Support the effective organization of perinatal care on a regional level ▪ Improve management and prevention of preterm birth ▪ Develop definitions of indicators of quality regionalized perinatal care, 	

Improving Care for Mothers and Babies—Main Activities and Results

In FY09, HCI began implementing the initiative “Improving Care for Mothers and Babies” in three oblasts of the Central Federal District of Russia in collaboration with the Central Scientific Research Institute for Health Care Organization and Information, the Kulakov Scientific Research Center for Obstetrics, Gynecology and Perinatology, the Ivanovo Scientific Research Institute for Motherhood and Childhood, and the Tver Oblast Health Department. After an initial formative effort and discussion with national, regional and facility partners, the improvement effort became formalized into six distinct regional improvement collaboratives, each with participating sites teams from Kostroma, Tambov, and Yaroslavl oblasts: prevention of newborn hypothermia, breastfeeding promotion, optimizing labor management using the partograph, prevention of unwanted pregnancies, abortions and sexually transmitted diseases (STDs) among teenagers, and primary neonatal resuscitation, and regionalization of perinatal care. In FY11, we added three new oblasts and worked with six oblasts to improve care in the same six technical areas. In addition, HCI worked with partners to develop policies at the national level to institutionalize the better care practices implemented in the collaboratives.

Collaborative on Prevention of Hypothermia among Newborns

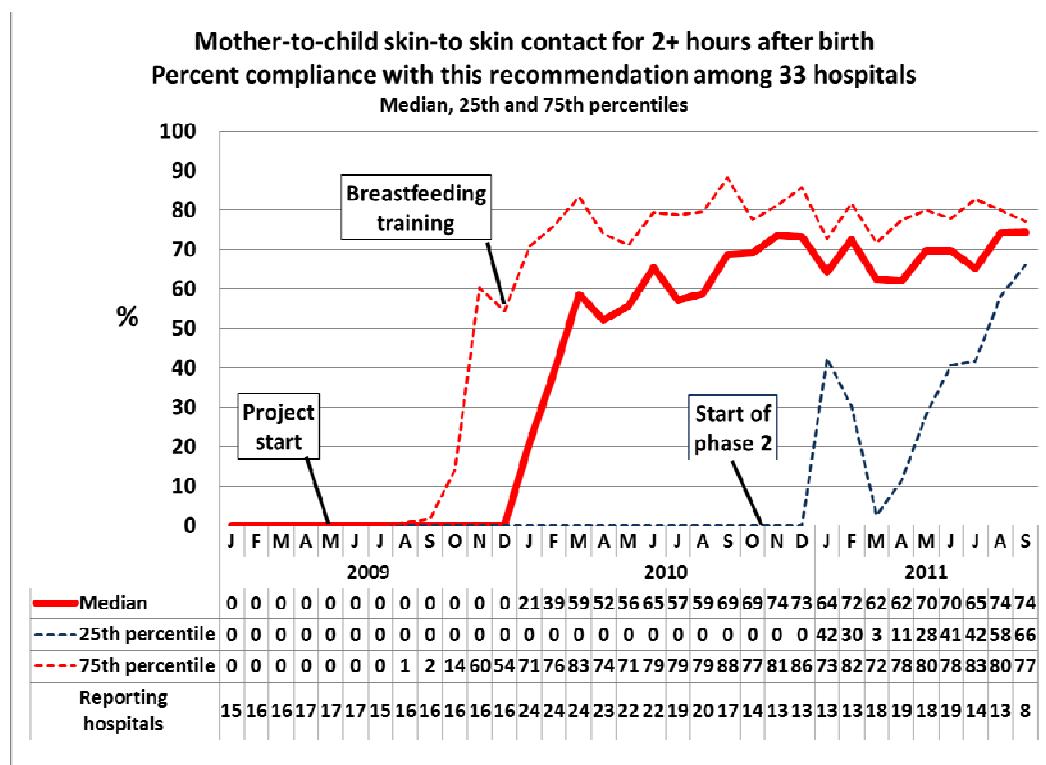
Some 29 facilities from all six oblasts participated in this collaborative. Although the Tver oblast workplan called for a sole focus on neonatal resuscitation and regionalization of care, three Tver hospitals asked to join the hypothermia collaborative as a necessary precursor to care and resuscitation for low birthweight babies, which are especially vulnerable to hypothermia. Clinical trainings were held in Ivanovo and Tula oblasts for 39 participants from 14 hospitals. For many facilities, implementing the “warm chain” change package involved capital investments on insulating windows and radiant heaters, as well as renovation of aging, drafty facilities. Other critical organizational elements include temperature control in the delivery room and maternity ward, and skin-to-skin contact between mother and baby immediately after delivery. The latter was an element of both the hypothermia and breastfeeding collaborative; the project recommended maintaining contact for at least two hours since results of test cycles during the first phase showed the newborn’s temperature dropping if removed earlier. Although

some participating hospitals claimed they could support mother and baby in the delivery room for only 60-90 minutes after birth, Figure 36 shows that by September 2011, even the lowest 25th percentile of hospitals had started to prolong contact to a full two hours. Important policy documents were adopted by the MOHSD supporting and enabling adoption of the hypothermia prevention change package.

Breastfeeding Collaborative

This collaborative, conducted in collaboration with the Russian affiliate of the WHO/UNICEF Baby-Friendly Hospital Initiative, drew formal participation from 16 health facilities from four oblasts. Each facility focused on expanding breastfeeding at one or more levels of health care: antenatal care and parenting classes at the women's consultation, at the maternity hospital, and in the community with support from district pediatricians and children's polyclinics. The collaborative played an especially important role in piloting innovations to support breastfeeding for ill and preterm infants at children's hospitals, five of which participated in the collaborative. Trainings—including a special training session focused on ill and preterm infants—drew enthusiastic participation beyond the borders of the collaborative, from 91 participants from 17 health facilities, three academic institutions, and one mothers' support group. Many of these also implemented elements of the change package. Tambov Oblast also worked to spread the change package oblast-wide, training about 50 pediatricians at a day-long seminar.

Figure 36. Russia: Mother-to-Child skin-to-skin Contact for 2+ hours after birth-Percent Compliance



During the year, two additional health facilities, both from Kostroma Oblast, received "Baby-Friendly Hospital" status: Tambov Regional Children's Hospital's work in piloting implementation of the "10 Steps to Successful Breastfeeding" in a neonatal unit for ill and preterm babies was presented at the Baby-Friendly Neonatal Care Conference in Uppsala, Sweden and the Russia results will contribute to developing worldwide standards for breastfeeding support in neonatal intensive care units for the Baby-Friendly Hospital Initiative. A draft change package on expansion of breastfeeding was distributed in May and a final document was being prepared for November publication. Two important Russian policy

documents were published supporting this change package. Figure 37 shows trends in increasing exclusive breastfeeding rates at 14 participating maternity hospitals which reported indicator data. Figure 38 shows results of supporting exclusive breastfeeding at three children's hospital units for ill and preterm neonates.

Figure 37. Russia: Percent of newborns exclusively breastfed at discharge from maternity department (14 reporting hospitals)

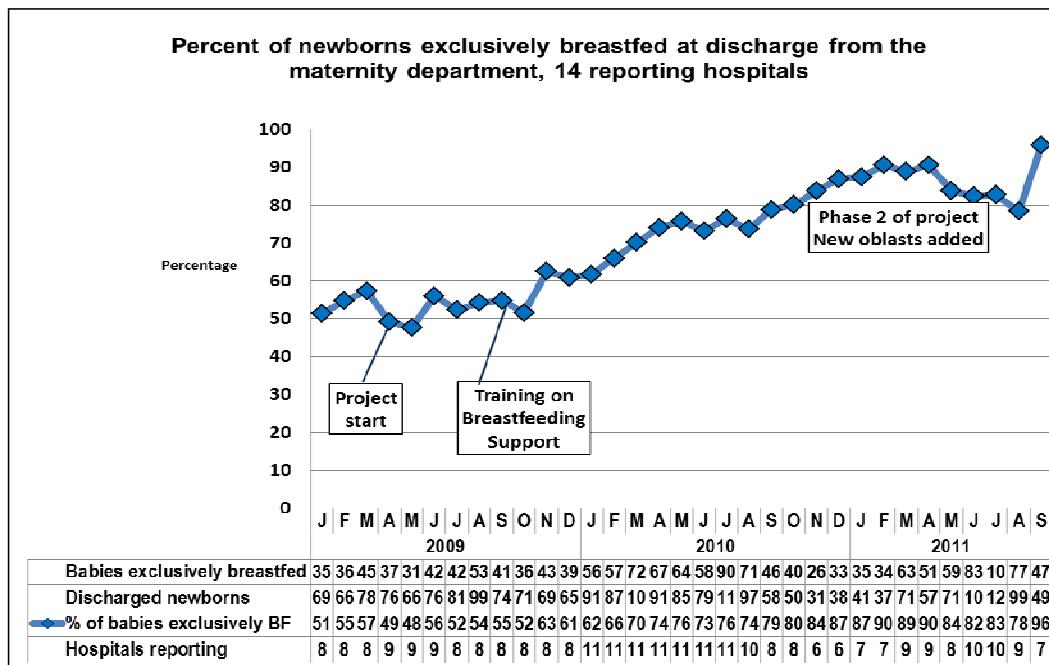
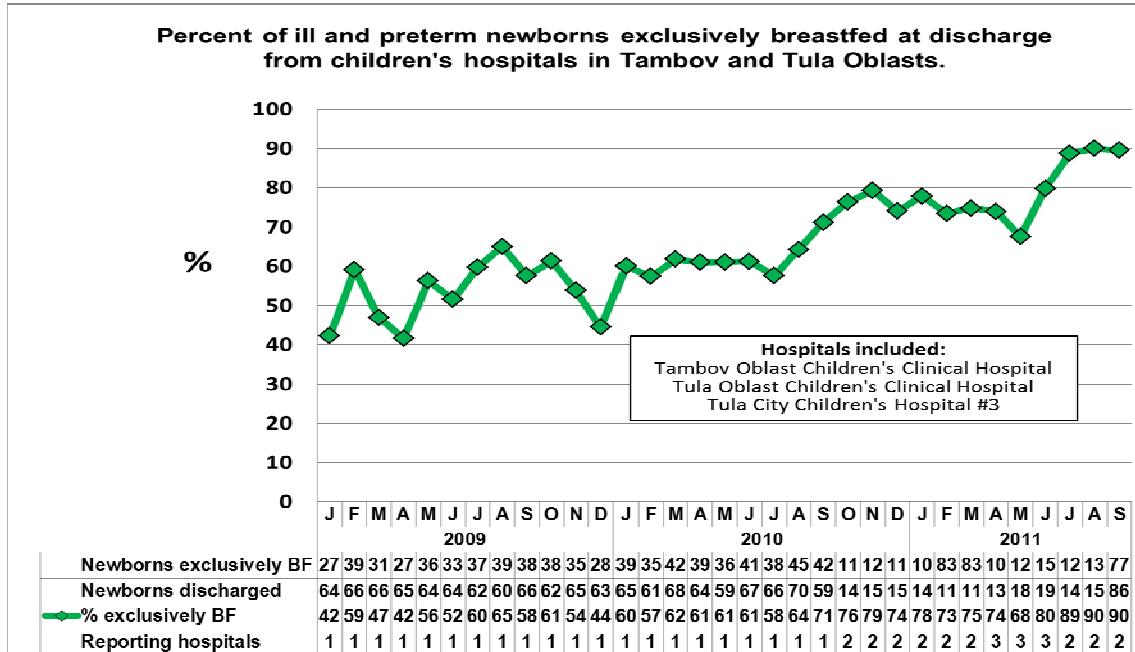


Figure 38. Russia: Percent of ill and preterm newborns exclusively breastfed at discharge from children's hospitals in Tambov and Tula Oblasts



Collaborative on Optimizing Labor Management through Use of the Partograph

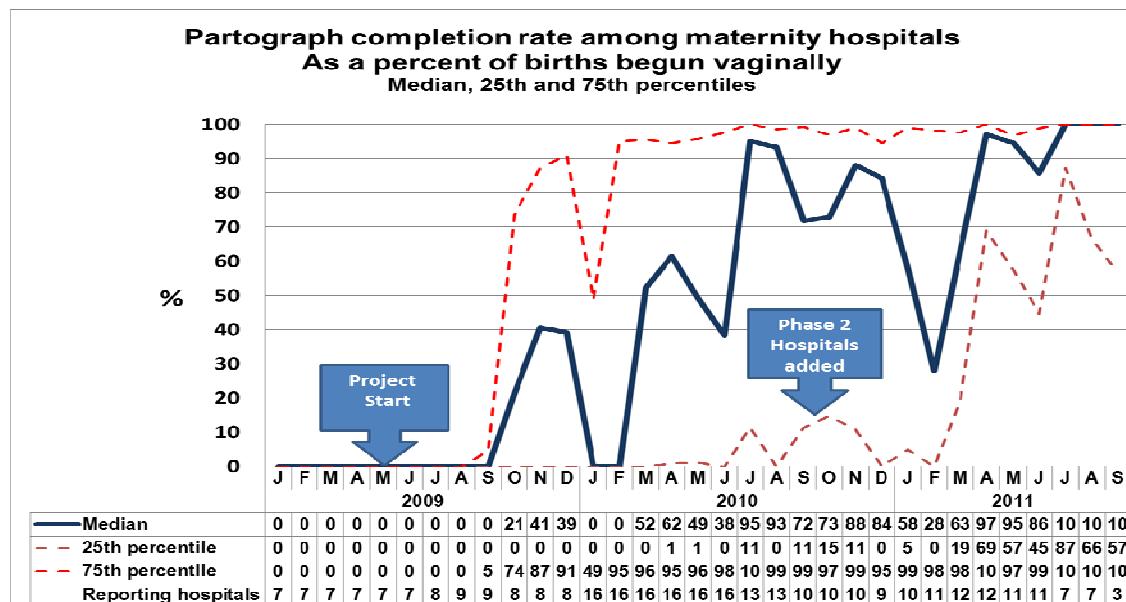
Some 21 facilities officially took part in this collaborative, although some in Tambov oblast dropped their participation and some in Tver unofficially adopted the partograph midstream. A Kostroma oblast regulation adopted at the beginning of FY11 required use of the partograph oblast-wide. Key elements of the change package, in addition to completion of the partograph form in real time during all births begun vaginally, included use of evidence-based algorithms for diagnosis (using the partograph) and management of abnormal labor, daily case reviews and monthly and quarterly audits. Based on results during the first phase, it was expected that the change package would result in reduced use of augmentation of labor and, as a clinical outcome, in incidence of asphyxia and intrauterine hypoxia.

Figure 39 shows the trends in partograph completion during the first and second phases of the project. At first, as can be seen by the curves of the 25th and 75th percentiles, some obstetricians were reluctant to fully commit to the partograph. However, a stronger trend to comprehensive use of this important tool was seen by the end of the project. While definitive clinical results are hard to assess due to incomplete data reporting by participating facilities and wide variation in reported rates of asphyxia and hypoxia, a trend toward decreasing median rates of these neonatal respiratory problems has been seen. The written project change package was finalized and received the formal approval of the Kulakov Center in May. The partograph was endorsed in a key Russian policy document in July.

Collaborative on Prevention of Unwanted Pregnancies, Abortion, and Sexually Transmitted Infections among Teenagers

Ten facilities participated in this collaborative, and Kostroma Oblast extended activities oblast-wide. The May 2011 learning session drew participants from an additional 20 facilities, and an extremely lively discussion ensued on communication with teens, collaboration with the community and the church, and Russian policy on parental involvement in teen health and abortion prevention. The change package was adapted from the UNICEF “Youth-Friendly Clinic” model. It includes six separate but integrated objectives: Training staff on consulting teens, educational activities for teens, communications with communities, reorganizing clinics to improve access for teens, ensuring appropriate reproductive health consultations for all teens coming to the clinic, and an intensive focus on high-risk teens.

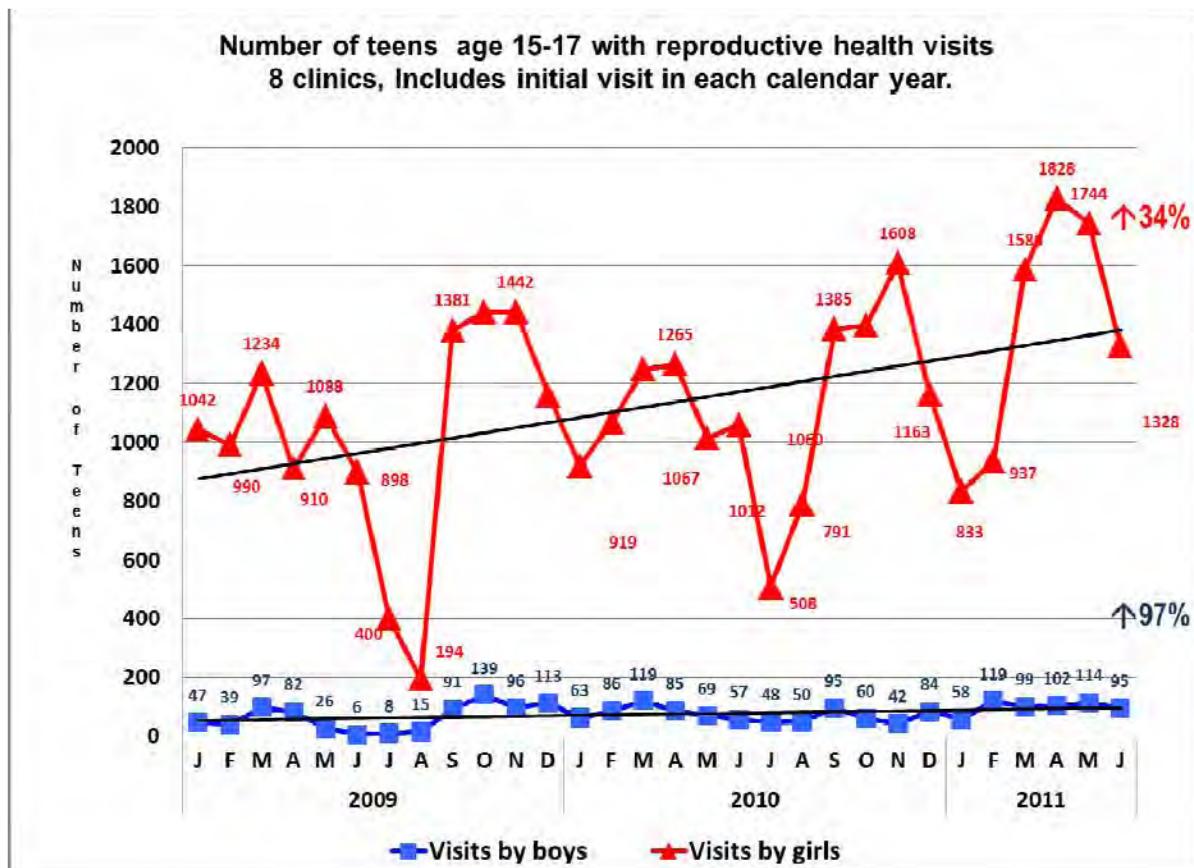
Figure 39. Russia: Partograph completion rate among maternity hospitals



In Tambov, the Family Planning Center reported having provided consultation to 21% of the city's youth. Figure 40 shows the effect of the collaborative on reproductive health visits at eight reporting facilities.

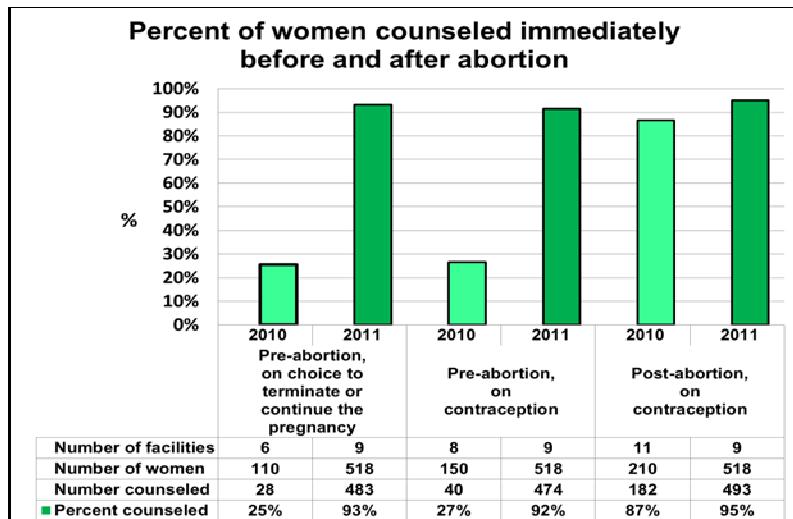
The monthly statistics show a clear cyclical effect related to the school year, but overall growth of 34% for girls and 97% for boys, comparing the first 6 months of 2009 to the same period in 2011. STI testing similarly has grown 19% for girls and 87% for boys. Despite the more rapid growth in attention to boys, these centers still disproportionately target girls, with the number of girls counseled 14 times the number of boys.

Figure 40. Russia: Number of teens aged 15-17 with reproductive health visits in each year, Eight collaborative sites, January 2009-June 2011



One of the highest-risk group of girls targeted under this change package is those at risk for repeat abortion. At the end of phase I, sites in Kostroma, Tambov and Yaroslavl oblast identified as a priority improving pre- and post-abortion counseling on contraception provided to all age groups, not just teens. An expert chart review in July-August 2010 showed little evidence of pre-abortion counseling and only brief notation of post-abortion counseling, which raised questions about its quality. A survey of 518 women at nine project facilities in the three oblasts, conducted in April-September 2011, showed substantial improvement in counseling before and after abortion (see Figure 41).

Figure 41. Russia: Percent of women counseled immediately before and after abortion.

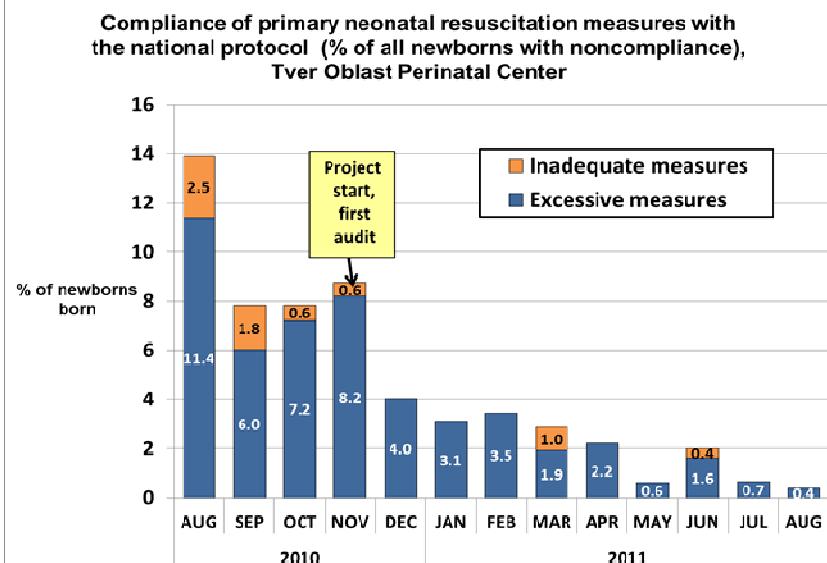


The respondents were high-risk: 55% said they had not used any method of preventing this unwanted pregnancy, and 39% reported one or more previous abortions during the past three years. Reported rates of pre-abortion and post-abortion counseling all exceeded 90%, and 91% of the women surveyed said they had already decided to use a specific method of contraception in the future.

Collaborative on Improvement of Primary Neonatal Resuscitation

All six oblasts and 18 pilot health facilities participated in this collaborative, which was designed to develop regional training programs and other strategies to ensure implementation of an updated, evidence-based Russian protocol for primary neonatal resuscitation, which became effective in August, 2010. The new regulations require proficiency of all maternity department and emergency department personnel in the country. During Phase 1, model regional training programs were developed at Yaroslavl State Medical Academy (YSMA) and Tambov Oblast Children's

Figure 42. Russia: Percent of births in noncompliance with neonatal resuscitation measures in line with national protocol



Hospital, and the Ivanovo Institute initiated master classes. During Phase 2, we held a teleconference on planning regional training programs attended by 161 participants from the six oblasts. The project procured training manikins for Tver and Tula oblasts and YSMA and an intubation trainer for Tver State Medical Academy and facilitated participation of regional neonatologists in the Neonatal Resuscitation Program conducted by international specialists as well as a series of other training events. Tver Oblast organized a training center at Tver Perinatal Center, responsible for organizing training for all facilities in the oblast, monitoring adequacy of equipment and quality of resuscitation. Tver Perinatal Center also

developed a system for auditing documentation of neonatal care that dramatically improved compliance with the new national protocol (Figure 42). Tula Oblast procured four additional training manikins, including a fully computerized trainer, and established its own simulation training center at Tula Perinatal Center. A training plan was developed through 2012 to cover all the major maternity facilities in the oblast.

Collaborative on Regionalization of Perinatal Care

In this collaborative, oblasts tested and implemented methods of adapting their health care systems to new Russian federal regulations of a three-level regionalized system of maternity care, including developing systems and protocols for prevention and management of preterm birth. Tambov, Tver and Kostroma oblasts participated in this collaborative oblast-wide. Fifteen pilot improvement teams addressed pre-term birth and referral of pregnant women. The improvement team at Sharya regional hospital, Kostroma oblast included five small regional hospitals that had joined in its referral network, using computers provided by HCI and software developed by the Ivanovo Institute. Clinical training on management of preterm birth was provided to 39 participants in Tver and Kostroma oblasts. The Second International Scientific-Practical Conference on Regionalization of Perinatal Care was held at the Ivanovo Institute in March, co-sponsored by HCI. There were 143 participants from eight regions, who reported on their progress according to newly developed indicators of regionalization success.

During the period, Tambov and Tver oblasts refined their regulations on referral of women in pre-term labor to newly-designated Level II and III maternity facilities, as Kostroma oblast had done previously. The Kulakov Center published an evidence-based protocol on prevention and management of pre-term birth; a draft project change package on the topic was issued in January 2010 and is being revised for final publication. Kostroma oblast's computerized expert referral system was rolled out oblast-wide, starting with the northeast region supported by HCI. From December 2010-September 2011, 761 women had been triaged by the system, half of them (389) in the northeast region. Oblast-wide, 65 (8.5%) were defined as high risk and preliminarily referred to the Ivanovo Institute for delivery, 284 (37%) as moderate risk and referred to Kostroma Oblast Hospital, and 414 (54%) as low risk and able to deliver at Level I hospitals.

Institutionalization of Maternal and Newborn Care Changes at the National Level

In July 2011, the Ministry of Health and Social Development (MOHSD) issued a “methodological letter” that endorsed three MNCH change packages developed by HCI and its Russian partners as national policy. The practices endorsed include: use of the partograph in vaginal birth; use of the “warm chain” to prevent neonatal hypothermia; exclusive breastfeeding for babies through six months and breastfeeding up to two years of age; and support, consultation and classes for mothers on breastfeeding at each level of maternal, newborn and child health care. This methodological letter had been enabled by a 173-page September 2010 sanitary-epidemiologic regulation from the Russian equivalent of the CDC, which modernized infection control in maternity hospitals, and either explicitly endorsed or removed many barriers to evidence-based essential newborn care practices and family-centered care. Our key partners at the Kulakov Center, chief Russian neonatologist Elena Baibarina, and former chief neonatologist Irina Riumina, were closely involved in preparation of the methodological letter and the sanitary regulation, respectively.

With the publication of the July “methodological letter” the majority of practices advocated by “Improving Care for Mothers and Babies” have become Russian national policy. A three-level regionalized healthcare system for obstetric and neonatal care was required by regulations adopted in 2009-10. Updated primary neonatal resuscitation algorithms based on international best practices were required by 2010 regulations; there is now a nationwide initiative to build simulation-based training facilities to teach these practices as advocated by our project. Another “methodological letter” was approved by MOHSD in May 2011, authored by our partners at the Ivanovo Institute for Motherhood

and Childhood. That letter presents the model of partnership developed by the Ivanovo Institute perinatal center in collaboration with our partner regions as an example of a fourth level of inter-regional collaboration in a regionalized system. This model includes the computerized monitoring and referral system for pregnant women, piloted by HCI in Kostroma oblast. Best practices in prevention and management of preterm birth, another part of the regionalization collaborative, were set forth in a protocol published by the Kulakov Center earlier in 2011.

The sole outstanding area—teen reproductive health—is addressed in major legislation on the right to health care under consideration in the Russian Duma. Most of the controversy surrounding that law concerns the extent to which it will or will not restrict the right to abortion. However, the rights of women to family planning services and the rights of teens age 15-17 to health care, including reproductive health care, are clearly established in the bill and have not attracted much debate. This bill should also solve the problem of lack of insurance coverage for family planning, which was eliminated during insurance reforms in 2006.

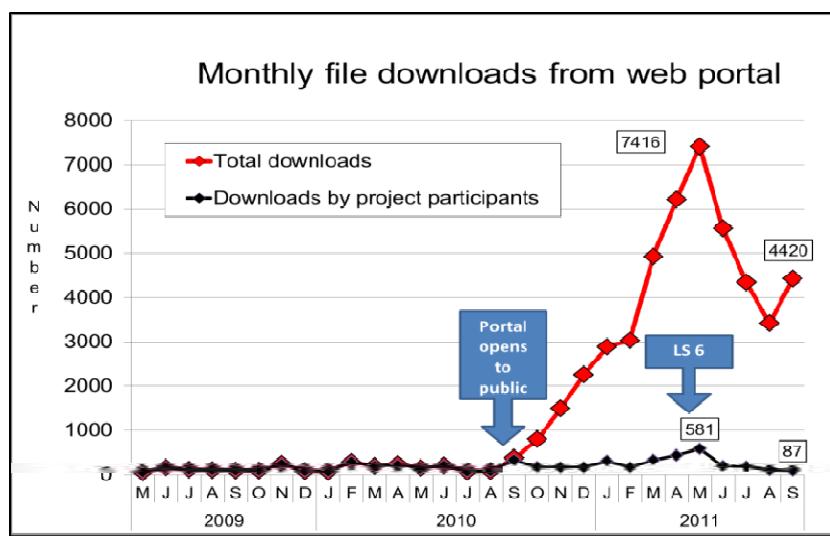
Development of the Russian Web Portal on MCH and QI

The public-use portion of the HCI/MCH Russian language web portal, www.healthquality.ru, had 14,958 unique users from October 2010 (when it was launched) through September 2011. This included 566 users who were project experts, officials or participants from the six project oblasts. Visits were registered from 65 countries—mainly, members of the former Soviet Union—and 172 Russian cities. In addition to the six project oblasts, there was heavy use reported from Moscow, St. Petersburg, Samara and Kazan. There were 50,506 downloads of files from the portal library, including 5,326 (11%) from project participants. Some 275 files were available to the public, while perhaps twice that number, including presentations at learning sessions, and materials developed by improvement teams, were available to project participants. The most popular topics for file downloads were materials related to teen reproductive health and those related to QI methodology; project written change packages were also popular. The pattern of file downloads over time is shown in Figure 43. Downloads peaked in May 2011, at the time of the sixth learning session and posting of updates in several change packages.

Improving Care for Mothers and Babies—Directions for FY12

In the first quarter of FY12, we expect to hold the final project teleconference, complete publication of our final change packages, and achieve signing of an agreement for collaboration between the American Academy of Pediatrics and the Kulakov Center, which will continue many of the collaborative activities begun under the project. We are planning to publish summaries of a number of activities in the Russian and/or English language clinical and professional literature as journal articles.

Figure 43. Russia: Monthly file downloads from Russian web Portal



Component 3: Early Detection and Treatment of Tuberculosis

What are we trying to accomplish?	Activities	Scale of intervention
Assist Russian partners in improving early TB detection and enhancing treatment efficiency by strengthening the role of general health care 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 GHC system, as well as the development of cooperation and communication 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 GHC 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 (population of 2,573 million) with a total of 4,738 registered TB patients (of them 1,926 detected in 2009), Participating districts-Saratov, Engels and Balakovo rayons. Saratov- 19 PHC facilities, oblast TB dispensary, 2 rayon 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 (population of 1,525 million) with a total of 2,327 registered TB patients (of them 1,277 detected in 2009), Participating districts-Bryansk, Novozybkovsky, and Karachevsky rayons. Bryansk-10PHC facilities, oblast TB dispensary, Novozykovsky –TB district dispensary, Central rayon hospital; Karachinsky – Central rayon hospital (polyclinic and district TB service within it)</p>

TB Detection and Treatment—Main Activities and Results

In FY11, HCI began a new activity in Bryansk and Saratov oblasts to apply QI methods to accelerate the early detection of TB and improve TB treatment outcomes in these two regions. Selection of these regions was based on consideration of the support from the federal TB research institutes, interests expressed by the regions, and on epidemiological TB data. MOUs were signed between HCI and health authorities in both regions. Initial meetings were held with experts and heads of TB research institutes responsible for overseeing the work of selected regions to develop a plan of joint activities. One of the objectives of the cooperation is to support establishment of the TB Training Center of Best Practices for early TB detection based at Saratov's Medical University.

In May-September 2011, HCI conducted a number of introductory round tables, trainings in early TB detection and laboratory diagnostics as well as the first learning session (held in June) in both regions. HCI also convened a key partner meeting in September. At the first learning session, the following common solutions to improve TB detection at the primary health care (PHC) level were identified: to provide quality sputum smear microscopy tests by setting up sputum collection rooms at PHC facilities; to arrange systematic personnel education how to collect qualitative diagnostic materials (sputum); to accompany the patients to the place for smear collection and to assure the quality of diagnostic material collected; to provide weekly control of chief nurses responsible for smear collection of non-transportable patients; and to make sure that patients at PHC facilities without medical insurance can get pre-doctor care by the medical assistant who will be responsible for recording possible patient's TB history, his contact information, and if necessary for referring this patient to the room for smear

collection. The timeframe for each of the problem formulated was specified separately for each of the territory.

In Saratov Oblast, the percent of new sputum smear-positive (SS+) TB patients detected in PHC facilities increased up to 54.2% during July-September 2011, whereas in the previous six months this indicator averaged 32.2% (the MOHSD-recommended target for this indicator is at least 60%). The increase in the percent of new SS+ patients in PHC facilities might be associated with project activities in Saratov, notably the round table in May and learning session in June. Both events emphasized the importance of involving PHC specialists in the process of early TB detection. Through a group process, the participants analyzed the process of TB detection at the PHC level, identified the key issues within it, and proposed possible solutions to improve early TB detection at PHC level. Analysis of key reasons for delayed TB detection was jointly implemented by HCI staff, leading TB specialists from Bryansk and Saratov oblasts, and TB experts from the federal TB research institutes to identify possible ways to accomplish objectives and to measure the changes (see Table 8).

Table 8. Russia: Analysis of key reasons in delayed TB detection

Secondary drivers depending on patients	Changes/Interventions	Micro-indicators
Lack of knowledge on the services provided at PHC facilities Undervaluation of illness severity Lack of documentation (medical assurance, passport, etc) Self-stigmatization Low health priorities Lack of knowledge on Tb symptoms Drug/alcohol abuse Self-treatment Lack of money for transportation	Develop billboards, posters and other social advertisement Develop leaflets for patients: With information on TB facility On TB On healthy lifestyle Work with mass media Improve preventive work for youth Appropriate funds for transportation Spread information about possible pre-doctor examination without medical insurance	Number of publications in mass media (municipal, territorial) Number of leaflets spread among the patients Number of posters and leaflets placed in PCH facility in front of X-rays rooms and lab
Secondary drivers depending on doctors	Changes/Interventions	Micro-indicators
Low consciousness regarding TB Insufficient knowledge on TB symptoms and detection methods Non-compliance with the doctor's algorithm Association of TB with high-risk groups Poor time management Insufficient knowledge on command and control instruments Lack of wish and demand in self-development Low motivation Lack of quality control High workload Non-compliance with diagnostic minimum Definition of patients, who are not screened on TB Work with TB contacts	Educate the specialists Introduce the rules on quality sputum collection to the job descriptions of nurses at PHC facilities Carry out the independent audit of medical documentation Include the quality algorithm implementation into the medical audit Develop algorithms and recommendations for doctors Establish rooms for pre-doctor examination Include TB discipline into postgraduate education for PHC specialists	Proportion of patients medical records with correctly filled doctor's algorithm to the total number of patients medical records Availability of instruction sheets and algorithms for the district doctors Number of polyclinics accepting patients without residence registration Proportion of sputum collected under the supervision of medical staff to the total number of sputum collected that proceed to the lab
Secondary drivers depending on administration	Changes/Interventions	Micro-indicators
Lack of personnel	To stakeholders at PHC facilities:	

Poor system of continuing education for medical doctors and nurses Limitations in working hours of X-rays rooms No registration of X-rays screening at the reception or level of pre-doctor examination Poor information exchange on X-rays screening within PHC facility Lack or insufficient infection control plan Poor preventive work: Poor health safety at the work (sputum collection) Insufficient quality of places for sputum collection (rooms, cabins) Poor work with TB contacts Inadequate budgeting and resource allocation re TB Poor cooperation with TB services: education on TB, patients' referral, quality control Low level of access to high risk groups, immigrants, released prisoners Lack of understanding from the heads of PHC facilities TB screening among non-transportable patients Lack or impossibility to use transportable fluorographs Cooperation of PHC facilities and police departments Development of regulatory structure Allocation of priorities at PHC	Enhance the capacity of PHC personnel Establish the information exchange on X-rays screening within PHC specialists Educate specialists in IC, and develop IC plan for the facilities Equip the places for sputum collection with cabins, operating materials, inhalers, instructions Provide sufficient number of quality operating materials To regional Government: Develop and approve regional TB preventive plan as a part of territory program – include all necessary technical components Form accurate priorities among regional stakeholders Organize the pre-doctor examination available for vulnerable groups Establish interagency cooperation – Committee on prevention of socially important diseases Joint plans Regular meetings to evaluate the results of previous decisions Joint monitoring and analysis Lobby the interests of target groups and medical workers Influence the formation of accurate regulatory structure at the region Provide external control to the quality of lab examinations	Number of specialists trained in IC Availability of IC TB plan at the PHC facility Existence of special sputum collection rooms/cabins at PHC settings along with the qualified personnel and instruction how to collect sputum Number of PHC specialists trained in early TB detection (from total number of specialists) Number of specialists trained in lab diagnostics (from the total number of specialists) Number of polyclinics where X-rays room has working hours from 8am to 8pm Proportion of patients referred to TB services within first 3 days after getting SS+TB results to the total number of TB suspects Proportion of referred patients, who came to TB services within first 3 days after getting SS+ TB result, to the total number of patients referred to TB services
Secondary drivers depending on laboratory	Changes/Interventions	Micro-indicators
Low quality of diagnostic materials Low qualification of lab specialists Lack of operating supplies and equipment Low motivation Assuring the collection of the quality diagnostic material Low expectations from labs Lab workers don't provide detailed reports separately for each district	Control the quality of diagnostic materials Introduce the registration of sputum quality for microscopy test Educate the lab specialists Equip the laboratories Provide quality control of sputum smear microscopy Provide regular feedback from lab specialists to the doctors	Number of labs with the registration of sputum quality Number of sputum culled by lab for microscopy tests Number of labs fully equipped with operating supplies
Secondary drivers depending on society	Changes/Interventions	Micro-indicators
Stigmatization in society, at work Low health priorities Lack of understanding in the society Problems associated with socially vulnerable population: poverty, homeless, jobless, drug abuse Poor involvement of business sector	Work with mass media Lobby TB patients and healthy society Improve health education Involve the governmental social protection services through interagency committees, etc. Work with employers:	Number of publications in mass media Proportion of patients receiving social support to the total number of patients in need MACRO: Social studies on

Low awareness on TB among population Low social responsibility among employers Climatic and geographical location	-Reduction of stigma and discrimination towards TB patients; -Timely TB screening of employees; -Help to families with TB patients; -Assistance in work with TB contacts.	stigmatization towards TB patients among the population
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TB Detection and Treatment—Directions for FY12

HCI will expand the project activities to a third region—Astrakhan—and will continue providing technical assistance to Bryansk and Saratov oblasts to ensure that positive results achieved in 2011 will continue to have better impact on improving TB detection at PHC facilities. HCI will also continue developing best practices on TB detection for the practical education at TB Training Center in Saratov. HCI will launch a program with the regional branch of the Russian Red Cross in Bryansk oblast on provision of social support to 200 TB patients to improve patients' adherence to TB treatment (in form of food or hygiene packages, transport tickets, etc). HCI staff will provide the technical support to the working teams and to organizational and methodological departments in the territories to analyze the TB treatment process from the QI perspective and to propose changes for its improvement.

LATIN AMERICA AND THE CARIBBEAN

2.15 Bolivia

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
TB Spread Collaborative in the city of El Alto to consolidate the use of QI methods and lessons learned in FY10 in five health care networks, with emphasis on the Boliviano-Holandes and Lotes y Servicios networks	<ul style="list-style-type: none"> ▪ 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 control office at El Alto and health networks ▪ To increase the use of rapid HIV tests in every new TB patient ▪ To improve MDR-TB surveillance 	<p>Approximately 900,000 inhabitants in the Municipality of El Alto, encompassing five Health Care Networks, including four hospitals, 43 health centers and 18 laboratories</p> <p>Approximately 900 TB patients are expected in El Alto each year.</p>
TB Spread Collaborative in the city of Cochabamba 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	<ul style="list-style-type: none"> ▪ 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 	<p>Approximately 620,000 inhabitants in the city of Cochabamba, encompassing nine hospitals, 29 health centers, and six laboratories, all of them belonging to one health care network (Cercado).</p> <p>All hospitals and health centers with more than five TB cases last year will participate in the spread collaborative</p> <p>Approximately 620 TB patients are expected in Cochabamba each year.</p>

Technical support to the National TB Control Program (NTCP)	<ul style="list-style-type: none"> ▪ To support the NTCP to organize and implement a training program using the TB CD-ROM and updated distance learning modules, mobilizing Global Fund resources ▪ Together with the NTCP and a local university, develop and test an approach to introduce training on the national TB control program in the curriculum of health schools 	National
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Main Activities and Results

TB Spread Collaborative in El Alto

By the end of FY10 an evaluation of progress of the TB spread collaborative in El Alto showed that HCI and the MOH had been successful in improving processes, such as ensuring the availability of TB drugs and supplies, the quality of sputum samples, and the adherence of TB patients to treatment, which resulted in improvements of cure rates, second month-conversion, and treatment success rates, as well as a reduction in treatment abandonment rates. QI teams had tested several successful changes to these processes which resulted in an array of best practices to improve the overall TB program. These improvements were synthesized later in a document entitled “Guidelines for lessons learned on how to improve the TB Program”. However, at the same time we realized that QI teams had not been successful in finding how to increase the detection of new respiratory suspects and consequently new TB cases. This was particularly difficult since the Bolivian Government has introduced several bonuses—some in cash and others in kind—that are being paid or distributed to mothers, families, and senior citizens who use MOH health services. In addition to a huge increase in demand for MNCH services, these bonuses also represented a lot more paper work for the health workforce, without the benefit of additional staff. TB care was left as a lesser priority with much less attention from personnel.

For FY11, HCI and the regional MOH office in El Alto decided that the collaborative would work on two fronts: 1) the scale-up of the successful improvements to the entire five networks, its 49 health centers, hospitals and 18 laboratories; and 2) the start of a new “demonstration phase,” testing new innovative process changes to increase the detection of respiratory suspects and TB cases in 20 selected facilities. The scale-up was at the same time an effort to further institutionalize the continuous quality improvement (CQI) approach to managing the TB program, since the El Alto regional MOH office had appointed five full-time nurses, one in each of the five health care networks, to manage the scale-up of the quality improvements in the TB program. Figure 44 shows progress made in increasing TB case detection with this new focused approach.

TB Spread Collaborative in Cochabamba

In addition to the continuing work in El Alto, USAID and the MOH requested HCI to organize the spread of improvements in key TB control processes to the city of Cochabamba, a city of 620,000 inhabitants, served by the MOH through one health care network (Cercado) comprising nine hospitals, 29 health centers, and six laboratories. We organized the spread through three sequential “waves”, each one addressing the spread of one key improved process: 1) ensuring the availability of TB drugs and supplies, 2) improving the quality of sputum samples, and 3) ensuring adequate training of MOH personnel through the TB CD-ROM and distance-learning materials developed by HCI in partnership with the National TB Program. For each one of these three processes HCI developed a series of modules that describe the most common problems that plague the process, the importance of the process for overall TB results, and the successful changes that were tested in El Alto and resulted in an improved process. The descriptions are as detailed and as illustrated as possible, with the intention to serve as a “do-it-yourself” guide for the target spread sites. In addition we took selected “TB champions” from El Alto to learning sessions in Cochabamba, and our own HCI staff who managed the

El Alto process. Figure 45 shows the improvement in TB cure rates achieved in Cochabamba, following the introduction of the successful changes that emerged from the work in El Alto.

Figure 44. Bolivia: Percentage of expected respiratory suspects who were detected, 16 facilities, El Alto TB collaborative, October 2009-September 2011

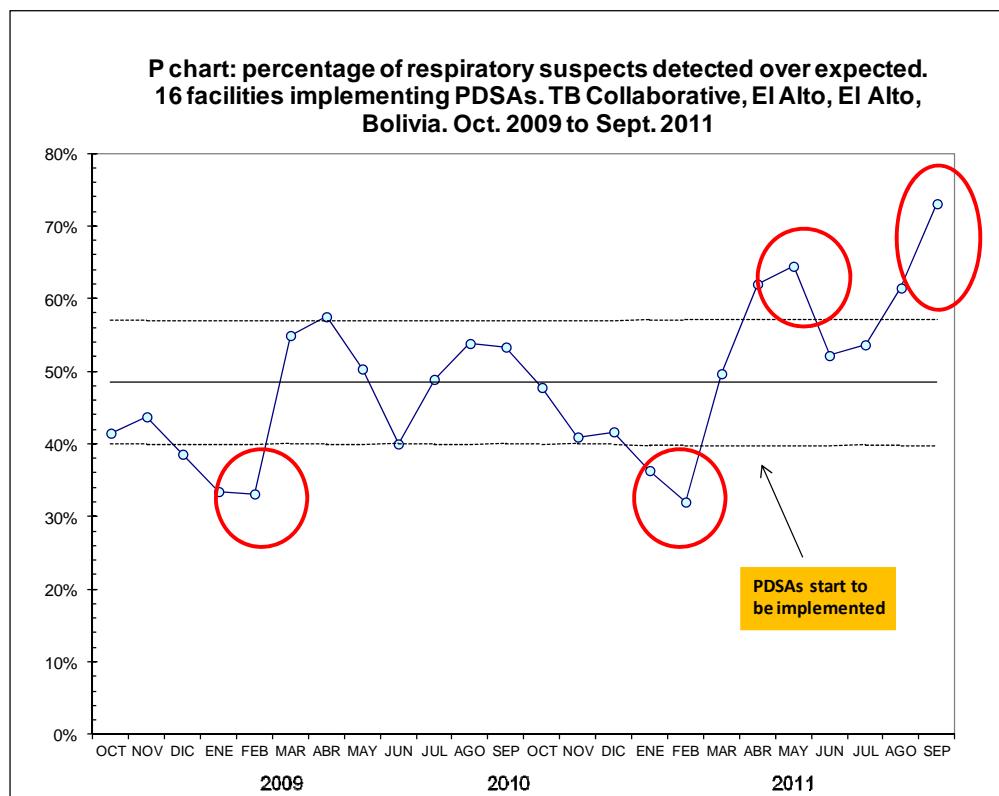
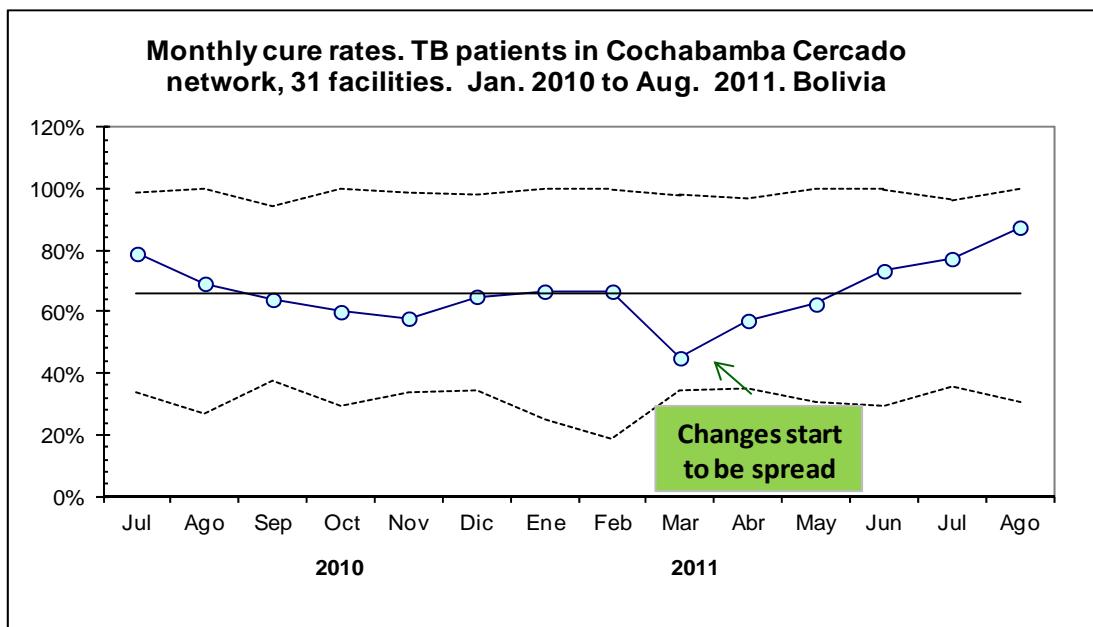


Figure 45. Bolivia: Monthly cure rates of TB patients, 31 facilities in the Cochabamba Cercado Network, July 2010-August 2011



Technical Support to the National TB Control Program and the UNIVALLE University

The successes achieved in El Alto and Cochabamba gained HCI the recognition and support of the National TB Control Program (NTBCP). During FY11 HCI worked closely with the NTBCP to: 1) develop, test and refine several TB distance-training modules which together with the TB CD-ROM developed by HCI constitute the base materials that the NTBCP is using for training MOH personnel at all country departments at national level; 2) develop and test a “TB software,” which will be installed at each facility nationwide for personnel to enter TB data and program information that is currently entered by hand and paper; this software is now under revision and adjustments previous to its distribution and training at national scale; 3) participation of HCI in the National Committee that conducted the evaluation of the TB Program at national scale and formulated recommendations, including several of the lessons learned at El Alto; and 4) support the NTBCP to develop a Guidelines document for the implementation of “DOTS Boxes,” an improvement developed at El Alto to ensure availability of TB drugs and supplies- by NTBCP at national scale. In fact the NTBCP has already started to use funds from the national MOH budget to buy and implement DOTS Boxes in Bolivia.

In FY11 HCI signed an agreement with the UNIVALLE University in La Paz and trained a cadre of TB training facilitators in the use of the CD-ROM and the distance-learning modules, for the continued training of medical and nursing students. The second stage of the training, from facilitators to students, started in September.

Directions for FY12

During FY12 HCI will continue to support the institutionalization of improvements and the strengthening of the management of TB at the five networks and regional TB program in El Alto, as well as the testing of innovative changes to increase the detection of respiratory suspects and new TB cases. We will continue to spread the El Alto improvements to Cochabamba, focusing on new processes such as the inclusion of private provider institutions within the TB control activities and the data collection and information management at the facility and network level. We will support the NTBCP in their efforts to spread improvements at national scale. Finally, HCI will support the new USAID FORTALESSA project recently awarded to UNICEF, to help them plan, organize, coordinate and implement improvement activities, while orienting UNICEF on QI methods and the “Improved TB Model.”

2.16 Guatemala

Overview of HCI's Program in FY11

What are we trying to accomplish?	Activities	Scale of intervention
Reduce maternal and neonatal mortality through the institutionalization of Essential Obstetric and Newborn Care (ProCONE) best practices at the primary, secondary, tertiary and community levels	<ul style="list-style-type: none">▪ Community Pro-CONE▪ Recognition of danger signs and emergency planning at individual, family and community levels▪ Cultural adaptation of delivery services▪ Basic Pro-CONE▪ Antenatal, postpartum and neonatal care▪ Normal deliveries▪ Complications Pro-CONE▪ Management of obstetric and neonatal complications▪ Obstetric letality rate▪ Helping Babies Breathe Initiative▪ Management of neonatal asphyxia	Eight of 29 Health Areas; 165 of 581 services (in the region) 16 hospitals, 67 Permanent Attention Centers, 78 health centers and posts. 1,850 of 6,215 service providers (in the region) 1,705,789 people benefitted out of 5,853,230 in the covered region (14 million in the whole country) Prioritized communities per Health Area: Quetzaltenango = 8 Sololá = 64 Chimaltenango = 16 Totonicapán = 10 Huehuetenango = 54
Improve access to and quality of family planning services as part of ProCONE		

interventions	<ul style="list-style-type: none"> ▪ Kangaroo Mother Care ▪ Management of low birth weight & small babies ▪ Maternal Mortality Surveillance System ▪ Family planning ▪ Service availability ▪ Provider competence ▪ Client satisfaction ▪ Stock level of contraceptives ▪ Compliance with informed consent 	Quiche = 16 Ixil = 24 Total = 192 San Marcos = 343 Hospitals per Health Area: Quetzaltenango = 1 Sololá = 1 Chimaltenango = 1 Totonicapán = 1 Huehuetenango = 1 Quiche = 1 Ixil = 1 San M arcos = 1 Alta Verapaz = 1 Total = 9 For family planning: Indicators introduced into the Community, Basic, and Complications ProCONE Collaboratives
Maternal and Child Nutrition	<ul style="list-style-type: none"> ▪ Reduce maternal and child malnutrition by supporting compliance with cost-effective essential nutrition actions at the community and health services levels 	Departments = 5 Health Areas = 7 of 29 health areas Total municipalities in priority health areas = 114, 60/114 in a reduced list, 28/60 with rural value chains, and 12 prioritized Total municipalities in the country = 333
Quality Management System (QMS)	<ul style="list-style-type: none"> ▪ Implement a quality management system (QMS) in the MOH based on ISO 9001: 2008 certification requirements 	MOH HQ, five Health Area Directorates, and 10 facilities in the five Health Areas

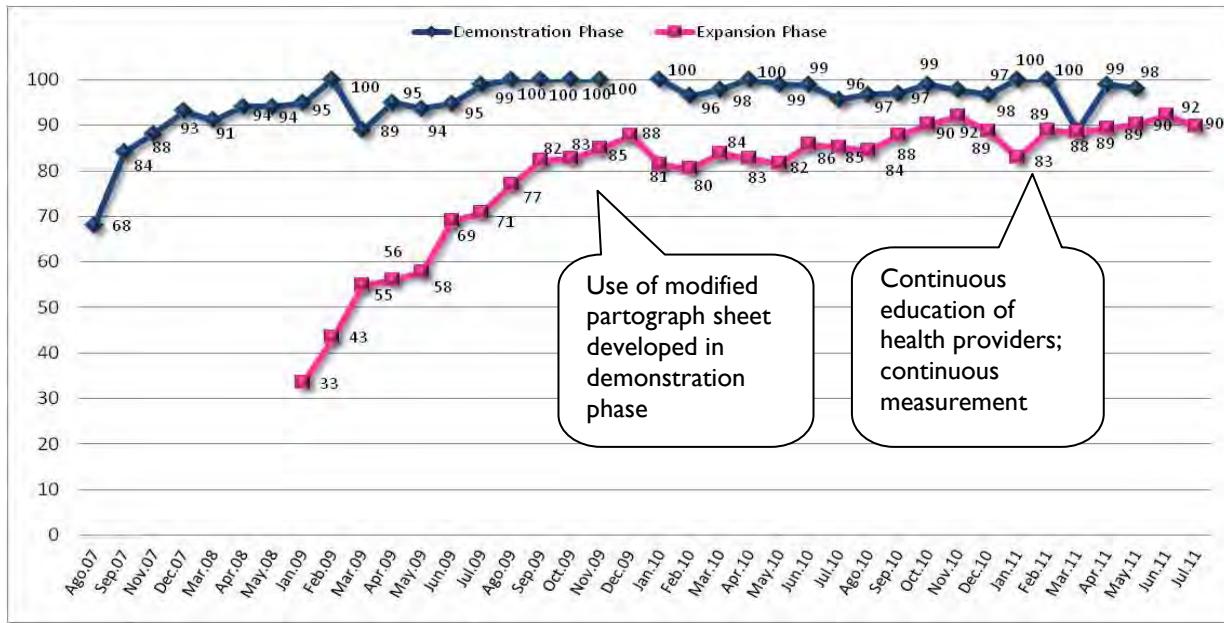
Main Activities and Results

Promotion of Essential Obstetric and Newborn Care (ProCONE)

In FY11, HCI continued to implement three related collaboratives on the promotion of essential obstetric and newborn care under the Spanish acronym, ProCONE, in eight priority health areas of the highlands region. The Community ProCONE Collaborative promoted prenatal care, birth preparedness and emergency planning, recognition of danger signs in pregnancy, delivery and the neonate, and referral and transportation to a health facility. During the year, sites maintained gains from the previous year and modestly improved. The percentage of pregnant women who could define and had an emergency card from rose from 49% in the first quarter of FY11 to 65% in the last quarter. The positive change is due to better prenatal counseling, finding new ways to present the same information to women, encouraging women to complete and have a relative sign the emergency card, putting it in a visible place at home, aiming for early identification of pregnant women and their identification in community maps, forming pregnant women's clubs, and conducting home visits.

Under the Basic ProCONE Collaborative, which addresses facility-based prenatal care and care for routine deliveries in facilities throughout the eight health areas, data show that sites sustained their performance above 80 percent compliance with standards throughout FY11. Figure 46 shows the improvement in compliance with immediate postpartum care in facilities that attend deliveries during the demonstration phase in San Marcos and the expansion phase in seven additional health areas. In this case, the indicator has maintained its value above 80 percent for over two years.

Figure 46. Guatemala: Improved compliance with immediate postpartum care, San Marcos (demonstration phase) and seven additional health areas (spread phase), January 2009-July 2011

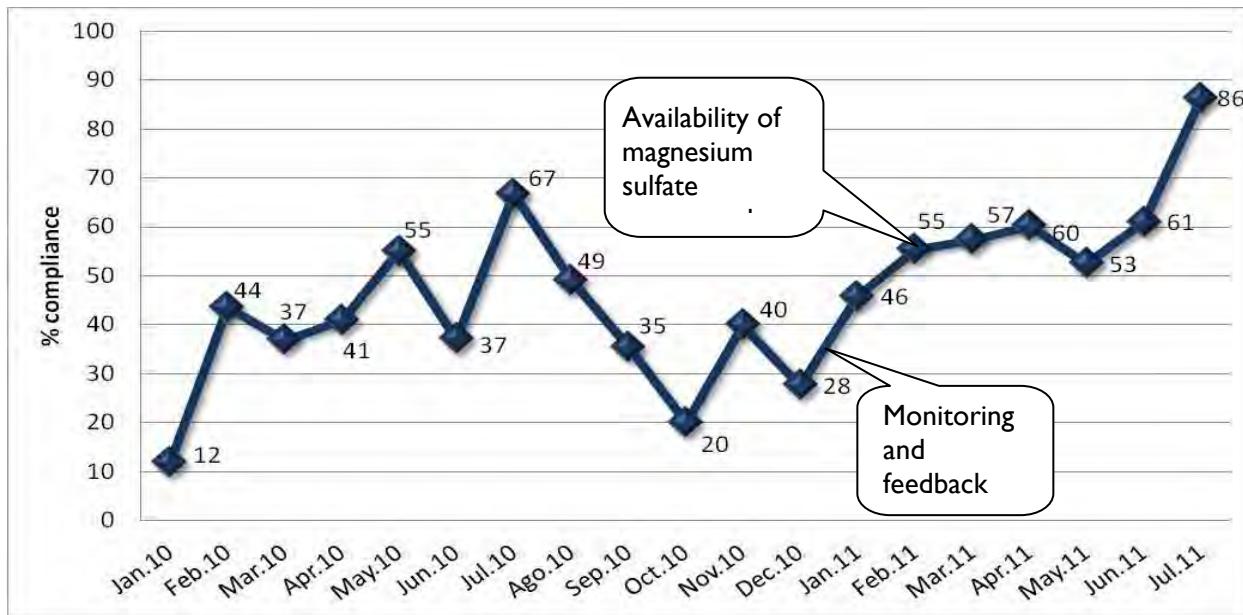


	J.9	F.9	M.9	A.9	M.9	J.9	J.9	A.9	S.9	O.9	N.9	D.9	J.10	F.10	M.10	A.10	M.10	J.10	J.10	A.10	S.10	O.10	N.10	D.10	J.11	F.11	M.11	A.11	M.11	J.11	J.11
Num.	232	291	589	561	609	687	730	778	783	772	805	604	847	851	908	772	824	913	927	917	888	925	788	650	939	930	1009	946	979	687	720
Deno.	990	596	1023	958	1001	1017	1086	1101	1095	995	1018	750	1038	1108	1155	1006	1001	1073	1056	1050	1002	1056	925	801	1124	1071	1205	1100	1138	815	825
Serv. Rep.	82	82	106	112	106	112	113	110	108	96	93	75	109	117	116	105	109	108	105	98	100	101	96	85	115	114	119	114	100	76	72
% Serv. Rep.	57	57	74	78	74	78	79	77	76	67	65	52	76	82	81	73	76	76	73	69	70	71	67	59	81	80	84	80	70	54	51

In the past year, eight hospitals have worked in the demonstration phase of the Complications ProCONE Collaborative with the objective of improving the management of the most frequent obstetric and neonatal complications. This objective was not reached completely for reasons such as fluctuating support from the Vice Ministry of Hospitals, resistance and skepticism from physicians from different schools of medicine, rotation of and new staff in hospitals, opposition from other cooperating agencies, among others. Nevertheless, some institutionalization has been attained with the indicators and criteria for quality management of the most prevalent maternal and neonatal complications having been included in MOH guidelines. Figure 47 shows the improvement in the management of cases of pre-eclampsia and eclampsia in the eight hospitals. In July 2011, the indicator rose to an unprecedented 86 percent. The positive change is attributed to continuous monitoring of management criteria and immediate feedback provided to health staff involved. Guaranteeing the availability of magnesium sulfate used to prevent severe pre-eclampsia from becoming eclampsia (which leads to life-threatening convulsions) in the hospital has also been critical.

The ProCONE Community and Basic collaboratives are also addressing aspects of prenatal, postpartum, and neonatal care that deal with nutrition, such as micronutrient supplementation, nutritional counseling, exclusive breastfeeding. The project is monitoring compliance with essential nutrition actions in the period from pregnancy to two years of age, including optimal maternal nutrition, optimal breastfeeding, optimal complementary feeding, appropriate nutritional care of sick and severely malnourished children, vitamin A for women and children, adequate intake of iron and folic acid for women and children through supplementation, food fortification, and promotion of iron- and folic acid-rich foods. Gaps such as lack of micronutrients for women and children, poor registration of child growth, and missed opportunities have been documented, and efforts to address these gaps are being made.

Figure 47. Guatemala: Improved compliance with standards for management of pre-eclampsia and eclampsia, Eight hospitals in the ProCONE complications collaborative, January 2010-July 2011



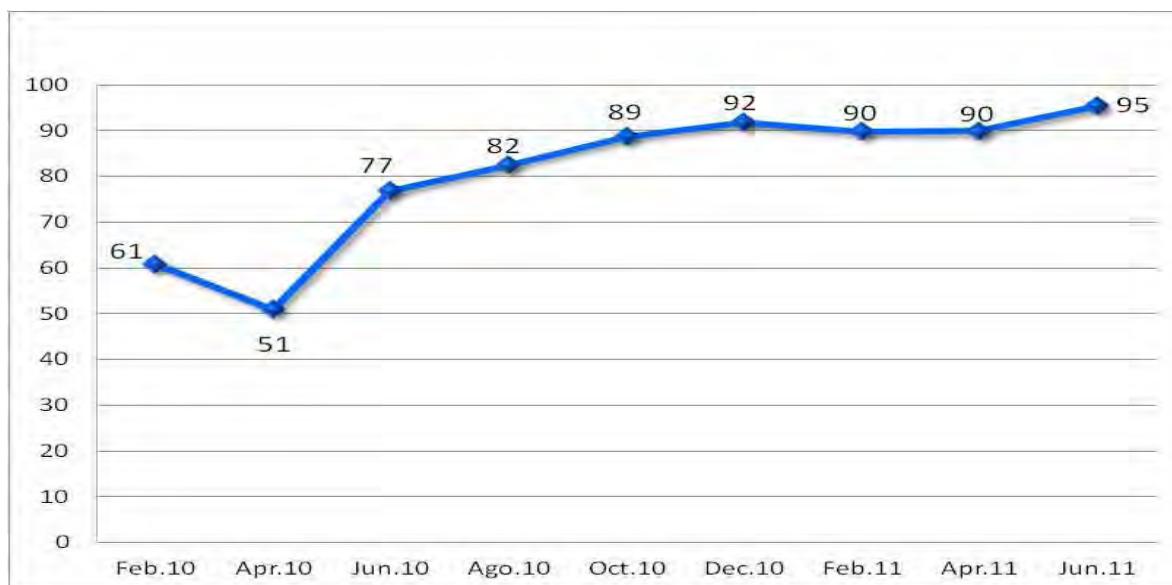
	Jan.10	Feb.10	Mar.10	Apr.10	May.10	Jun.10	Jul.10	Ago.10	Sep.10	Oct.10	Nov.10	Dec.10	Jan.11	Feb.11	Mar.11	Apr.11	May.11	Jun.11	Jul.11
Num.	6	17	14	25	22	13	32	27	22	13	18	13	38	36	39	47	41	25	38
Denom.	51	39	38	61	40	35	48	55	62	65	45	47	83	65	68	78	78	41	44
Ser. Rep.	7	6	7	8	8	8	8	8	8	7	6	6	8	8	8	8	8	6	5
% S. Rep.	88	75	88	100	100	100	100	100	100	88	75	75	100	100	100	100	100	75	63

Figure 48 shows the indicator of essential nutrition actions in children, which is measured every 2-3 months in 63 health posts in 16 priority districts that are also Community ProCONE health districts. The expansion phase has been led by professional nurses in health centers and permanent care centers who have trained auxiliary nurses in health posts on health care norms, the use of clinical records and QI monitoring. In the coming year, the same strategy will be used to expand the quality improvement approach to 57 additional health posts and the extension of coverage community centers in 12 priority municipalities (health districts) within the Feed the Future Initiative.

Quality Management System

In FY11, HCI has continued to support the MOH to implement the national Quality Management System (QMS) that was designed with HCI assistance and officially launched by the MOH at the end of FY10. The QMS applies ISO 9001:2008 quality management criteria to financial and administrative processes within the central MOH as well as clinical care processes in selected health facilities. In FY11, two facilities in Guatemala City that deliver HIV and STD services obtained ISO certification. In addition, auditors from ICONTEC (the Colombian Technical Norms and Certification Institute) conducted evaluations and recommended certification of maternal and neonatal health care in six primary care facilities. The re-certification of the central MOH administrative and financial processes as well as those of maternal and neonatal care in the San Pedro Sacatepéquez Health Center in San Marcos was also recommended.

Figure 48. Guatemala: Quarterly compliance with essential nutrition actions for infants and young children, 63 health posts in seven health areas, February 2010-June 2011



	Feb.10	Apr.10	Jun.10	Ago.10	Oct.10	Dec.10	Feb.11	Apr.11	Jun.11
Num	152	297	630	747	881	635	729	939	712
Den	250	585	821	906	994	692	813	1045	747
Health posts rep. 11	26	41	47	44	42	38	41	31	
% posts rep.	17	41	65	75	70	67	60	65	49

This year the firm Profina S.A. carried out an assessment of 13 internal MOH processes at the central level and in two Health Area offices in Quetzaltenango and Central Guatemala. Preliminary results reveal that the MOH's efficiency rating increased to 90%, up 48 points from the rating it received in 2005 when PricewaterhouseCoopers conducted an assessment on the functioning of the various Ministries in the government. At the time, the MOH was rated one of the worse, with an average efficiency rating of 48% percent. Table 9 compares the 2005 and 2011 ratings. The improved efficiency rating is due to ISO 9001:2008 certification at the central Unit of Financial Administration along with other efforts such as strengthening the internal audit unit and better documentation of processes especially in the area of financial decentralization.

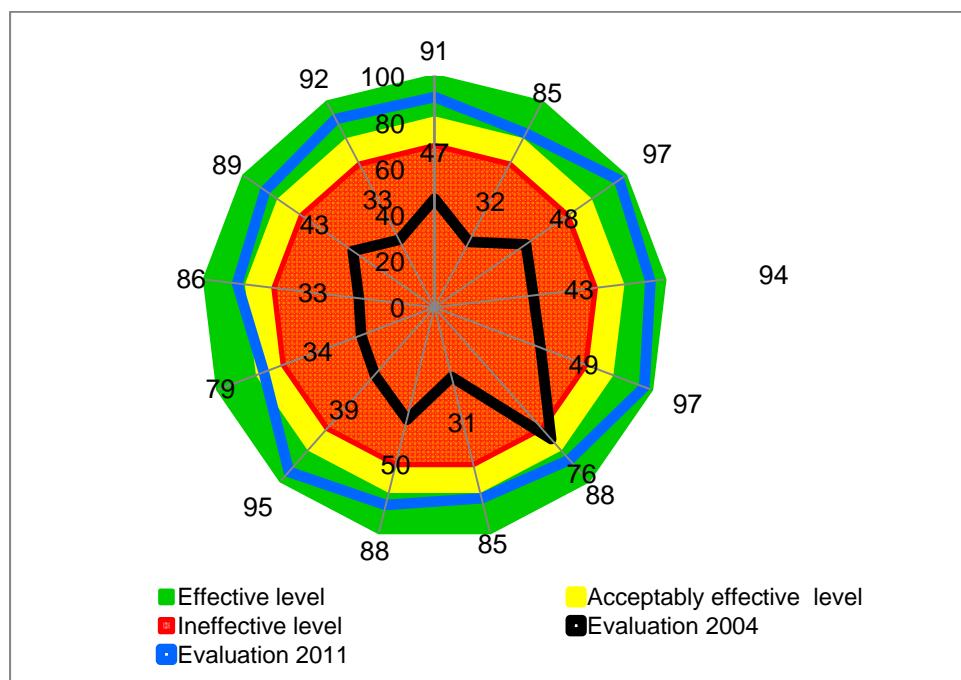
Table 9. Guatemala: Improvement in the effectiveness of 13 internal functioning processes of MOH and interventions conducted

No.	Processes Evaluated	2005 (%)	2011 (%)
1	Organizational Structure	47	91
2	Personnel Management	32	85
3	Procurement Process	48	97
4	Accounting System	43	94
5	Budget Execution	49	97
6	Strategic Planning	76	88
7	Inventory Process	31	85
8	Treasury Process	50	88
9	Decentralized Supervision Unit	39	95
10	Documentation of Procedures	33	92
11	Loans and Donations	34	79
12	Information Technology	33	86

I2	Internal Audit	43	89
	Indirect Intervention		
	Direct Intervention		
	No Intervention		

Figure 49 illustrates the results in a radial graph. Except for strategic planning, the baseline assessment had all processes fall in the ineffective level (red area in the graph). In the final assessment, all processes except loans and donations fell in the effective level (green area in the graph); 92% of processes were rated effective

Figure 49. Guatemala: Improvement in the effectiveness of 13 internal management processes of the Ministry of Health, comparing 2005 and 2011



Directions for FY12

The HCI Guatemala project was awarded an extension of six months from October 2011 to March 2012. During this period the main directions are: work under the US government Global Health and Feed the Future Initiatives to reduce child chronic malnutrition and maternal and neonatal mortality; concentrate actions in 12 priority municipalities located in four health areas; implement a community-based health care model with integration of MNCH, nutrition, and family planning components while maintaining the Quality Management System (QMS) in the MOH; and coordinate with other USAID projects on health (PNUD), sustainable livelihoods (PVOs), economic development (private sector) and democratic governance.

2.17 Honduras

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
Improve the management of obstetrical complications at ambulatory and hospital levels through support for CQI in targeted	<ul style="list-style-type: none"> Improve outcomes of women with obstetrical complications 	La Ceiba, Trujillo, Comayagua, Olanchito, El Progreso and Yoro Hospitals

hospitals		
Improve the management of newborn complications at ambulatory and hospital levels through the introduction of Helping Babies Breathe and Kangaroo Mother Care	<ul style="list-style-type: none"> ▪ Reduce the neonatal fatality rate by asphyxia, sepsis and prematurity 	HBB: train personnel and support introduction in 20 maternal clinics KMC: Launch in the national teaching hospital
Referral and counter-referral collaborative in Comayagua Health Region	<ul style="list-style-type: none"> ▪ Improve referral linkages to assure appropriate care for obstetrical complications at each level of the health system in Comayagua Region 	1 hospital, 5 maternal clinics, and 30 health centers in Comayagua Beneficiary population: 427,000
Child pneumonia and diarrhea collaborative in La Paz Health Region	<ul style="list-style-type: none"> ▪ Synthesize learning from the pneumonia and diarrhea collaborative in La Paz Region 	25 health facilities: 1 hospital, 1 maternal clinic, and 23 health centers in La Paz Beneficiary population: 156,560
Intrahospital infections collaborative	<ul style="list-style-type: none"> ▪ Reduce the rate of intrahospital infections 	Hospitals of Copán, Cortes and Atlántida
National Quality System	<ul style="list-style-type: none"> ▪ Support the Secretariat of Health in the design and implementation of a national quality system and policy, including licensing standards for health facilities and guidelines for development of new standards 	National level

Main Activities and Results

Improve the Management of Obstetrical Complications

In follow-up to work in prior years with QI teams in 11 regions of Honduras in maternal and newborn care, in FYII, the Quality Assurance Department (QAD) of the Secretariat of Health of Honduras asked HCI to focus improvement efforts on the six regional hospitals that were the lowest performers for handling obstetrical complications. HCI organized a new focused collaborative with these six hospitals, with learning sessions held in September and December 2010 and August 2011. HCI facilitated the sharing of successful changes among the six hospitals, including the introduction of locally manufactured hydrostatic balloons, better measurement of blood loss, reinforcement of the use of the partograph, reorganization of blood pressure monitoring, a specific triage process for pregnant women, clearer task assignment among staff in labor and delivery, and standardized post-partum monitoring. Figure 50 shows some gains in the management of obstetric complications during the year. Of the six hospitals, Trujillo, Olanchito and Yoro hospitals have improved their performance, but Ceiba hospital's performance has gradually declined. In August, the QAD and HCI met with the hospital director of La Ceiba and its quality committee and obtained commitments to reactivate their quality improvement work, which had not been active in FYII.

In FYII, HCI launched a new effort to reduce deaths due to newborn asphyxia in 20 maternal clinics of the five priority health regions of Comayagua, Copán, Intibucá, La Paz, and Lempira, through the implementation of the Helping Babies Breathe (HBB) initiative. HCI organized the training of three national master trainers—two from the Secretariat of Health and one from HCI staff—in the regional workshop held in Guatemala in February 2011. Manuals, posters, and learning materials were adapted from those developed by the American Academy of Pediatrics and reproduced for use in Honduras. HCI also procured one mannequin for each maternity clinic and Neonatalie anatomical models for training. HCI worked with the Child Health Program of the Secretariat of Health to define indicators for

monitoring the results of improved handling of asphyxia cases and develop forms for gathering these data.

Figure 50. Honduras: Percent of women with an obstetric complication (hemorrhage, high blood pressure, endometritis) who were handled according to standards (Jan. 2010-Aug. 2011)

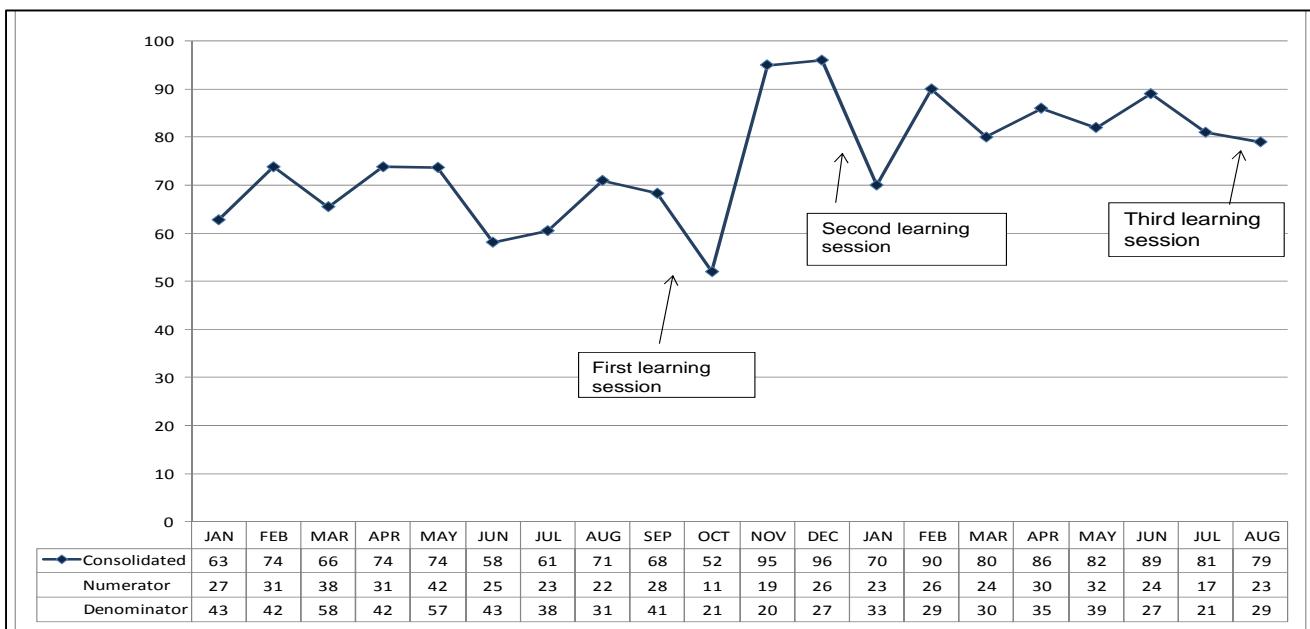
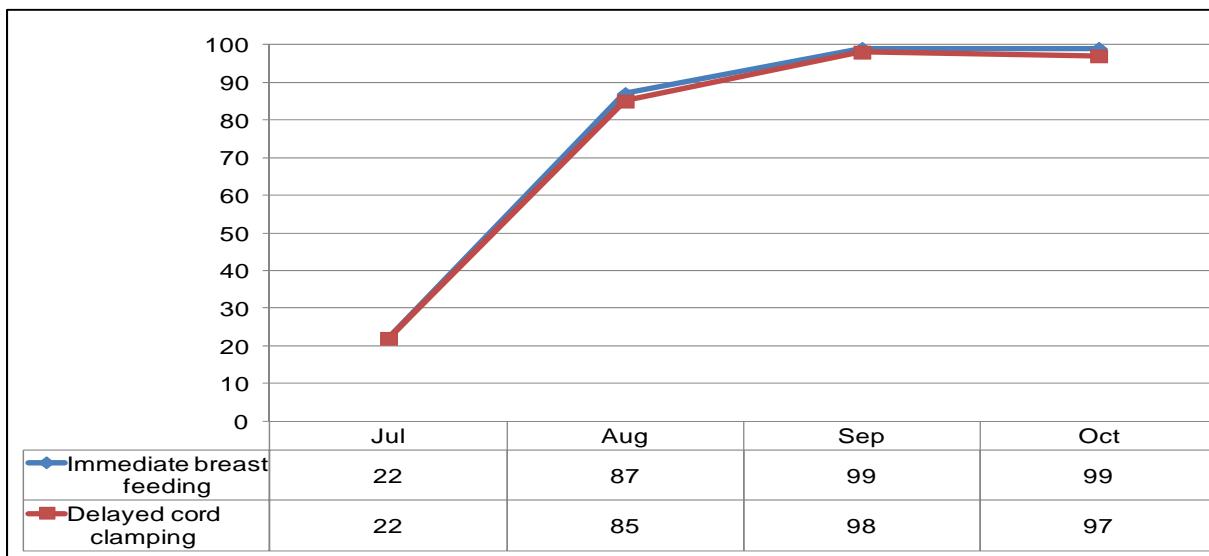


Figure 51 shows results for two of these indicators: immediate breastfeeding and delayed cord clamping. In April 2011, HCI organized the first national HBB training workshop for a team of facilitators from the regional level and supervisors of the 13 maternal clinics in Comayagua, La Paz and Intibucá regions. HCI also assisted these trainers to prepare plans for replicating the training for all staff in these maternal clinics.

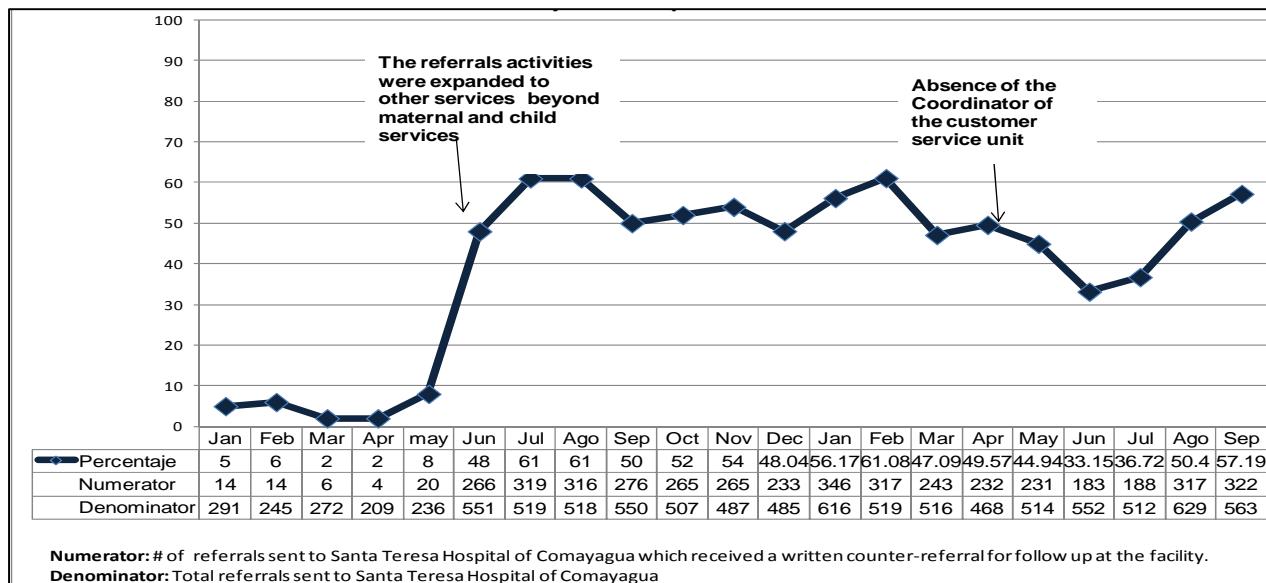
Figure 51.Honduras: Percent of newborns who received immediate breast feeding and delayed cord clamping-20 maternal clinics in Comayagua 6 health regions (July-Oct, 2011)



The other major improvement intervention supported by HCI in Honduras was the Referrals and Counter-referrals Collaborative in Comayagua. This collaborative was launched in 2009 but it was not

until 2010 that the hospital began to make changes and work actively on achieving their aim of 50% of the referrals received in Comayagua Hospital from the region's maternal clinics and health centers receiving a written response for follow-up care at the corresponding facility. While the collaborative first focused on maternal and child care referrals, this year the teams have expanded their focus to all referrals, including adult care. The major changes introduced by the improvement team in Comayagua Hospital were the installation of referral form in-boxes in all hospital services and the engagement of the hospital's customer service unit in monitoring and transmitting referral forms. Figure 52 shows the performance of the indicator of completed counter-referrals over the year.

Figure 52. Honduras: Percent of referrals send to Santa Teresa Hospital of Comayagua for which a counter-referral for follow-up care was sent and received by the referring facility, Jan. 2010-Sept. 2011



Directions for FY12

In FY12, HCI will assist the QAD to spread best practices in the management of EONC complications and in the referral and counter-referral process at ambulatory and hospital levels in the health regions of Intibucá, Lempira and Copan. HCI will also support the QAD to spread the child pneumonia and diarrhea improvements to the health regions of Intibucá, Lempira and Copan. The new intra-hospital infections collaborative will continue. HCI will also support the Secretariat of Health to implement the national Quality Health System to strengthen the process for updating standards and monitoring compliance at the regional level as well as to design standards for continuous quality improvement.

2.18 Latin American and Caribbean Regional Kangaroo Mother Care Initiative

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	How will we know?	Scale of intervention
Introduction and spread of Kangaroo Care in Honduras, Guatemala, El Salvador, Nicaragua and Ecuador	<ul style="list-style-type: none"> ▪ Introduce and implement Kangaroo Care (KC) in one leading teaching hospital in each country ▪ Spread kangaroo care to additional hospitals in each country ▪ Reduce hypothermia and 	Percent of low birth weight (LBW) babies who receive KC in leading teaching hospital Number of additional hospitals where KC has been introduced and implemented Percent of LBW babies who	Initially, one leading teaching hospital in each country: 1) Bertha Calderón hospital, Managua/Nicaragua; 2) Maternidad hospital in San Salvador; 3) Quetzaltenango regional

	<ul style="list-style-type: none"> ▪ infections in low-weight newborns ▪ Increase breastfeeding practices and reduce low weight in preterm newborns 	<ul style="list-style-type: none"> present hypothermia Percent of LBW babies who present infections Percent of LBW babies who are able to breastfeed regularly 	<ul style="list-style-type: none"> hospital, Guatemala. Scale of spread TBD in each country
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Main Activities and Results

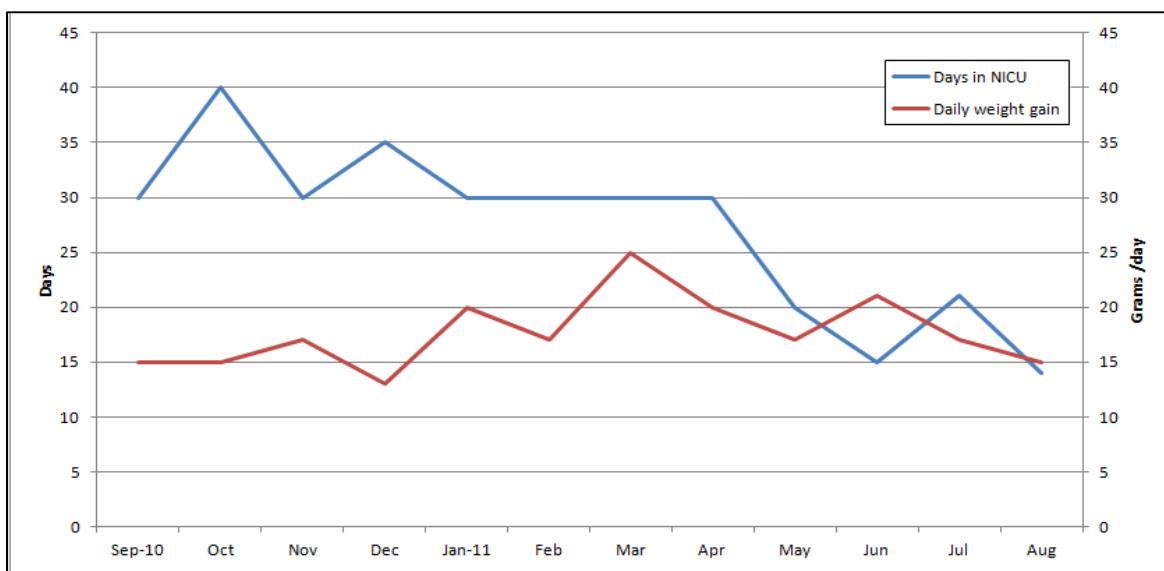
HCI supported Ministries of Health and hospital implementation teams to build and implement Kangaroo Mother Care (KMC) programs in five countries: Nicaragua, El Salvador, Guatemala, Honduras, and Ecuador.

Nicaragua

HCI continued to provide support to the implementation at the Bertha Calderon Hospital (HBC) in Managua, which began its KMC program in July 2010. In FY11, 317 preterm babies were admitted to the Neonatal ward, 246 of which were admitted to the hospital's KMC program, 78%. As seen in Figure 53, the hospital has been able to cut the average number of days these babies spent in the Neonatal Intensive Care Unit in half while at the same time maintaining a steady average weight gain. Many of the babies remained in the program for an average of three weeks, a full 15 days less than before the program was implemented. HCI Nicaragua worked with the HBC team to design an ambulatory care program for babies participating in the program, which will be implemented in FY12. HCI Nicaragua also drafted indicators for quality of care, which are currently being validated.

Data collection was completed on the operations research study on the cost-effectiveness of the KMC strategy in the Bertha Calderon Hospital in Nicaragua, and the team, with technical support from HCI's Research & Evaluation team, is working on analysis of the data.

Figure 53. Nicaragua: Average number of days in the NICU and average daily weight gain for 246 low-weight pre-term babies and Kangaroo Care Unit, Bertha Calderon Hospital, Managua, September 2010- August 2011



El Salvador

In El Salvador, the KMC program was inaugurated at the Dr. Raúl Arguello Escolán Specialized National Maternity Hospital in January 2011. Participants are taught Kangaroo Care concepts and while in the program, attend daily meetings held in the program center, where educational workshops cover such topics as breastfeeding and baby care. In FY11, 127 patients were admitted to the KMC program at the

hospital. By the end of the year, the program had achieved the following results in weight gain for patients:

- Average daily weight gain before KMC: 25.8 grams per day
- Average daily weight gain after KMC: 41.9 grams per day
- Average daily weight gain ambulatory KMC: 75 grams per day

El Salvador is currently focusing on expanding the KMC program to two regional public hospitals. Teams from these hospitals were trained by the team from the National Maternity Hospital, with support from HCI El Salvador and the Ministry of Health. In total, 90 doctors and nurses from the two hospitals were trained and completed observation visits to the National Maternity Hospital. HCI support procurement of equipment and supplies for the two expansion programs. The KMC program started at San Miguel hospital with the first admissions in August.

Guatemala

The Guatemala team attended training at the Kangaroo Foundation in March 2011; the team included a neonatologist, neonatal nurse, psychologist, and staff from HCI Guatemala and the Ministry of Health attended a training on program implementation and management as well. The team launched a KMC program at the Western Regional Hospital in Quetzaltenango in July 2011. The hospital also started an ambulatory program at that time. After the implementation of the program, the hospital saw a 50% reduction in incubator use. Currently, the hospital program has two small rooms with three beds each within the Neonatal Care Unit. Since July, 311 low-weight preterm babies were admitted to the neonatal ward; 96 preterm babies received hospital and ambulatory KMC. Of these babies, 88 have successfully graduated from the KMC program, 6 were readmitted, and 2 have died.

Honduras

In August 2011, HCI sponsored a team from the national teaching hospital, Hospital Escuela, to train at the Kangaroo Foundation in Colombia. Escuela Hospital is the largest hospital in Honduras, located in the city of Tegucigalpa. The team included the Chief of Pediatrics, a neonatologist, the chief nurse of the neonatology ward, and a psychologist. Though the hospital had an existing KMC program, the program had few resources and no physician supervision. HCI Honduras and the Ministry of Health also participated in a one week training at the Kangaroo Foundation on KMC program implementation and management.

Since the training, the team has worked to strengthen the existing KMC program by creating a new physical space for the program at the hospital and is working to procure the necessary supplies for the program. This will allow parents of newborns 24-hour access and will reduce overcrowding; the team plans to provide space between incubators to allow chairs for parents who will participate in the program. The team also began to prepare trainings for other hospital providers in KMC methods and protocols.

Ecuador

The Ministry of Health in Ecuador has authorized the program and selected a team for training. The KMC program will be implemented at the Cotopaxi Provincial Hospital in Latacunga. The Ecuador team has begun preparations for a two-week training at the Kangaroo Foundation in Bogotá.

Directions for FY12

The First Annual LAC Regional Meeting on Implementation of the Kangaroo Mother Care (KMC) Method will be held December 7-9, 2011 in Santo Domingo, Dominican Republic. This meeting is being organized jointly by HCI and MCHIP and will be attended by other Latin American country teams in addition to the five HCI countries. At the meeting, the five HCI country teams will present their advances on KMC implementation. Teams will discuss lessons learned, a future community of practice,

and other topics relevant to KMC program implementation and management. A common set of indicators for monitoring of KMC process and impact will be discussed and agreed upon during this meeting. Throughout the year, HCI will continue to provide technical assistance to Ministries of Health and hospital implementation teams to support KMC programs and scale up. A strengthened KMC program will begin at the Hospital Escuela in Honduras. A team from the Cotopaxi Provincial Hospital in Ecuador will attend training at the Kangaroo Foundation in Bogotá and begin a KMC program at their hospital.

2.19 Nicaragua

HCI's program in Nicaragua in FYII worked at national scale, with quality improvement interventions reaching facilities in all 17 local integrated health systems (known by the Spanish acronym, SILAIS) and addressing a large number of care areas, including obstetric and newborn complications (including asphyxia, sepsis and ventilator-associated pneumonia), family planning, ART and care for persons with HIV, HIV testing among high-risk populations such as people with TB, and infection control and prevention. In addition, the project also supported the implementation of Helping Babies Breathe training, hospital preparations for certification in the Mother and Baby Friendly Hospital Initiative, and the development of a Kangaroo Mother Care program in the country's leading maternal and child hospital, Bertha Calderon in Managua.

In FYII, HCI provided direct technical assistance to teams in 15 SILAIS offices, 20 Ministry of Health hospitals, 21 private medical clinics affiliated with the Nicaraguan Social Security Institute, and 37 MOH health centers. The main activities of technical assistance provided by USAID/HCI targeted: management competencies to systematize quality monitoring, analyze information and timely decision making; offer of long-term methods offer and delivery in post obstetric event; promoting FP care for post partum adolescents; user satisfaction monitoring; and organization of contraceptive methods offer and delivery in specialties and hospital outpatient services. The gap between counseling and discharge of postpartum women with contraceptive methods has significantly decreased. This is the result of staff's competencies strengthening on counseling technique and availability of educational materials for users; better data recording and analysis resulted in timely decision-making, and services were reorganized with more staff supporting counseling.

Figures 54-58 highlight some of the project's results in FYII across these care areas. The individual graphs include annotations about the kinds of changes that teams introduced to improve service quality. Figure 55 shows a decrease in the median post-partum hemorrhage (PPH) cases as the result of the implementation of AMTSL in hospitals. In addition to increased AMTSL compliance for vaginal and cesarean births, effective interventions that contributed to this reduction were: improvement in the classification of PPH cases, timely identification of PPH risk factors, and better surveillance of women in immediate post partum period.

HCI continued technical assistance to the MOH for the Essential Obstetric and Neonatal Complications (EONC) collaborative in nine prioritized SILAIS, in order to reduce maternal and neonatal morbidity and mortality. Regarding neonatal health, the emphasis was on prevention of perinatal asphyxia, sepsis and respiratory distress syndrome. The main changes targeted maternal risk factors early identification; monitoring labor through partogram; obstetricians and pediatricians joint assessment of pregnant women with high obstetric risk; rapid assessment of babies who need help to start breathing, timely newborn care by staff with greater competencies, inclusion of statistics chief in monthly monitoring analysis and inclusion of Primary Care in surveillance, clinical cases analysis and joint discussion sessions. As a result of these actions for neonatal health, the rate of perinatal asphyxia was reduced, as shown in Figure 56.

Figure 54. Nicaragua: Quality counseling assures informed and voluntary choice of contraceptive method (Jan. 2009-Sept. 2011)

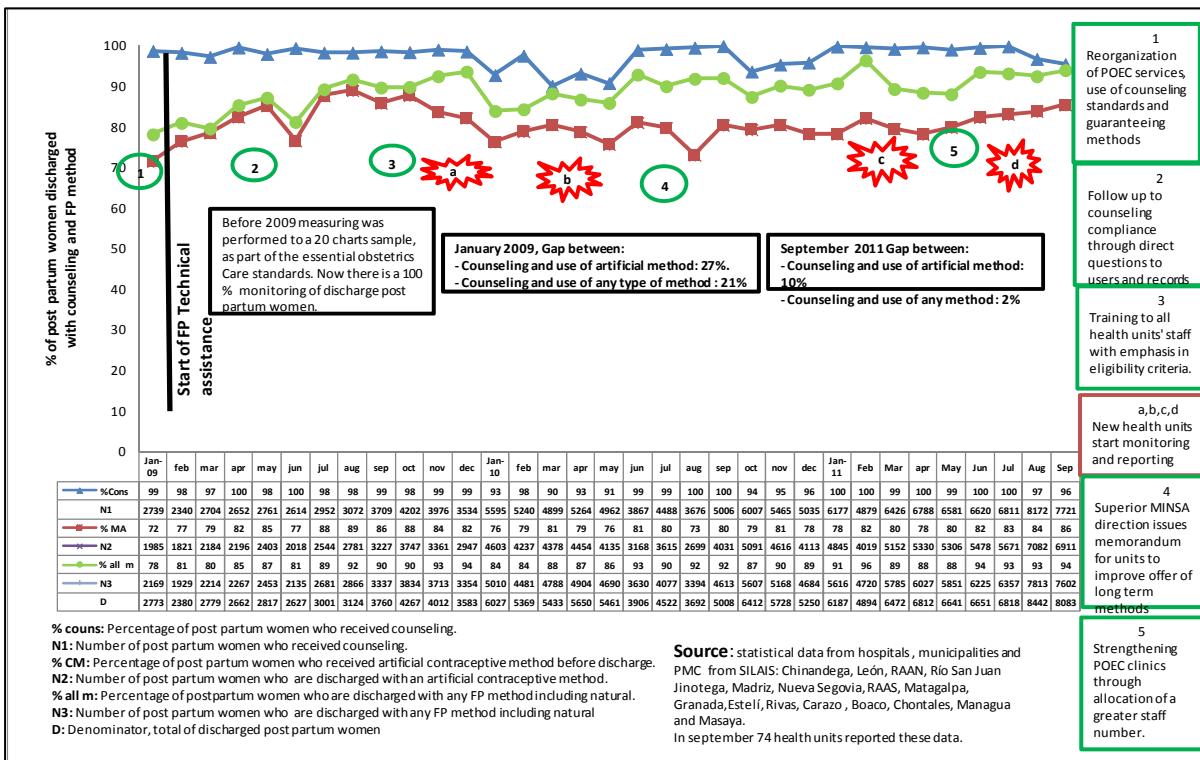


Figure 55. Nicaragua: Implementation of the 4 AMTSL Steps has allowed for containment of post-partum hemorrhage cases in 8 hospitals, Jan. 2009-Sept. 2011

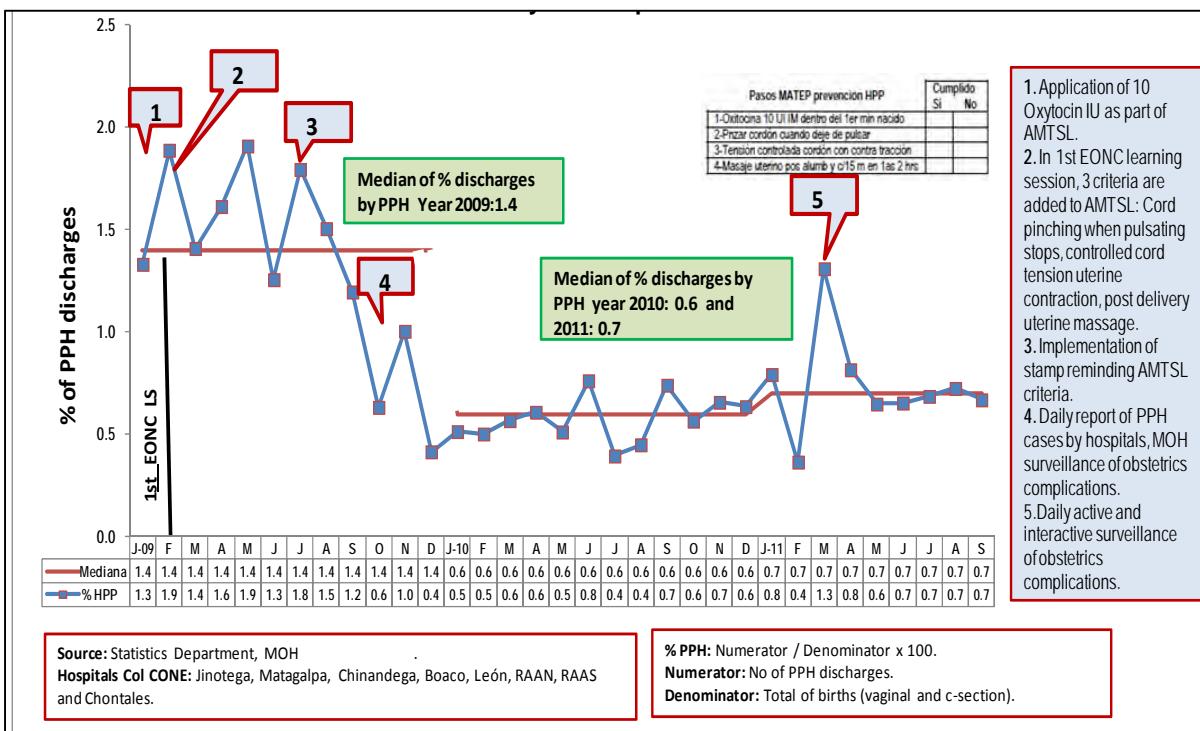


Figure 56. Nicaragua: The EONC collaborative has contributed to reducing the rate of perinatal asphyxia in 9 hospitals. Jan. 2009-Sept. 2011

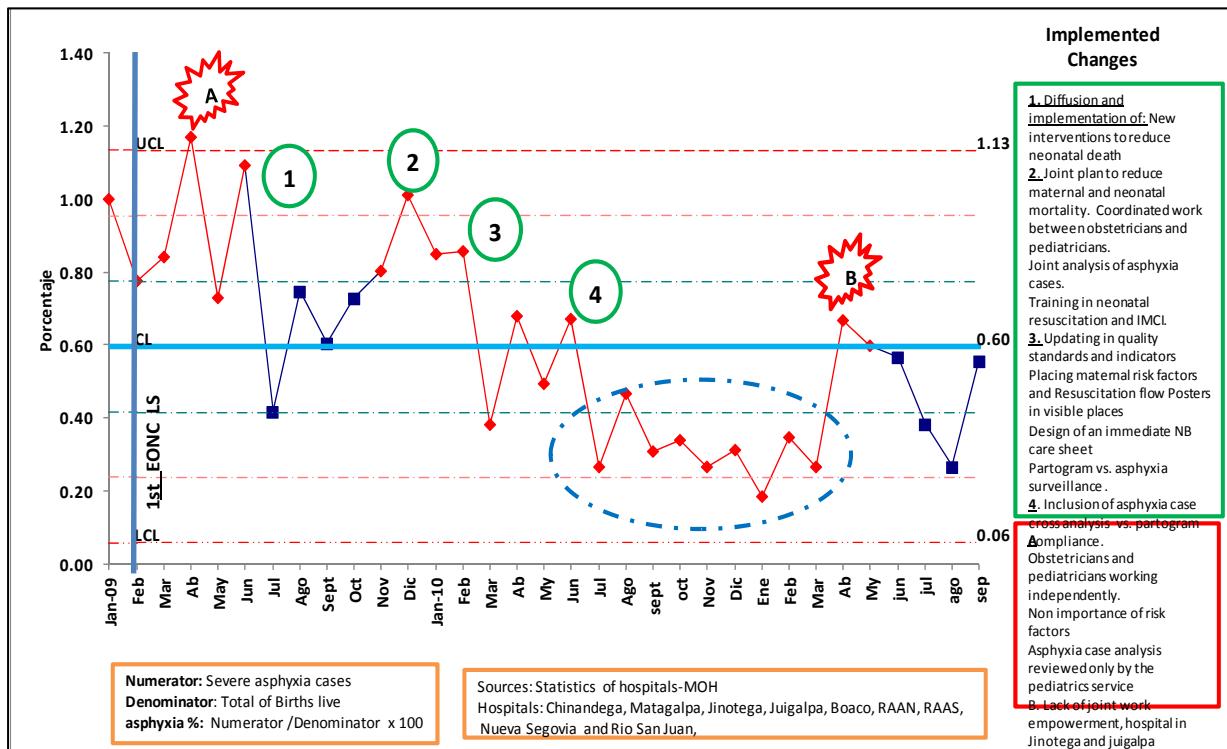
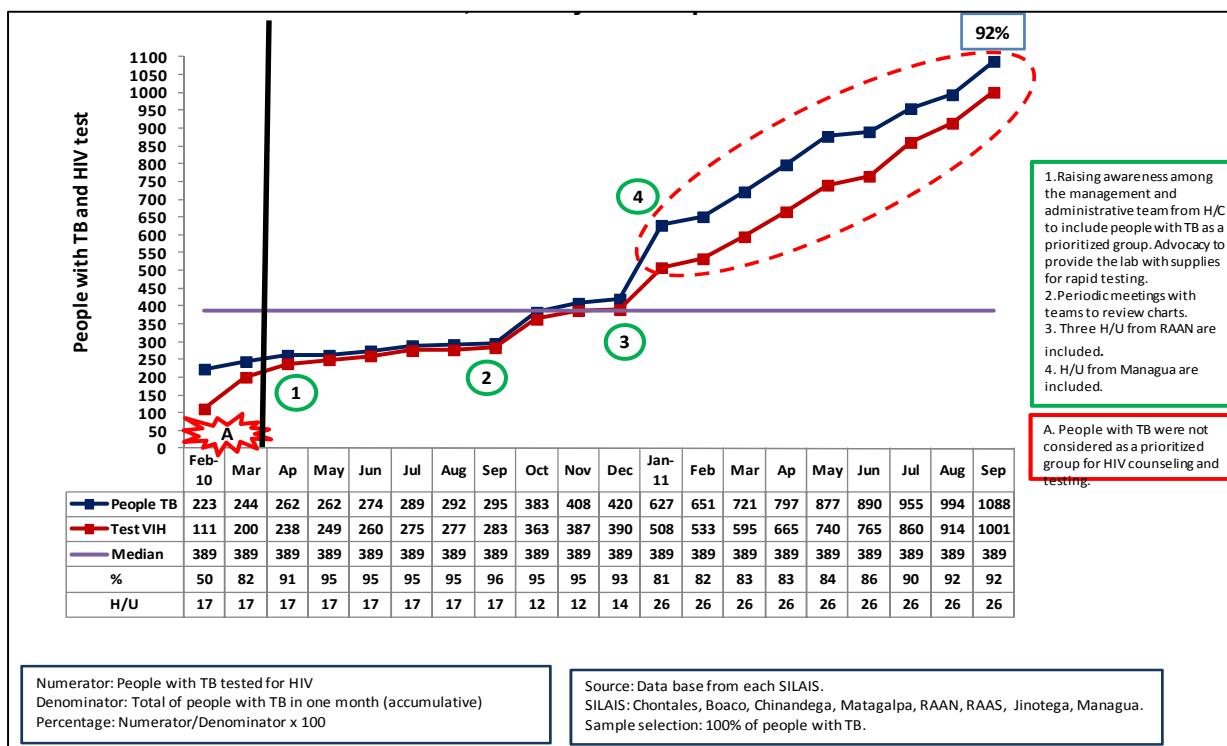


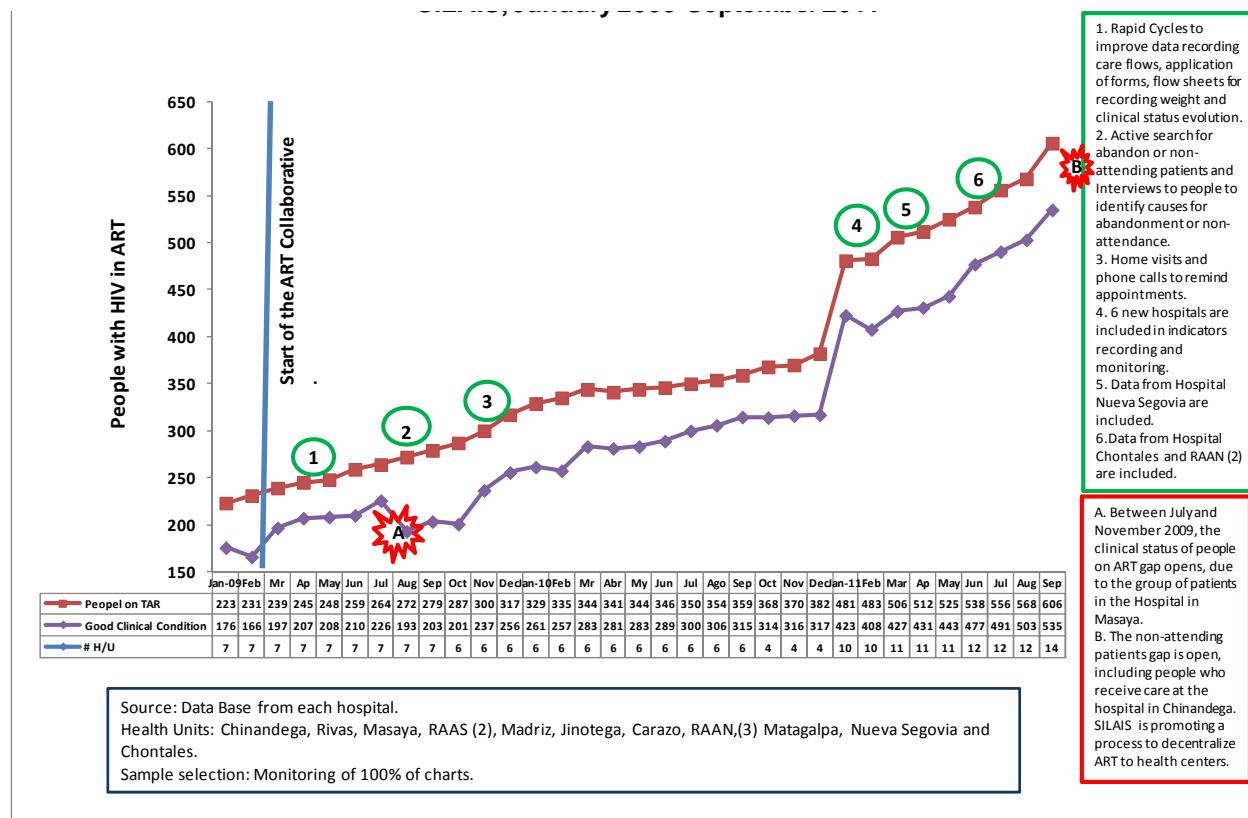
Figure 57. Nicaragua: HIV testing in people with TB in health facilities in eight SILAIS, Feb. 2010-Sept. 2011



During FY11, HCI focused technical assistance on promoting Voluntary Counseling and Testing (VCT) to people in vulnerable contexts (people with STIs, pregnant women, and people with TB) in 26 health units in eight SILAIS, monitoring the VCT flow in these facilities. Teams monitored counseling and testing quality indicators and implemented necessary improvements to the VCT flow. Improvement activities for HIV and TB co-infection case identification were extended to other health units, from 14 at the beginning of this year to 26, in eight SILAIS. TB program staff currently provide pre-test counseling to 100% of adults with TB and conduct tests in the same place where patients receive care, facilitating the voluntary, private and confidential character of results and testing. Counseling and results are systematically recorded in the file and in the TB program notebook. As shown in Figure 57, these actions have allowed for the percentage of testing in people with TB to increase from 50 to 92% during the February 2010 to September 2011 period.

During FY11, HCI continued providing support to improving the quality of care for people with HIV in 14 hospitals in 13 SILAIS. Health facilities where HCI provides technical assistance provided care for a total of 606 people on ART through September 2011. Multidisciplinary QI teams have managed to maintain quality indicators with values ranking between 89 and 100% compliance. Retention of patients in the ART program increased by 2% and mortality decreased in the same proportion for the same period, from 16% to 14%. The abandonment percentage was reduced by 5%. These results have been possible because of better coordination between hospitals and health units, achieving closer monitoring of people admitted into the ART program and searching for non-attending patients. The psychosocial support teams conduct home visits to promote self-care and reinforce adherence, and also provide counseling to improve nutrition and food hygiene. Strengthening family links of people with HIV, the "Mothers supporting their children in solidarity" Initiative, peer counselors, and self-help groups are interventions that we have also supported and that have contributed to these results.

Figure 58. Nicaragua: Retention in care and clinical status of people on ART in 11 SILAIS, January 2009-September 2011



Directions for FY12

HCI expects to close out all technical assistance in Nicaragua in FY12. To reinforce the sustainability and institutionalization of clinical and management improvements achieved to date, technical assistance will target transfer of management tools to MOH officials at both the local and central levels. We will also continue targeting sustainability of improvements and quality monitoring actions. We have developed a teaching package containing methodological designs in maternal and child health, family planning and HIV to be implemented at pre-service level by the Ministry of Health and in the curricula of the nursing and medical schools at three universities. Additional technical assistance activities will continue in family planning, maternal and child health, infection prevention, Kangaroo Mother Care, and HIV/AIDS.

3 USAID Global Health Element and Core-funded Activities

3.1 Maternal, Newborn, and Child Health

Overview of HCI's Program in FY11

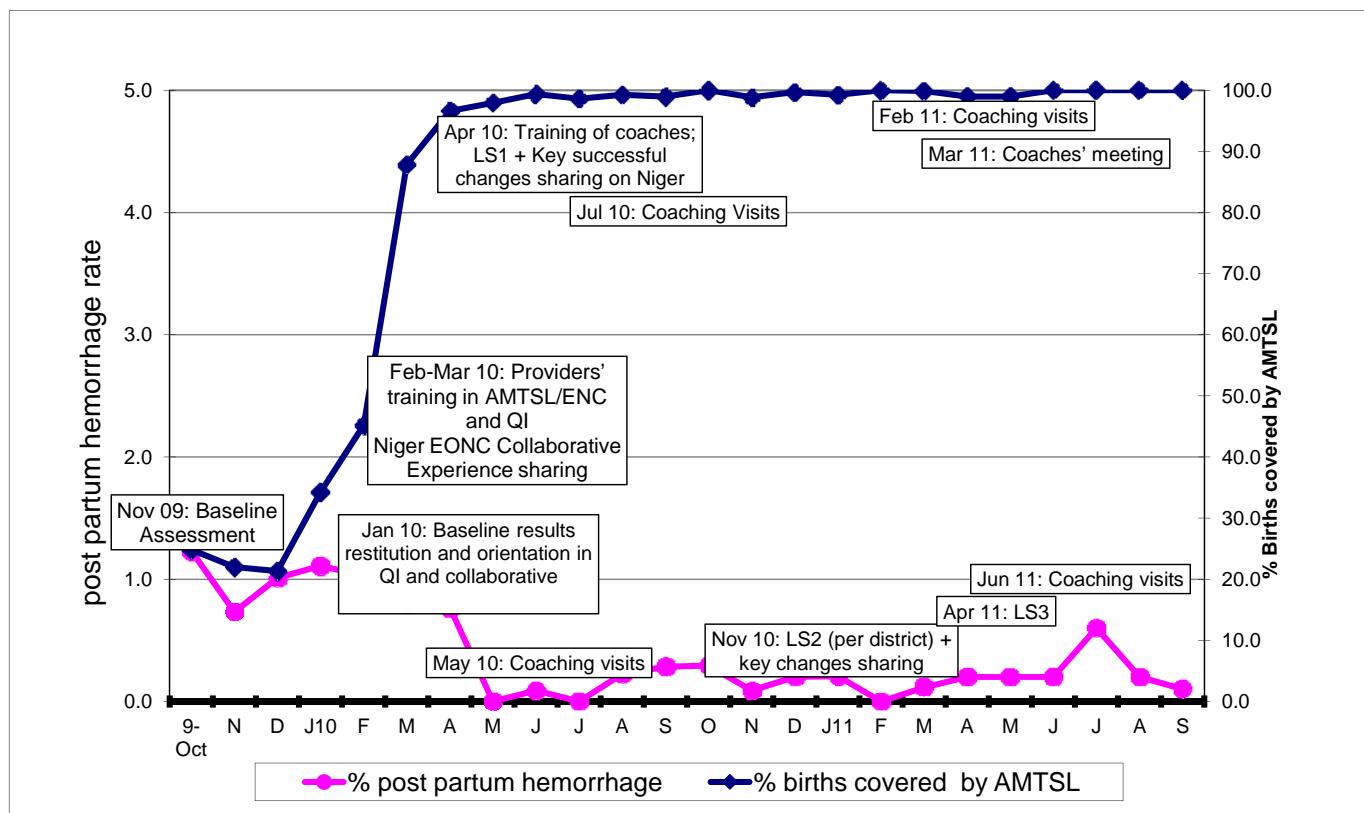
QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Contribute to MNC mortality reduction through the application of effective QI approaches at the health facility and community levels in selected USAID priority countries	<ul style="list-style-type: none"> ▪ Apply the collaborative improvement model to improve evidence based MNC at the health facility and community levels in Mali ▪ Apply the collaborative improvement model to improve evidence based child survival interventions care at community levels (Health Huts) in Senegal ▪ Apply the collaborative improvement model to improve evidence based maternal and newborn care at the health facility and community levels in Uganda ▪ Apply the collaborative improvement model to improve evidence based antenatal care and PMTCT services at facility and community levels in Kenya 	HCI Mali will work in the Kayes Region (1/9) It will cover 41 facilities (41/57) in two districts (2/7) for 577,000 inhabitants (out of 1,687,116)
		Mbour District, population 300,000 and Tivaounae District, population 200,000.
		Luwero District, population 416,000 and Masaka District, population 250,000.
		Kwale District population 160,000
Support and scale up USAID Global Initiatives	<ul style="list-style-type: none"> ▪ Introduce HBB 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 ▪ Participate in developing and testing WHO Checklist for Safe Childbirth ▪ Test locally made training models to improve health workers' skills in maternal and newborn care ▪ Contribute to review of USAID MNCH portfolio 	National level: Afghanistan, Uganda, and Guatemala Global Mali 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 	Global

Main Activities and Results

Facility and Community Maternal and Newborn Health Collaboratives in Mali

Based on lessons learned from HCI's experience in Niger, HCI designed a program to transfer the success obtained from Niger in increasing the use of AMTSL to Mali. HCI developed a joint action plan with USAID Mali bilateral programs, such as Project Kénéya Ciwara II (PKCII). HCI shared best practices from the AMTSL/ENC collaborative with USAID partners. In addition, HCI held a partners' meeting on Quality Improvement and developed a MOU on partnership between HCI and its 2 main USAID bilateral projects, PKCII and Assistance Technique Nationale Plus (ATN Plus). HCI organized regular coaching visits to the QI teams in participating health facilities and facilitated the documentation of best practices and success stories from the AMTSL/ENC collaborative. During FY 11, HCI conducted gender awareness sessions to its staff and prepared to introduce improvements to pre-eclampsia/eclampsia services. Community activities started with the establishment of community QI teams (QITs) in 26 villages participating in the community collaborative. Coaches were oriented and coaching sessions conducted to community QITs. Activities included the training of 86 CHWs and auxiliary nurses on the detection of and counseling on danger signs in pregnant women, birth plans, and QI concepts. Figure 59 below represents the increase in the uptake of AMTSL and the consequent decrease in postpartum hemorrhage for clients in the participating health facilities.

Figure 59. Mali: AMTSL coverage and reduction in postpartum hemorrhage, 41 targeted sites, average monthly births-1,024: Kayes Region, Oct. 2009-Sept. 2011



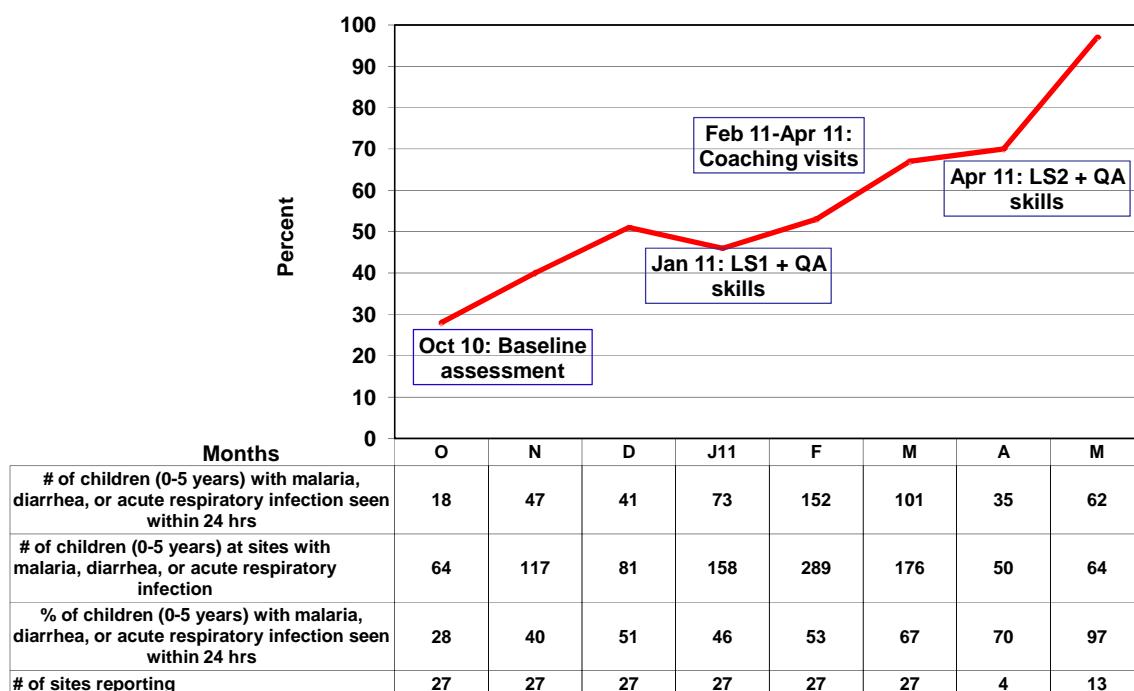
Community Case Management of Childhood Illness in Senegal

HCI is demonstrating the effectiveness of applying QI at the community level in two districts, Mbour and Tivaouane, for improving the community case management of childhood illness. QI teams were established in all 30 target Health Huts, community level posts. Coaches were selected and oriented and the Health Huts were visited. 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 because of the rare opportunity created by the Learning Sessions for community teams to meet and learn from each other. Improvements were achieved through the introduction of simple changes to the current community services such as the following:

- Addition of a new column to the Community Health Worker Register to assure the follow up of sick children within 24 hours
- Introduction of a new Referral Center Referral booklet instead of a single form
- Systematic recording of vital signs for each child seen at the Health Hut
- Improvement in procurement of essential child survival supplies (e.g., oral rehydration salts)
- Use of school children to sensitize parents / neighbors to increase utilization
- Increase CHW outreach and time spent at the household level
- Better involvement of the community leaders and committees

Figure 60 presents improvements in proportion of children seen by the CHW within 24 hours of illness.

Figure 60. Senegal: Percent children with malaria, diarrhea, or acute respiratory infection seen by a CHW within 24 hours of illness onset, Oct. 2010-May 2011 (Senegal)



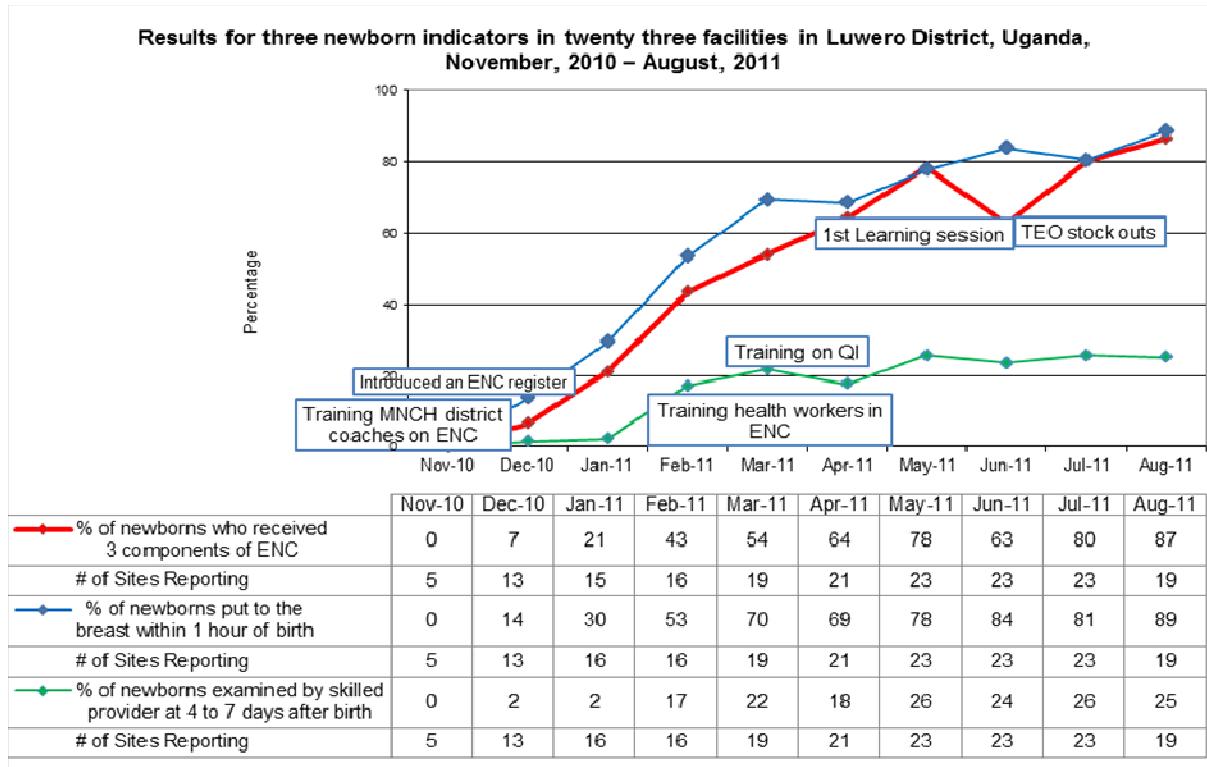
Facility and Community Maternal and Newborn Health Collaboratives in Uganda

In FY11, HCI began supporting the Ministry of Health in Uganda to apply the collaborative improvement approach to maternal newborn care that adapts and spreads evidence-based practices across facility teams in central Uganda. HCI with the MOH and District Health Office in Masaka and Luwero districts are implementing an improvement collaborative in MNCH care in 34 health facilities. The collaborative focuses on:

- Contributing to reduction in neonatal deaths through increasing number of newborn babies receiving essential newborn care (ENC)
- Contributing to reduction in maternal mortality through prevention of postpartum hemorrhage by actively managing the third stage of labor
- Linking pregnant mothers to HIV services through working with facilities to ensure that pregnant mothers are tested for HIV thus have a known HIV status

Masaka and Luwero districts are known for their high newborn and maternal mortality rates. However, the standard of newborn care provided could not be ascertained because services provided weren't documented at the facilities. An assessment done in December 2010 found that only 32% of health facilities surveyed had equipment for resuscitation of newborns, and health facilities and health care workers are ill-equipped to care for newborns. The high level of stillbirths attested to delayed care-seeking and poor quality services. 46% of mothers were discharged from facilities prior to 24 hours postpartum. Health workers were still emphasizing return visit for follow-up 6 weeks after delivery, even though the international recommendation is to have mother and baby return for postpartum check 3 days and 7 days after birth. Consequently, there was usually no interface between the mother/newborn and a health care worker during the first week of life when the risk of both maternal and neonatal death is highest. Facility staff members were also unaware of the Uganda's MoH newborn care standards. Figure 61 illustrates improvements achieved in the Luwero District.

Figure 61. Uganda: Improvement in coverage of essential newborn care in Luwero District



Twenty health care workers trained in ENC using the Helping Babies Breathe (HBB) curriculum, AMTSI and Quality Improvement as district trainers. Training materials handed out and used to cascade training to 82 MNCH providers. The district coaches, through monthly coaching, and quarterly learning sessions support 34 health facility quality improvement (QI) teams to improve maternal newborn care.

Figure 62. Uganda: Community Collaborative Targets
1. To increase the number of newborn babies that have been provided with Essential newborn care in the Community Improvement Collaborative sites
2. To increase the number of babies breastfed within the first hour after birth in the Community Improvement Collaborative sites
3. Increase the proportion of mothers counseled about newborn danger signs in the Community Improvement Collaborative sites
4. To increase the number of babies that are examined by a CHW 2-3 days after birth in the Improvement Collaborative sites
5. To increase the number of babies that are examined by a CHW 4-7 days after birth in the Improvement Collaborative sites
6. To build the capacity of health workers to help babies breathe immediately after birth in the Community Improvement Collaborative sites
7. To increase the number of postpartum mothers who are identified as having a danger sign and referred to a health unit
8. To improve hand hygiene of CHWs during delivery and care of the newborn
9. To increase the use of uterine massage to decrease bleeding after birth Improvement Collaborative sites
10. To increase the number of newborns who have a danger sign and are referred to a health unit.
11. To increase the number of low birth weight newborns receiving Kangaroo Care at community level

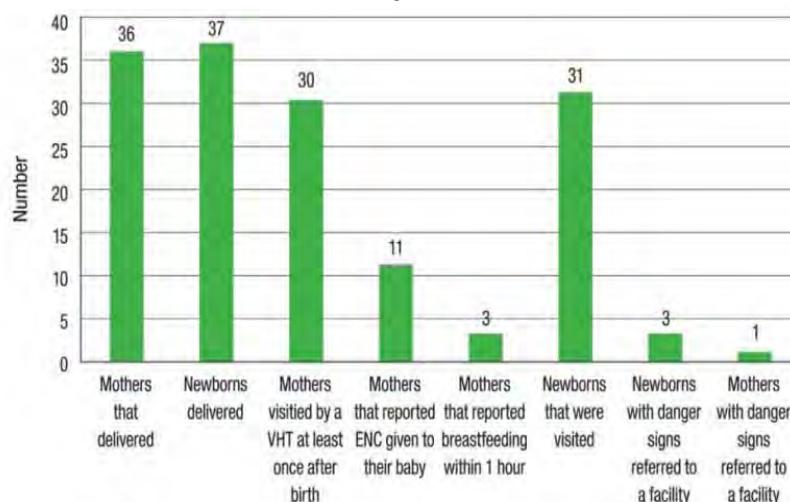
On average, 200 facility health workers have been trained monthly during coaching sessions to improve service delivery. Challenges, results, changes and next steps from the facilities are shared with coaches during monthly meetings. Good practices are identified and shared with facilities thus spreading good practices through coach sessions and learning sessions. Data on ENC, prevention of PPH by application of AMTSI and linkage of pregnant mothers to HIV testing is analyzed monthly by facility teams with support from district coaches to identify gaps, causes and solutions to improve maternal newborn health. The Community Collaborative targets are shown in Figure 62.

Community-based Collaborative

In rural Uganda where government health services only reach 50% of the population, reaching out to the community with community health workers has been an integral part of MCH services. However, the effectiveness of such community services has not been assured or assessed. To complement the efforts to reduce maternal and neonatal mortality at facility level and reach the previously unreached, HCI is applying quality improvement approaches at the community level in selected districts in

Uganda. Development of a community-based improvement collaborative began in June 2011. 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 in Masaka district and empowers them to play an active role in improving and measuring 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

Figure 63. Uganda: Data aggregated from 8 community improvement Collaborative sites in Luwero District, August 2011



the development of the community collaborative, there was 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 QI coach who is a health care provider at the referral facility visits each community once a month to support the VHTs and collect the data. Figure 63Figure 63 shows some of aggregated date from 8 sites in the Luwero District.

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

In FY11, HCI started a new core-funded intervention to improve coverage and the quality of antenatal care (ANC) and improve its integration with PMTCT. This demonstration collaborative is being implemented in all 21 facilities in one rural district of Kenya: Kwale District in Matuga Constituency, Coast Province, which was identified by the Ministry of Health as performing below the national average in ANC and PMTCT utilization. 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. Review of these 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 iron and folate. QI teams also took steps to ensure that ANC services included counseling on the need to take the iron and folate tablets. Figure 64 shows how the teams were able to increase the proportion of pregnant women who received a three-month supply of folate. Additionally, the QI teams, also ensured ANC services included counseling on the need to take the iron and folate tablets. Figures 64 and 65 summarize the results so far in improving the availability and distribution of Folate during ANC visits and the increase in the ANC coverage which was associated with an increase in the percent of health facility deliveries.

Figure 64. Kenya: Percentage of pregnant women receiving 3-month supply of foliate, Jan.-July 2011, 21 facilities, Kwale District

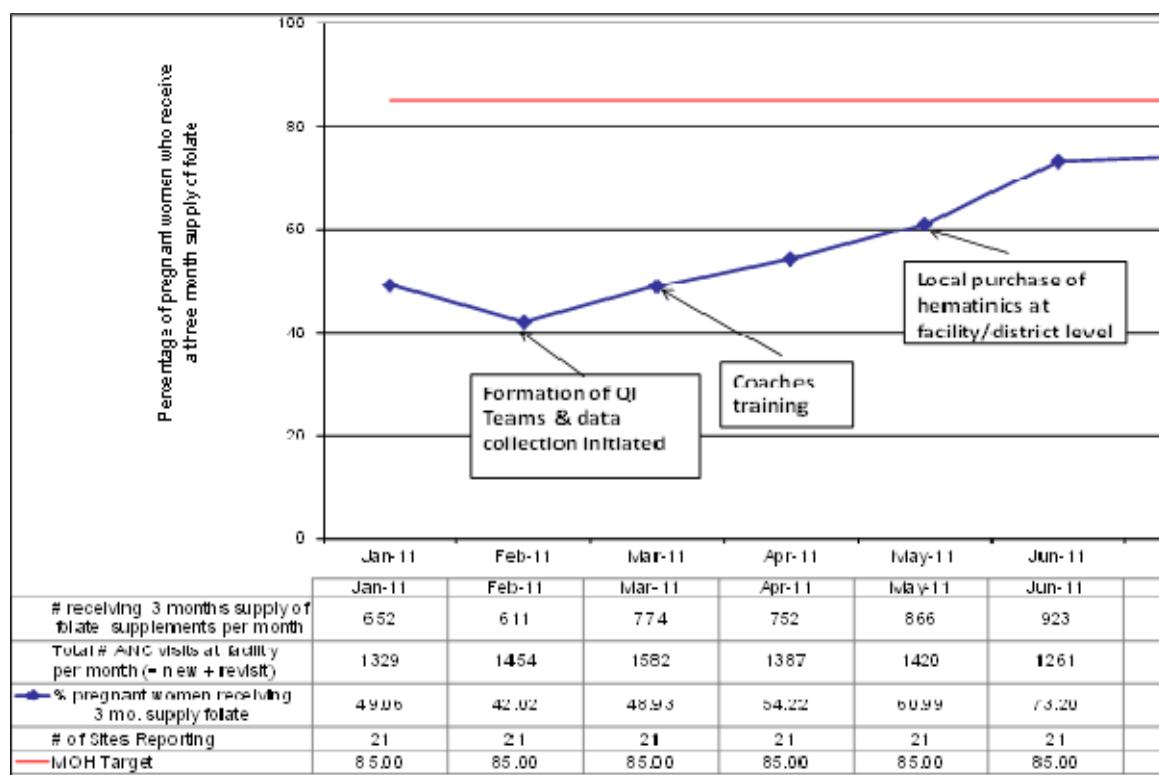
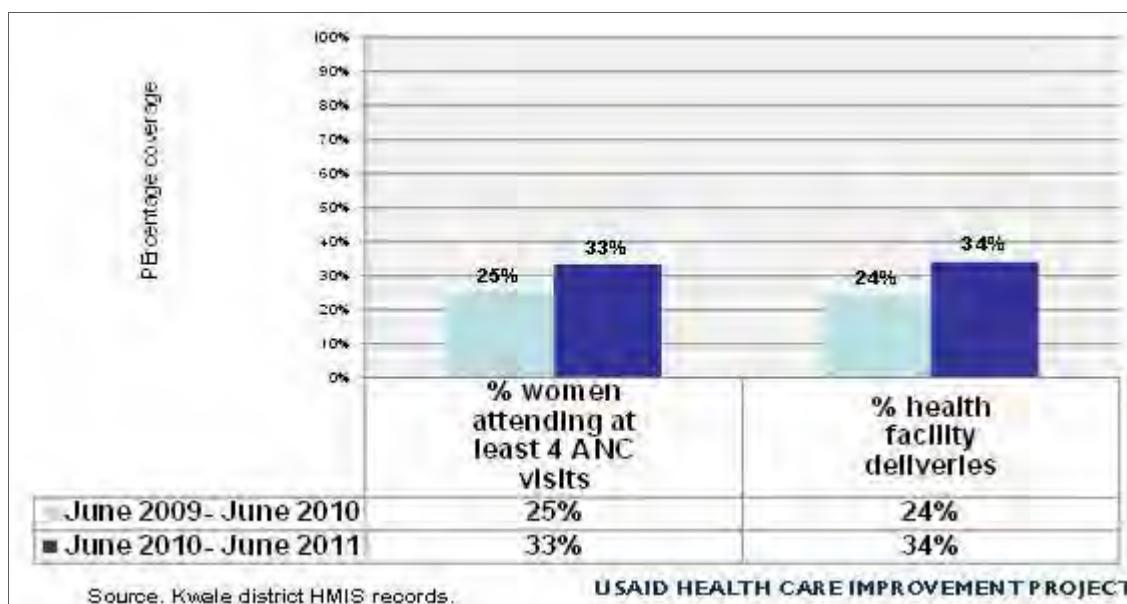


Figure 65. Kenya: ANC coverage and health facility deliveries for Kwale District



Supporting the Scale-up of USAID Global Initiatives

HCI has been leading the effort to introduce, coordinate, and roll out HBB in Afghanistan, Uganda, Guatemala, Honduras, Ecuador, El Salvador, and Nicaragua. In Afghanistan, HBB has been integrated into the Newborn LRP for continuing education and into the pre service Community Midwifery and Nursing curriculums. A series of HBB trainings has been conducted in maternity hospitals in Kabul and HCI targeted provinces (Balkh, Bamyan, Parwan, and Heart). HCI has conducted 19 training sessions (2 batches of TOT and 17 batches for first line health care providers) since 28 Sep 2010. A total of 374 first line providers and 40 Masters Trainers have been trained. The primary recipients of the training have been doctors and midwives. In Latin America, there has been an active exchange of information among HCI LAC country teams regarding a variety of HBB implementation issues, including steps for implementation, training of trainers, use of training materials, procurement of HBB sets and materials. HCI has been coordinating efforts with MCHIP and USAID/LAC Bureau. There has been a request from PAHO/Colombia for HCI trainers to conduct a national HBB training. HCI has introduced low cost, locally made childbirth models to facilitate training of health care providers and community health workers in maternal/newborn care. The models have been introduced and enthusiastically endorsed for training in Uganda, Afghanistan, Guatemala, Honduras, Ecuador, El Salvador, and Nicaragua.

Promote the Application of QI Methods in the Global Health Initiative

Early in FY11, HCI led the process of developing a USAID partners' paper on Finding Common Ground: Harmonizing the application of quality improvement models in maternal, newborn, and child health programs. The paper, endorsed by USAID, will serve as basis for collaboration and achieving synergies among QI programs in the field. HCI continues to contribute to the USAID led working group on integrated community case management of child illness. Contributions included developing global indicators, technical assistance in designing studies on the topic, and coordination of scaling up the approach in developing countries.

Directions for FY12

HCI MNCH programs will strengthen the integration services with other health areas particularly PMTCT and family planning. 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. Synthesis of HCI's filed experiences will be completed 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.

3.2 HIV/AIDS

Overview of HCI's Project in FY11

What are we trying to accomplish?	Activities	Scale of interventions
Improve long-term clinical outcomes for patients and enhance program sustainability in chronic illness care for HIV/AIDS.	<ul style="list-style-type: none"> ▪ Gap Analysis Framework for ART 	Multiple Sites - Nicaragua, Tanzania, Uganda
Use the WHO-endorsed Chronic Care Model to adapt the health system to the chronic needs of HIV/AIDS patients. Leverage the HIV /AIDS platform to establish and facilitate spread of best practices for chronic conditions care.	<ul style="list-style-type: none"> ▪ Strengthening the Health System for Chronic Condition Care 	15 sites in Buikwe District, Uganda
Improve patients' ability and confidence to chronically self-manage their HIV.	<ul style="list-style-type: none"> ▪ Patient Self-Management & Community Support 	14 sites in Morogoro Urban District, Morogoro Region, Tanzania
Improve management and outcomes for pain, malnutrition, and other symptoms and illnesses commonly associated with HIV.	<ul style="list-style-type: none"> ▪ Palliative Care Collaborative 	13 sites in Mayuge and Namutumba districts, Uganda
	<ul style="list-style-type: none"> ▪ Nutrition Care in HIV Programs 	8 sites in 3 districts of Nyanza Province, Kenya
Apply QI principles to strengthen the global effort to maximize HIV-free survival of children through PMTCT through: establishment of best practices and guidance for implementation of the latest WHO - PMTCT and infant feeding guidelines, and Improving service uptake and retention of women and infants along the PMTCT continuum.	<ul style="list-style-type: none"> ▪ WHO - PMTCT and Infant Feeding Guidelines Prototype 	3 sites in Njombe District, Iringa Region, Tanzania
	<ul style="list-style-type: none"> ▪ PMTCT – AIMGAPS ["Assuring Infants and Mothers Get All PMTCT Services"] 	11 sites in Iringa Region, Tanzania
	<ul style="list-style-type: none"> ▪ ANC Service Uptake (MCH – PMTCT integration) 	21 sites in Kwale District, Kenya
	<ul style="list-style-type: none"> ▪ PMTCT – OVC Linkages 	Sites/country to be determined
Apply QI principles to improve injection safety practices and reduce the incidence of unnecessary medical injections	<ul style="list-style-type: none"> ▪ Injection Safety 	Sindh Province, Pakistan
Global Technical Leadership	<ul style="list-style-type: none"> ▪ Provide technical assistance to HCI country programs in HIV and AIDS ▪ Disseminate information on learning from HCI country programs and research 	All HCI HIV and AIDS programs

Main Activities and Results

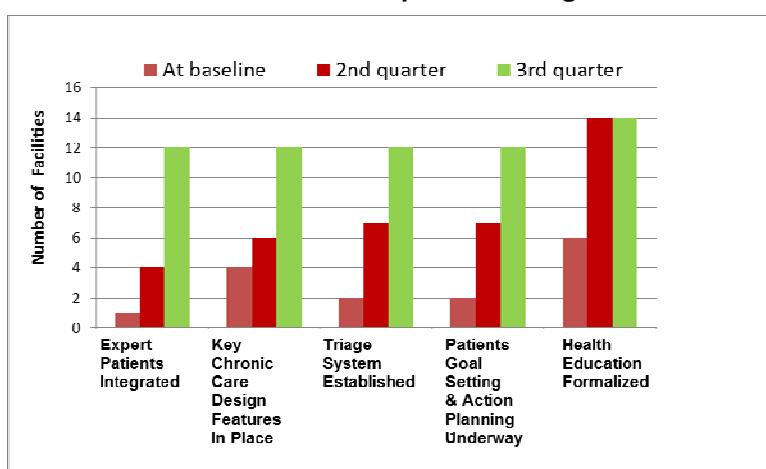
Gap Analysis Framework for ART

Use of the Gap Analysis Framework for ART is ongoing in Nicaragua, Tanzania, and most notably in Uganda where it has been scaled up at all 96 sites in 45 districts included in the HIV improvement collaboratives. Six facilities in Tanzania implementing the ART Framework have also added patient self-management and community support activities to improve the quality of ART care.

An instructional manual on “How to Implement a Gaps Analysis Framework to Guide Quality Improvement in ART Programs” along with the “ART Gap Calculator”, a tool for projecting local estimates of ART need, was also published and made available for download on the HCI website.

Strengthening the Health System for Chronic Conditions Care

Figure 66. Uganda: Changes implemented to improve chronic care for HIV patients in Uganda



At a high level meeting on chronic conditions care held in FY10, the Uganda MOH, HCI and other stakeholders resolved to adopt a comprehensive approach to improving the Uganda health care system so that it can more effectively serve people with HIV and other chronic conditions. To develop and prototype this approach, the MOH has been working with HCI during FY11 to employ quality improvement principles in redesigning the health system in one district, using the WHO-endorsed Chronic Care

Model adapted to the Ugandan context. This involves close examination of the current system through the lens of Chronic Care Model principles and identification of gaps in this system. Quality improvement methods are then used to apply chronic care principles to address these gaps. This approach is being piloted in one district (Buikwe) at 15 health facilities and emphasizes empowerment of patients in self-management, development, and provision of tools for decision support, strengthening of the clinical information system, reorganization of the health care delivery system and strengthening community support for patients with chronic diseases. The aim of these improvements is to have informed and activated patients interacting productively with a prepared and proactive health care team. This prototype for system redesign for chronic care has resulted in significant improvements in clinical processes (Figure 66) and outcomes for HIV and AIDS (Figure 19 on page 33) in Buikwe District.

Although the primary aim of this effort is to improve chronic care for HIV and AIDS patients, the same facilities have been using improvements in HIV and AIDS care and treatment as a model to develop and implement changes which improve chronic care for diabetes and hypertension as well. This “spillover effect” has resulted in significant improvements in chronic care processes and intermediate outcomes for hypertension and diabetes. The number of patients enrolled in care for hypertension and diabetes has also increased. Enrollment of patients has increased from 62 to 482 for diabetes and from 136 to 930 in a period of six months. The percentage of those who keep appointment and who meet their intermediate outcome targets have also improved. The percentage of patients with stable and controlled blood pressure (110/60-140/90mmHg) has increased from 5% to 66% and the proportion of diabetic patients with stable fasting blood sugar has increased from 15% to 74% (4-7.5mmmol/L) between February and August 2011.

Patient Self-management Support for HIV and AIDS

In order to strengthen existing activities aimed at improving the quality of HIV and AIDS services in Tanzania, HCI is applying the Chronic Care Model at 14 health facilities in the region of Morogoro, placing a particular emphasis on improving support for Patient Self-Management. Through this effort, health care providers were trained by HCI and district officials in supporting and partnering with patients in managing their care. To assist health care workers and provide expertise that comes with first-hand experience in successful HIV self-management, expert patients, referred to as “peer mentors”, were selected, and introduced to facilities to work with HIV patients. Throughout this fiscal year, the program has concentrated on building the capacity of health care workers in patient self-management support (PSMS) and on strengthening the skills of peer mentors to support patients to self-manage. Peer mentors are now assisting other patients with HIV to develop goals and action plans which address their individual barriers to good HIV self-management.

Peer mentors are providing individual and group education using standardized job aids developed by HCI to provide patient-centered health education sessions and counseling. They also share their personal experiences in living positively with HIV/AIDS to help patients overcome life challenges associated with HIV infection. Peer mentor duties related to self-management support include: health education, patient goal setting, and action planning, ART service orientation and linkages, and counseling (on various topics including adherence, disclosure, partner testing, isolation, fear of stigma, and stigma). In most facilities, peer mentors have also assumed routine clinic tasks previously performed by health workers to alleviate their workload and streamline facility operations including, patient demographics recording, nutritional assessment, registration, filing, and triage. Feedback from providers and patients on peer mentors and their involvement in patient care has been outstanding. However, early indicators have been affected by difficulties in assuring sufficient motivation and support for peer mentors (Figure 67). HCI is working with facilities, local MOH officials, community-based organizations, and other stakeholders to develop long-term solutions to sustaining this very well regarded peer mentor program.

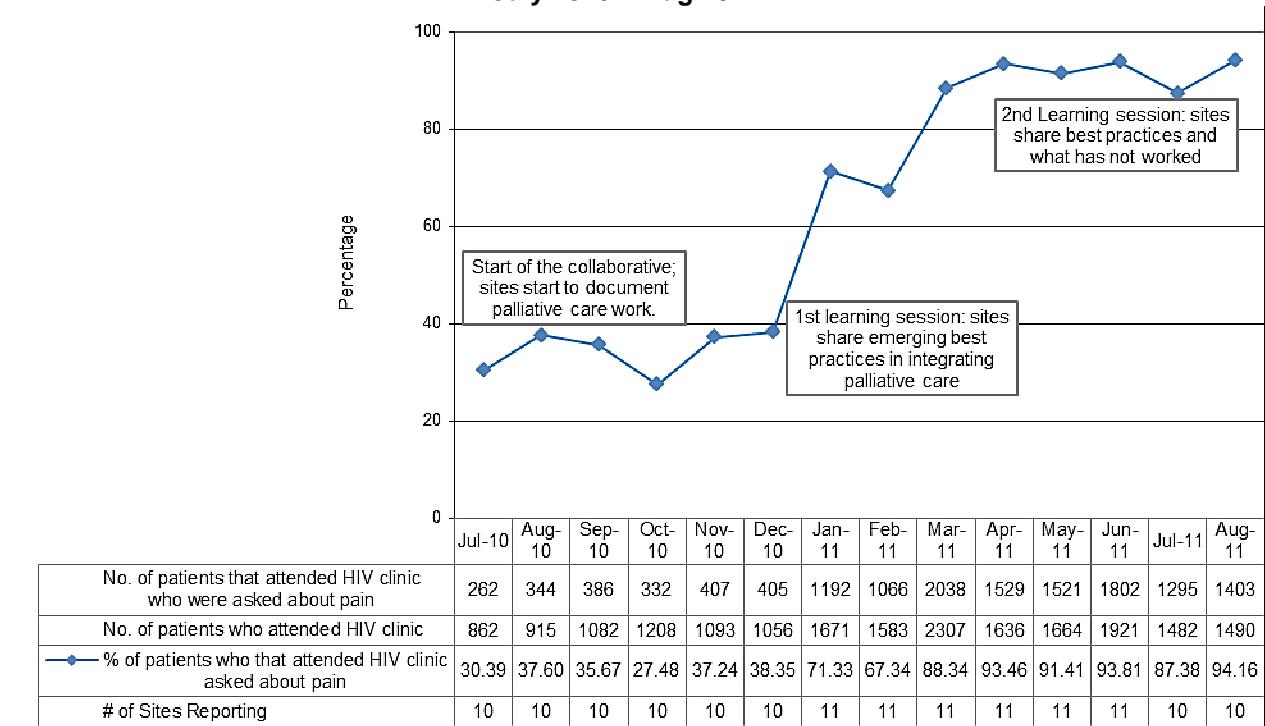
Figure 67. Uganda: Patient Self-Management facility & patient indicators for 6 sites in Morogoro Urban District, April-Aug 2011



Palliative Care Collaborative

The palliative care demonstration collaborative launched in Uganda in late FY10 and continued throughout FY11. It came to completion around the end of the fiscal year. This collaborative aims to improve the quality of life of patients and families facing life-threatening illness focusing on HIV/AIDS, through prevention and relief of suffering by early identification and treatment of pain and other illness-related problems. HCI supported the MoH to implement this collaborative in Namutumba and Mayuge districts, with a focus of better pain and symptom management by providers at HIV/AIDS treatment facilities and in the community through facility-linked volunteers. Data from health facilities shows that over 90% of patients attending HIV clinics are now asked about pain and prescribed pain medications (see Figure 68 and Figure 20 on page 34). HCI supported the two districts to identify one clinical officer each to be trained in pain management and licensed to prescribe morphine for patients in severe pain. HCI played a major role in helping both districts to increase the availability of morphine and other pain medicines to eligible patients and to assure a sustainable supply chain for these medications.

Figure 68. Uganda: Percentage of clients who attended the HIV clinic asked about pain, July 2010 – Aug 2011



Nutrition Care in HIV Programs

The demonstration collaborative for HIV-Nutrition was launched in eight sites in Nyanza Province, Kenya, in June 2011. HCI has supported QI teams at the demonstration sites to reorganize care flow processes so that all patients have nutritional assessment and care that is appropriate for their nutritional status. Furthermore, improved documentation of nutritional services has been achieved at all sites, and a new nutrition advisor was recruited and hired to replace the first advisor who left the project to pursue an advanced degree. In late August, HCI-Kenya led the first learning session for the HIV-Nutrition collaborative in Nyanza Province. All teams presented critical basic improvements to nutrition services that had been made since the beginning of QI activities. The most obvious area of improvement so far has been in nutritional assessment. It was revealed that prior to the QI collaborative, providers had only been assessing patients for malnutrition “on suspicion” (i.e., when they appeared grossly malnourished). Since the launch of the collaborative in June 2011, QI teams have

increased the percentage of HIV infected patients assessed to 98.6%. As a result of this improvement, the number of cases of malnutrition being detected has increased significantly as well. The major changes implemented to achieve this dramatic rise in nutritional assessment have been to reassign the task of assessing patients' nutritional status to expert patients and to reorient patient flow so that the assessment is done at registration.

WHO - PMTCT and Infant Feeding Guidelines Prototype

The new WHO guidelines for PMTCT recommend more effective use of ARVs by women and breast-feeding infants. 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, a prototype of the guidelines has been launched at three facilities in the Njombe district of Tanzania to identify and develop solutions for the challenges that new guidelines pose for PMTCT programs.

A baseline assessment was conducted at 6 sites in the Iringa Region of Tanzania in February 2011. The indicators and assessment tools cover: facility characteristics, service area characteristics and service delivery issues, participant assessment and health provider assessment. Following the baseline assessment, three facilities in Njombe District at different levels of the health system (hospital, health center, and dispensary) were selected for inclusion in the prototype. HCI advisors visited these three sites during the third quarter to orient providers on QI methodology and the prototype concept, establish QI teams, and collect information on patient flow, availability of supplies and equipment, human resources (at the RCH clinic, CTC, and maternity ward), and follow-up services for HIV-exposed children. This information was used to identify anticipated operational challenges for provision of PMTCT services according to the new guidelines.

During the fourth quarter, representatives from the three sites participated in a training on the new PMTCT / IF guidelines conducted by a regional implementing partner. The training participants then oriented the staff at their respective facilities, and implementation of the new guidelines was initiated. QI teams at each of the facilities continued to uncover challenges with implementation and to identify possible solutions to overcome these challenges. (Table 10) Focus group discussions were conducted with HIV infected mothers to gather feedback on potential challenges in adhering to the changes in PMTCT care. The following table includes a list of challenges that QI teams have identified in implementing the new guidelines. QI teams also began to develop and test changes to address these challenges and will continue to do so into the next year. HCI advisors have also reported to the PMTCT Coordinator at the MOHSW, challenges which require interventions beyond the facility level of the health system.

Table 10. HIV/AIDS: Challenges with implementing new guidelines

Clinical Area	Challenges
ANC	Inadequate supplies of ARV prophylaxis for pregnant women to meet the increased demand Limited CD4 testing for pregnant women resulting in difficulty determining eligibility for ART or ARV prophylaxis Late ANC enrollment hindering early initiation of ARV prophylaxis (or ART)
Infant follow-up	Lack of ARV prophylaxis for HIV Exposed Infants at Child Follow-Up Clinic (traditionally, ARVs for infants are kept at the HIV clinic and labor ward only) Inadequate provider knowledge on ARV prophylaxis dosage calculation for exposed children during follow up Providers wait for PCR test results of exposed infants before starting on ARV prophylaxis in order to confirm HIV status. There is often a delay of 1-2 months, however, before test results are received, resulting in unacceptable and potentially life-threatening delays in

	<p>initiation of ARVs for prophylaxis or treatment.</p> <p>Mothers express concern about giving medication to infants for an extended period of time when they are not sick or HIV infected</p> <p>Mothers previously counseled on strict EBF are confused now that supplemental (mixed) feeding from 6 – 12 months is required by the new guidelines and are worried that it might be harmful for their infants</p>
Cross-cutting	<p>PMTCT registers do not incorporate the 2010 guidelines, making it difficult for providers to document services provided.</p> <p>Poor male involvement has a greater impact with extended ARV use during pregnancy and for exposed infants during breastfeeding.</p> <p>Provider knowledge on the 2010 guidelines is often limited.</p>

PMTCT – AIMGAPS (Assuring Infants and Mothers Get All PMTCT Services)

The complexity of service delivery systems, poor medical record keeping, lack of PMTCT comprehension by both patients and providers, and mistreatment of mothers at health care facilities, are all among the many factors contributing to poor uptake of PMTCT services and high rates of attrition across the PMTCT continuum. Each step of the PMTCT continuum is an opportunity for poor uptake of individual PMTCT services, all which are needed to maximize HIV-free infant survival and assure the ongoing health of mothers and infants.

In mid-FY11, HCI launched the AIMGAPS collaborative improvement activity in the Iringa Region of Tanzania in order to improve uptake and quality of PMTCT services for HIV-infected mothers and their exposed infants. In February 2011, a baseline assessment was performed at six facilities in the Iringa region which identified a variety of factors that contribute to loss of patients from PMTCT programs. Results were used to inform QI activities in the collaborative. Eleven sites were selected for participation in this collaborative (including the six sites from the assessment). In May 2011, providers from the 11 sites participated in the first learning session where they were oriented on the objectives of AIMGAPS, introduced to QI methodology, discussed current gaps in PMTCT care, finalized and learned the QI monitoring system (indicators, data collection tools, etc.), and developed work plans. QI teams established at the facilities identified root causes of poor service uptake and developed solutions to improve uptake of services and retention of mothers and infants along the PMTCT continuum.

In June 2011, the first coaching visits were conducted by a team of HCI staff, implementing partner representatives (EngenderHealth), and regional and district health officials to the 11 facilities. During the visit, the coaches assisted the QI teams in collecting baseline data. Focus group discussions were also conducted with providers and then separately with HIV infected mothers to uncover challenges to accessing and remaining in PMTCT/HIV care. During each site visit, the coaches and the QI team members also discussed challenges with the current data systems and methods for improvement, reviewed past work plans and activities to date, and developed a plan for the upcoming weeks.

HCI advisors convened a meeting in early August with regional and council health teams in Iringa to discuss integrating QI at different levels of the health system, the need for involvement by regional and council health officials to assure the sustainability of improvement activities, and the roles that these health officials can play during learning sessions and coaching visits to support QI activities at the facility. After this meeting, the second learning session was held with representatives from each of the facilities, EngenderHealth (regional implementing partner), RHMTs, and CHMTs. At the learning session, QI team members had an opportunity to present data on one or two indicators as well as changes currently being tested to improve PMTCT services (Table 11) HCI advisors conducted additional coaching visits in September with a focus on assisting the teams improve documentation, data collection, and analysis so facilities would have the information necessary to determine whether the changes being tested are yielding improvements. Relevant data is now being routinely collected at the maternity ward and the infant follow-up clinic as well.

Table 11. HIV/AIDS: Changes developed and tested to improve the quality of PMTCT services

Area for Improvement	Changes developed and tested
Access to care	Health education at facility to mothers and partners on early enrollment in ANC Improved counseling to HIV infected mothers regarding importance of bringing infants for follow-up care early Working with local leaders to educate community on HIV testing among male partners, escorting pregnant women to ANC and earlier enrollment in ANC
Quality of care	Lab tech from CTC assigned to draw blood at ANC weekly or trained provider at ANC on how to draw blood for CD4 Prioritize pregnant women for CD4 testing (on specific day, or allocate spots for testing of pregnant women) Coordinate with nearby NGO laboratories to accept CD4 samples from facilities Provide same-day clinical staging for HIV infected pregnant women (especially in facilities where CD4 is not readily available) Trained services providers on infant feeding counseling Involved CHMT and regional implementing partner on ordering and supplying test-kits for PCR to prevent stock-outs
Retention/linkages in care across cascade	Health education to mothers to involve partners in ANC/PMTCT Staff <i>accompany and introduce</i> mothers/infants to CTC during referral process Provide CTC registration at ANC In-charge verifies each day that all pregnant women testing HIV+ are enrolled in PMTCT Assigned a staff person at RCH to identify and present HIV-exposed infants to PMTCT follow-up staff for registration Created job-aid to remind staff to register HIV infected women at CTC and in PMTCT Redefined 'enrollment' in CTC from ANC to mean that patient has been referred and assigned a CTC number (not only referred)
Documentation	In-charge trains ANC staff on proper PMTCT register use General orientations at facility on importance of documentation of PMTCT services provided at ANC, maternity and child follow-up

ANC Service Uptake (MCH – PMTCT integration)

Successful PMTCT service uptake and resulting HIV-free survival of infants are inherently dependent on uptake of antenatal care services. HCI's Maternal and Child Health Unit has launched a collaborative improvement activity in antenatal care in Kenya's Kwale district in order to address ANC service uptake. Specific PMTCT services are also being targeted by this activity, and Suzanne Gaudreault (Sr. QI Advisor for HIV/AIDS) accompanied Youssef Tawfiq (Director of MCH) to Kenya in March 2011 in order to rapidly assess the system for providing ANC and PMTCT services and to identify gaps in this system. A work plan was subsequently developed, and the activity was launched. Details of this ongoing collaborative improvement project are included in the Maternal and Child Health section of this document.

PMTCT – OVC Linkages

The OVC-PMTCT linkages project is currently on hold, pending further direction from USAID.

Injection Safety

An RFP has been issued for the Injection Safety activities in Pakistan on 30th September 2011. We are currently in the process of selecting a local organization to implement the injection safety work in Sindh province. Baseline assessment tools have been drafted.

Directions for FY12

In FY12 HCI will continue and further develop existing activities in chronic care (Uganda), patient self-management support (Tanzania), nutrition (Kenya), AIMGAPS (Tanzania), WHO - PMTCT and infant feeding guidelines testing (Tanzania), injection safety (Pakistan), and ANC-PMTCT integration (Kenya). Several new activities will also be launched in FY12. First, quality improvement initiatives in nutrition will be launched in Zambia and Malawi. Second, QI will be applied to implementation of the 2010 PMTCT and infant feeding guidelines in additional countries in partnership with FANTA. Third, a new collaborative improvement activity will be launched in Mali on injection safety and the rational use of injectable medications. Finally, an initiative, to be led by the MCH and Family Planning Unit will be launched to develop an M&E system, improvement methodologies, and cost-effectiveness analysis for Family Planning – HIV integration at pilot sites in Uganda.

3.3 Health Workforce Development

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	Scale of intervention
HIV Funding		
HR QI Collaborative in Niger: Performance management, Engagement, Productivity	<ul style="list-style-type: none"> ▪ Apply quality improvement methods to the improvement of human resources for health ▪ Improve productivity (efficiency/ effectiveness) of health workers ▪ Improve engagement and retention of health workers ▪ Improve quality of maternity services delivered by health workers ▪ Improve HR management capacity of the Ministry of Health from the local to the central levels by applying best practices through working teams and involving stakeholders at all levels 	The demonstration phase of the collaborative includes 11 regional and district management teams and 15 facilities (Two regional, seven district, six peripheral facilities) in eight districts of Tahoua Region which covers 2,339,950 inhabitants
HR QI Collaborative in Tanzania	<ul style="list-style-type: none"> ▪ Increase in productivity and level of engagement for service provider at the CTCs in Mtwara ▪ Reduction in the CTC/RCH staff turnover ratio ▪ Reduction in average waiting time for service at CTC/RCH ▪ Increase in staff satisfaction ▪ Increase in ART coverage, ART patients retention and wellbeing 	12 sites in Tandahimba District, Mtwara Region, Tanzania Catchment population: 200,000 Adult HIV prevalence: 3.6%
Ethiopia CHW Collaborative See Community Health section for report on this activity	<ul style="list-style-type: none"> ▪ Apply quality improvement methods to improve Community Health Workers and community health system performance and productivity 	Oromia Region, Ethiopia Two Woredas (Illi and Tole) and six health centers (Teji, Yaya, Asgori, Tole, Kusaye, Abebe) and 18 health posts
Health Worker Engagement Study	<ul style="list-style-type: none"> ▪ Develop a validated tool to measure engagement ▪ Explore relationships between engagement, performance, and retention, in order to identify implications for HRH management and policy 	Survey of 800 health workers providing HIV services in 6 regions of Tanzania: Dar es Salaam, Mtwara, Iringa, Morogoro, Kigoma and Tabora
Mali CHW Productivity Study	<ul style="list-style-type: none"> ▪ Develop and pilot a model that examines CHW productivity and estimates time required for delivery of services and optimal household catchment area 	Identify gaps in knowledge through literature review. Conduct qualitative study to examine definitions in Mali context. Conduct quantitative assessment based on qualitative results. Disseminate/publish

		findings in journals
In-Service Training	<ul style="list-style-type: none"> ▪ Develop an improvement framework, in collaboration with international development partners for in-service training, that provides guidance for improved sustainability, effectiveness and efficiency of training programs ▪ Survey in-service training programs to identify opportunities for improvement 	<p>International improvement framework developed through consultation and consensus-building with international development partners</p> <p>National survey of in-service training program providers in 1 country</p>
CHW AIM Operations Research in Zambia	<ul style="list-style-type: none"> ▪ Assess the effectiveness of the CHW AIM in improving program functionality, CHW engagement and CHW performance 	<p>5 NGO partners in Zambia Salvation Army World Vision MOH Mothers to Mothers CHAZ</p>
Uganda Expert Patient (EP) Study	<ul style="list-style-type: none"> ▪ Conduct assessments in a sample of 6 sites that use Expert Patients to deliver a variety of tasks ▪ Findings from this study will offer a snapshot of how EPs are used, and what systems are currently in place to support them in facilities providing HIV/AIDS services 	<p>Uganda: 6 sites in 3 collaboratives Total: 12 Expert Patients Total: 12 health workers Total: 6 site managers Total: 6-10 clients</p>
MCH Funding		
CHW AIM Dissemination (Initiatives task order)	<ul style="list-style-type: none"> ▪ CHW AIM tool, including ▪ AIM Scoring guidance (soft copy for on line publication) ▪ User Materials (soft copy for online publication) ▪ Hold one regional meeting to disseminate the CHW AIM and train individuals on the CHW AIM approach 	<p>Dissemination to local NGOS, missions, country programs, international organizations (WHO, CARE, WV)</p>
CHW Central (Initiatives task order)	<ul style="list-style-type: none"> ▪ Disseminate CHW AIM and other resources online ▪ Discussion forum on strengthening CHW programs ▪ Quarterly TAG meetings with partners ▪ Hold a regional meetings in Uganda to disseminate the CHW AIM and train individuals in the CHW AIM approach 	<p>Web-based Participation from local NGOS, missions, country programs, international organizations (WHO, CARE, WV)</p>

Main Activities and Results

Niger Human Resources Improvement Collaborative

The Niger Human Resource (HR) collaborative is applying modern improvement methods to reinforce the link between HR inputs and quality of care and patient outcomes. During FY11, health worker job descriptions (Objective 1) were updated to align with the Ministry of Public Health's (MOPH's) new goals for all health workers in the 26 target sites. 80% of health workers within sites had their skills observed and assessed by supervisors and coworkers, along with having skill gaps both identified and closed (Objective 2: Capacity Development). Furthermore, sites institutionalized feedback mechanisms that included observation of performance, systematic chart reviews, and team-based feedback sessions to evaluate and improve performance.

Most sites have developed and submitted plans with specific criteria for performance evaluations, and more than 25% of health workers have had a clear and fair evaluation according to defined criteria. In addition, half of all sites have developed, adopted and communicated rewards for good performance, adopted and communicated rewards for good performance and consequences for poor performance.

During 2011, two coaches meetings (January and September) took place and presented external and internal coaches (QI team leads) with an opportunity to meet and discuss the challenges faced by the sites implementing the different Performance Cycle Objectives, focusing on Obj 3-5. In order to

complete Obj. 6, coaches, labor union representative, and the MOPH also worked on designing both incentive and consequence measures of performance. The regional management team (DRSP) is developing a career path for health workers (Obj 6), in addition to processes that ensure that they are monitored, that training is tracked, and that problems within the workforce are addressed at the regional level. (Overview in Table 12)

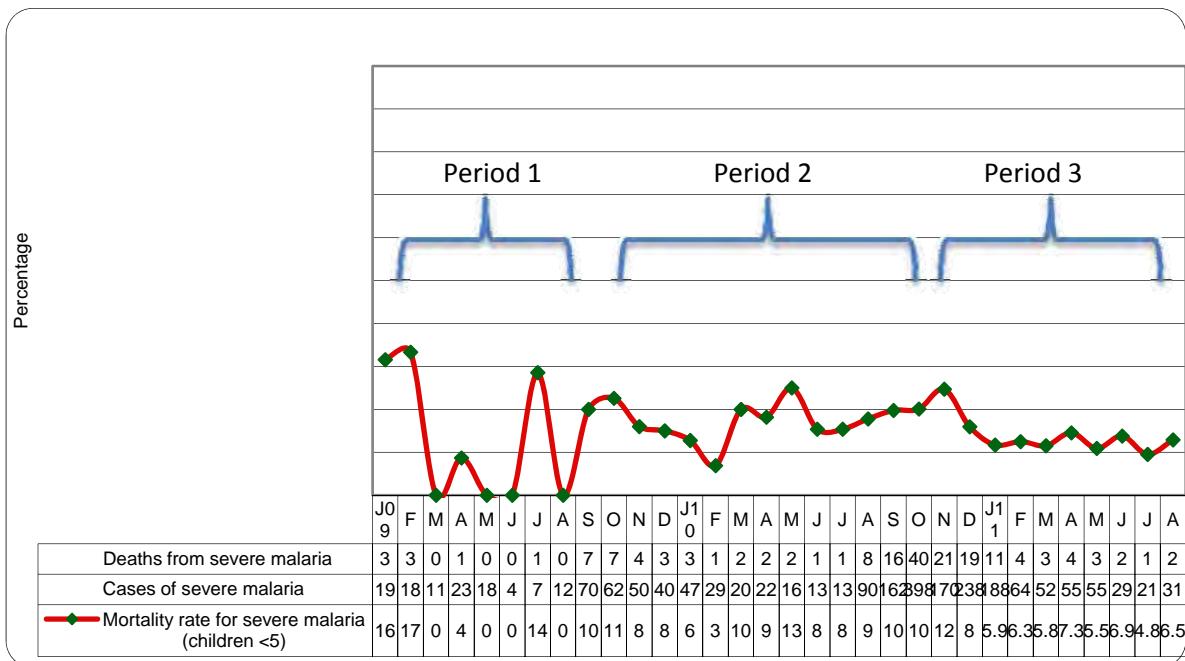
Table 12. HWD: Overall Indicators for HR Collaborative Improvement Indicators			
Performance Cycle Indicators 1-5	Achievement		
	Sept 2010	Sept 2011	
Obj. 1: % of <u>health workers</u> with clearly defined job descriptions	98%	98% (n=350*)	
Obj. 2.1 % of <u>health workers</u> with clearly defined job descriptions whose skill gaps have been analyzed	0	74%	
Obj. 2.2 % of <u>skills gaps</u> closed	0	80%	
Obj. 3 % of <u>health workers</u> who've received feedback discussion	0	56%	
Obj. 4.1 % of <u>health workers</u> with clearly defined performance evaluation criteria	0	35%	
Obj. 4.2 % of <u>health workers</u> who have been evaluated according to criteria	0	25%	
Obj. 5 % of <u>facilities</u> who have developed a reward and consequence plan for health workers	0	52%	
Clinical Indicators	Years		
	2009	2010	2011 (Jan-Sept)
Rate of deliveries by skilled health workers (in sites)	12.4%	32.8%	38.12%
Contraceptive prevalence rate	9.6%	20.67%	27.15%
Postpartum hemorrhage rate	2%	0.3%	0.06%
Management Indicators	Years		
	0%	56%	40.6%
Rate of completed coordination meetings	50%	50% DHs (1/2) 65.62% CSIs (21/32)	100% DHs (2/2) 46.87% CSIs *(15/32)
Rate of completed supervision visits	25%		

Two learning sessions were held during 2011. The first one was a collaborative-wide session in February for teams to discuss lessons learned following the coaching meeting the prior month. At this time, coaches introduced the QI teams to Obj. 3, 4, 5 and provided them with enough information to test their changes. As a part of the regional session, coaches shared results of the midterm evaluation (November 2010), which displayed significant progress for certain criterion, but areas for improvement in others were identified (e.g. indicators for productivity, client flow, and engagement—all of which had been actively monitored as a part of the change package). The table below shows some of the indicators the collaborative is tracking, and results have been significant:

While working to implement the performance cycle, teams are continually applying HR change ideas from the HR collaborative in the clinical arena: The regional hospital center (CHR) which includes the region's main pediatrics unit, has reduced case fatality rate of severe malaria for children under 5 from over 15% to 7%.

Figure 69 below shows the changes over time:

Figure 69. Niger: Malaria Facility-based Case Fatality Rate for Children <5, Tahoua Regional Hospital, 2009 - 2011

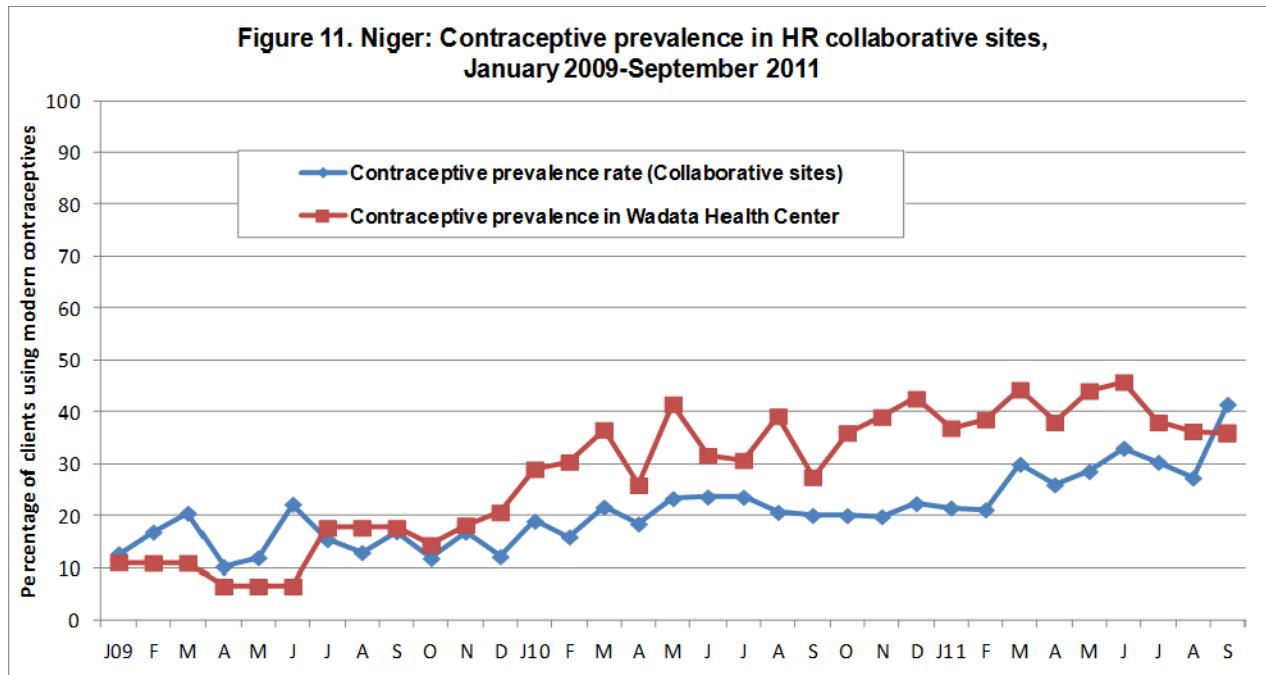


Period 1: From Jan 09 to Aug 09, the site was not yet a part of the collaborative: few client charts were kept and they were not properly completed. Alignment and task definition was completed in Sept. with specific goals: to reduce mortality below 15%

Period 2: From Oct 09 to Oct 10, processes were developed: each patient has a completed file, patient pathways were designed, and job descriptions were defined for health workers. In October and November 2010, there was a stock outage of HIV/Hep test kits, so transfusions stopped for 2 months.

Period 3: From Dec 10 to date, health workers have clear tasks, processes are clear, and many changes for improvements have been tested: case fatality rate decreased and has leveled out. Their goal for 2011 was fatality rate below 10 %. The contraceptive prevalence rate within all collaborative sites continues to increase. When the collaborative started, rates hovered below 20% but have improved as sites have assigned health workers the explicit task of reaching out into communities and have emphasized family planning within facilities. Since December, the concepitive prevalence rate has consistently been above 20% and exceeded 30% in April (Figure 70).

Figure 70. Niger: Contraceptive Prevalence Rates for Collaborative Sites, CSI Wadata, and regional level



Tanzania Human Resources Improvement Collaborative

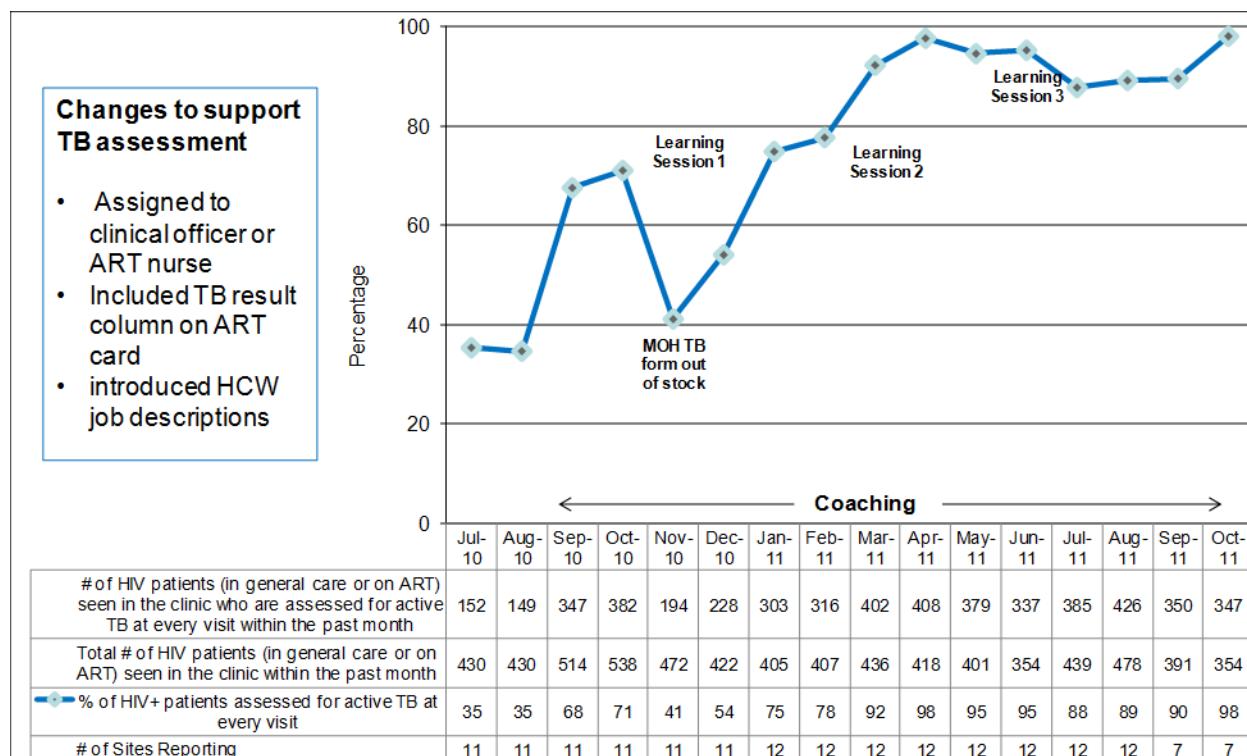
In the past year, the 12 sites participating in the HR Collaborative improved ART/PMTCT services through streamlining facility-level HR processes and service delivery. For example, the facilities have increased the percentage of pregnant women attending ANC who tested positive for HIV and enrolled into CTC per month to 100% (previously 70%). Additionally, the percentage of exposed children receiving Cotrimoxazole improved from 13% to almost 70%. The HR collaborative involves 57 health care workers, all of whom now have job descriptions (compared to 2 at baseline), which involves rationalizing tasks and workload across the facility. All job descriptions are aligned with facility level goals for ART/PMTCT.

To achieve these results, the facility-level teams developed process maps which outlined their current care processes, in addition to identifying the provider responsible for each task. Afterwards, the teams discussed ways to improve care by redistributing responsibilities across providers, while finding more efficient ways to delivery services. This resulted in the creation of a revised process map. Key changes undertaken by sites at this time included the following: expanding or creating community outreach; providing health education during patient waiting times; following-up with patients; enrolling HIV+ pregnant women immediately into the Care and Treatment Clinic (CTC) to ensure the continuation of treatment; standardizing TB screening during initial enrollment in CTC; shifting tasks between nurse midwives and clinicians; and improving record keeping.

Once teams had developed a new or re-designed process of care, they created job models that both rationalized and clarified tasks, which were based upon site-specific objectives. The job models were then used to assist teams in preparing job descriptions according to the format specified by the Government of Tanzania. In July and August, all health workers began the initial stage of designing a competency model for his/her specific post or tasks as defined by his/her job model. To improve feedback mechanisms, teams included supervisory feedback and time for workers to share the successes and challenges in providing care in monthly facility-level QI meetings. QI teams developed and agreed upon a standardized format, which is currently used in all health facilities for reporting purposes.

Three learning sessions (October 2010, January 2011 and June 2011), in addition to regular coaching visits from HCI staff and MOH counterparts, took place to support facilities. Improvements within the 12 facilities generated interest among the Regional Health Management Team (RHMT), which requested that HCI consider spreading these activities to new areas. A one-day meeting was held for ministry representatives and resulted in the creation of a scale-up roadmap to expand the program to other Mtwara ART sites. As a result of these discussions, HCI is planning to integrate key approaches from the Tandahimba HR collaborative (results below in Figure 71) into other ongoing Mtwara ART/PMTCT collaborative in FY12.

Figure 71. Workforce Development: Percent of HIV positive patients assessed for active TB at Tandahimba human resources collaborative-all sites (2010-2011)



Tanzania Health Worker Engagement Study

Previous studies in middle and high income countries have shown that increased levels of health worker engagement is correlated with better performance, health worker retention, quality of care and patient outcomes. In collaboration with the Ministry of Health and Social Welfare (MOHSW), the National Institute for Medical Research (NIMR) and Muhimbili University of Health and Allied Sciences (MUHAS), this mixed methods study seeks to develop an understanding of the relationships among health worker engagement, performance and retention in the Tanzanian context, as well as to explore the ways in which these factors influence engagement.

Two workshops were held, in collaboration with the research team and key stakeholders, to develop an operational definition of health worker engagement, to identify factors influencing engagement (August 2011) and to develop study tools and a sampling protocol (September 2011). Tools were finalized and reviewed by a panel of Tanzanian and international HRH experts for content validity and were then submitted for ethical review in October.

Mali CHW Productivity Study

The purpose of this study is to develop an operational definition of community health worker productivity, while also formulating and testing measures of productivity. It also aims to identify and explore the different factors that influence productivity. A concept paper has been developed, and this study will take place in Mali during FY12.

Development of an Improvement Framework for In-service Training

HCI is facilitating a Delphi process to develop an improvement framework for improved sustainability, effectiveness, and efficiency of in-service training (IST) programs. This iterative process, which involves key experts and stakeholders, validates the content formulated through developing and reaching consensus on recommendations. In order to form the basis of an improvement framework, a draft set of recommendations was developed through a three-round series—the first of which took place during the Global Health Council conference in June 2011 and generated 75 initial recommendations, which were consolidated into 51 for the second round.

22 of the 25-member consensus group responded to Round 2, an online, virtual survey that was conducted from August 30 to September 19, 2011. The participants came to at least 60% agreement on most of the recommendations as worded, upon which they were then revised and voted. Additional revisions took place during Round 3, which was undertaken at the URC office in Bethesda on October 2011, with virtual participation by the remaining consensus group members. Evidence summaries for each recommendation, in addition to a summary of results and comments from Round 2 participants, were provided. Members voted anonymously on each recommendation by via cell phone texting or by using Poll Everywhere's live audience only technology. In all, 48 recommendations passed with at least 90% agreement among consensus members.

CHW AIM Operations Research in Zambia

The purpose of the CHW AIM Operations Research Activity (OR) is to assess the effectiveness of the CHW AIM in improving program functionality, CHW engagement, and performance. The operations research applies the tool on two occasions: as part of the initial baseline and as an endline process 12 months later. Alongside the CHW AIM process, the research team also conducted surveys, interviews, and service delivery recordings to assess CHW engagement and performance. Additional data were collected on structural elements of the program, such as duration, training guidelines, supervision systems, and service delivery achievements and targets, which were undertaken through a manager focus group interview and record review. Finally, costs of training, supervision, and incentives were collected for the year prior to the intervention, so that additional costs resulting from changes by the CHW AIM process could be measured and cost effectiveness ensured. Baseline data collection took place between September 16 and December 21, 2010.

During 2011, the CHW AIM OR team followed up with program managers to obtain feedback on the process, on progress in action plan implementation, and to identify any areas in need of additional support. Requests included assistance on the way in which to draft CHW job descriptions, guidance for strengthening community linkages, documents related to performance assessments of HIV/AIDS services, supervision guidelines, and planning tools, and a CHW code of conduct tool. In September, the research team also began preparing for endline data collection on CHW engagement, in addition to the distribution of records for the final data collection on CHW performance. Furthermore, the final CHW AIM workshops were conducted in November, and the CHW AIM Operations Research final report is expected to be completed early in the first Quarter of 2012.

Uganda Expert Patient Study

Key questions for this research examined the way in which shifting tasks to expert patients has affected HIV/AIDS services in health facilities and communities in Uganda from the different perspectives of key

actors involved in the process, including MOH officials, expert patients, community members, clients, facility managers and other clinical staff:

- How are expert patients being used?
- What organizational support is provided to expert patients?
- What are the perceptions of actors most closely affected by the use of expert patients?

Six HIV service HCI collaborative sites were visited and 68 structured interviews (12 of which were with expert patients on worker engagement) were conducted. Of the six sites visited, five were general hospitals and one was a level IV health center.

Result from this study show that shifting tasks to expert patients in these facilities and communities was successful, and there was strong enthusiasm among all stakeholders. Facility staff, clients, and communities, as well as expert patients, all benefited – clients waited shorter amounts of time and were more receptive to care, satisfied with care, health workers were able to hand off some responsibilities, and expert patients strengthened relationships with coworkers and communities. Tasks shifted to EPs at the facility included preventive health education, filing and data maintenance, crowd management, treatment adherence and health education, and client assessment during triage. In communities, EPs followed up with HIV clients, presented health education and supported care in the homes.

However, there was an absence of policies, standardized curricula, and operational guidelines for the use of PLHA to deliver services in facilities and communities. As the use of EPs increases and spreads, it is important that measures are taken to support consistency, sustainability and to ensure quality standards. Recommendations from the study include:

Develop a national policy framework that clearly defines the EP role and tasks in the facility and community, as well as the enabling environment required for the success of such a program including clear guidance on:

- Role definition to clarify what tasks expert patients should and could perform.
- Recruitment criteria and guidance about the recruitment process.
- Standardized training that is based on a clearly defined EP role and which is harmonized between government programs and private organizations, and across sites within certain programs.
- Supervision and monitoring that will ensure that EPs are performing to standard and to enable expert patients to take on tasks that are more complex with confidence. Incentives balanced to include financial and non-financial rewards.

CHW AIM Dissemination

150 copies of the CHW AIM toolkit were finalized and produced in March 2011, each of which included a CD, a facilitator's guide, and a training guide, in addition to user-friendly, downloadable tools that can be adapted for use in varying countries. The CHW AIM was presented at the CORE group meeting in May and was launched in June 2011 at the Global Health Council conference, during which time hard copies were available for dissemination. The toolkit is also featured in the workforce section of the HCI Portal and on the CHW Central Community of Practice page.

Recently, CHW AIM was used to assess the functionality of CHWs within three regions in Madagascar, and the overall feedback has been positive. In order to apply this approach, HCI had translated the toolkit into French. That said, some of the terms and phrases were unclear within the local context, so the areas of concern are currently being reviewed and revised. The toolkit should also be available in Spanish by the end of the year.

CHW Central Community of Practice Web Site

The CHW Central website (shown in Figure 72) averages over 80 new members a month and had reached 330 member as of September 30, 2011. It has been strongly promoted by networks and organizations including GHWA, Intrahealth, HRH Resource Center, and the CORE Group, and three expert-led discussions have been presented.

Figure 72. Workforce Development: CHW Central Community of Practice Website

The screenshot shows the homepage of the CHW Central website. At the top, there is a header with the USAID logo and the text "HEALTH CARE IMPROVEMENT PROJECT". A search bar, "Why Register?", "Register", and "Login" buttons are also in the header. Below the header, a navigation menu includes "Home", "About HC", "Implementation Tools", "Implementation Tests", "Implementation Examples", and "Contact Us". A sub-navigation menu under "Home" lists "CHW Central", "CHW Central", "CHW Central", and "CHW Central". The main content area features a large image of several people in a community setting. On the left, a "Join Now!" button is visible. The right side is divided into several sections: "What's New", "Conversations With...", "Resources", "Information about CHW", and "Links". Each section contains specific news items, such as "CHW Central launches at the Global Health Council Meeting in Washington, D.C.", "A Conversation With Rebecca Furth Operations Research on CHW Assessment and Improvement May 15, 2011", and "Information about CHW About CHW Central CHW Central is an online community of practice focusing on CHW recruitment, assessment, and training. Click here to learn more.".

The first expert-led discussion was on the CHW AIM Operational Research and led by Rebecca Furth, Initiatives Inc. The next two were led by CHW Central Technical Advisory Group (TAG) members: Scalability and Sustainability of CHW Programs by Henry Perry, JHUSPH, and CHW Incentives and Motivation, by Dan Irvine, World Vision. TAG members receive monthly updates, and their support for leading new conversations is enthusiastic. A list of potential speakers and topics for the next three months has also been established.

An effort to hold one-on-one discussions with the TAG members is generating ideas for future web events. Although member exchange has been slower to expand than anticipated, efforts are being made to encourage additional participation. Initially, progress was, in part, hampered by functionality issues

that hindered the ability to contact members of the site with important updates. A meeting with CCP has led to the resolution of many issues, and members are now receiving monthly emails, which has already had an impact on the number of inputs.

Directions for FY12

Certain FY11 activities will be entering their final stages during the first quarter of FY 12, and include: the closeout of the Niger HRH Collaborative, the integration and spread of the HRH collaborative change ideas into the Mtwara ART/PMTCT collaborative supported by the Tanzania Mission, and the finalization and dissemination of the in-service training improvement framework. The following health workforce studies will also be completed and published: the Zambia CHW AIM Operations Research, the CHW Productivity study, the Uganda Expert Patient Study, the Tanzania Health Worker Engagement Study, and the In-service Training Improvement Study. The CHW central website will continue to expand with increased member contributions, and the CHW AIM will be disseminated through a regional meeting in Ethiopia.

New FY12 activities build upon innovative approaches and lessons learned in prior years by the HRH collaboratives. Change ideas will be both tested and applied to improve District Health Management in Lindi, Tanzania, while also strengthening pharmaceutical human resources to improve access to HIV-related medicines in Uganda. Furthermore, the Health Workforce team will continue to develop and disseminate practical, evidence-based tools that support CHW program improvement and team-based performance management.

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

Overview of HCI's Project in FY11

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Support USG country teams and their implementing partners to improve quality of their OVC programs	<ul style="list-style-type: none"> ▪ USG Implementing Partners (funded by PEPFAR) develop a harmonized vision for efficient and effective programs 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 in Asia 	Sub-Saharan Africa Asia Haiti
Gather evidence on the impact of services standards on the quality of care	<ul style="list-style-type: none"> ▪ Gathering evidence that applying service outcome-based standards make a difference in organizational practices, children's well-being, and human resource engagement. ▪ Gathering evidence that organizing for QI is a cost effective strategy. ▪ Gathering evidence that organizing for QI increases equity of access to services (age and gender) 	Kenya Tanzania Nigeria Cote d'Ivoire Malawi
Develop QI guides, job aids and tools to support applying quality improvement methods at the point of service delivery	<ul style="list-style-type: none"> ▪ Develop a set of guiding generic tools that can be adapted to every country's context (tools for QI Teams, tools for QI Task Force) ▪ An E learning module that guides key stakeholders when engaging in the QI process. (piloted and launched) 	Global
Strengthen communication about quality improvement among OVC Program stakeholders	<ul style="list-style-type: none"> ▪ Strengthen the QI champion networks based on sharing of experiences ▪ Build the QI capacity of champions (leaders/facilitators) and other Implementing partners through the dissemination/communication of the E-Learning Modules ▪ Exchange visit ▪ Technical update meetings in DC (OVC Task Force, USG OVC TWG) ▪ Briefs/newsletters ▪ Revised websites 	Global
Coach the development of the African Quality Improvement Alliance for vulnerable children	<ul style="list-style-type: none"> ▪ Transition the QI support work from HCI to an African-based institution ▪ Develop African ownership of the QI processes 	Africa

Main Activities and Results

Support USG Country Teams and Implementing Partners to Improve the Quality of OVC Programs

Haiti: Since the January 2011 HCI Standards Development workshop, led by Diana Chamrad, HCI Senior Technical Advisor and Dorcas Amolo, HCI Kenya Chief of Party, the task team has been revising the standards of care for vulnerable children within their committees. USAID/Haiti has approved the

proposed HCI scope of work and budget to continue the Standards Development process. We anticipate initiating activities in early 2012.

Zambia: In April 2011, by USAID/Zambia invitation, HCI facilitated a three-day standards development workshop with OVC stakeholders: 42 participants attended, representing 30 organizations, including ministry, partners, and donors. The participants produced standards in eight areas critical to child well-being. The Minimum Quality Standards include desired outcomes, measurable goals, essential actions, guidelines on how to accomplish the essential actions, and dimensions of quality in each of the core service areas: (1) Food and nutrition support; (2) Shelter and care; (3) Health; (4) Education and vocational training; (5) Protection; (6) Psychosocial support; (7) Economic strengthening; and, (8) Coordination of Care. Additionally, several crosscutting themes were noted from the workshop including the need for mapping services, need for integration of services and referral mechanisms, gender considerations, developmental aspects of children, and needs assessments for each child to determine appropriate services. The meeting resulted in a draft set of service standards that apply to the point of service delivery level. A situational analysis of OVC programs in Zambia was also conducted, providing information on current programming strengths and limitations.

In June 2011, HCI conducted a two-day Children's Workshop in Lusaka, Zambia to ensure the inclusion of the voices of children in its participatory approach to developing minimum standards for children's services. Two boys and two girls from each province, aged 12 – 18, were selected from the nine provinces of the country to participate in the workshop. The participants were very engaged in the workshop process, expressed great concern over hardships that children face in Zambia, and recommendations for improving child well-being. The input from the children was summarized and presented to the Task Team members to consider for inclusion in the standards.

Malawi: HCI conducted a standards development workshop in 2009, followed by mentoring in the coaching process. After being invited by USAID to reinvigorate the piloting phase of standards development and hold a coaches training in an additional district, HCI recruited a QI Advisor Meetings with stakeholders have been scheduled to resume activities in Malawi. The task team decided that they will need to re-establish roles and responsibilities of members. A stakeholders meeting, organized by the Ministry of Gender, Children and Community Development (MoGCCD), took place on September 30, 2011. The meeting was attended by MoGCCD, Save the Children, UNICEF, USAID, and HCI. A myriad of issues were discussed during the meeting, including progress made in the QIS program in Malawi, developments in the OVC care and support service area since the QIS program was initiated and how the various child care initiatives can be used to benefit OVC in Malawi. The few new initiatives that were mentioned included the adoption of the Child Status Index by FHI, the development of the Case Management Program and the new Child Care Protection and Justice Bill.

Strengthen Communications about Quality Improvement among OVC Program Stakeholders

HCI Advisors from HQ, Kenya, and Mozambique attended the Regional Forum on Psychosocial Support and Provision of Basic Services for Orphans and other Vulnerable Children and Youth (OVC&Y) in Johannesburg, South Africa from May 15th to 17th, 2011. The Forum was attended by delegates from SADC Member States including Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe, as well as other countries from the East Africa Region. Representatives of civil society organizations from all these countries, research and academic institutions, United Nations agencies, International Co-operating Partners and civil society also attended the meeting. The meeting was convened jointly by SADC Secretariat and regional partners such as the Regional Psychosocial Support Initiative (REPSSI), UNICEF Regional Office for Eastern and Southern Africa, and the Nelson Mandela Children's Fund.

During the REPSSI conference, delegates shared research findings, lessons learnt, experiences and key issues regarding the provision of services required for children and youth to grow and develop in a supportive environment. They noted that Member States have developed policies, guidelines and programs, and have established structures to respond to challenges of OVC&Y. Delegates also recognized the need to strengthen the participation of children and youth in the provision of services and in their own development. They also noted that it is important to address the sexual and reproductive health needs for vulnerable children and youth to address the growing challenges related to HIV and AIDS, teenage pregnancies and child marriages. Participants also highlighted the need to prioritize key challenges for children and youth in particular substance abuse, children on the streets, abuse, and violence against children, and youth unemployment in the region. Delegates underscored the need to develop and strengthen mechanisms for tracking, monitoring, evaluating, and reporting the needs and services for vulnerable children and youth at national and regional levels.

Diana Chamrad was invited to serve on the ovcSupport.net Editorial Board which met in June. The position involves providing technical support for website content, particularly in the areas of mental health, psychosocial care, and child development.

The two E-Learning modules are near completion and are under review by USAID OVC Advisor. We are also gathering information from CCP on the feasibility of posting the course on hciproject.org.

Additionally, Dr. Chamrad, along with USAID OVC advisors and a representative of the Better Care Network, met with senior staff of the Council on Accreditation in NYC to explore possibilities of developing accreditation processes in the care and support of vulnerable children.

In early August 2011, an exchange visit and QI training took place in Abuja, Nigeria. The training included HCI Advisors and ministry officials from Nigeria, Cote d'Ivoire, Kenya, Zambia, and Tanzania as well as HQ staff.

Diana Chamrad presented a skills building workshop on QI and OVC at Catholic Relief Services HQ in late September 2011. The three-hour workshop was very well attended by field staff coming from different parts of the world. The workshop was well received and followed by a request for more training at HQ or in the field.

Coach the Development of the African Quality Improvement Alliance for Vulnerable Children

HCI staff took the opportunity to meet in Johannesburg, to discuss the African QI OVC Alliance. In attendance were Diana Chamrad, Dorcas Amolo, consultants Andre Wagner, Sarah Nieuwoudt, and Cristianne Wendler. The original scope of work was updated in anticipation of the mini-RFP posting. The original scope of work was updated in anticipation to the mini-RFP posting for proposals to function as a host for the Alliance.

The scope of the Alliance is evolving. The current focus of the organization is children at risk or out-of-family care. In late October, a meeting between Better Care Network, UNICEF, USAID, and HCI helped explore linkages and synergies of the groups as well as ideas for the Alliance's mission.

Directions for FY12

HCI will launch activities in Haiti in FY12. To continue the process of developing minimum standards of care for vulnerable children, a ministry-led QI Task Team will be established. An OVC QI advisor will be recruited to coordinate the ongoing QI activities including a Children's Workshop, a Coaches training, piloting of the Standards, and learning sessions.

HCI will focus much of its energies in FY12 on launching the African Alliance for Children and Families. An RFA will be posted to solicit applications as a host of the Alliance. The mandate is to develop an African Quality Improvement Alliance for Vulnerable Children, an Africa-led organization to provide

technical leadership for OVC programs on the continent. This is part of a long-term vision in which African NGOs, governments, communities, and private sector organizations can draw on an African institution for support of OVC programs.

3.5 Community Health

Overview of HCI's Program in FY11

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Communities of Excellence (CoE): Identify core competencies of communities to provide coordinated care to vulnerable children and families	<ul style="list-style-type: none"> ▪ Delineate core competencies and community capacity needed to provide coordinated care ▪ Develop a barometer or a tool to assess the capacity of a community to provide coordinated care to Orphan and Vulnerable Children ▪ Identify possible communities of excellence ▪ Develop networks to promote exchanges among other communities 	Ethiopia Two Woreda; Dire Dawa and Debre Zeit
Community Level Collaborative (Ethiopia) to improve functionality and engagement of CHWs	<ul style="list-style-type: none"> ▪ Apply quality improvement methods to improve community health worker (CHW) and community health system performance and productivity 	Two Woreda in Oromia Region, Ethiopia: Illu and Tole, involving six health centers (Teji, Yaya, Asgori, Tole, Kusaye, Abebe) and 18 health posts

Main Activities and Results

Communities of Excellence Study in Ethiopia

HCI initiated the development and piloting of a tool to measure the adequate capacity of a community to provide coordinated OVC care to vulnerable children and their families. Among the five research institutes' proposals, the School of Social Work within Addis Ababa University was selected to carry out the study. Two NGOs' OVC program sites, Debre Zeit and Dire Dawa, were recommended by the mission to collect qualitative data from their communities to develop and pilot test the tool.

URC had identified and contacted five competent research institutions in Ethiopia to invite them to develop technical proposals for the Communities of Excellence study: Miz-hasab, Dadimos, DSS, Addis Ababa University (AAU), and ACIPH. The study terms of reference, drafted at HCI headquarters, were modified to better fit the local context based on feedback from key national partners. After the research institutions received the terms of reference, URC staff in Ethiopia held face-to-face discussions on the concept of the study and their expected responsibilities. The technical proposals and selection criteria were shared with the Ministry of Health, HAPCO, and USAID Ethiopia for comments. The School of Social Work within Addis Ababa University was chosen based on a formal scored review.

In March 2011, the School of Social Work conducted a literature review to gather existing knowledge about community care of OVC, including community capacity to deliver coordinated and comprehensive care, community-level service packages for vulnerable children from local experiences, and the experiences of other African countries. The knowledge from the literature and field observation was used to develop a conceptual framework for understanding issues of community capacity to care for OVC. This framework was further refined based on field data that were collected from two selected model community groups. Based on the information obtained from the field data for each component of conceptual framework, the research institute has been working on developing a community capacity-measuring tool. A technical working group was established from the members of the OVC Task Force. The two local NGOs have submitted proposals to HCI to conduct the pilot study to test the tool which will be developed to measure the community capacity to provide coordinated care for OVC children and their families.

Community-level CHW Collaborative in Ethiopia

After USAID introduced the demonstration project to the director of Oromia Regional Health Bureau, our QI advisor worked with regional health officers to select the QI sites in June 2011. The regional health bureau recommended South West Shoa Zone to implement the CHW collaborative demonstration project where two Woredas, six health centers, and 15 health posts were selected as quality improvement demonstration sites. A half-day orientation about the CHW collaborative demonstration project was conducted in July 2011 for the Woreda Health Offices and health center staff. Melaku Muleta, HCI's local QI advisor, visited the participating districts to document the implementation of QI activities in June and July 2011.

With the support from the Oromia Regional Bureau, the QI advisor conducted a half-day orientation about the CHW collaborative with eighteen district and six health center representatives. A four-day coaches' training was organized in Wolliso in August 2011. There were a total of 31 participants from the regional health bureau, the two districts, and the six health centers in the CHW collaborative coaches' training. After completing the coaches' training, the coaches established QI teams in each of 18 health posts following the guidelines developed during the training. A guide for QI team orientation was been developed for coaches to help them to systematically orient the community QI teams based in the health posts.

Directions for FY12

The AAU School of Social Work will finalize the Communities of Excellence assessment tool, which will then be implemented by the two NGOs in their OVC program sites. The Community Working Group will periodically provide feedback during its implementation by the NGOs. The final revised tool will be shared with all stakeholders. The CHW collaborative will conduct its baseline survey in January 2012 and will continue QI team meeting and learning sessions according to the implementation plan. The first learning session is planned to be held at the end of January 2012.

3.6 Family Planning

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?	How will we know?	Scale of intervention
Provide technical support to Improvement Collaboratives on post-partum family planning 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 IC 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	<p>Percentage of women receiving post-partum family planning counseling</p> <p>adequate FP knowledge of women counseled at post-partum service points</p> <p>Percentage of counseled women who use modern family planning methods</p> <p>Pregnancy rate of women after one year of receiving the post-partum counseling</p>	Mali: 41 sites in Kayes and Diema districts, Kayes region Afghanistan: 6 hospitals in Kabul

Main Activities and Results

Post-partum Family Planning Improvement Collaborative in Afghanistan

Despite the overwhelming evidence of potential benefits of family planning (FP) in reducing maternal mortality, most women delivering in hospitals in Afghanistan leave without receiving family planning counseling. To contribute to reducing maternal mortality by achieving better spacing of pregnancies and avoiding unwanted pregnancies, HCI is implementing a Postpartum Family Planning Improvement

Collaborative (PPFP IC) in selected maternity hospitals in Kabul (three public and three private hospitals). This demonstration PPFP IC will permit the testing of a package of interventions of best practices to be scaled up.

An initial situational assessment conducted in the 6 Kabul Maternity Hospitals revealed that 3 out of 6 hospitals had attached family planning rooms with obstetric care unit, 2 out of 6 hospitals had Information, Education and Communication (IEC) materials in the FP rooms, 3 out of 6 hospitals had enough space available for counseling and for procedures (but no private space where husbands and wives could be counseled together), 5 hospitals had condoms, IUDs, injections and pills, and 4 hospitals had the ability to perform tubal ligation.

The primary objective of the PPFP IC is to assure that all newly postpartum women in the selected maternity hospitals receive FP counseling before discharge. Some of the changes that have been introduced to achieve that objective include training the postpartum hospital staff in PPFP, creating a PPFP checklist for use of providers and PPFP counselors on the postpartum ward, hiring 2 PPFP counselors at both Istiqlal and Malalai Hospitals, and creating a private FP counseling space where husbands and wives can be counseled together that is in close proximity to the postpartum ward and where the Afghan Family Guidance Association (AFGA) provides services. An effective link between the maternity hospitals and AFGA has been created to facilitate referral of postpartum women for FP services and commodities.

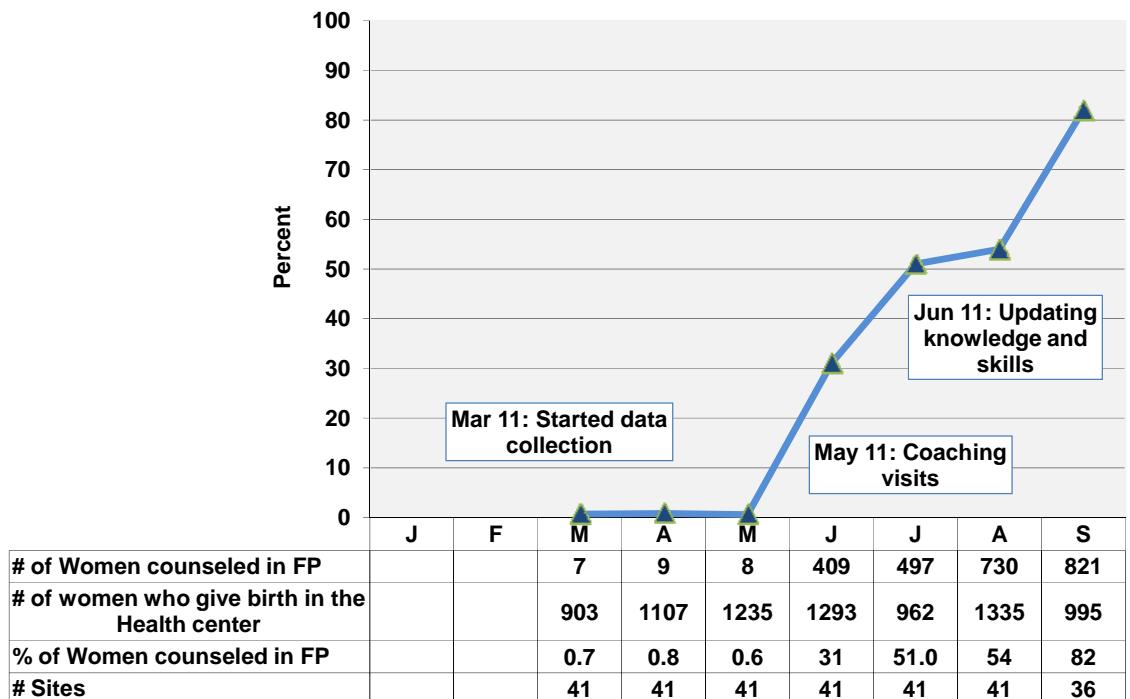
HCI has involved national policy makers and other stakeholders from the onset of the IC to assure their participation in the process, endorsement of the IC results, and to engage them in the plan for spread. No baseline data existed for the PPFP IC indicators. To be able to measure changes, cohort studies are being conducted at the hospitals. The first cohort is made up of newly delivered PP women who have been registered, but the staff continued their routine PPFP practices. The other cohort is newly PP women after introduction of changes such as systematic counseling of all newly PP women prior to discharge, couples counseling, and linkage between AFGA and the postpartum ward. Follow up of these two cohorts will enable HCI to measure and determine if the changes that were made led to an improvement or not.

Post-partum Family Planning Improvement Collaborative in Mali

Globally, it is estimated that 25 – 40% of maternal mortality can be prevented if unwanted pregnancies are avoided. The greatest majority of women (97%) in post-partum period do not want to have another pregnancy for at least two years, however only 40% of them use family planning. This discrepancy poses a great unmet demand for family planning services.

Quality improvement effort in Mali, a country with one of the highest fertility rate and unmet demand for family planning, integrated family planning counseling into postpartum care in two districts. QI teams in 41 participating health facilities noticed that most health facilities do offer family planning services, yet these services are not traditionally regarded as part of post-partum care. The quality improvement intervention simply linked the family planning unit with the post-partum ward within the same health facility. This was coupled with improving the family planning counseling skills of involved staff and assuring a space to provide private counseling to the post-partum woman jointly with her husband. Figure ... below shows the results. Family planning counseling, which did not exist as part of post-partum care, was installed and over 80% of post-partum women receive family planning counseling before discharge (see Figure 73).

Figure 73. Mali: Percentage of women who delivered at facility and received family planning (FP) counseling



Directions for FY12

HCI will complete the FP improvement collaboratives in Mali and Afghanistan and will document results, lessons learned, and plan for spread. HCI will continue to gather evidence that FP is one of the most effective interventions to improve maternal and child survival in several developing countries. Hence, to maximize the utilization of the limited resources available for FP, the project will identify opportunities to integrate FP in ongoing health services. For example, HCI will support a program, with HIV funding, to integrate FP services into ART services provided to HIV-positive women in Uganda.

3.7 Tuberculosis

QI Interventions and Other Activities	What are we trying to accomplish?	How will we know?	Scale of intervention
Strengthen TB and TB-HIV integration services in TB case detection, treatment and management	<ul style="list-style-type: none"> ▪ Increase TB treatment success ▪ Increase the percentage of TB cases that are tested for HIV ▪ Increase the percentage of PLWHA who are screened for TB ▪ Increase access to HIV care and quality ART services among HIV-TB co-infected patients 	Treatment success rate Percent of TB cases that are tested for HIV Number of PLWHA that are screened for TB Number of registered HIV positive TB patients who attended TB clinic and were referred for HIV care and support services Number of registered HIV- TB patients, who are eligible for ART who are started on ART Number of registered HIV- TB patients that continue previously initiated ART	HCI is covering two out of 63 provinces in Vietnam, with the province-wide interventions. The populations of the two provinces including Hai Duong and Nam Dinh are 1.7 and 1.8 million persons respectively.

Improve public-private partnerships in TB control	<ul style="list-style-type: none"> ▪ Increase TB case detection rates 	Case detection rate Number of cases referred by non-TB public and private providers	
Strengthen the routine Monitoring and Evaluation (M&E) system	<ul style="list-style-type: none"> ▪ Strengthen TB DOTS implementation 	Number of quarterly district and provincial meetings Number of quarterly M&E visits	
Capacity building	<ul style="list-style-type: none"> ▪ Strengthen TB DOTS implementation 	Number of health care providers trained	

Overview of HCI's Program in FY11

Main Activities and Results

Vietnam

During FY11, HCI wrapped up technical assistance to two provinces in Vietnam—Nam Dinh and Hai Duong—to strengthen TB and TB-HIV integrated services, improve public-private partnerships in TB control, build capacity in HIV counseling and testing and TB-HIV integration services, strengthen infection control, and strengthen the routine monitoring and evaluation system at the district and provincial levels. Technical assistance under HCI ended in March 2011.

Key results of the project over the 18 months of intervention in the two provinces were to increase the coverage and quality of HIV counseling and testing (C&T) services for TB patients. The HIV testing rate for TB patients increased from 42% in 2010 to 96% in 2011 in Nam Dinh, and from 47% in 2010 to 75% in 2011 for Hai Duong. Treatment success rates for TB-HIV patients increased from 53% to 92% in Nam Dinh and from 69% to 91% in Hai Duong.

Different models for public-private mix (PPM) were deployed in the two provinces, but both had a significant impact on TB control. In Nam Dinh, the number of referrals increased from 338 in 2009 to 590 in 2010, among which 31% of cases had TB. In Hai Duong, the number of TB suspects referred increased from 140 in 2009 to 178 in 2010, with 28% of referrals confirmed positive.

Directions for FY12

HCI activities in Vietnam were closed down in March 2011.

4 Common Agenda Activities

4.1 Project Management

Overview of HCI's Program in FY11

The global activities under HCI Task Order 3 in FY11 continued to expand in scope and scale, requiring further evolutions to the management structure supporting them. Building upon the improvements made in prior years, HCI's management team formalized many process improvement efforts in FY11 while also benefitting from overall changes in the URC corporate structure. The overall increase in scale of the project allowed the hiring of additional management staff to more efficiently manage the increased burden in coordination of activities, budgeting, reporting, and deliverables.

Main Activities and Results

Project Staffing

At the headquarters (HQ) office, the changes to project management during FY11 included the recruitment of Dr. Edward Broughton as the Research and Evaluation (R&E) Director (considered key personnel in the HCI IQC), Ms. Vanessa Thraves as the Finance and Administration Officer, and Ms.

Erica Koegler in the newly created role of Technical Assistant to the HCI Director, Dr. Massoud. The promotion of Dr. Broughton, a health economist, to the position of R&E Director is evidence of the increasing importance of cost-effectiveness analysis to the field of quality improvement. Ms. Thraves comes to the project with an MBA from the University of Chicago and five years of experience managing teams in the insurance industry. Her new role in managing project finances and contractual matters has greatly increased the ability of the team to not only manage those growing functions, but also to build the capacity of both HQ and field staff to better directly manage financial and contractual matters. The Technical Assistant role was created to support the Director in producing papers, presentations, and other publications to advance the global technical leadership of HCI and undertake other special projects. Ms. Koegler left the project in June to return to graduate school. She was replaced in the position by Ms. Nana Mensah-Abrampah, who was promoted to the position from her role as Project Assistant.

Coordination of Technical Activities

Progress on all TO3 activities was formally reviewed each quarter with the Contracting Officer's Technical Representative (COTR) for the HCI Project. During FY11, we held four Quarterly Review Meetings (QRM) with the COTR: on October 21, 2010; January 20-21, 2011; April 27-28, 2011; and July 27-28, 2011. Because of the expansion in the number of technical and country activities being implemented by HCI, beginning in January, the QRM was expanded to take place on two consecutive days. In addition, the HCI Director and COTR held weekly coordination meetings throughout the year.

The annual budgeting and planning sessions were again held in Bethesda during FY11 to cap the progress on FY11 activities and to budget and write the work plan for FY12 activities. This year, global coordination of activities was greatly improved through the inclusion of all regional directors and key country directors in the workshop. The participation of these directors in planning and budget negotiation has led to increased leveraging of technical activities as well as funding across the project and will be repeated in future years.

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 further improved and streamlined in FY11. Through monthly calls and WebEx sessions, Project Coordinators at HQ review expenditures with relevant managers in the field and on core technical teams, including a review of subcontractor status. With consolidated templates, these monthly reviews inform quarterly budget realignments, which are linked together across the project and reviewed by senior management after each quarterly review meeting. Through this standardized process, budgets are continuously realigned to fit the changing activities throughout the year, encouraging efficiencies in activities while also making the most effective use of those savings on an ongoing basis.

Reporting and Deliverables

The preparation of contractually required deliverables and other reporting to USAID are overseen centrally at HQ 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 quarterly performance monitoring reports, trip reports, research and technical reports, the annual project report, the annual self-evaluation report, and financial and other deliverables during TO1 and have been maintained in TO3.

In addition, many informal reports are delivered to Missions and core 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 project. During FY11, HCI formalized the dissemination of quarterly reports originally prepared for the COTR 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 FY12

In FY12, the HCI management team will continue to restructure itself as needed to respond to project needs. We plan to further standardize HR documents and checklists across countries; consolidate new procedures, policies, and job aids such as checklists into regular policy updates distributed by URC headquarters to all field offices, and hold one training and process improvement workshop for field financial and administrative managers.

4.2 Knowledge Management

Overview of HCI's Program in FY11

Activities	What are we trying to accomplish?
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, and cooperating agencies in contributing content to the HCI KM system
Incorporate new content in the KM system and expand the interactive features available through the HCI Portal	<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 ▪ Translate the Improvement Database to Russian, French, and Spanish and launch HCI Portal pages in each of those languages.
Conduct studies to inform ongoing enhancements to the HCI KM system	<ul style="list-style-type: none"> ▪ Get user feedback to improve the usefulness and acceptability of the HCI KM site; and understand how users are using site content to improve the site and make it more useful and user-friendly ▪ Conduct small studies to test interventions to increase use of the HCI Portal and validate submissions to assure that accurate information is posted by users outside HCI
Convene a knowledge management “deep dive” to look at best practices in spreading knowledge and apply lessons to the HCI KM system	<ul style="list-style-type: none"> ▪ Refine HCI KM strategies based on expert input and reflection ▪ Orient HCI field teams and headquarters staff to the use of KM approaches in QI
Continue to develop content for the maternoinfantil.org web site and strengthen linkages with other elements in the HCI KM system	<ul style="list-style-type: none"> ▪ Ensure that the results and experiences from HCI work in Latin America are reflected on the HCI KM site and on the maternoinfantil.org site and that content is shared and linked between the two sites ▪ Facilitate sharing across HCI teams in Latin America related to Helping Babies Breathe (HBB) and Kangaroo Mother Care
Launch and support the Helping Babies Breathe Global Development Alliance private site	<ul style="list-style-type: none"> ▪ 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
Re-launch the Newborn Alliance web site	<ul style="list-style-type: none"> ▪ Create a web site to support and disseminate the activities of the Newborn Health Alliance and promote best practices in newborn care

Main Activities and Results

Promote Wider Use of Improvement Knowledge

Visits to the HCI Portal in FY11 saw a sharp increase over the previous year, its first year of operation. This increase is attributable to greater efforts to promote the site among USAID cooperating agencies, to the new “Communities” features added in June 2011 with the launch of the CHW Central

community of practice, and to the contest for best improvement report held during the third quarter. During FY11, the www.hciproject.org site received 66,255 total visits from 51,029 unique visitors, 23.8% of whom were returning visitors. Most visitors (62.6%) came from search engines, with 23.5% coming directly to the site's URL, and 13.9% being referred by other sites linked to the HCI Portal. Data on visitors by region show that the share of visitors from developing countries remained about the same as last year at 43%, with visitors from over 200 countries. The top 10 pages visited during FY11 are shown in Table 13.

Table 13. Knowledge Management: Ten most accessed pages on the HCI Portal, FY11

Rank	Page	# page views
1	Home page	16,358
2	CHW Central	6,689
3	About HCI	3,455
4	Improvement Tools	3,241
5	Improvement Topics	3,220
6	Analytical Tools/Statistical Data Presentation	2,666
7	Improvement Database	2,633
8	Improvement Reports	1,588
9	User login	1,385
10	User register	1,293

Activities to promote the use of the HCI Portal included display of the HCI Portal at booths or tables at the Quality Improvement Strategy Meeting in Kampala in March 2011, International Forum on Quality in Health Care in Amsterdam in April 2011, CORE Group spring meeting in Baltimore in May 2011, and the formal launch of CHW Central at the Global Health Council annual conference in Washington, DC in June 2011. The contest for “Best Improvement Report” held in April 2011 also drew a large number of visitors to the site in the third quarter of FY11.

Develop New Content and Features for the HCI Knowledge Management System

The project expanded its knowledge management team with the addition of two full-time QI specialists for knowledge management and communication: Ms. Kate Fatta started in November, and Ms. Emily Treleaven joined the project in January 2011. The additional staff will significantly improve our ability to develop new content for the HCI Portal, including improvement reports and collaborative profiles on HCI-supported interventions.

In 2011, HCI worked with partners CCP and Initiatives Inc. team to design the new “Communities” section of the HCI Portal. The “Communities” pages will serve as hubs for topic-specific communities of practice, inviting site visitors to join communities covering topic areas of their interest. Each community will feature expert blogs (“Conversations with...”), specific resources related to the topic area, “member exchanges” (ability to pose questions to other community members and experts, as well as contact other members for offline communication), and highlight news and other announcements related to the community topic. “Communities” are intended to be open, with content accessible to all site visitors and the option to join one or more specific communities open to any registered HCI Portal user. Registered users of the HCI Portal who opt to join a specific community will be able to post comments on resources listed for that community, participate in the Member Exchanges, and participate in Virtual Learning Sessions or other events organized by the community.

The first community to be launched by HCI was “CHW Central”, which was launched in June 2011 and promoted through a special satellite event at the GHC Conference in Washington, DC (see Figure 74). CHW Central is intended to be a one-stop resource for improving CHW programs. The CHW Central community is being developed by and will be managed by staff of Initiatives Inc. based in Boston. Also during the year, HCI began translation of the content of the HCI Portal to Russian, French, and Spanish.

Studies and Interventions to Promote through the HCI KM System Wider Use of Improvement Knowledge Generated by QI Activities

Two new KM studies were initiated during FY11 under TO3. One evaluates methods used in Bolivia to spread learning from the El Alto TB collaborative to the new TB collaborative in Cochabamba. In the last quarter of FY11, Initiatives began a survey of users of the CHW Central Community of Practice.

Convene the Health Care Improvement Knowledge Management Deep Dive

A key event sponsored by the project took place March 10-11, 2011. The “Health Care Improvement Knowledge Management Deep Dive” was designed by URC to bring together world-class knowledge management experts and health care improvement leaders for a thoughtful conversation on what strategies and lessons from outside and inside health care can be brought to bear on managing knowledge for health care improvement. The meeting was attended by 33 participants from URC (both headquarters and field office personnel), USAID, and Institute for Healthcare Improvement, Johns Hopkins Center for Communications Programs, the Bill and Melinda Gates Foundation, Iowa Health System, the International Society for Quality in Health Care, and the Health Resources and Services Administration.

Figure 74. Knowledge Management: CHW Central Community of Practice in the new Communities section of the HCI Portal

The Deep Dive served to examine the many proven practices that organizations have developed to provide both the opportunity and a systematic way for members to share their knowledge internally as well as across organizational boundaries. The practices can be broadly categorized into two groups: **Connecting** practices that bring together people with the “know-how” providing them with opportunities to learn from one another, share experiences, and generate new ideas about their work, and **collecting** practices—methods of capturing information, including new insights gained through Connecting practices. Connecting and collecting practices are not mutually exclusive, and many of them can be used to serve both purposes.

Much of the focus of HCI’s knowledge management system to date has been on the collecting part of KM – documentation of QI experiences in specific countries and for specific problem areas. While such written documentation is necessary, we recognize that it is not sufficient to truly enable knowledge of

how to improve health care flow efficiently and effectively within an improvement activity (e.g., among teams participating in a specific collaborative) or to make that knowledge available to others in the country and in other countries. Expanding the use of knowledge transfer approaches to enable implementers to connect to share their knowledge is key to incorporating KM into our work.

Building on the Deep Dive and a separate KM workshop held for HCI headquarters staff and two visiting field staff in June, the HCI KM team has begun working with several headquarters technical teams and country teams to incorporate KM approaches and principles in HCI activities. Drawing on the ideas discussed at the KM Deep (see Figure 75), a short document describing KM concepts and approaches and ways in which they can support HCI objectives was sent to all headquarters staff and country directors at the beginning of August. During the last quarter of FY11, several KM methods for generating, sharing, and synthesizing ideas and lessons were applied by staff in Ethiopia, Tanzania, Uganda, and Kenya. HCI KM staff have also started field visits to train country teams in KM and communications concepts and approaches and to plan how they can incorporate them into their activities. In late September, Kate Fatta traveled to Tanzania and Emily Treleaven to Nicaragua to orient the HCI technical teams in each country on KM concepts and approaches and assist them in using storytelling and short videotaped interviews to capture key learning in improvement activities.

Figure 75. Knowledge Management: Key concepts that came out of the Health Care Improvement Knowledge Management Deep Dive

Knowledge management is less about pushing information out and more about fostering connections between people who have knowledge, and those who need that knowledge.

Getting people to ask the right questions is an essential part of developing and spreading knowledge. More training and orientation needs to be provided to help those working in improvement to learn to ask probing questions.

Story-telling is a relatively easy and effective way to share information. Through story-telling, not only does the audience learn what was done, but the teller learns through the process of telling the story. Story-telling helps us share tacit knowledge. The most effective stories are “sticky”—they stick in the minds of those who heard them.

Technology can be an effective tool to facilitate sharing, but it does not replace human connection. Some helpful technologies to enable that human connection include short video clips as well as social media like Facebook and Twitter

In March, HCI negotiated a contract with a new web site maintenance company in Ecuador, Kipukuna, to operate and increase the functionality of the maternoinfantil.org web site. One of the enhancements being made to the site is to add a platform for E-Learning to house short courses related to maternal and child health. Another activity in the last quarter of FY11 was to begin developing communities of practice among HCI LAC teams for Helping Babies Breathe and Kangaroo Mother Care. HCI's Ecuador team led efforts in July and August to hold Skype conference calls and a web-based discussion forum on HBB indicators with HCI teams from Ecuador, El Salvador, Guatemala, Honduras, and Nicaragua. The efforts are now moving toward the creation of more structured communities of practice among HBB and KMC implementers in the five countries. The Quito office has hired a new communication specialist, Ms. Ximena Gudiño, who will provide coordination for these communities, with technical support from Miguel Hinojosa and Jorge Hermida.

Continue to Develop Content for the maternoinfantil.org Web Site and Strengthen Linkages with Other Elements in the HCI KM System

In October 2010, HCI launched the HBB Community of Practice private web site at www.hbb-community.org with a small group of members of the HBB Advisory Committee, including staff from USAID, the American Academy of Pediatrics (AAP), MCHIP, and Save the Children. HCI designed the site in FY10, based on interviews with members of the HBB Advisory Committee. It was agreed at the

Support the Helping Babies Breathe Global Development Alliance Private Site

In October 2010, HCI launched the HBB Community of Practice private web site at www.hbb-community.org with a small group of members of the HBB Advisory Committee, including staff from USAID, the American Academy of Pediatrics (AAP), MCHIP, and Save the Children. HCI designed the site in FY10, based on interviews with members of the HBB Advisory Committee. It was agreed at the

launch that the site will be co-managed by representatives from HCI, AAP, USAID, MCHIP, and Save the Children. During the year, HCI provided support to HBB implementers to use the site and added content on HCI activities in Latin America, Uganda, and Afghanistan.

HCI led a WebEx session in March to show members of the HBB Advisory Committee how to upload materials to the private HBB Community of Practice site that HCI created for HBB. At the request of Lily Kak of USAID/MCH, Ms. Lani Marquez made a similar presentation at the March 14 HBB Global Development Alliance partners meeting held in Washington, DC. In July, she oriented AAP (Robyn Wheatley) and USAID (Jessica Shoemaker) staff who will serve as new managers for the site.

Re-launch the Newborn Alliance Web Site

The LAC Regional Newborn Health Alliance website, www.alianzaneonatal.org, was re-launched in July, following the need to transfer hosting of the site to a new firm. Kipukuna will provide maintenance support for this site as well as the www.maternoinfantil.org site.

Directions for FY12

In FY12, HCI will expand the use of the knowledge management approaches, including storytelling, video, social media, and group learning and knowledge synthesis techniques, to connect implementers of health care improvement and foster deeper knowledge exchanges around the technical focus areas of the project. We will launch Spanish, French, and Russian versions of the HCI Portal and link these to other sites in the HCI KM system. New Communities and Topics will be added to the HCI Portal. HCI will also partner with the new ISQua Knowledge website to provide web-based support to Hong Kong QI workshop participants and lead discussion forums.

4.3 Research and Evaluation

Overview of HCI's Program in FY11

Focus of research and evaluation	What are we trying to accomplish?	Geographic focus
Institutionalization of modern QI approaches and QI results	<ul style="list-style-type: none"> ▪ Advance learning globally on status and drivers of institutionalization of results and QI implementation 	Studies in: Ecuador, Guatemala, Honduras, Nicaragua (2), Niger (2), Russia, Global
Methods and approaches for effective design and implementation of improvement collaboratives	<ul style="list-style-type: none"> ▪ Advance learning globally on design & implementation of improvement collaboratives, especially related to application of QI at community level 	Studies in: Afghanistan, Ethiopia, Guatemala, Mali, Niger, Uganda
Methods and approaches for effective design and implementation of spread activities	<ul style="list-style-type: none"> ▪ Advance learning globally on shared learning and spread of effective changes (better care practices) 	Studies in: Afghanistan, Cote d'Ivoire, Ecuador (2), Guatemala (2), Mali, Nicaragua, Russia, Uganda (2), Global (2)
Cost-effectiveness of QI approaches and strategies (including comparative studies)	<ul style="list-style-type: none"> ▪ Advance global learning on comparative advantage and economic efficiency of QI activities 	Studies in: Afghanistan (3), Cote d'Ivoire (2), Ecuador (2), Guatemala (2), Honduras, Kenya, Mali (2), Nicaragua (4), Niger, Russia, Uganda (4)
Other QI methodologies, distinct from the improvement collaborative approach.	<ul style="list-style-type: none"> ▪ Advance learning globally on QI methodologies distinct from the overall improvement collaborative approach 	Studies in: Afghanistan, Guatemala (2), Malawi, Tanzania (2), Uganda (4)
Studies on barriers to implementation of HCI improvement activities	<ul style="list-style-type: none"> ▪ Advance knowledge on barriers to improvement 	Studies in: Afghanistan, Cote d'Ivoire
Capacity building for research and support to country programs	<ul style="list-style-type: none"> ▪ Build research and data management capacity of HCI staff 	All countries and HCI technical staff

Main Activities and Results

During the year, significant changes took place in the R&E unit. Dr. Edward Broughton, who has served as the project's economic analyst since fall 2009, took over as director. Under his leadership, the unit has worked to design studies with control or comparison groups to strengthen the case for attribution and has instituted a systematic Institutional Review Board process—both as part of the unit's larger goal to strengthen the evidence base about quality improvement in peer-reviewed health literature. Also in FY11, three other new members joined the unit. Dr. Astou Coly, a French-speaking epidemiologist, is leading studies in Mali, Niger, Cote d'Ivoire, and Tanzania and is supporting countries in quantitative data analysis. Dr. Sarah Smith, a Spanish-speaking anthropologist who works on the project through a subcontract with EnCompass LLC, is improving HCI's qualitative studies and helping to deepen our understanding of institutionalization. Simon Hildebeitel, who has supported HCI's work in Russia and Afghanistan since the project began, is increasing support for HCI country data collection and improving the R&E unit's knowledge management efforts.

In FY11, HCI worked on 54 research and evaluation studies under TO3, completing 10 and with plans to finalize all in FY12. Table 14 lists the studies supported during FY11 and summarizes results or progress during the year. The link provided for each study is for the respective R&E Study Profile on the HCI Portal. The study profiles summarize methodology and results and provide links to available tools and reports.

Table 14. Research and evaluation studies supported under HCI TO3 in FY11

Afghanistan: Cost-effectiveness of QI in the Context of EONC

This prospective cohort study is examining the costs of implementing a collaborative improvement approach for both facility and community-based maternal and newborn interventions in Afghanistan. The broad objectives are : 1) To examine the costs of using a collaborative strategy to improve the quality of MNCH services delivery and patient outcomes and 2) To characterize factors that increase or hinder the cost-effectiveness of QI interventions at the community, facility and higher levels of the health care system. In FY11, data for this study were collected through June 2011, including monitoring data on quality from the collaborative and estimating costs related to implementation through interviews, record and budget review. HCI began analysis of these data in FY11, and the report will be written in FY12. <http://www.hciproject.org/node/1636>

Afghanistan: Cost-effectiveness Analysis of QI Hospital-level Improvements in Kabul

This is an economic analysis of implementing a collaborative improvement intervention for maternal and child health in hospitals in Kabul from the perspectives of the MoPH, private hospitals and USAID (who funded the improvement work through the HCI project). The study estimates the cost of implementing the maternity hospital improvement collaborative in the three private and four public hospitals in Kabul; determine the effectiveness of the collaborative in terms of QI process and outcome indicators; estimate the costs of expanding the intervention to other health facilities in Kabul; and determine the cost-effectiveness of the improvement collaborative compared to the performance and efficiency prior to implementation of the intervention. In FY11, data were collected and HCI began analysis. It will be completed in FY12. <http://www.hciproject.org/node/1635>

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

This evaluation of the spread of the MNCH Improvement collaborative, which was piloted in Kunduz and Balkh provinces, to three new provinces seeks to address the following questions: 1) Which 'change ideas' were adopted/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'? 2) How were 'change ideas' communicated to sites, and what were the reasons behind uptake of each change idea? 3) Were there reasons that facilitated or hindered uptake of change ideas? What were the reasons and what were QI participants' perspectives on them? 4) What were the most successful means of spreading QI changes? The protocol and data collection tools for this study were finalized in FY11, and data collection began. It will be finalized in FY12. <http://www.hciproject.org/node/2470>

Afghanistan: Strengthening the Application of QI for Community-level Services for EONC

The majority of maternal and child health care takes place at the community level. In FYII, HCI completed a protocol and data collection tools for this study to support, document and describe the evolution, results and lessons learned from implementing QI at the community level in relation to increased uptake and quality of high-impact community maternal and newborn services. This prospective cohort study of QI teams at the community level will use quantitative data from monitoring of quality indicators and from household surveys of mothers' knowledge and practice that will be leveraged and combined with qualitative data on the QI process, community health worker engagement, and community engagement in QI. The study will determine what strategies and methods key stakeholders perceived as effective at facilitating community level QI, and how CHWs and other stakeholders modified initially ineffective strategies and methods in order to facilitate community-based QI.

<http://www.hciproject.org/node/3035>

Afghanistan: Evaluation of the Patient Master Index in three Kabul Hospitals

HCI began evaluation of the Patient Master Index in three hospitals in Kabul. The Index is a new medical record system that was introduced to Malalai, Khai Khana, and Isteqlal Kabul hospitals in August 2011. The MoPH has expressed keen interest in revising and modifying the current outdated and dysfunctional system. The study will investigate the accuracy and costs of the new medical records system, measure the level of provider and client satisfaction, and recommend changes for the system's improvement and sustainability.

Afghanistan: Validity of Patient Data Records in Maternal and Newborn Health Facilities

The MoPH is interested in determining the validity of data collected by health facility and hospital staff. If deficits are found in data collection and reporting, then HCI can focus more of its improvement activities to address this in order to be able to accurately inform the QI intervention. No validity study of this sort has been done in Afghanistan to date. It will help determine the validity of data collected by HCI and will provide a method that the MoPH can use to validate its HMIS data. It will determine gaps in data collection and guide interventions to improve data quality in the future. This study will be conducted in maternity facilities in Kabul and will address three research questions: 1. To what extent are data reported on patient charts and the register representative of what happened during childbirth? 2. What factors are associated with the validity of the self-assessment data collected from participating maternity hospitals? Factors to be tested include the cadre of the health worker, their level of experience, the type of facility, and the time of day of the delivery. 3. What is the level of compliance to standards of clinical practice seen in the deliveries observed? The research protocol and tools were developed, and data collection began in FYII. <http://www.hciproject.org/node/2471>

Afghanistan: Joint MOPH Study on Hospital-acquired Infection

In FYII, the MOPH of Afghanistan asked for direct assistance on a study of hospital-acquired surgical infections in Kabul hospitals. HCI drafted a protocol for the study, which is being reviewed by the Ministry. The project will be an excellent opportunity for HCI to continue to develop the research capacity of Ministry of Health staff.

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

This cross-sectional study will measure the effect of the HCI-supported collaborative to improve the quality of services for PLWHA on client satisfaction, provider satisfaction, and HIV services. HCI finalized a protocol and data collection tools for this study in FYII and data collection began in September. The political situation in Cote d'Ivoire caused a delay in the development and implementation of HCI's planned research in the country. As the violence subsided, research activities began again the summer of 2011. <http://www.hciproject.org/node/3053>

Cote d'Ivoire: Dissemination Strategies for HIV/AIDS Prevention (and Cost-effectiveness Analysis)

In Summer 2010, the PMTCT/ART collaborative expanded from 41 to 120 sites, based on a synthesis and consolidation of learning from the initial 41 sites. This study's goal is to examine the effectiveness and cost effectiveness of the strategies for spread in terms of uptake of this learning by new teams, and to understand factors that drive effective uptake of learning from a previous group of teams. This study will include both a quantitative and a qualitative component, focusing on both the process of spread and the results of spread. Coaches will compile information from the SES Journal and interviews with teams about changes implemented. Results (based on indicators routinely monitored) will be assessed in light of changes implemented, as well as magnitude, speed, and maintenance of improvements (in comparison with the demonstration phase). Qualitative

interviews with QI team members, coaches, and collaborative managers to assess barriers and facilitating factors to uptake of ideas generated by previous groups of teams. The political situation in Cote d'Ivoire caused a delay in the development and implementation of HCI's planned research in the country. Research activities began again the summer of 2011.

Cote d'Ivoire: Factors Influencing Loss-to-follow-up Rates for ART Patients

Loss to follow up is a significant problem in the Cote d'Ivoire. The objective of this study 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. The political situation in Cote d'Ivoire caused a delay in the development and implementation of HCI's planned research in the country. Research activities began again the summer of 2011.

Ecuador: Sustainable Scale-up of Oxytocin for Prevention of Postpartum Hemorrhage

The study analyzed the adoption, scale-up, and institutionalization of active management of the third stage of labor (AMTSL) for prevention of postpartum hemorrhage (PPH) using continuous quality improvement (CQI). The rates of AMTSL compliance for women with vaginal deliveries were from chart reviews in health facilities participating in 1 of 3 phases of AMTSL programming. Months taken to implement AMTSL at ≥80% and ≥90% compliance are compared across phases. The study found the proportion of oxytocin administration during the first 3 months was 5% in phase 1, 9.8% in phase 2 and 72.2% ($p \leq 0.001$ v phase 1 and 2). The average number of months for provinces to achieve oxytocin administration to ≥80% and ≥90% of women with vaginal deliveries was 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 ($p \leq 0.01$ v phase 1, $p \leq 0.001$ v phase 2) and 4.0 ± 3.4 ($p \leq 0.001$ v phase 1 and 2) in phase 3, respectively. By December 2009, AMTSL implementation was sustained and ≥90% for all 3 phases. CQI process identified resistance and barriers to the adoption, scale-up, and institutionalization of AMTSL and developed mechanisms to overcome these barriers. An article describing the findings was submitted in August 2011 to the *International Journal of Gynecology & Obstetrics*.

Ecuador: Spreading Evidence-based Essential Obstetric and Newborn Care Practices and QI in Ecuador: Results of an In-depth Study in 51 Health Care Facilities

This study includes a descriptive and analytical component and focuses on the spread strategy currently being implemented by the MOH in Ecuador to spread the better care practices (evidence based norms and organizational changes) emerging from the EONC demonstration collaborative. The study will describe the preparation and implementation of the spread strategy for 55 hospitals in 5 provinces. It will examine how well new facility-based teams, supported by provincial spread teams, are able to monitor indicators of quality, and implement changes in processes to ensure compliance with standards in order to achieve effective EONC services. A final report will be completed in the first half of FY12. <http://www.hciproject.org/node/1285>

Ecuador: Sustainability and Institutionalization of EONC QI Activities from 2005 Onwards at the Central MOH, Regional and Facility Levels

This study will determine to what extent continuous quality improvement (CQI) processes, intermediate results and EONC best practices have been maintained, improved and/or declined over time since CQI implementation in 14 demonstration phase facilities. A cross-sectional survey will be completed in FY12 to describe the status of process and intermediate variables. Data on best practices will be collected from the longitudinal CQI Self-Monitoring and Evaluation data.

Ethiopia: Evaluation of a Community QI Model

This study will explore whether QI methods applied at the community level have impacted the functionality of health extension workers; if and how the linkage between the community and the health system been strengthened; whether a community health system been established and/or strengthened; and if so, how it functions; and how improvement methods impact the function of the components and management of the community health system. This study will focus on linking pregnant women to HIV testing and counseling services. A separate but complementary study on the cost-effectiveness of the Community Health Worker Improvement Collaborative will also be conducted. The protocol and data collection tools were drafted in FY11 and this study will be completed in early FY12. <http://www.hciproject.org/node/3036>

Global: The “How” and Why” of Cost-effectiveness Analysis of Care Pathways

The study describes what cost-effectiveness analyses (CEAs) for care pathways are, how they are conducted, and how their results are interpreted. It discusses issues of perspective, time frame, and what research questions are being addressed. It also outlines effectiveness measures and the desirability of using a control group to enhance the case for attributability. Costs and cost consequences are also discussed. This study was published in the Journal of Care Pathways in September 2011. <http://ijcp.rsmjournals.com/content/15/3/76.abstract?sid=1dd35d5-e43e-4601-ad69-edce6a5f72e2>

Global: Towards More Effective Spread of Improvement Methods in Lower and Middle-Income Countries: A Synthesis of the Research

HCI consultant John Ovretveit (Karolinska Institute, Sweden) and Dr. Broughton wrote a synthesis report that examined published studies on using QI collaboratives (QIC) as a method for teaching, enabling, and encouraging health workers to learn and use QI methods. The synthesis includes two studies published in refereed scientific journals and several reports from the HCI project and found that while there are limitations to the published studies because they were not designed to provide evidence about the use of quality methods by health care personnel participating in QICs, the rationale for using QICs is strong and there is evidence that they can achieve significant process and outcome improvements. Further research is needed to compare the effectiveness and costs of QICs for different purposes and to measure sustainability of the results, they achieve and of the methods, they teach. <http://www.hciproject.org/node/2962>

Guatemala: Evaluating a System for Incentives to Traditional Birth Attendants for Referrals of Obstetric Complications to Health Facilities

The ProCONE strategy implemented by the Guatemala Ministry of Public Health and Social Action and the HCI promotes quality obstetric and neonatal care and includes components in communities and essential obstetric and newborn care. To increase the rate of TBA referrals of potentially complicated cases to appropriate health facilities, this case-control study measured the effect of monetary and non-monetary incentives to TBAs and community committees for referrals of potential complications to appropriate facilities, compared to no incentives. Data collection and analysis was conducted in FY11, and the study will be completed in FY12.

Guatemala: Strengthening the Application of Quality Improvement for Community-level Services for EONC

This descriptive study will identify successful and unsuccessful adaptations to the standard improvement collaborative model for use in community-based services (e.g., health posts); linking these services to EONC facilities and in related behavior change communication and community participation activities. It will use in-depth interviews and quantitative analysis by record review of the ProCONE EONC community project that made adaptations to the improvement collaborative approach. Data collection was completed in FY11, and writing and analysis has started. This study will be completed in FY12.

Guatemala: Case Study of Spread of Best Practices from Health Centers to Health Posts in San Marcos

HCI QI Advisor Dr. Sarah Smith traveled to Guatemala from July 31st to August 12th to collect data for this case study on the spread of best practices in maternal and newborn care from the Health Center (CAP) in San Lorenzo to two health posts and one minimal care unit under its jurisdiction. The study examined how the facilities learn about change ideas and best practices, how they select and adapt practices to implement, why adaptations were necessary, and the perceptions of facility staff about the changes and the QI process. Findings from this case study indicate that aspects of the strategy were successfully spread from the CAP to the lower level facilities and there was success in implementing selected best practices. However, these practices were vertically disseminated from the doctor at the CAP to the nurses at the other facilities. There was not a thorough process of collecting and analyzing data, identifying gaps, and implementing changes. It also appeared that there was limited understanding of how to analyze and interpret data for program management, upon which the process of improvement is based. What were spread were not QI methods but rather selected best practices through a vertical process. HCI completed this study in FY11. The final study manuscript is in review and will be submitted for publication in the PAHO Journal in the first half of FY12. A final Spanish language report with recommendations will also be provided to the HCI-Guatemala office for distribution.

Guatemala: Evaluation of a Collaborative Approach and of ISO Certification to Improve Quality of Maternal-Neonatal Health Care Services: A Comparative Cost Analysis

Guatemala has been implementing two QI methods to improve quality of care – the Promotion of Essential Obstetric and Neonatal Care (ProCONE for its Spanish acronym) health improvement collaborative and International Organization for Standardization (ISO) certification of health facilities. HCI is looking at how these two approaches can be integrated to leverage each of their comparative advantages in improving and maintaining quality of care. In FY11, HCI completed a protocol and data collection tools and collected all data which allowed comparisons of cost-effectiveness of the ISO and ProCONE strategies on essential maternal and neonatal health (MNH) care best practices and their mediating factors to determine how to best leverage each strategy's advantages in improving and maintaining QOC. The study addressed the following questions: 1) What were the differences in processes (mediating variables) that theoretically affect outcome (coverage, effectiveness, and cost-effectiveness)? 2) What were the relative differences between ISO+ProCONE and ProCONE alone in MNH patient coverage? 3) What were the differences between ISO+ProCONE and ProCONE alone in MNH best practices? 4) What were the incremental cost-effectiveness (ICE) of ISO+ ProCONE compared with ProCONE alone; and 5) What drivers (mediating variables) affected the success of each method? The report will be available in FY12. <http://www.hciproject.org/node/2923>

Guatemala: Case Study on San Pedro ISO Implementation

As part of HCI's ISO work, San Pedro became the first health center to be ISO certified in Guatemala. This is a descriptive case study of the experience of San Pedro health center in their process towards ISO certification, with a focus on the process used, the efforts expended to achieve certification, the impact on the staff at San Pedro, and lessons learned for future ISO certification. A draft of this study was completed in FY11, and will be finalized in FY12.

Guatemala: Evaluation of the Institutionalization of Improving the Quality of Maternal-Neonatal Health Care Services

The ProCONE Maternal and Neonatal Health Care Improvement Collaborative was developed by the Guatemalan Ministry of Public Health and Social Assistance (MSPAS) and focuses improving prenatal, delivery, postpartum, and neonatal care. From March 2007 to September 2008, ProCONE (Promoción y Cuidados Obstétricos Neonatales Esenciales) was implemented using a collaborative improvement approach in 25 facilities in western Guatemala. After this successful demonstration phase, ProCONE best practices and QI processes (documentation of changes implemented, monitoring of key quality of care indicators, and periodic sharing of QI team learning) were spread to 122 additional health facilities in seven high-priority regions of Guatemala, starting in January 2009. The primary aims of the study are 1) to evaluate the impact of the ProCONE process in the demonstration area points of service, and in the initial spread phase points of service compared with each other and with points of service delivery in socio-demographically similar comparison areas and 2) to determine the degree of institutionalization of QOC and of QI implementation at the point of service delivery (facility) level, after the active phase of the collaborative. This includes describing the QI implementation (explanatory) processes and other events (such as turnover of upper-level MOH staff) that influence the institutionalization of QOC and QI. The study will also determine the degree of institutionalization of QOC and of QI implementation, at the supportive (district, health area and central) levels of the health system, after the active phase of the collaborative. It will also examine the extent of institutionalization, key drivers, and current gaps related to institutionalization of QI and best practices within the health system at all levels, propose a strategy, and measure its impact. Qualitative and quantitative methods will be used to examine knowledge/competency related to QI, perceived accountability and responsibility for QI, and actual implementation of QI activities on an on-going basis. HCI began data collection in FY11 and the study will be completed in FY12. <http://www.hciproject.org/node/2924>

Guatemala: Studying Spread of Best Practices for Maternal and Newborn Care from Health Centers to Health Posts in San Marcos

Guatemala will be synthesizing learning generated from the spread phase of the ProCONE collaborative and conducting a second expansion to cover all health posts in the seven health areas where it has been working. They have already done this expansion in San Marcos to all 75-health posts, and this study will evaluate the process of spread of best practices from health centers where they were developed, to health posts. Data from San Marcos was collected (but not analyzed) during an earlier spread study. Quantitative and qualitative data will generate information on the magnitude, speed and maintenance of improvement in new sites compared to sites

participating in previous spread, exposure and uptake of changes synthesized from the spread phase, and need for and level of support provided to ensuring uptake of both best practices and QI. Data collection, analysis and report writing was completed in FY11. This study is currently in review and will be disseminated in FY12.

Honduras: Institutionalization of Better Care Practices and CQI in Demonstration and Replication Regions

HCI completed a study on institutionalization of CQI for maternal and child care in Honduras in FY11. HCI implemented a demonstration phase in five health regions from 2004 to 2006. A second replication phase in 2007 to 2009 expanded CQI to six additional regions, reproducing the approach used in the demonstration phase, but was implemented by the Honduran Secretariat of Health through its Department of Quality Assurance (DGC). This study 1) analyzed differences in the process and results between the demonstration and replication phases; 2) documented the level of QI institutionalization and/or activities maintained upon finalization of the implementation phase to determine what needs to be strengthened; and 3) documented changes implemented that have been successful in achieving improvements in EONC care. By determining the strengths and weaknesses of each phase, this study sought to guide effective spread of CQI activities to the remaining regions of Honduras. It examined several elements of institutionalization of QI, including measures of developmental/preparatory activities that impact CQI implementation (such as training and coaching, sharing experiences, and rewards and incentives), the establishment of a supportive environment for institutionalization (including leadership, team work, values that support CQI, support from higher authorities, and continuous coaching / supervision), and evidence of institutionalization, and impact on outcome indicators. Results were similar in the demonstration and replication phases, although differences did emerge in areas such as coaching / supervision, mean number of trainings attended, and QI team opportunities for sharing experiences and lessons learned with one another. Compliance with indicators of obstetric care increased from 80% to 90% in demonstration sites while in replication increased from around 50% to almost 80%. The study provided recommendations on training, coaching, motivation/incentives, reporting, coordination/supervision, and community support to guide institutionalization of QI and improved quality of care and to strengthen current implementation in both demonstration and replication regions. <http://www.hciproject.org/node/2553>

Honduras: Cost-effectiveness of the Referral System for Pre-eclampsia

In FY11, HCI developed a protocol for a longitudinal pre/post and case-control cost-effectiveness study of a referral system for pre-eclampsia. The study will examine the costs and the changes in identification, referral and treatment of women with pre-eclampsia / eclampsia and compare it to the situation before implementation of the improvement strategy. Data collection began in FY11, and this study will be completed in FY12.

Kenya: Implementation of Standards of Service for Orphans and Vulnerable Children: 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. <http://www.hciproject.org/node/2964>

Malawi: Impact of Emergency Triage, Assessment and Treatment (ETAT) on the Quality of Care Given to under-five Children

This retrospective study described the extent to which ETAT guidelines and protocols have been implemented in three selected district hospitals in southern Malawi and evaluates the impact of ETAT on the quality of care given to under-five year old patients presenting at outpatient departments (OPD) of these hospitals. The study found that three years after introduction of emergency triage, assessment and treatment in 2004 (with support from

QAP III), it was still being implemented in these three district hospitals, although there were some areas needing strengthening. The findings suggest that ETAT implemented in the three Malawian district hospitals has improved the quality of care for under five children but needs to be strengthened and sustained. In FY11, HCI prepared a version of this study for journal submission. <http://www.hciproject.org/node/2017>

Mali: An Evaluation and Cost-effectiveness Analysis of an Improvement Collaborative for Eclampsia /Pre-eclampsia Services

This comparative study will evaluate the cost-effectiveness of a quality improvement collaborative (QIC) for eclampsia /pre-eclampsia services in Mali compared with clinical training alone. It will determine whether delivering mothers in QIC intervention facilities received better care and had better outcomes than delivering mothers in training-only facilities. It will examine the incremental cost-effectiveness of the QIC intervention compared to the training-only intervention. It will also determine whether performance in training-only sites improved when clinicians in the facilities are exposed to the QIC methodology, and whether performance in the QIC intervention facilities changed in the six months following the active intervention period. Baseline data collection was completed in FY11 and will be completed in FY12. <http://www.hciproject.org/node/2477>

Mali: Evaluation of a Quality Improvement Collaborative to Improve Community Health Systems for Maternal and Child Health

Much of delivery and newborn care in Mali takes place at the community level. This study will support, document and describe the evolution, results, and lessons learnt from implementing QI at the community level in relation to increased uptake and quality of high-impact community maternal and newborn services in Mali. This will be a prospective cohort study of QI teams at community level. Quantitative data from monitoring of quality (performance) indicators and from household surveys of mothers knowledge and practice will be leveraged, and combined with qualitative data. Preparation was done in FY11 and the study will be completed in FY12.

Mali: Spread of Better Care Practices and Quality Improvement for EONC Services from Niger to Mali

This study seeks to answer: 1) What changes were taken up by the Mali facilities, how did they receive the changes, how were changes modified by the sites, what facilitated/hindered uptake of changes by Mali sites; 2) What improvement in EONC quality indicators were experienced in facilities where the Niger change package was introduced? 3) How do changes in EONC quality indicators seen in Mali compare to the changes seen in Niger? 4) What is the cost of implementing the change package? and 5) What is the cost-effectiveness of implementing the change package for EONC in Mali? <http://www.hciproject.org/node/2480>

Nicaragua: Evaluation of Medical and Nursing Competencies in Antenatal, Delivery, and Newborn Care in Five SILAIS

HCI completed this study in FY11, which follows up on a 2005 study by the Ministry of Health (MINSA) on competencies of health staff who provide maternal and newborn services. MINSA used results of the earlier study, in conjunction with external agencies and projects, developed norms, protocols, and clinical practice guides which allowed for national-level standardization of clinical competency. MINSA and other agencies also worked together to develop tools for continual monitoring of service quality. Five years after this initial evaluation, MINSA was interested to know whether the interventions to improve staff competencies had an impact. HCI study sought to determine if the gap in knowledge and skills among health staff providing services for women during pregnancy, labor and delivery, and post-delivery and for newborns been reduced in five SILAIS over the 5 years

This study found significant improvement in competencies for maternal and neonatal care between 2005 and 2010. Knowledge from 58% in 2005 to 72% in 2010 and an improvement in skills from 59% in 2005 to 67% in 2010. All improvements in scores achieved between 2005 and 2010 were statistically significant, with the exception of breastfeeding for which knowledge was already high (97%) in 2005. Health provider knowledge about breastfeeding, bleeding during the second stage of labor, AMTSI, post-partum surveillance, and prevention of post-partum hemorrhage and sepsis scored above the average of 72%. Knowledge of infection prevention, surveillance during delivery, interpretation of the partograph to identify risk factors, immediate care of the newborn, prevention of neonatal asphyxia, neonatal resuscitation, gestational hypertension, and management of hemorrhagic shock all received scores below average. Based on these findings, the report gave recommendations to address the knowledge and skills gaps. <http://www.hciproject.org/node/2987>

Nicaragua: Sustainability of Improvements in Maternal and Child Care and Institutionalization of Continuous Quality Improvement

This study asked whether improvements in care processes implemented from 2000 to 2010 through CQI have been incorporated into and are used daily by health care workers in Nicaragua and determines how the support system put in place through institutionalization of CQI assists facilities in maintaining CQI within unit's operation and organization. It found high levels of compliance with selected vital clinical standards, with seven of the ten SILIAS selected for the study performing at levels above 80%, and 20 of the 30 health facilities studied were carrying out more than 80% of 13 key CQI activities with the correct frequency. The largest impact that the intervention the progress achieved in the sustainability of clinical best practices and the institutionalization of the development of clinical skills and abilities and CQI. Variability seen in the study among different health units can help identify certain challenges and optimizing conditions, already in place or in the process of being developed, that can be used and replicated to achieve sustainability of CQI at the national level. The study results will be used by MINSA to prioritize their continued support for CQI in specific health facilities. <http://hciproject.org/node/2485>

Nicaragua: Expanding the Learning: Spread of Innovations in MNCH to New Teams

This retrospective, descriptive study sought to better understand the spread process of a continuous quality improvement (CQI) collaborative. It examined the spread of CQI methods and results from a demonstration phase through a spread phase and subsequent post-collaborative CQI strengthening phase. It examined how spread was organized and what results were achieved and found that beginning the spread phase before completion of the demonstration phase was effective, allowing for immediate transmission of knowledge to new sites. It found that health staff training had a greater focus on clinical capacity and less on QI methods, but emphasizes the importance of both to support institutionalization of QI. It showed that the regulatory framework, including protocols, guidelines, standards, quality indicators, algorithms, and checklists, was of the utmost importance and that inter-agency work on spread was essential. HCI completed this study in FY11. A final version of the report will be available in early FY12. <http://www.hciproject.org/node/2997>

Nicaragua: Economic Analysis of a Pediatric Ventilator-associated Pneumonia Prevention Initiative

This economic analysis of an improvement intervention to decrease ventilator-associated pneumonia (VAP) prevalence in pediatric intensive care units (ICUs) in two hospitals in Nicaragua was done to determine the cost-effectiveness of a simple intervention involving utilization of additional sterile hospital supplies and providing training to PICU / NICU staff on practices to decrease the risk of pneumonia among ventilated patients. The study asks: 1) How much the improvement intervention costs? 2) How effective must it be to be cost-neutral? And 3) What are the most important variables in the model? The study found that a very small decrease in the occurrence of VAP would make the intervention cost saving. This study, completed in FY11, was accepted for publication in the *International Journal of Pediatrics* in November 2011. <http://www.hciproject.org/node/2019>

Nicaragua: Post-Partum Family Planning Intervention for At-Risk Women in Masay and Rivas

This study examines the impact on family planning referral and follow-up of offering "Contraception Post Obstetric Event" combined with higher quality family planning services (a strengthened referral system and individual follow-up) to women aged 15-19 years or >35 years in the intervention area of Masaya, comparing the results with the control area of Rivas. Women in these age groups and their infants have an elevated risk of morbidity and mortality. However, In Nicaragua, women aged 15-19 years old or >35 years old continue to exhibit lower demand for family planning methods, especially those in rural areas and lower economic groups. This study sought to 1) measure contraceptive use in women aged 15-19 years or >35 years who initially did not choose any method of contraception post-partum; 2) determine if higher quality of family planning services in Masaya increased the probability a women in these high-risk age cohorts would visit a health facility for contraceptives post-partum compared to Rivas, and 3) determine if higher quality of family planning services in Masaya was associated with a decreased inter-gestational period and/or a decrease in the number of high-risk pregnancies. The unexpected result was that fewer women used their family planning referral for a follow up visit to their local health facility for contraceptives in the intervention area (Masaya) compared to the control area (Rivas). More women in Masaya reported visiting a health facility on their own without their referral than in Rivas. While the number of women that used their official family planning referral to return to their local health facility was well recorded, the number of women that returned without their official family planning referral and/or visited a pharmacy was not well recorded. The type and quality of family planning service received by women that returned without their official family planning referral and/or visited a pharmacy is unknown. These women may have not received the follow up

and/or additional advice on the importance of contraceptive use and adherence. Secondly, while home visits to promote contraceptive use may have been made to women who did not visit a health facility following their obstetric event, these visits may not have been as systematic as initially planned. The study shows that while reinforcing quality standards is important to achieve certain outcomes, the reasons why women choose to use contraceptives and their adherence to these contraceptive methods remain complex and involve many different aspects of individual behavior, the community and health system. <http://www.hciproject.org/node/2998>

Nicaragua: Process and Level of Institutionalization Achieved in AMOCSA, a Private Health Care Entity in Chinandega

This study, completed in FY11, examined La Asociacion Medica de Occidente, S.A. (AMOCSA), a private health care organization that participated in the implementation of Continuous Quality Improvement (CQI) activities in Nicaragua. AMOCSA participated in a series of improvement activities from 2004 to 2008 to improve health services, focusing on maternal and infant health, family planning, and prevention of infections. In 2007, HCI provided technical assistance to develop a Quality Management Program for AMOCSA to ensure sustainability of CQI activities. This study examined clinical and QI training, the enabling environment for QI, and evidence for institutionalization and sustainability of CQI. Overall, the study found evidence of institutionalization in AMOCSA facilities, including the incorporation of CQI activities into a number of different new clinical and non-clinical areas without HCI support. CQI leaders were perceived to promote values related to CQI, provide rewards and incentives for working on CQI, and enable an environment where essential CQI activities are carried out regularly. These activities helped AMOCSA facilities achieve higher levels of compliance with clinical norms and standards, which increased from 81.1% in 2004 to 92.3% in 2009. <http://www.hciproject.org/node/2481>

Nicaragua: Cost-effectiveness of Implementing Kangaroo Care in Bertha Calderon Hospital, Managua

This pre-/post-intervention study examined whether implementation of Kangaroo Mother Care in Bertha Calderon Hospital in Managua improved health outcomes for mothers and children and reduced the length of hospitalization, deaths and costs? Data were collected throughout FY11, and in September 2011 Dr. Broughton traveled to Nicaragua to work with the HCI team to analyze the data and begin write up of the final report. This report will be completed in the first quarter of FY12.

Nicaragua: Cost-effectiveness of a Program to Improve Clinical Quality and Retention of HIV Patients in Three MINSA Hospitals

This study compared a collaborative improvement effort to improving clinical quality and use of multidisciplinary teams to decrease hospitalizations and medications for opportunistic infections, loss to follow up, and deaths while improving clinical status of and visits attended by HIV patients with the business-as-usual strategy. Data for this study were collected throughout FY11, and in September 2011 Dr. Broughton traveled to Nicaragua to work with the HCI team to analyze the data and begin write up of the final report which will be completed in the first quarter of FY12.

Niger: Evaluation of the Effects of the Pediatric Hospital Improvement Collaborative on Malaria Care

This study examined the effect of a multi-faceted QI intervention on quality of malaria and pneumonia care in children ages 0-5 years in Nigerien public district hospitals, using a case-control pre and post intervention observational design. Preliminary analyses indicate significant improvements in the intervention group for assessment standards, as compared to the control group. However, fewer improvements were seen in diagnosis and treatment; clustering of cases within a few providers likely influenced these results. The report was written in FY11, and a final version will be available in FY12.

Niger: Sustaining Better Maternal and Newborn Care and Quality Improvement: Challenges and Successes

The final report for this study conducted in FY09 to FY10 was completed in FY11. The baseline for this study examined the extent of institutionalization of QI and better care practices from the EONC collaborative, and factors that facilitated or hindered institutionalization at site, district, regional and national levels. Findings were used to develop an “institutionalization change package” to be implemented by the Ministry of Health during 2010. Findings from the baseline study indicated that although the level of quality of care and QI implementation remain

near to levels during the collaborative, many inputs needed to maintain these results are precarious – large staff turnover, little support being offered from district level, etc. These factors, among others, have become the focus of the change package, which contains a list of suggested ideas to assure key elements for quality of care and use of QI methods at site level, to reinforce technical and organizational capacity of district and regional health managers to support QI activities, and to create an enabling environment (policy and strategies) for QI implementation at all levels of the health system. The study found that participating in collaborative improvement builds technical and organizational capacity to maintain gains in quality over time and builds QI skills needed to maintain quality of care. It further found that improvement focused on one technical area can build skills to apply subsequently to other technical areas. These results can help QI programs in other countries by providing leaders with key information about how to strengthen institutionalization within the context of collaborative improvement (or other QI approach) implementation. It suggests that a minimum set of QI activities can maintain gains in quality of care even in areas of high staff mobility; and that hospital management, district/regional leaders, and national level actors have specific QI roles to play to ensure maintenance of gains in quality and continued practice of QI.

<http://www.hciproject.org/node/1286>

Niger: Drivers and Costs of Institutionalizing Quality in Regional Health Systems

In FY11, HCI prepared a protocol for this study which will evaluate the drivers of costs and effectiveness of the MOH strategy for scaling up the Essential Obstetric and Neonatal Care (EONC) / Institutionalization of QI package to more maternities and managerial structures and determine the incremental cost-effectiveness of the MOH strategy comparing it to the pre-intervention (business-as-usual) strategy. Three regions will be examined: Tahoua, where HCI has provided support to improvement activities; Maradi, where HCI has provided technical guidance to institutionalize quality by without any supported operational activity; and Tillaberi, where there is an internal regional initiative without any HCI support or assistance. The study will be completed in FY12

Russia: Using Learning: Spread of Innovations across Teams in an MNCH Collaborative. Effects of an Interactive Website

To overcome communication barriers, HCI/Russia's "Improving Care for Mothers and Babies" project 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 QI teams can document and share their implementation of changes and results. The study examined the which effective changes were successfully spread, which spread techniques were most useful and effective in spreading effective changes, and how well teams document their tests of change on the web portal. It found that information about innovations in health care can be effectively shared through a structured Internet portal, even in countries with low computer literacy. However, this technology for spread of innovation is best used supplemental to learning sessions permitting in-person training and information sharing. HCI completed this study in FY11. A final version of the report will be available in early FY12. <http://www.hciproject.org/node/2488>

Russia: Utilization and Costs of an Interactive Website to Improve Maternal and Newborn Health Care

This study examined the level of use and the development and maintenance costs of the interactive MNCH website used in Russia as part of the QI intervention. It found the website cost a total of \$161,000 over a 30-month period and that during the 28 months the internal website was live, it attracted 24,000 visits. The open access part of the website hosted 29,000 visits over 12 months and the combined number of downloads was 49,000. The study concluded that the website appeared to be an important contribution to the dissemination of information on QI and care standards for Russian-speaking MNCH clinicians. The costs of maintaining the site are expected to be much lower in the future. The data collection and analysis for this report were done in FY11, and the report will be finalized in FY12.

Russia: Institutionalization in MNCH in Saratov, Orenburg, Tula, and Tver: Oblast, Rayon, and Facility-based Mechanisms for Sustainability

In FY11, HCI developed a protocol and tools for a study on QI institutionalization from QAP- and HCI-supported projects in Russia from 1998 to 2008. This study, which will evaluate institutionalized features of the project activities in five Russian regions (Saratov, Samara, Orenburg, Tula, and Tver) seeks to: 1) Describe the background, resources and barriers to QI implementation; 2) Determine the degree of QI institutionalization at facilities, rayons and regions; 3) Determine possible "guides" of changes in existing QI practices of health care facilities; 4)

Describe the experiences of implementation and spread of healthcare practices in the participating facilities after the termination of HCI's involvement; 5) Develop experience of support and spreading of organizational and methodological decisions on QI at facilities, partner organizations, rayon and regional systems of health care management; and 6) Develop a list of improvement measures seeking to encourage implementation of QI methodology and its institutionalization in different health care facilities. Data collection tools for this study were tested in July 2011, and data collection is ongoing. This study will be completed in FY12.

Tanzania: Cross-sectional Examination of Service Delivery of Community Home-based Care

In FY11, protocols and data collection tools were developed and data collected for a baseline evaluation study in Tanga district to evaluate the current state of home-based care (HBC) to inform development of the framework and standards for HBC. This study addressed the following questions: 1) How has the widespread provision of ARVs changed the scope and mandate of HBC in Tanzania? 2) What is the current scope of services that are being provided by HBCs? 3) How have changes brought by provision of ARVs affected relationships and roles of NGOs in providing services to PLWA? 4) What are the expectations of patients, health workers and the MOH of the HBC standards of practice? (What are the essential services that should be provided?) 5) What are the deficiencies in the current HBC practices? This is a prospective cross-sectional study that examined HBC from the perspectives of the three principle components of the health system: the providers, patients and implementing partners. This report will be completed in FY12. <http://www.hciproject.org/node/3054>

Tanzania: Cost-effectiveness Analysis of the Quality Improvement Collaborative for the Most Vulnerable Children (MVC) Program in Bagamoyo, Tanzania

Little is known about the effectiveness and economic efficiencies of improvement collaborative in MVC programs. This study seeks to track changes in the wellbeing of MVC as measured by the Children's Status Index (CSI) from before implementation of the improvement collaborative until after the intervention has been completed. The incremental costs of the program will also be tracked over this period and a basic cost-effectiveness analysis will be performed. The study will also define who the stakeholders are in the delivery of MVC services. The study's goal is to produce actionable information to program decision makers to guide their support or otherwise for this intervention to address the needs of MVCs. It should provide information for implementers of the improvement intervention to facilitate more effective changes in future interventions. A draft report for this study was completed in FY11; the final report will be available in FY12.

Uganda: Assessment of the Introduction of the Chronic Care Model for HIV Care

This study of the implementation of the chronic care model in Uganda will assess changes in the level of knowledge of good chronic care practices for HIV/AIDS, diabetes and hypertension among healthcare providers; changes detected in the availability of drugs and equipment for chronic illnesses; and changes in patients' self-management support and community linkages for management of their chronic conditions. In FY11, HCI analyzed the preliminary data from the study. Data on fasting blood glucose were collected from 18 patients from a single outpatient clinic that was adopting the chronic care model for treatment of patients with HIV, hypertension, or diabetes mellitus (DM). The sample represents all of the patients diagnosed with DM for whom data were available for at least part of the 11 months from the baseline period through the beginning of the intervention and up until June 2011. The sample data showed statistically significant improvement based on blood glucose levels of DM patients. It is encouraging that some data were collected and augers well for more complete data collection in the future to allow for an accurate evaluation of the effectiveness of the intervention in managing chronic diseases over a relatively short time period in this context.

Uganda: Patients' Involvement in Quality Improvement Activities at HIV Care Clinics

This study examines to what extent clients are involved in improvement activities (problem identification, problem analysis, solution identification, and testing and implementing changes) at HIV/AIDS care clinics, and what are health care providers' and clients perceptions on clients' active participation in the process. Baseline data collection was completed for this study and analysis was begun in FY11, including a gendered analysis to examine any differences in access to and perceptions of services and involvement in improvement activities. It showed that providers and clients all agreed that client involvement, in some form, would be a positive enhancement to HIV services at their facilities. Examples included involving clients in identification of problems, administrative tasks, medication preparation and dispensing, and outreach activities, such as visiting clients in their homes and counseling those who do not know their status to get tested. Clients also felt that participating in improvement

activities would be empowering and give them a sense of ownership. As a result of these findings, it was decided to conduct a study to determine the extent to which selected interventions successfully engaged clients and providers together in improvement activities for HIV care in comparison to facilities that do not receive client involvement interventions. Drawing on recommendations from key informants in this baseline assessment and approaches used by other partners working in Uganda, a selection of interventions to increase client involvement were presented to the seven intervention sites in a learning session. Sites selected the interventions that best suit their facility's needs and resources. Facilities will work on these interventions for 6 months, after which endline data will be collected. A final report for this study will be completed in FY12. <http://www.hciproject.org/node/3038>

Uganda: An Evaluation and Cost-effectiveness Analysis of an Improvement Collaborative for Maternal and Newborn Care Services

Earlier HCI evaluations have shown that QI teams are able to achieve large increases in compliance with health care standards and health outcomes, across all care areas addressed. However most assessments of collaborative improvement have been uncontrolled pretest/post-test designs that cannot rule out other plausible causes for observed improvements. This study addresses this issue by comparing between maternal and newborn health outcomes in collaborative QI sites and control sites with no QI intervention—in this case a control arm receiving clinical content training (CCT) only. This study is examining whether intervention sites achieve better results (quality of care indicators and patient outcomes) than CCT sites; What is the incremental cost-effectiveness of the CQI/CCT intervention compared to the CCT-only intervention; and does the CQI/CCT intervention result in other effects compared to the CCT only intervention? This study began in FY11, and preliminary analysis was done in June 2011. Endline data collection for this study is planned for the second quarter of FY12, and a final report will be completed in FY12.

Uganda: Spread of Better Care Practices to Improve Coverage, Retention, and Outcomes of Patients Receiving ART Care in Limited-resource Settings

HCI completed finalized a research protocol and data collection instruments for a study of spread of better care practices in Uganda. The objective of this study is to gain a better understanding of how better care practices identified from demonstration collaboratives can be spread to and embraced by new sites at scale. This study will focus on finding what processes need to be implemented to introduce and ensure spread of better care practices to the new sites; how these processes can be improved; which best practices spread to new sites; what factors (including resources) facilitated or hindered the uptake of the better care practices; and whether these practices lead to better coverage, better retention and better outcomes for ART patients in the new sites. Data collection for this study was completed in FY11. The final report will be completed in FY12.

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

Uganda: Comparison of Coaching Strategies for Improvement Collaboratives in Ugandan HIV/AIDS Health Centers

HCI has been implementing centrally organized collaborative improvement, with coaching provided by technical experts outside the MOH hierarchy, in 113 sites in Uganda to improve health care for patients with HIV/AIDS since 2006. In 2008, HCI introduced a district-based coaching strategy using MOH district management structures, as an alternative to centrally organized coaching, to facilitate sustainability of the approach and encourage its institutionalization and greater country ownership in the Ugandan health system. This study's goal was to measure the relative efficiency and effectiveness of the two strategies in achieving improvements in process indicators. It found that there were mostly very small improvements in quality indicators for both district and central strategy sites but these were generally not associated quality improvement team performance. There were some differences in QI team performance in four of 13 team indicators but no difference in improvements between district and central strategy site. The district strategy was about 1/5th the cost of the central strategy and therefore much more efficient. HCI will prepare a version of this study for journal submission in FY12.

<http://www.hciproject.org/node/2992>

Uganda: Health Facility Factors Associated with Improvements in the Quality of HIV/AIDS Care at Health Facilities

HCI, through the collaborative approach of QI, has supported facilities at all levels from HCIIIs to regional hospitals to improve client coverage, retention, and treatment outcomes. Identifying and analyzing modifiable factors that impede the ART framework will enable us to identify areas where we can focus upon to achieve greater impact in

improving care. This study will evaluate facility-related factors that affect increases in patient coverage, retention, and outcomes for HIV/AIDS care. It will determine that performance in improving quality of services was not associated with most characteristics of the health facilities.

Uganda: Adaptability of Better Care Practices to Improve HIV/AIDS Care as They Spread Across Sites

26 facilities in the Northern Region of Uganda are participating in the collaborative improvement effort implementing the ART Framework. This study aims to understand how best practices to improve HIV/AIDS care are modified and adapted as they are spread across and implemented at these various sites, which are free to choose which changes they wish to apply and to modify those changes to suit their needs. This study will identify best practices that are being spread throughout the facilities and gather details of the implementation of specific changes. In FY11, data was collected for this study and analysis and report writing begun. This study will be completed in FY12. <http://www.hciproject.org/node/3051>

Uganda: Improving Enrollment of HIV+ Pregnant Women in Chronic HIV Care/ART Units at Health Facilities

This cross-sectional study seeks to evaluate the scale of the problem with enrollment of HIV+ pregnant women in chronic HIV care, identify the causes, and inform health facility interventions to improve the linkages between ANC and chronic care for HIV+ mothers. It will determine what proportion of HIV+ pregnant women registered in ANC units at health facilities are enrolled into chronic HIV care unit; what mechanisms the health facilities use to ensure successful linkage of HIV+ pregnant women to HIV care clinic; and what factors pregnant or recently (6 months) delivered women report that promoted their successful enrollment into chronic care from ANC units. A protocol and tools for this study were completed in FY11, and are awaiting local ethical approval.

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

Research on Institutionalization of QI Approaches and Results

The primary research activity related to institutionalization in FY11 was the collection and synthesis of data on measures of institutionalization of QI in 15 countries. Findings from this study were reported in the FY11 TO3 self-evaluation report. The analysis also incorporated findings from the three specific institutionalization studies that were completed in FY 11 in Honduras, Nicaragua, and Guatemala.

Research on the Design and Implementation of Improvement Collaboratives

HCI completed two studies on the design and implementation of improvement collaborative in FY11. A study on the “Sustainable Scale-up of Oxytocin for Prevention of Postpartum Hemorrhage in Ecuador” analyzed the implementation of active management of the third stage of labor using continuous quality improvement processes in Ecuador. This study described the initial reluctance of clinicians to adopt changes in clinical practice and how these were overcome during the life of the intervention. A manuscript from this study was submitted to the *International Journal of Gynecology and Obstetrics* in August.

A study in Uganda that began in FY10 and was completed in FY11 compared two different strategies for coaching as part of an improvement collaborative for HIV clinical care. The “central strategy” involved coaches from HCI and the central MOH while the “district strategy” utilized coaches from the district health office with less involvement from HCI or the central Ministry. The improvements seen in both strategies were about the same but the cost of the district strategy was only one fifth of the cost of the central strategy.

Research on Spread

In FY11, HCI completed four studies on spread. In Nicaragua, during the implementation of the spread phase, QI teams from the demonstration phase continued working within the collaborative and supporting those health units involved in the spread phase. This approach, coupled with continuous communications between sites, allowed for immediate transmission of knowledge to spread sites and

ongoing sharing of best practices and experiences. A study examining the spread of ProCONE in one health area in Guatemala revealed that most nurses participating in the spread phase were not aware of the document outlining the best practices as determined by the demonstration phase. The process of spread in this case was informal; indicating that future spread activities should be more deliberate. A further case study examining the spread process from one health center to three lower facilities in Guatemala found that the dissemination of best practices was a vertical process that did not allow for the critical use of data in decision-making. Finally, a global synthesis of learning on spread was prepared by Dr. John Ovretveit of the Karolinska Institute in Sweden. The first three studies are currently in review and will be available in early FY12. In addition, five spread studies are currently underway in Afghanistan, Ecuador, Mali, Russia, and Uganda, all of which will be completed in FY12.

Research on Cost-effectiveness of QI Approaches

HCI completed an economic analysis of an OVC program in Kenya. It showed improvements in child welfare as measured by the Child Status Index and an additional cost of US\$ 1.67 per child served for the implementation by HCI plus US\$ 0.16 per child in additional costs for the implementing partners. A study in Guatemala determined the additional costs and effects of ISO 9001:2008 certification for improving child health services. The additional cost was high, at over US\$ 38 per additional service delivered. A study of the costs and usage of the Russian MNCH website showed the development and operation of the site cost about \$170,000 over 30 months and that the site had over 53,000 visits and 49,000 visitors over that time. Maintenance of the site in the future is likely to be cheaper than this initial stage. Data collection for two economic studies in Nicaragua was completed in FY11: one for implementation of Kangaroo Mother Care in the largest maternity hospital in Managua and another for an HIV care improvement intervention. Preliminary results show both interventions to improve health and save money, making them highly attractive for the Nicaraguan Ministry of Health. Final reports will be available in FY12.

As noted in Table 14, two articles on economic analyses were published or accepted for publication in peer-reviewed journals. Several other economic studies currently underway began in FY 11 and will be completed in FY12. These include two in Afghanistan and one each in Cote d'Ivoire, Ecuador, Honduras, Mali, Niger, Tanzania, and Uganda.

Research on Other QI Methods Distinct from Collaborative Improvement

HCI completed a study on a “Post-Partum Family Planning Intervention for At-Risk Women in Masay and Rivas, Nicaragua”, which examined the impact of individual follow-up and a strengthened referral system for contraceptives. The study produced unexpected results, with more women in the control area using their family planning referral for contraceptives than in the intervention area, revealing that the reasons why women choose to use contraceptives and their adherence to these methods remain complex, involving a mix of individual behavior, community, and health system factors.

The R&E team worked closely with the HCI Guatemala team to examine the added value of using the ISO 9001: 2008 certification to improve the quality of maternal and child care in facilities where HCI has already implemented collaborative improvement. Preliminary results show that ISO certification showed a 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. The total incremental cost of ISO implementation was \$177,000 to provide services for approximately 4,600 ANC and child health visits.

Research on Barriers to Implementation

A study on obstacles to institutionalization of MNCH improvement in Niger was completed in FY11, and three new studies were started that investigate barriers to implementation of QI. In Uganda, one study on the use of expert patients in improving HIV and ART care quality found that these patients were underutilized and identified reasons for this. The findings led to another study that commenced in

FY11 on the effects of an intervention aimed at improving expert patient involvement, a topic that holds a great deal of interest for the Ugandan Ministry of Health because they consider this an efficient way of getting more HIV patients into long-term care. A study begun in Afghanistan will investigate barriers to implementing a new medical record system.

Building Capacity for Research and Support for Country Programs

The R&E team worked in close collaboration with HCI country teams in several ways: to complete study protocols, organize and execute data collection, analyze data, write reports and summaries, and disseminate results to stakeholders in country. This required dozens of teleconference calls and visits to all major countries except Cote d'Ivoire (due to political instability for part of the year) and the three southern African countries. Specific activities to improve country program research capacity are:

Presentations on economic analysis: Since this is a relatively new part of the QI field, training country staff in the principles of cost-effectiveness and other types of economic analysis and how to communicate their results was a priority. Presentations were made to country staff and implementing partner organizations in Afghanistan, Kenya, Nicaragua, Tanzania, and Uganda. This knowledge then empowered country teams to communicate cost-effectiveness results to USAID Mission staff and MOH officials.

Presentations on quantitative and qualitative analysis: As part of the drive for increased rigor in data collection and analysis, HCI headquarters staff provided in-person training in Afghanistan, Nicaragua, and Uganda on the appropriate use of quantitative and qualitative data.

Presentation on communicating results: Dissemination of results to in-country stakeholders and the international audience is crucial to ensuring widespread use of QI methods. Training on communicating results was conducted in Nicaragua, Uganda, and Russia to empower country teams to disseminate results from HCI research to broad-based country audiences.

Continuing capacity development for data use in QI: HCI refined and disseminated the improved quality indicator data collection tools and taught the country teams how to use them more effectively and efficiently in their routine tracking of program performance.

Collaborative data analysis: In at least four studies (in Nicaragua, Niger, Uganda and Guatemala), HCI used the data analysis phase of studies to teach country teams how to analyze their data and write the reports with the goal of producing research worthy of publication in peer-reviewed journals.

Directions for FY12

There are four main themes for R&E activities planned for 2012, each building on the studies already completed or underway. The first is improving the case for attributing the improvements seen in participating health care service units specifically to HCI's QI activities. In many cases, this involves comparing improvements in intervention sites to those in control or valid comparison sites. Another is building into the study design a way to ensure that the data collected are reliable and valid. This is crucial for QI because the process is mostly driven by data. The third theme is a continued emphasis on collecting and using data on the costs of HCI activities. This is to address the great dearth of economic studies in this field and provide stakeholders with actionable results about the efficiency of improvement interventions. Finally, the R&E team will continue to strengthen country teams' capabilities in qualitative research so as to better answer the questions of how and why improvement interventions work (or fail to) in different contexts. This includes a deeper analysis of institutionalization and spread of QI using methods adapted from anthropology and behavioral economics. The ultimate goal is to provide more high quality research addressing the most relevant questions in improvement science and to disseminate the results widely in journals outside the traditional QI publications, in addition to the reports available through the HCI Portal.

4.4 Technical Leadership and Communication

Overview of HCI's Program in FY11

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

Global Technical Leadership and Expanding the Use of Modern QI Approaches

During the year, HCI continued collaboration with many international organizations and partnerships, including the WHO Patient Safety Program, the Global Health Workforce Alliance, and the Global Development Alliance for Helping Babies Breathe. In March, HCI began to strengthen its partnership with the International Society for Quality in Health Care (ISQua) to link knowledge management efforts and contribute to ISQua's new knowledge-sharing resource on improvement, the ISQua Knowledge, www.isquaknowledge.org as well as sponsor a skill-building workshop on improvement and co-lead with WHO Patient Safety, a quality measurement summit at the ISQua annual meeting in Hong Kong in September 2011.

In March 2011, HCI assisted the Quality Assurance Department (QAD) of the Ministry of Health of Uganda to convene a meeting to develop a national strategy for improving the quality of health care for all Ugandans. The meeting was designed to bring together health systems leaders from Uganda as well as other countries and engage participants in thoughtful conversation around successful models and policies for improving health care at the national level. For all participants to be able to fully engage in informed conversation around the discussion questions, several recommended readings had been distributed to participants in advance. These readings provided insight into national QI efforts of various countries, including both successes and failures. Participants in the meeting included multiple MOH departments, major health sector donors, implementing partners from various health focus areas in Uganda, and representatives from Afghanistan, Niger, South Africa, and Sweden. Examples discussed in the meeting drew on experiences in Uganda, Afghanistan, Sweden, Niger, South Africa, Ethiopia, Russia, and Palestine. As a result of the meeting, the MOH Quality Assurance Department identified three next steps in moving forward: It will take a stewardship role in engaging top leadership and advancing improvement efforts; the national steering committee and core technical group for health improvement will be revitalized to advise the direction of efforts; and QAD will develop a national health strategy document to harmonize and integrate various QI initiatives and partners into MOH programs.

Advocate for the Adoption of QI Approaches

During FY11, HCI staff made 53 presentations in various formats at 19 international, regional, and national 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 15.

Table 15. Research and Evaluation: HCI participation in national, regional, and international conferences under TO3 in FY11

Conference	HCI Participation
Global Health Mini-University, Oct. 8, 2010, Washington, DC	Edward Broughton presented "Econoqualimetrics: The new science of evaluating efficiency in care improvement" Kathleen Hill co-presented on "Do No Harm: Promoting Evidence and Action for Respectful Care at Birth" for the TRAction Project, drawing on HCI and QAP work on cultural adaptation of delivery care
International Society for Quality in Health Care (ISQua), 27th International Conference, Oct. 10-13, 2010, Paris, France	M. Rashad Massoud presented the paper, "The power of collaborative improvement to increase compliance with standards and health outcomes: Evidence from 12 countries" for Lynne Franco Anthony Musisi Kyayise presented on "Improving Retention and Outcomes of HIV Patients in Uganda" as part of the session, "Improving quality in resource-constrained settings" Dr. Kyayise also presented the poster, "Working with District Health Teams to improve and sustain Quality of HIV Care" about the district health management collaborative in Uganda Tisna Veldhuijzen van Zanten presented the poster, "Certification of Health Services in Guatemala" for Rodrigo Bustamante
Regional Conference on HIV Infection and Immune Suppression, Oct. 21-22, 2010, St. Petersburg, Russia	Victor Boguslavsky presented, "Improving access to medical and social services to HIV patients and most-at-risk populations as a response to HIV epidemic in St. Petersburg. Results of six-year cooperation" HCI sponsored Bruce Agins of HIVQUAL International to present on the organization of HIV care in a presentation entitled, "HIV/AIDS in the City 2010: From New York to St. Petersburg"
Asia Near East SOTA, Oct. 26-28, 2010, Kathmandu, Nepal	M. Rashad Massoud presented the plenary presentation "Improving Health Care" Dr. Massoud co-presented with Bob Emrey of USAID at a "Mini-University" session entitled, Human Resource Management: Innovative Tools and Approaches for Human Resource Management
Salzburg Global Seminar. Reforming Health Care: Maintaining Social Solidarity and Quality in the Face of Economic, Health and Social Challenges, Nov. 7-12, 2010, Salzburg, Austria	M. Rashad Massoud made the presentation, "What Can Mature Health Care Systems Learn from System Reform Elsewhere?"
mHealth Summit, Nov. 8-10, 2010, Washington, DC	Nancy Newton presented the poster, "Use of mHealth for Quality Improvement in Guatemala"
International Union Against Tuberculosis and Lung Diseases, Nov. 11-15, 2010, Berlin, Germany	Samson Haumba presented the poster, "Implementing a quality improvement program in a TB diagnostic facility in semi-rural Swaziland"
Social Welfare Workforce Strengthening Conference, Nov. 15-18, Cape Town, South Africa	Dorcas Amolo made presentation on the work of the Care that Counts Initiative Dorcas Amolo and Gretchen Bachman of USAID convened a dinner meeting of USAID, UNICEF and other stakeholders to discuss the African Alliance for QI in OVC Programs
First Global Symposium on Health Systems Research,	Lynne Franco made the oral presentation, "Improving Health Systems: Analysis of the Results from 27 Improvement Collaboratives in 12 Countries"

Nov. 16-19, 2010, Montreux, Switzerland	
Africa SOTA, December 7, 2010, Cape Town, South Africa	Al Bartlett of USAID presented the HCI-prepared presentation, "CHW AIM Overview" at the African Health Officers State-of-the-Art (SOTA) meeting. Milton Amayun of USAID Benin presented on the results of the Benin field test of the CHW program functionality assessment tool, an earlier version of the CHW Assessment and Improvement Matrix.
Second Global Forum on Human Resources for Health/Prince Mahidol Award Conference 2011, January 25-29, 2011 Bangkok, Thailand	Maina Boucar, COP of URC West Africa, and Dr. Saidou Ekoye, a Niger MOH official, were nominated for an Award for Excellence for the Niger HR collaborative and a Special Recognition Award for individual achievement and recognized at the Forum. A poster on the Niger HR collaborative was presented at the conference. Lauren Crigler, Tana Wuliji and Alison Wittcoff also attended the conference.
2011 International Forum on Quality & Safety in Healthcare, April 5-8, 2011 Amsterdam, The Netherlands	Maina Boucar made the oral presentation, "Challenges and successes in maintaining gains in quality of care and institutionalizing quality improvement in Niger." Edward Broughton made the oral presentation, "Cost-effective analysis of the essential obstetric care quality improvement intervention in Niger." Lauren Crigler made the oral presentation, "The Global Health Workforce Crisis - Issues and Solutions." Mirwais Rahimzai made the oral presentation, "Leading change from the frontline: an example from Afghanistan." He also participated in a special session with the Afghan MOPH delegation that was added to the conference program in Amsterdam. M. Rashad Massoud made the oral presentation, "Learning from failures." Suzanne Gaudreault and Humphrey Megere participated in the panel, "Kampala 2010 - Applying quality improvement to redesigning care to meeting the chronic nature of HIV/AIDS." M. Rashad Massoud chaired the session, "Patients managing their own chronic diseases – case studies from different countries," at which Alex Ario Riolexus of the Ugandan MOH presented. M. Rashad Massoud participated in the "Large-Scale Improvement Leaders Meeting." Victor Boguslavsky made the oral presentation, "Future of Distant Learning." Robert Kyeyagalire presented a poster entitled, "Improving HIV Clinic Efficiency through Improvement Changes in Storage and Retrieval of Patients' Files: A Case of the Data Management Collaborative in Uganda." Mabel Namwabira presented a poster entitled, "Improving Retention of Patients in HIV Care in Uganda." Edward Broughton presented a poster entitled, "Cost-effectiveness analysis of ventilator-associated pneumonia prevention in Nicaragua." Kate Fatta presented Dr. Jean N'Guessan's poster entitled, "Effects of Collaborative Improvement on PTMCT and ART indicators in Cote d'Ivoire: a comparative study." Diana Chamrad presented Lucie Nzian's poster entitled, "Improving community care for vulnerable children through a quality improvement process." Nicole Simmons presented a poster entitled, "Using an Internet Portal to Spread Innovation in Russia."
CORE Group Spring Meeting May 10-13, 2011, Baltimore, Maryland	Ram Shrestha made the oral presentation, "Compensating and Retaining Community Health Workers." Donna Bjerregaard of Initiatives made the oral presentation, "The CHW is Back!" Andrew Gall presented on "Health Equity in Practice: Cotopaxi, Ecuador" during the "Health Equity in Practice: Six key steps for programming and practical examples from the field" session. Ram Shrestha, Emily Treleaven, and Lani Marquez participated in the meetings of

	the CORE working groups to generate greater interest among PVO implementers in improvement approaches.
American College of Nurse-Midwives Annual Conference, May 23-28, 2011, San Antonio, TX	Annie Clark made two presentations: 1) An educational session for ACNM on Helping Babies Breathe, and 2) an International Round Table on Improving the Quality of Maternal/Newborn Care using the Improvement Collaborative Approach
Global Health Council Conference June 13-17, 2011 Washington, DC	HCI hosted an auxiliary event at the GHC meeting on June 14 to launch the CHW Central Community of Practice web site. Kathleen Hill presented on, "An assessment of NCD Health Services in the Europe and Eurasia Region: Opportunities and Constraints" during a one-hour panel session. Hernán Delgado led a roundtable discussion on, "School-Children Height Censuses to Monitor Chronic Malnutrition." Robert Kyeyagalire led a roundtable discussion on, "Cost-effective Analysis of the Data Management Collaborative in Uganda." Whitney Isenhower presented the poster, "Human Resources Improvement Collaborative improves maternal care in Niger" on behalf of Maina Boucar and Lauren Crigler. HCI publications were displayed and CD-ROMs of HCI publications were distributed at the URC booth at GHC.
International Confederation of Midwives June 19-23, 2011, Durban, South Africa	Annie Clark co-facilitated a Home Based Life Saving Skills workshop at the Congress. Over 200 people attended her demonstration, which included Helping Babies Breathe. She also presented "Birth to 48 Hours Care" about a community and front line worker collaboration in the Ethiopia MaNHEP Project to improve survival of women and the newborn child in rural Ethiopia. Annie also demonstrated the use of the MamaNatalie (childbirth simulator) and Neonatalie (newborn resuscitation simulator) products at the Laerdal booth in the Exhibit Hall, as support to the Helping Babies Breathe Global Development Alliance, of which HCI is a partner. The Congress was attended by more than 3000 midwives from more than 100 countries.
Fighting Drug-Resistant TB in the 21st Century: Novel Approaches to Pharmaceutical Management, July 19-21, 2011, Johannesburg, South Africa	Tana Wuliji gave the plenary presentation, "Addressing pharmaceutical human resources challenges in TB control" at this regional MDR-TB conference organized by MSH's USAID Strengthening Pharmaceutical Systems Program, WHO, and The Stop TB Partnership.
Baby Friendly Neonatal Care Conference and Workshop September 14-16, 2011, Uppsala, Sweden	Svetlana A. Polyanskaya, Neonatologist at Tambov Regional Children's Hospital, presented on the work of the breastfeeding improvement collaborative: "The Baby-Friendly Hospital Initiative in Neonatal Units for Sick and Preterm Newborns in Russia"
International Society for Quality Assurance in Health Care (ISQua) Conference September 14-17, 2011 Hong Kong, China	Shawn Dick and Malcolm Daniel of NHS/Scotland led the full-day pre-conference workshop, "Designing a QI project with consideration for reliability" Jorge Hermida and Amy Stern both presented at the pre-conference "Indicators Summit" on "Lessons on national and international use of metrics to improve health systems" Mirwais Rahimzai presented on health care improvement in Afghanistan Herbert Kisamba made the oral presentation, "Meeting the Requirements for Team Learning In Quality Improvement: An assessment of Quality Improvement Teams in Western Uganda" Donna Jacobs made two oral presentations: "Initiation of Highly Active Antiretroviral Therapy for HIV-infected patients at the Primary Health Care level in South Africa" and "Quality Improvement of HIV and AIDS programs: experiences from South Africa (2007 – 2010)" Donna Jacobs also presented the poster, "Training for Quality Outcomes in South

	<p>Africa”</p> <p>John Byabagambi presented the poster, “Functionality of quality improvement teams at multi-level health facilities: experiences from Southwest Uganda”</p> <p>Rhea Bright presented the poster, “Adoption and Implementation of Performance-based Criteria for HIV Services:</p> <p>Jorge Hermida delivered the “ISQua Talk” entitled “Heal me but don’t kill my culture” as part of the launch of ISQua new web site, “ISQua Knowledge”</p>
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Also during FY11, HCI staff made 26 presentations on project results and approaches to USAID, host country, and cooperating agency staff, as part of the project’s efforts to promote awareness of QI approaches and results. These presentations are detailed in Table 16.

Table 16. HCI TO3 briefings and presentations for USAID, international donor, and cooperating agency staff in FY11

Date/Venue	Presenter(s) and Topic
October 15, 2010, OHA, Washington, DC	M. Rashad Massoud and Fazila Shakir presented on “Addressing Coverage by Improving Efficiency and Facility Capacity in Uganda” at the OHA Partners meeting
October 20, 2010, American College of Nurse-Midwives (ACNM), Washington, DC	Annie Clark, a member of ACNM, presented on HCI’s maternal-newborn care improvement work, including Helping Babies Breathe
October 22, 2010, URC, Bethesda, MD	Rashad, Jean Nguessan, Kathleen Hill, Youssef Tawfik, Jim Heiby, Carla Boussen, Jack Galloway and Erica Koegler gave briefing on QI and QI collaboratives for delegation from the MOH of Tunisia and Heba el Gazzar, the World Bank program manager, and two other Bank staff. The Tunisian delegation included the Director of Quality of Health Care and the Director of the Department for International Cooperation.
October 28, 2010, OHA, Washington, DC	Amy Stern and Rhea Bright presented by phone to from OHA on “PMTCT Services: Preliminary Results from the OGAC Indicators-Global Fund Field Tests”, describing the findings from the field tests in Namibia, Uganda, and Cote d’Ivoire.
Dec. 9, 2010: MCHIP headquarters	Rebecca Furth of Initiatives presented “Improving Community Health Worker Programs” to share the experience to date with the CHW AIM tool with MCHIP’s Technical Advisory Committee on CHWs. Ram Shrestha also participated, to share his experiences with CHW programs in Nepal.
January 10, 2011 World Bank, Washington, DC and with videoconference link to Baku, Azerbaijan	M. Rashad Massoud presented on: “Licensing, Accreditation and Quality Assurance to Improve Health Care: Lessons from International Experiences” as part of a seminar series on Good International Health Care Practices organized for the Ministry of Health of Azerbaijan and other institutions operating in the health sector of the country.
January 13, 2011, Office of HIV/AIDS, USAID, Washington, DC	Nigel Livesley and Suzanne Gaudreault presented on “The Chronic Care Model: An Innovative and Comprehensive Approach for Improving the Quality of Care for People Living with HIV”
January 24, 2011, URC, Bethesda, MD, with Belize & Nicaragua participants connected by Web Ex and conference call	At the “Debrief on the Belize Collaborative Improvement of Maternal and Neonatal Health Services” in Belize, Oscar Nuñez presented on “Collaborative Improvement of Maternal and Neonatal Health Services in Belize, Central America.” Luis Urbina presented on “Objectives, Expected Outcomes, Results and Recommendations/Next Steps.” Belize MOH officials were present at the meeting.
January 31, 2011, Center for Strategic and International Studies, Washington, DC	Victor Boguslavsky participated in a panel on as part of an international forum “Sharing Health: US-Russia Collaboration in the Health Sector.” He spoke about the main challenges affecting health system/sector reform in Russia today and potential avenues for collaboration with the American colleagues. The panel reconvened 12 Russian and U.S. experts in global health policy who had met in May 2009 to discuss key U.S. and Russian health areas, including infectious disease surveillance, health systems reform and chronic disease prevention and

	management. The January seminar served as a follow-on to the first CSIS meeting. The session was welcomed by Lisa Carty, Deputy Director and Senior Adviser, Global Health Policy Center and Andrew Kuchins, Director and Senior Fellow, Russia and Eurasia Program at CSIS, and was followed with an overview of global health priorities presented by Dr. Nils Daulaire, Director, Office of Global Health Affairs, US Department of Health and Human Services. On the Russian side, the speakers included Elena Dmitrieva, Director of Health and Development Foundation; Dr. Andrei Gerish, Deputy Head of Department at the Russian Federation Ministry of Education and Science; Dmitry Yanin, Director, Confederation of Consumer Societies; Dr. Vasili Vlassov, Professor, Higher School of Economics; Dr. Anna Korotkova, Deputy Director of the Federal Research Institute for Health Care Organization and Information; and Victor Boguslavsky.
May 31, 2011 The World Bank, Washington, DC	Kathleen Hill presented “Assessment of NCD Services for Women of Reproductive Age in Albania, Armenia and Georgia” to staff in the World Bank’s Europe and Central Asia Department
June 1, 2011 OGAC PMTCT Technical Working Group, Washington, DC	Amy Stern and Rhea Bright presented “PMTCT Services: Results from Global Fund Performance Criteria Field Tests.”
June 8-9, 2011 The Global Fund to Fights AIDS, Malaria and TB, Geneva, Switzerland	Amy Stern and Rhea Bright presented at the findings of the OGAC Indicators Field Tests to GFATM staff M. Rashad Massoud presented an overview of the USAID Health Care Improvement Project. Amy Stern and Rhea Bright presented on findings of the OGAC Indicators Field Test. Suzanne Gaudreault presented “Beyond Reporting: Building Country Capacity to Report on and Use Data.”
July 18, 2011, USAID, Washington, DC	Emily Treleaven, M. Rashad Massoud, and Taroub Faramand (consultant) presented on HCI’s Gender Integration Strategy to USAID gender advisors from OHA and PRH; USAID advisors provided feedback on HCI’s approach and tools
July 19, 2011, PATH, Washington, DC	Ram Shrestha presented “Strengthen Community QI through Utilizing Community Health System Network” at the workshop sponsored by the Infant and Young Child Nutrition (IYCN) Project, “What works for community nutrition programming?”
August 22, 2011 USAID, Washington, DC	Maina Boucar, Nigel Livesley, Humphrey Megere, Davis Rumisha, and Diana Chamrad presented at the USAID Africa Bureau on HCI’s work in Africa Victor Boguslavsky presented at the USAID E&E Bureau on HCI’s work in Russia Jorge Hermida presented at the USAID LAC Bureau on HCI’s work in Latin America
August 29, 2011, OGAC/Department of State, Washington, DC	Amy Stern presented findings from the field tests conducted in five countries to assess the feasibility and relevance of the Global Fund’s proposed “performance” or “essential” criteria for five HIV service delivery areas.
September 14, 2011, USAID, Washington, DC	Tamar Chitsahvili and Kathleen Hill presented on the results of the four-country E&E region NCD services assessment
September 14, 2011, USAID, Washington, DC	Tamar Chitsahvili and Kathleen Hill presented on the results of the four-country E&E region maternal newborn care services assessment
September 22, 2011, Catholic Relief Services (CRS), Baltimore, MD Services	Diana Chamrad presented a half-day working on applying QI methods to OVC programming for CRS headquarters and field staff
September 29, 2011, URC, Bethesda, MD	M. Rashad Massoud and Lani Marquez presented a briefing on HCI and on our Knowledge Management System for Dr. Najeeb Al Shorbaji and Dr. Cyrus Engineer of the WHO Knowledge Management Unit

Produce Technical Reports Describing QI Interventions and Their Impact

During FY11, one article on HCI TO3 results was published and a second article submitted for publication in peer-reviewed journals. In addition, we published 14 technical reports, 13 research and evaluation reports, 11 short reports and one toolkit describing QI interventions and their results from work implemented under Task Order 3. These publications are listed in Table 17. Several other manuscripts are in development and will be submitted for publication in FY12.

Table 17. Research and Evaluation: HCI TO3 journal articles, reports, and informational materials submitted or published in FY11

Articles Published or Submitted for Publication in Peer-reviewed Journals
Broughton E. The "how" and "why" of cost-effectiveness analysis for care pathways. Published in the September 2011 issue of the <i>International Journal of Care Pathways</i> .
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." Submitted 30 August 2011 to the <i>Int J Obs Gyn</i> . Manuscript number: IJG-D-11-00928. (Conditionally accepted for publication, 29 November 2011)
Technical Reports (Date Published)
Delgado HL. 2010. Bases para el Mejoramiento de la Situación de Desnutrición Crónica en Guatemala. <i>Informe Técnico</i> . Publicado por el Proyecto de USAID de Mejoramiento de la Atención en Salud. Bethesda, MD: University Research Co., LLC (URC). (October 2010)
Delgado HL. 2010. Situación y Tendencias de la Desnutrición Crónica en Guatemala. <i>Informe Técnico</i> . Publicado por el Proyecto de USAID de Mejoramiento de la Atención en Salud. Bethesda, MD: University Research Co., LLC (URC). (October 2010)
Delgado HL. 2010. Status and Trends in Chronic Malnutrition in Guatemala. <i>Technical Report</i> . (October 2010)
Delgado, H.L. Basis for Addressing the Situation of Chronic Malnutrition in Guatemala. <i>Technical Report</i> . (October 2010)
Tawfik Y, Segall M, Necochea E, and Jacobs T. Finding Common Ground: Harmonizing the Application of Different Quality Improvement Models in Maternal, Newborn, and Child Health Programs. 2010. <i>Technical Report</i> . (October 2010)
Dick S. 2011. Improving Health Care at the National Level: Insights from the Amman, Jordan International Policy Seminar. <i>Technical Report</i> . Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC). (February 2011)
Isenhower W, Kyeyagalire R. 2011. Chronic Care Design Meeting: Transforming Health Systems and Improving Quality Care for Chronic Conditions in Africa. <i>Proceedings</i> . Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC). (March 2011)
Koegler E. 2011. Insights from a National Health Care Quality Improvement Strategy Meeting. (June 2011).
Rondinelli I, Bouchet B, and Rimal N. 2011. Assessment of the Quality of HIV/AIDS Services in Malawi. (June 2011)
USAID Health Care Improvement Project. Rapport D'Activités de la Phase de Démonstration du Collaboratif d'Amélioration de la Qualité des Services et Soins VIH en Côte d'Ivoire [demonstration phase report in French] (June 2011)
Crigler L, Boucar M, Wittcoff A, Isenhower W, Wuliji T. Aligning and Clarifying Health Worker Tasks to Improve Maternal Care in Niger: The Tahoua Region Human Resources Quality Improvement Collaborative. <i>Technical Report</i> . (August 2011)
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La gestión de medicamentos en Cajas DOTS garantiza que el ciclo de tratamiento se complete en El Alto, Bolivia (2-page flyer) (September 2011)
Building on the successes of HIV and TB Programs to Improve Care for NCDs in Uganda (2-page flyer) (September 2011)

Gender

A major activity new technical leadership activity for HCI in FY11 was the development and implementation of a gender strategy for the project that would integrate gender considerations into our approach to improving health care in assisted countries. HCI engaged a gender consultant, Dr. Taroub Faramand of WI-HER, to carry out a needs assessment and identify current gender-related activities, relevant gender issues related to the project activities, opportunities to consider gender in the context of each country, and needs for training. In April 2011, the project developed a gender framework for guiding consideration of gender issues in intervention planning, implementation, and reporting. A checklist to promote the consideration of gender in project activities was developed. The framework and checklist were presented to headquarters and field offices and addressed in the project's FY12 work planning meetings.

In the last quarter of FY11, HCI field offices were supported in identifying local organizations to conduct staff trainings. The goals for the training were to build staff skills in gender considerations within the QI process, including identifying local gender disparities affecting project activities and health outcomes; conducting a gender analysis to inform new activity development, and collection and analysis of sex-disaggregated data. By the end of FY11, six field offices had conducted staff gender trainings (Uganda, Nicaragua, Swaziland, Honduras, Niger, and Mali), and trainings were planned in Tanzania, Afghanistan, Cote d'Ivoire, Kenya, and Russia. The project's gender strategy was presented to gender advisors from the USAID Office of HIV/AIDS, Office of Population & Reproductive Health, and the Global Health Bureau, who were supportive of HCI's approach and provided feedback on the strategy and Gender Integration Checklist.

Facilitate Articles and Broadcasts in Mass Media

In FY11, the project facilitated eight new mass media articles and broadcasts on the results of QI interventions. In Afghanistan, HCI facilitated three episodes of the "Families Health" television show which aired in May, August, and September 2011 and discussed improvement efforts supported by HCI on early initiation of breastfeeding, AMTSI, and post-natal care. Each episode featured the QI team from Medhi Hospital, explaining the QI approach they implemented and the results in each area. 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. Other mass media articles included: one in the Guatemala City newspaper Prensa Libre in February 2011 about the Helping Babies Breathe regional training held in Guatemala; a conversation between Dr. Victor Boguslavsky, and former Senator Bill Frist on the US-Russia collaboration in health on the Center for Strategic and International Studies website; and a case study on applying QI to HRH management in Niger for the UNFPA's website in connection with the 2011 State of the World's Midwifery Report, launched in June 2011.

Support the Development of QI Training Programs

Through the end of FY11 under TO3, HCI has supported the creation of two graduate level training programs in QI: a QI curriculum for the new Kenya Methodist University Medical School, which opened in 2011, and a national curriculum for pre-service and in-service training in quality improvement that has been officially adopted by the Ministry of Health of Nicaragua. In 2012, the QI curriculum will also be incorporated into the medical and nursing school curricula of the National Universities in Managua and Leon.

During FY11, we explored interest in develop QI courses in Honduras (with the School of Medicine of the National Autonomous University) and in Kenya with Mount Kenya University, which has expressed interest in creating an African Institute for Continuous Quality Improvement as part of the school's core curriculum. We also began a new collaboration with regional organizations in East Africa to develop a competency framework and strategic framework for training in quality improvement for the region. We

anticipate that this new activity will result in additional QI courses developed in countries in the East Africa region in FY12.

Directions for FY12

In the third year of implementation of HCI TO3, the project will place even greater emphasis on the development of “knowledge products” and journal articles that synthesize key learning developed through improvement activities. HCI will expand staff participation in CORE Group activities and engagement with US NGOs that are members of CORE. HCI will design and co-sponsor a Salzburg Global Seminar in April 2012 to address key issues in improvement in developing countries. We will continue to develop HCI’s new partnership with ISQua Knowledge to provide online support to Hong Kong QI workshop participants to develop their improvement projects and contribute to other discussion forums on ISQua Knowledge. The project will also continue to work with Dr. Faramand to develop other tools and resources to support staff to better integrate gender as a part of the QI process and develop case studies and improvement reports documenting gender aspects in HCI’s work. We also plan to develop a series of e-Learning courses on improvement.

5 Performance Tracking Plan

Cumulative progress in meeting HCI TO3 performance targets through the end of FY11 is summarized in Table 18 by task order objective.

Table 18. Performance Tracking Plan: HCI TO3 cumulative achievements and activities planned through FY11

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in 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	
Performance target 1.1: 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>Target has been met:</p> <p>The SES Endline Evaluation report was completed and submitted to the COTR on September 30, 2010.</p> <p>The learning system standards were communicated to all HCI country teams through guidance issued by the HCI Director in September 2010; all HCI teams reported on their application of the learning system standards for both the FY10 and FY11 TO3 self-evaluation reports.</p>
Performance target 1.2: 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>Target has been met:</p> <p>A report summarizing the learning system standards and how they are implemented in all countries was submitted to the COTR on September 30, 2010.</p> <p>Progress on implementing the learning system standards by country was reported to the COTR during the project's January 2011 quarterly review meeting.</p>
Performance target 1.3: 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>Target has been met:</p> <p>A plan for ongoing analysis and synthesis of quantitative results from the learning system was submitted to the COTR on September 30, 2010.</p> <p>In FY11, HCI teams placed more emphasis on development of knowledge products that convey key learning derived from improvement activities, including specification of effective interventions. Technical reports produced in FY11 on HCI-supported work in Tanzania, Cote d'Ivoire, Nicaragua, and Guatemala summarized such learning and provided follow-on recommendations. These reports are listed in Table 14.</p> <p>Degree of improvement in key indicators by country was reported in the FY11 TO3 self-evaluation report.</p>
Performance target 1.4: Beginning with the submission of the Year One annual report for Task Order #3, the contractor will provide a comprehensive summary of	<p>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. Recommendations for follow-on actions are presented to host country officials through regular briefings and at workshops and conferences marking the conclusion of specific improvement activities.</p> <p>Recommendations for follow-on actions are presented to each funding Mission and USAID Washington office through country- and activity-specific end-of-year</p>

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
supported QI activities and the quantitative results of these activities, including analysis with follow-on recommendations.	reporting, Country Operational Plans (COPs), and HIV/AIDS Operational Plans (HOPs). The TO3 FY11 and FY12 annual work plans also summarized supported QI activities and follow-on steps.
Objective 2: Institutionalize modern quality improvement approaches as an integral part of health care in USAID-assisted countries	
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>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 are summarized in the HCI TO1 FY11 and TO3 FY11 self-evaluation reports in sections addressing "Progress toward Achieving Task Order Objective 2, Institutionalization".</p> <p>In addition, HCI completed in FY11 a number of country studies on the institutionalization of QI that address steps taken to support institutionalization and provide quantitative measures of the institutionalization of QI:</p> <ul style="list-style-type: none"> Niger: Sustaining better maternal and newborn care and quality improvement in Niger: Challenges and successes Honduras: Institutionalization of QI activities in demonstration and replication regions Nicaragua: Institutionalization and sustainability of QI in maternal and child care in the MOH system Nicaragua: Institutionalization and sustainability of QI in AMOCSA, a private sector health service delivery system
Objective 3: Expand the evidence base for the application of QI to human resources (HR) planning and management	
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>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, and September 29, 2011. Because this collaborative is being completed in the first quarter of FY12, the COTR has determined that no more six-month progress reports are required and that the final report on the Niger HR collaborative will serve as the final deliverable for this activity. The final report is expected to be submitted to the COTR by March 31, 2012.</p>
Performance target 3.2: During the first year of Task Order #3, the contractor	<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)</p>

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
will complete field-testing the current tool for monitoring community health worker performance in 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.	tool in Nepal, Benin, Ethiopia, and Zambia in FY09 and FY10. A revised version of the tool was published in April 2010 on the 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>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: 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. Consequently, this performance target has been fully met.</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>Under TO3, HCI has initiated two HR collaborative in high-burden AIDS countries: 1) HR Collaborative in Tandahimba District, Mtwara Region, Tanzania 2) CHW Collaborative in Oromia, Ethiopia Approaches to improve processes of district health management, pharmaceutical management and pharmaceutical care and the performance of district health management staff and pharmaceutical human resources will be developed and tested in two new activities in FY12: District health management collaborative in Lindi Region, Tanzania Pharmaceutical workforce management collaborative in Uganda</p>
<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>One study was completed in FY10 (impact of infant feeding counselor training in Tanzania) and five more studies are underway: 1) Niger documentation of HR collaborative's impact on quality of care 2) Study of incentives for traditional midwives in Guatemala 3) Uganda expert patient study 4) Assessment of the effectiveness of the CHW AIM tool for improving CHW program functionality in Zambia 5) Documentation of the Tanzania HR collaborative's impact on quality of care</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</p>	<p>Target has been met: This performance target was exceeded in FY10: 32 phase I improvement collaboratives were launched or completed under TO1 by the end of FY10. As of</p>

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
<p>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>the end of FY11, 15 additional phase I improvement collaboratives had been launched under TO3:</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, Morogoro 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) <p>Level of improvement achieved in these collaboratives through the end of FY11 was presented in the TO3 FY11 self-evaluation report. Collaborative profiles on these phase I collaboratives will be 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 addresses district-level health program management.</p> <p>The new Regional and District Health Management Team collaborative starting in October 2011 in Tanzania will focus on improving health management processes in the Lindi Region of Tanzania.</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 Morogoro ART/PMTCT collaborative 4) Tanzania EngenderHealth Infant Feeding Collaborative in Iringa

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
<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>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) Cote d'Ivoire ART/PMTCT spread collaborative <p>In FY12, HCI will prepare a report summarizing the application of the chronic care model to AIDS in African countries.</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 the design and implementation of improvement collaboratives.</p>	<p>One study was completed in FY10, two were completed in FY11, and four other studies are underway and will be completed in FY12:</p> <ol style="list-style-type: none"> 1) Tanzania: Evaluation of the Partnership for Quality Improvement (partner collaborative) strategy (completed in FY10) 2) Ecuador: Sustainable scale-up of AMTS (completed in FY11 and submitted for publication to the <i>Int J Obst Gyn</i>) 3) Uganda: Effectiveness of different coaching strategies on QI team performance (completed in FY11) 4) Guatemala: Strengthening the application of quality improvement for community level services for EONC (underway) 5) Guatemala: Descriptive study of QI team performance (underway) 6) Mali: Strengthening the application of quality improvement for community level services for EONC (underway)
Objective 5: Expand experience with the spread collaborative approach in USAID-assisted countries	
<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</p>	<p>HCI supported 10 phase II spread collaboratives under TO1; 10 new phase II (spread) improvement collaboratives have been initiated to date under TO3:</p> <ol style="list-style-type: none"> 1. Bolivia TB DOTS spread collaborative in El Alto, La Paz Province, serving a population of 900,000 2. Bolivia TB spread collaborative in the city of Cochabamba, serving a population of 620,000 3. Afghanistan maternal and newborn health facility spread collaborative in Parwan, Bamyan and Herat provinces, serving a population of over 690,000 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,

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
<p>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 (improvement) collaborative.</p>	<p>and Kostroma oblasts</p> <p>7. Russia spread collaborative on optimizing labor management through use of the partograph in 21 facilities in Kostroma, Yaroslavl, Ivanovo, Tambov, and Tula oblasts</p> <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, serving a population of 560,000</p> <p>In FY12, we expect to start at least one additional spread collaborative: in Mali, to spread the successful changes to deliver AMTSI and essential newborn care in the remaining facilities in Kayes Region and to neighboring Segou Region, covering an additional population of 1.6 million. (Projected completed number by end of TO3: 21)</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>HCI supported 6 studies on spread under TO1, has completed two more under TO3 through FY11, and has developed 12 additional studies under TO3:</p> <ul 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 (to be completed in FY12) 4) Russia: Spread of innovations in MCH collaboratives through a web portal (to be completed in FY12) 5) Uganda: Spread of better care practices to improve coverage, retention, and outcomes of patients receiving ART (to be completed in FY12) 6) Afghanistan: Evaluation of spread strategy to 3 new provinces (to be completed in FY12) 7) Guatemala: Spread of ProCONE best practices from health centers to health posts in San Marcos 8) Guatemala: Case study of spread from San Lorenzo health center to three peripheral facilities 9) Evaluation of the spread of EONC best practices from Niger to Mali 10) Nicaragua: Spread of innovations in MNCH to new teams 11) Bolivia: Evaluation of methods used to spread learning from the El Alto TB collaborative to new sites in Cochabamba 12) To be developed
<p>Performance target 5.3: By the end of the second year of Task Order #3 (September 2011), the contractor will submit a</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</p>

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
report summarizing the status of spread activities to date, including the findings of studies and evaluations and major knowledge gaps	and approved for publication on November 7, 2011.
Objective 6: Expand the experience base for other specific QI approaches	
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>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 or are underway under TO3 as of the end of FY11:</p> <ul 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 is in review by USAID. 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 is in review by USAID. 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 assessment is in preparation and will be discussed in a stakeholders meeting planned for April or May 2012. 7) Documentation of impact of OVC standards in Tanzania with Pact: The development of this case study was initiated in FY10, and a complete draft of the case study was prepared in FY11. The draft version is in technical review. 8) 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 will be published in the second quarter of FY12. 9) 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 has recently been completed. Following editing, it will be submitted to the COTR for final approval. 10) Cost-effectiveness analysis of OVC standards development and piloting in Kenya: This study was carried out in FY11, and the final report submitted to the COTR for approval in November 2011.

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
	<p>11) 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. Endline data collection took place in the first quarter of FY12.</p> <p>In addition, three new studies of applications of other QI methods are planned for FY12:</p> <ul style="list-style-type: none"> – Uganda: Evaluation of the application of the chronic care model for HIV care – Uganda: Evaluation of patient involvement in QI on HIV care – Impact of interventions to improvement the competency of skilled birth attendants in Nicaragua
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>Two studies are underway:</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>
Objective 7: Improve the cost-effectiveness of QI in USAID-assisted countries	
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>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>
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>In addition to the 15 KM studies that were completed under TO1, five additional KM intervention are underway or planned to be 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 2) Survey of users of the CHW Central site 3) Design of a Spanish-language community of practice for implementers of Kangaroo Mother Care 4) Evaluation of a Spanish-language community of practice for implementers of Kangaroo Mother Care 5) Best improvement report contest to increase outside submissions to HCI Improvement Database and interviews with the finalists to validate their submissions
Performance target 7.3: During the course of Task Order #3, the contractor	<p>Ten cost-effectiveness studies were carried out under TO1. Two new studies to improve the cost-effectiveness and efficiency of QI were completed in FY11 under TO3 and another nine are underway and will be completed in FY12:</p>

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
will carry out 15 studies and evaluations related to improving the cost-effectiveness of specific QI approaches or methodologies, including those carried out under Task Order #1.	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 submitted to the COTR for approval in November 2011) 3) Uganda: Cost-effectiveness of central level vs. District coaching strategy (underway) 4) Afghanistan: Cost-effectiveness of quality improvement in the context of EONC collaboratives in Balkh and Kunduz (underway) 5) Afghanistan: Cost-effectiveness of quality improvement in the context of hospital level improvement in Kabul (underway) 6) Costs of the Russian MCH website (underway) 7) Ecuador: Cost implications of spread strategy (underway) 8) Guatemala CEA of ISO versus collaboratives (underway) 9) Honduras CEA of referral system for pre-eclampsia 10) Nicaragua: Cost-effectiveness analysis of Kangaroo Mother Care interventions 11) Nicaragua: Cost-effectiveness analysis of QI interventions for HIV
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.	By the end of FY11, the HCI Portal had been accessed by 69,529 unique visitors. The Spanish maternal and child health web site (www.maternoinfantil.org) has had over 53,000 unique visits since its launch in FY09. As of the end of FY11, the KM system has received 56 acceptable submissions from outside the Task Order. By the end of FY11, HCI had received and responded to 207 requests for assistance through the various knowledge management websites supported by the project.
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 carried out in FY12, 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	To date under TO3, we have written confirmation from two international organization: 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

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
incorporate language that explicitly endorses QI as a strategy for achieving these objectives.	<p>In FY11, we held discussions related to adoption of QI policies with the following organizations:</p> <ul style="list-style-type: none"> – ChildFund International, with whom we developed a community IMCI improvement collaborative in Senegal. – REPPSI (Regional Psychosocial Support Initiative), to develop a module on QI for their distance learning program, Certificate in Community Based Work with Vulnerable Children and Youth – Catholic Relief Services, which requested that HCI lead a capacity-building workshop on QI for its field staff – CORE Group, which has established a new QI sub-group in its Social and Behavioral Change Working Group – Salzburg Seminar, which has agreed to support a Salzburg Seminar in April 2012 on improving health care in developing countries
<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>	<p>Target has been met:</p> <p>By the end of FY11, under TO1 and TO3 combined, HCI had published nine articles in peer-reviewed journals and 29 technical reports describing QI interventions and results. Under TO3 alone through FY11, HCI has published 10 technical and research reports and published or submitted two more journal articles:</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) 5) Sustainability of Improvements in Maternal and Child Care and Institutionalization of Continuous Quality Improvement in Nicaragua (May 2011) 6) Institutionalization of Continuous Quality Improvement in AMOCSA, a Private Health Care Provider in Chinandega, Nicaragua (May 2011) 7) The Partnership for Quality Improvement to Improve PMTCT and ART Services in Tanzania: Assessment of Results, Capacity, and Potential for Institutionalization (June 2011) 8) Aligning and Clarifying Health Worker Tasks to Improve Maternal Care in Niger (August 2011) 9) Post-partum Family Planning Intervention for At-risk Women in Masaya and Rivas, Nicaragua (August 2011) 10) Results from the Pilot Phase of an ART/PMTCT Improvement Collaborative in Cote d'Ivoire (September 2011) <p>New HCI journal articles on QI results developed under TO3 that have been published or accepted 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 AMTSI in Ecuador (conditionally

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
	accepted for publication in <i>Int J Obs. Gyn</i> in November 2011)
<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 and TO3 by the end of FY10. In FY11, we facilitated eight 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 (Judyh 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 HRH 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 HRH is on p. 116 of the 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. 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. 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. 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>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>Through the end of FY11 under TO3, we developed two graduate level training programs in QI:</p> <p>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.</p> <p>In Nicaragua, the HCI team has developed a national curriculum for pre-service and in-service training with the Ministry of Health and with the National Universities in Managua and Leon.</p> <p>During FY11, we explored interest in develop QI courses in Honduras (with the School of Medicine of the National Autonomous University) and in Kenya with Mount Kenya University, which has expressed interest in creating an African Institute for Continuous Quality Improvement as part of the school’s core curriculum. Dr. Stephen Kinoti of URC has been in discussion with the University’s</p>

HCI TO3 Performance Target	How the target has been by the end of FY11 or will be met in FY12
	<p>Vice Chancellor and the Chairman of the University Council, and confirmed in November 2011 while at the ECSA Health Ministers' Conference in Kenya that Mount Kenya University will incorporate CQI in all their core curricula for Physicians, Clinical Officers, Nurses, Pharmacists, Laboratory Technologists, and Pharmacy Technologists.</p> <p>In October 2011, HCI began a new collaboration with regional organizations in East Africa to develop a competency framework and strategic framework for training in quality improvement for the region. We anticipate that this new activity will result in additional QI courses developed in countries in the East Africa region.</p>

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