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HEALTH CARE  
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PROJECT



# USAID HEALTH CARE IMPROVEMENT PROJECT TASK ORDER 3



## FY10 ANNUAL PROJECT REPORT



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

Performance Period:

October 1, 2009–September 30, 2010

December 30, 2010

This annual project report was prepared by University Research Co., LLC (URC) 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.

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*Front cover:*

A community health worker and program staff in Benin discuss ratings for their program as part of the field test of the Community Health Worker Program Assessment and Improvement Matrix (CHW AIM) tool. HCI developed the tool to help implementers rapidly identify areas to strengthen based on best practices and guide action planning for improvements in community-level service delivery. *Photo by Lauren Crigler, Initiatives Inc.*

Training on provider-initiated HIV counseling and testing for provincial and district tuberculosis care providers in Nam Dinh, Vietnam, where HCI assists provincial, district and facility staff to improve the quality of TB and TB-HIV services. *Photo by Hien Le, URC.*

Dr. Guillermo Echeverría, Administrative Vice Minister of Health of Guatemala, presents the plaque acknowledging International Organization for Standardization (ISO) certification to Dr. Anibal Orozco, Director of San Pedro Sacatepéquez Health Center. The health center was certified as meeting ISO 9001:2008 quality management standards for maternal and neonatal health services. HCI is supporting the Ministry of Health of Guatemala to achieve ISO 9001:2008 certification for both clinical care and key administrative and financial management processes. *Photo by Mónica González, URC.*

A social service worker in Nevsky District of St. Petersburg engages with a group of HIV-infected mothers and their babies to discuss common concerns and needs. Providing social services for HIV-infected mothers and their babies in the home is one result of HCI's work with the city's Committee on Social Policy and district-level departments of social protection to link social services for families affected by HIV with the medical care system. Social service case management for HIV-infected mothers has now been institutionalized in all districts of St. Petersburg. *Photo by Vera Pavlyuchenko, Center for Social Protection of Families, City of St. Petersburg, Russia.*

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



# Table of Contents

LIST OF TABLES AND FIGURES.....	ii
ABBREVIATIONS .....	iv
<b>EXECUTIVE SUMMARY.....</b>	<b>vii</b>
<b>1 INTRODUCTION.....</b>	<b>1</b>
<b>2 COUNTRY AND REGIONAL TECHNICAL ASSISTANCE.....</b>	<b>3</b>
AFRICA.....	3
2.1 CARE THAT COUNTS INITIATIVE TO IMPROVE QUALITY OF PROGRAMMING FOR ORPHANS AND VULNERABLE CHILDREN .....	3
2.2 KENYA .....	5
2.3 MOZAMBIQUE.....	7
2.4 NAMIBIA .....	8
2.5 SOUTH AFRICA.....	11
ASIA .....	15
2.6 AFGHANISTAN.....	15
EUROPE.....	21
2.7 RUSSIA .....	21
LATIN AMERICA AND THE CARIBBEAN.....	28
2.8 BOLIVIA.....	28
2.9 GUATEMALA .....	30
2.10 HONDURAS .....	35
2.11 LATIN AMERICAN KANGAROO MOTHER CARE.....	39
2.12 NICARAGUA .....	40
<b>3 USAID GLOBAL HEALTH ELEMENT AND CORE-FUNDED ACTIVITIES .....</b>	<b>46</b>
3.1 MATERNAL, NEWBORN, AND CHILD HEALTH.....	46
3.2 HIV/AIDS .....	48
3.3 HEALTH WORKFORCE DEVELOPMENT.....	55
3.4 TUBERCULOSIS .....	58
<b>4 COMMON AGENDA ACTIVITIES.....</b>	<b>61</b>
4.1 PROJECT MANAGEMENT .....	61
4.2 KNOWLEDGE MANAGEMENT .....	63
4.3 RESEARCH AND EVALUATION.....	66
4.4 TECHNICAL LEADERSHIP AND COMMUNICATION.....	74
<b>5 PERFORMANCE TRACKING PLAN.....</b>	<b>79</b>

## List of Tables and Figures

Table 1. Contribution of HCI TO3 field activities to the Millennium Development Goals .....	1
Table 2. South Africa: Improvement in targeted program indicators .....	14
Table 3. Russia: Key system changes developed in HCI-support HIV collaboratives in St. Petersburg .....	24
Table 4. Bolivia: TB program improvements developed in El Alto in FY10 .....	29
Table 5. Guatemala: Comparison of compliance with child preventive health care standards in CCTP+QI and CCTP-only health centers, 2010 .....	35
Table 6. Change concepts being applied in field testing of HCI's ART Framework.....	51
Table 7. Ethiopia: Actions planned to improve CHW engagement .....	57
Table 8. HCI research and evaluation studies carried out under HCI TO3 in FY10.....	67
Table 9. HCI TO3 participation in national, regional, and international conferences, FY10.....	75
Table 10. HCI TO3 journal articles, reports, and informational materials submitted or published in FY10.....	76
Table 11. Briefings and presentations for USAID, international donors, and cooperating agency staff under HCI TO3, FY10.....	78
Table 12. HCI TO3 performance tracking: Cumulative achievements through FY10.....	79
Figure 1. Namibia: Improvement in medical injection safety and waste management indicators, baseline measures in 2005 compared to levels in September 2010.....	10
Figure 2. South Africa: Number of antenatal clients receiving HIV counseling and testing services, 2nd quarter FY07 – 4th quarter FY10.....	13
Figure 3. South Africa: Number of TB patients receiving HIV counseling and testing services, 1st quarter FY09 – 4th quarter FY10.....	13
Figure 4. Afghanistan: Proportion of vaginal deliveries for which partogram was completed, Nov. 2009 - Sept 2010(icts), October 2009 to May 2010.....	17
Figure 5. Afghanistan: Proportion of vaginal births for which 3 AMTSL elements (Oxytocin given at 1st minute after delivery, cord traction, uterine massage) were performed, Nov. 2009 - Sept. 2010 .....	17
Figure 6. Afghanistan: Average compliance with essential newborn care standards (drying and wrapping, umbilical cord care, and immediate breast feeding), Nov. 2009-Sept. 2010 .....	17
Figure 7. Afghanistan: High-impact interventions that are the focus of the Kabul Maternity Hospital Collaborative .....	19
Figure 8. Afghanistan: Improvement in correct use of the partograph, Kabul Maternity Hospital Collaborative, April-September 2010.....	20
Figure 9. Russia: Number of blood samples on CD4 and viral load care taken in three districts, St. Petersburg, Feb.–Sept. 2010 .....	23
Figure 10. Russia: Public portal launched in September 2010 on <a href="http://www.healthquality.ru">www.healthquality.ru</a> .....	27
Figure 11. Bolivia: TB cure rate after six months of treatment.....	29
Figure 12. Guatemala: Compliance with AMTSL in San Marcos (demonstration sites) and seven additional health areas (expansion sites), Aug. 2007-July 2010.....	31
Figure 13. Guatemala: Compliance with immediate newborn care standards in San Marcos (demonstration sites) and seven additional health areas (expansion sites), Aug. 2007-July 2010.....	32
Figure 14. Guatemala: Trends in community ProCONE indicators in 16 prioritized districts in seven expansion health areas (304 interviews with pregnant women and 166 interviews with community representatives in 180 communities).....	32

Figure 15. Guatemala: Compliance with case management standards for premature infants, 16 hospitals through May 2010 and 8 hospitals in June 2010.....	33
Figure 16. Guatemala: Improvements in family planning indicators in the new demonstration collaborative in Zacapa health area, April 2010 versus May-June 2010.....	34
Figure 17. Honduras: % of women with an obstetric complication (hemorrhage, pre-eclampsia/eclampsia, or endometritis) who were managed according to SSH standards, 15 hospitals in 11 health regions, Jan.-Sept. 2010.....	36
Figure 18. Honduras: % of newborns with a neonatal complication (asphyxia, prematurity or sepsis) who were managed according to standards, 15 hospitals in 11 health regions, Jan.-Sept 2010.....	37
Figure 19. Honduras: Mean % of QI teams who feel competent to perform the QI task (at least one member reporting ability to do the task without difficulty).....	38
Figure 20. Nicaragua: Implementation of 4 AMTSL steps has helped to reduce post-partum hemorrhage (PPH) cases in 9 hospitals in the EONC spread collaborative, Jan 2009-Sept. 2010.....	41
Figure 21. Nicaragua: Reduction in severe asphyxia at birth, 13 hospitals participating in the EONC complications spread collaborative, Jan. 2008-Sept. 2010.....	42
Figure 22. Nicaragua: Increase in use of IUD among post-partum women at discharge, Jan. 2009 (27 facilities) – Sept. 2010 (53 facilities).....	43
Figure 23. Nicaragua: Decrease in the rate of ventilator-associated pneumonia (VAP) in the Intensive Care Unit at the Manuel de Jesus Rivera Children’s Hospital, October 2008- October 2010 ....	44
Figure 24. Nicaragua: Applying the ART framework for improving care of people with HIV, ART collaborative sites in Chinandega, Rivas, Masaya, RAAS and Leon, January 2009 – September 2010.....	45
Figure 25. Mali: Percentage of deliveries receiving all three key elements of AMTSL in 41 sites participating in the facility MNH collaborative in Kayes Region, October 2009-November 2010.....	47
Figure 26. Implementation of the ART Framework, Sabasaba clinic in Tanzania (May 2008 – August 2010).....	50
Figure 27. WHO Chronic Care Model.....	52
Figure 28. Uganda: Palliative care collaborative status.....	53
Figure 29. Tanzania: Baseline health worker engagement scores in Mtwara region, July 2010.....	56
Figure 30. Vietnam: Increased HIV counseling and testing among TB patients in Hai Duong Province, 2009-2010.....	59
Figure 31. Increased TB suspect referral and case detection from non-TB health care facilities to the Provincial TB and Respiratory Disease Hospital, Nam Dinh Province, 2009-2010.....	60
Figure 32. Resources most often accessed on the HCI Portal in FY10.....	64
Figure 33. HCI learning system standards.....	74

## Abbreviations

AAP	American Academy of Pediatrics
ABC	Abstinence-Be Faithful-Condoms
AED	Academy for Educational Development
AIDS	Acquired immunodeficiency syndrome
AIM	Assessment and improvement matrix
AME	Annual medical examination
AMTSL	Active management of the third stage of labor
ANC	Antenatal care
APHI	Afghanistan Public Health Institute
ART	Antiretroviral therapy
ARV	Antiretroviral
BGH	Bureau for Global Health
C&T	Counseling and testing
CBO	Community-based organization
CBT	Computer-based training
CCP	Center for Communication Programs
CCTP	Conditional Cash Transfer Program
CD-ROM	Compact disk read-only memory
CDC	Centers for Disease Control and Prevention
CEA	Cost-effectiveness analysis
CHAI	Clinton HIV/AIDS Initiative
CHMT	Council Health Management Team (Tanzania)
CHW	Community health worker
CPT	Cotrimoxazole preventive therapy
COTR	Contracting Officer's Technical Representative
CQI	Continuous quality improvement
CRESAC	Regional Health Accreditation and Assessment Center
CRS	Catholic Relief Services
CSI	Child Status Index
CT	Counseling and testing for HIV
DOH	Department of Health (South Africa)
DOTS	Directly observed therapy, short course
DSW	Department of Social Welfare (Tanzania)
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EONC	Essential obstetric and newborn care
FHI	Family Health International
FP	Family planning
FY	Fiscal year
GBH	Global Health Bureau
GF	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHWA	Global Health Workforce Alliance
HBB	Helping Babies Breathe
HBC	Home-based care
HCI	Health Care Improvement Project
HCW	Health care worker
HCWM	Health care waste management
HIV	Human immunodeficiency virus
HQ	Headquarters

HR	Human resources
IC	Infection control
ICD	International Classification of Diseases
ID	Infectious disease
IEC	Information, education, and communication
IHI	Institute for Healthcare Improvement
IMCI	Integrated management of childhood illness
IPC	Infection prevention and control
IPT	Isoniazid preventive therapy
IS	Injection safety
ISO	International Organization for Standardization
JSI	John Snow Inc.
KM	Knowledge management
KMC	Kangaroo Mother Care
LAC	Latin American and Caribbean
LQAS	Lot Quality Assessment Sampling
M&E	Monitoring and evaluation
MCH	Maternal and child health
MCHIP	Maternal and Child Health Integrated Program
MDG	Millennium Development Goal
MDR	Multidrug-resistant
MINSA	Ministry of Health (Nicaragua)
MMAS	Ministry of Women and Social Action (Mozambique)
MNCH	Maternal, newborn, and child health
MNH	Maternal and newborn health
MOH	Ministry of Health
MOHSS	Ministry of Health and Social Services (Namibia)
MOPH	Ministry of Public Health (Afghanistan)
MSH	Management Sciences for Health
NDOH	National Department of Health (South Africa)
NGO	Nongovernmental organization
NHTC	National Health Training Centers (Namibia)
NISG	National Injection Safety Group (Namibia)
NTCP	National Tuberculosis Control Program
NTP	National Tuberculosis Program
OB/GYN	Obstetrician-gynecologist
OGAC	Office of the Global AIDS Coordinator (Department of State)
OHA	Office of HIV/AIDS
OI	Opportunistic Infections
OVC	Orphans and vulnerable children
PAC	Provincial AIDS Center (Vietnam)
PAHO	Pan American Health Organization
PDSA	Plan-do-study-act cycle
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)
PISAF	<i>Projet Intégré de la Santé Familiale</i> (Integrated Family Health Project) (Benin)
PLWHA	Persons living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission of HIV

PPH	Post-partum hemorrhage
PPM	Public-private mix
ProCONE	Promotion of essential obstetric and newborn care (Guatemala)
PSI	Population Services International
QA	Quality assurance
QI	Quality improvement
QIP	Quality improvement project
QMS	Quality management system
QRM	Quarterly review meeting
RAAN	North Atlantic Autonomous Region (Nicaragua)
RAAS	South Atlantic Autonomous Region (Nicaragua)
RH	Reproductive health
RHTC	Regional Health Training Centers (Namibia)
SADEC	Southern Africa Development Community
SES	Standard Evaluation System
SILAIS	Local Integrated Health Care System (Nicaragua)
SSH	Secretariat of Health (Honduras)
STD	Sexually transmitted disease
STI	Sexually transmitted infection
TA	Technical assistance
TB	Tuberculosis
TBD	To be determined
TOI	Task Order 1
TO3	Task Order 3
TOT	Training of trainers
TWG	Technical working group
UNICEF	United Nations Children's Emergency Fund
URC	University Research Co., LLC
USAID	United States Agency for International Development
USG	United States Government
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

## Executive Summary

University Research Co., LLC (URC) and its subcontractor team completed the first year of implementation of the USAID Health Care Improvement (HCI) Project Task Order 3 on September 30, 2010.

The HCI Task Order 1 contract is one of two global HCI Task Orders implemented by URC during FY10, both sharing the same objectives as the overall HCI IQC: HCI Task Order 1 (TO1), the original global task order, ran concurrently with HCI TO3 throughout FY10. Some countries that had been funded through HCI TO1 in FY09 moved entirely into funding through HCI TO3 in FY10; other countries continued receiving HCI support exclusively through TO1; and still others received support through both global task orders during the year.

During FY10, HCI provided technical assistance through Task Order 3 in 12 countries (Afghanistan, Bolivia, Guatemala, Honduras, Kenya, Mali, Mozambique, Namibia, Nicaragua, Russia, South Africa, and Vietnam) and conducted research in four more: Ecuador, Ethiopia, Niger, and Zambia. HCI assistance in Afghanistan, Guatemala, Honduras, Mali (Maternal and Child Health), Mozambique, Namibia, Care that Counts Initiative (programs serving orphans and vulnerable children), Russia, and South Africa received both TO1 and TO3 funding during FY10. This report describes only the activities funded through TO3.

The country assistance programs implemented through HCI Task Order 3 began the fiscal year at full speed, since most had already been receiving HCI assistance through Task Order 1 in FY09. The one country program that was new to HCI in FY10 was implemented in Kenya, but built on technical support that had been provided in FY09 through the core-funded Care that Counts Initiative. New research activities were begun in Ethiopia (documenting factors leading to Communities of Excellence in support for vulnerable children) and Zambia (evaluating the effectiveness of the Community Health Worker Assessment and Improvement Matrix). All other HCI TO3 activities represented a continuation of work begun under TO1.

Most field programs that had been implemented through HCI TO1 in FY09 expanded their activities in FY10 under TO3. In Afghanistan, HCI began to spread the maternal and newborn health improvement collaborative to three new provinces. In Kenya and Mozambique, pilot testing began of standards that had been developed with HCI support in FY09, involving multiple implementing partners in several regions of each country. In Russia, organizational improvements that had been tested and refined in the city-wide spread collaboratives in St. Petersburg to improve the quality of HIV/AIDS, TB-HIV, and social support services for HIV-infected women and their children were presented to Federal authorities in Russia for development into guidance for other regions. In Guatemala, the community essential obstetric and newborn care (EONC) collaborative spread to eight more regions, and an important milestone was reached with the certification of central level budgeting and administrative processes and clinical care in one health center as meeting ISO 9001:2008 standards for quality management. In Nicaragua, better care practices in family planning, infection prevention and control, antiretroviral therapy, and HIV counseling and testing were spread to most of the country's 17 regions.

In addition to technical assistance to country institutions, we made important progress in the implementation of several key areas in the HCI statement of work: completion of the field testing of the Standard Evaluation System for documenting project-supported QI activities; introduction of new learning system standards in all HCI-supported QI programs; completion of field testing of the community health worker performance evaluation tool; and the development of a new human resources collaborative in Tanzania, incorporating lessons from the Niger human resources collaborative implemented under TO1.

Spread of improvements and shared learning were key topics of HCI TO3 research in FY10. We also conducted four studies on institutionalization of QI: finalizing the Niger study and then adapting the tools and conceptual framework to apply them in Honduras, Nicaragua, and Tanzania. Studies on QI team performance were conducted in Guatemala and Uganda, and we began the design of a number of new cost-effectiveness studies that will be completed in FY11.

Also under TO3, we published 17 technical and research reports and two quality improvement training workshop participant manuals and conducted five technical briefings for USAID and cooperating agency staff. Staff participated in the technical program of seven international, regional, and national conferences in FY10, making 26 presentations on QI approaches and results.

Two new areas of work were developed under TO3 in FY10 that promise to be important directions for the project moving forward. The first is the application of the Chronic Care Model to HIV/AIDS and other major chronic conditions that are challenging developing country health systems. An international meeting convened by HCI in Uganda in the third quarter of FY10 laid out the key issues that must be addressed in the redesign of developing country health systems to enable the efficient and effective management of long-term illnesses. The second is the expansion and consolidation of our work to apply QI methods to community-level services. We added a full-time expert in community health to the HCI team to help us further develop QI approaches applied to community-based services and provide technical leadership for this rapidly growing element in our country work programs.

# 1 Introduction

This first Annual Project Report for Task Order 3 of the USAID Health Care Improvement Project summarizes the project’s key activities and results during the first year of implementation: October 1, 2009 through September 30, 2010.

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

As part of our country work planning and reporting, we also recognize how improvement activities contribute directly and indirectly to reaching the Millennium Development Goals (MDGs), particularly Goals 4–6. Since these goals are the prevailing global framework for measuring the improved health outcomes from donor-funded programs, the value of assessing our contributions to goal attainment is clear. 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 FY10 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
<b>MDG 1:</b> Eradicate Extreme Poverty and Hunger	<b>Guatemala:</b> Reduce child malnutrition in children under two years by expanding access to and improving the quality of growth monitoring and promotion services <b>Kenya:</b> Improve quality of services targeting orphans and vulnerable children (OVC) in the areas of food and nutrition, shelter and care, and economic strengthening <b>Mozambique:</b> Improve the quality of OVC services in the areas of food and nutrition, shelter and care, and economic strengthening
<b>MDG 2:</b> Achieve Universal Primary Education	<b>Kenya:</b> Increase school enrollment for vulnerable children affected by HIV through introduction of evidence-based education standards <b>Mozambique:</b> Increase school enrollment for vulnerable children affected by HIV through introduction of evidence-based education standards <b>OVC Care that Counts (Ethiopia):</b> Increase school enrollment for vulnerable children affected by HIV through introduction of evidence-based standards in the area of education
<b>MDG 4:</b> Reduce Child Mortality	<b>Afghanistan:</b> Reduce neonatal deaths by improving quality of care at public and private health facilities, as well as community-based health services <b>Guatemala:</b> Reduce neonatal and child health mortality by improving integrated preventive health care for children under six covered by the Conditional Cash Transfer Program and by increasing immunizations among children under two years <b>Honduras:</b> Improve essential newborn care services through institutionalization of continuous quality improvement (CQI) and reduce case fatality from pneumonia and diarrhea in children under five years <b>Nicaragua:</b> Reduce neonatal mortality from sepsis, asphyxia, and respiratory distress; reduce case fatality from severe pneumonia and diarrhea cases among children seen in hospitals; identify and treat infections during pregnancy; and prevent and control hospital nosocomial infections <b>OVC Care that Counts (Ethiopia, Kenya, Mozambique):</b> Improve the quality of programs providing health, food and nutrition, social protection, and psychosocial support services <b>Russia:</b> Reduce infant mortality by expanding services to prevent child abandonment by developing a model for medical and social support for HIV-infected mothers and their newborns

<p><b>MDG 5:</b> Improve Maternal Health</p>	<p><b>Afghanistan:</b> Improve delivery care quality at public and private health facilities, as well as community-based health services</p> <p><b>Guatemala:</b> Reduce maternal (and neonatal) mortality by scaling up best practices in essential obstetric and neonatal care at the primary, secondary, tertiary, and community levels and by improving access to and the quality of family planning services</p> <p><b>Honduras:</b> Ensure quality of EONC services by institutionalizing CQI and improve obstetric and neonatal emergency referrals</p> <p><b>Mali:</b> Increase the percentage of skilled deliveries, reduce postpartum hemorrhage, and improve the quality of obstetric care at the facility and community levels</p> <p><b>Nicaragua:</b> 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; and improve management of family planning programs</p>
<p><b>MDG 6:</b> Combat HIV/AIDS, Malaria and Other Diseases</p>	<p><b>Bolivia:</b> Increase detection of new tuberculosis (TB) cases and TB cure rates by improving the quality and coverage of TB control activities, including sputum sampling and lab services</p> <p><b>Kenya:</b> Improve OVC effectiveness to mitigate the impact of HIV/AIDS on children and families</p> <p><b>Mozambique:</b> Improve OVC effectiveness to mitigate the impact of HIV/AIDS on children and families</p> <p><b>Namibia:</b> 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><b>OVC Care that Counts (Cote d'Ivoire, Ethiopia, Kenya, Mozambique, Tanzania):</b> Improve health care for vulnerable children</p> <p><b>Russia:</b> 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</p> <p><b>South Africa:</b> Improve HIV prevention, care, and treatment services; expand linkages between communities and facilities through home-based care organizations; improve PMTCT, counseling and testing, TB/HIV, and ART services</p> <p><b>Vietnam:</b> 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>

## 2 Country and Regional Technical Assistance

### AFRICA

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

##### Overview of HCI's Program in FY10

Main QI interventions/ activities	What are we trying to accomplish?	Scale of intervention
Support USG country teams and their implementing partners to improve quality of their programs for orphans and vulnerable children (OVC)	<ul style="list-style-type: none"> <li>▪ 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</li> <li>▪ Build understanding and buy-in towards the science of improvement in Asia, based on Care that Counts experiences in Africa</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sub-Saharan Africa</li> <li>▪ Asia</li> <li>▪ Haiti</li> </ul>
Gather evidence on the impact of services standards on the quality of care	<ul style="list-style-type: none"> <li>▪ Demonstrate that applying outcome-based service standards makes a difference in organizational practices, children's well-being, and human resource engagement</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cote d'Ivoire</li> <li>▪ Mozambique</li> <li>▪ Tanzania</li> </ul>
Strengthen communication about quality improvement among OVC Program stakeholders	<ul style="list-style-type: none"> <li>▪ Build the QI capacity of champions (leaders/facilitators) and other implementing partners through exchanges</li> <li>▪ Strengthen the QI champion network based on sharing of experiences</li> </ul>	<ul style="list-style-type: none"> <li>▪ Worldwide</li> </ul>
Coach the development of the African Quality Improvement Alliance for vulnerable children	<ul style="list-style-type: none"> <li>▪ Transition the QI support work from HCI to an African-based institution</li> <li>▪ Develop African ownership of the OVC QI process</li> </ul>	<ul style="list-style-type: none"> <li>▪ Africa</li> </ul>
Communities of Excellence: Identify core competencies of communities to provide coordinated care to vulnerable children and families	<ul style="list-style-type: none"> <li>▪ Develop an illustrative definition of coordinated care</li> <li>▪ Delineate core competencies and community capacity needed to provide coordinated care</li> <li>▪ Identify possible communities of excellence</li> <li>▪ Develop networks to promote exchanges among other communities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ethiopia</li> </ul>

#### Main Activities and Results

HCI's support for the Care that Counts Initiative in FY10 shifted to TO3 funding as of May 2010, with the exception of the development of the e-learning modules, which continued under TO1 funding, and the Communities of Excellence activity, which was funded under TO3 all year.

#### Support USG country teams and their implementing partners to define and improve quality of OVC programs

Care that Counts was tasked by USAID to assist with sharing the standards development process and how to organize for quality improvement for OVC programs with implementing partners in Asia. In June 2010, several discussions took place with the USAID Office of HIV/AIDS (OHA) that led to revision of the objectives and scope proposed for this regional training. OHA is leading discussions with chairs of other USG Technical Working Groups (TWGs) on the plan for the meeting, which will include key experts in home-based care in the pursuit of strengthening family-centered programs. The new date for this regional meeting is being discussed by OHA with all potential participating country teams (India, Nepal, Thailand, Vietnam, Cambodia, and Indonesia). It is now anticipated that the Asia Regional

Training on QI for OVC Programs will be held in Cambodia after Country Operational Plans are completed.

### **Strengthen communication about quality improvement in OVC programs and exchange of best practices**

In May 2010, the OVC Task Force and HCI organized a brown bag lunch, “Taking Stock: Getting to Quality Care for Vulnerable Children and Families”. Beverly Nyberg, Senior OVC Advisor at the Office of the Global AIDS Coordinator (OGAC) explained in detailed the implications of the PEPFAR 2 Strategy for OVC programs and the importance of actually measuring how programs make a difference in children’s well-being. Kendra Blackett Dibinga, Senior Advisor for OVC Programs, Save the Children, shared the information about two other initiatives that are focusing on quality improvement for vulnerable children: the effort led by the Southern Africa Development Community (SADEC) to develop “a minimum package” and the early childhood development “package”. Participants engaged with the need to coordinate, share thinking and also harmonize efforts. HCI explained how the term “minimum package” can be counterproductive if it shifts the focus away from programming based on children’s and families’ needs. HCI also shared progress to date about the development of the African Alliance.

Care that Counts organized a quality improvement training in Kampala, Uganda in June 2010, which was facilitated by the Institute for Healthcare Improvement (IHI) and included as participants HCI OVC technical advisors from Mozambique, Kenya, Cote d’Ivoire, and Tanzania and government representatives from Mozambique, Kenya, Cote d’Ivoire, Tanzania, Nigeria and Malawi.

HCI’s Senior QI Advisor for OVC Programs made two poster presentations on Care that Counts results at the International AIDS Conference in Vienna in July 2010. During the conference, UNICEF requested that HCI review the regional OVC standards that had been developed by SADEC. She provided detailed feedback on the standards based on HCI’s country experiences over the past three years.

### **Coach the development of the African Quality Improvement Alliance for vulnerable children**

In May 2010, HCI briefed the USG OVC Task Force and OGAC on the progress of the development of the African Alliance for QI and the intention to have the Alliance hosted in Uganda at the Regional Centre for Quality Improvement, USAID requested HCI to cast a wider net and look for a social welfare institution that would be better suited to host the Alliance. HCI’s organizational consultant proceeded to explore other possibilities in South Africa and formally assessed three additional organizations that are seen as centers of best social work practices and children’s programs to determine their suitability to host the Alliance. The results of these assessments will be presented to the Alliance advisory committee at the regional Social Welfare meeting in Cape Town in November.

### **Communities of Excellence**

HCI was tasked by the USAID Africa Bureau with testing an approach that involves identifying “communities of excellence” that have successfully applied OVC service standards to improve quality of care or otherwise developed effective strategies to provide coordinated care for vulnerable children affected by HIV and AIDS: communities The communities must be already applying the science of improvement and demonstrating government leadership and civil society partnership to implement coordinated care. The expected outcome of this activity is a process and set of tools for defining, demonstrating, and measuring adequate community capacity to provide comprehensive coordination of care for mitigating the impacts of HIV/AIDS on children and their families.

In March, HCI hired a Senior Community Advisor to strengthen quality improvement activities at the community level; this advisor will work 25% of his time on the Communities of Excellence. Agreement was reached with USAID/Ethiopia to move forward with piloting the concept in Ethiopia within two

regions and two NGOs (ProPride in Dire Dawa and Mekdim in Debre-Zeit), in close collaboration with an Ethiopian research institution. Terms of reference for the Ethiopian research partner were developed. HCI’s Senior Community Advisor visited Ethiopia in June and July to recruit a local Project Manager and research organization and develop the study implementation plan. He also briefed the National OVC Task Force in Ethiopia on the concept of the Communities of Excellence study. Task force members asked that the study explore areas where the community can provide support and identify those areas where communities most need support from the outside.

### Directions for FY11

In FY11, HCI will continue to support national QI Task Forces and implementing partners to apply the Road Map for Quality Improvement of OVC Programs. A regional exchange will be held in Asia, and Care that Counts is expected to initiate support for two countries in Asia to engage in the QI process. HCI will carry out a QI standards development workshop in Haiti, complete the Communities of Excellence study in Ethiopia, and begin the transition of technical support for OVC quality improvement from HCI to the African Quality Improvement Alliance for Vulnerable Children. HCI will continue to gather evidence on the impact of standards and QI with the development of new cases studies on efforts in Kenya, Malawi, Mozambique, and Nigeria.

## 2.2 Kenya

### Overview of HCI’s Program in FY10

Main QI interventions/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"> <li>▪ Finalize the draft standards by incorporating all stakeholder views</li> </ul>	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"> <li>▪ The piloting will try to answer four main questions: 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?</li> </ul>	Four provinces have been identified with 7 districts participating: <ul style="list-style-type: none"> <li>▪ Nairobi – Kasarani and Westlands</li> <li>▪ Eastern – Meru North</li> <li>▪ Nyanza – Migori, Homa Bay and Nyando</li> <li>▪ North Eastern – Garissa</li> </ul>

### Main Activities and Results

#### Support the TWG to develop draft standards and incorporate all stakeholder views

Jointly with the Department of Children’s Services of the Ministry of Gender, Children and Social Development, HCI conducted a situational analysis to review the status of OVC programs in Kenya, with emphasis on determining whether the interventions make a difference in the lives of children. The study was conducted in four provinces: Eastern, Nyanza, Nairobi, and North Eastern Province.

In December 2009, HCI organized and facilitated a consensus-building workshop on behalf of Kenya’s Government and the Department of Children’s Services. During the workshop, the 45 participants agreed on steps to take to finalize the zero draft standards, including to have HCI review and polish the zero draft and share it with stakeholders for final review and feedback. As part of the review, one new service area was included which had not been developed during the standards workshop: Coordination and Continuity of Care.

A meeting of OVC QI champions was held in February 2010 to define how individuals and organizations would take the zero draft standards further for refinement. It was agreed in the meeting that each individual would share the zero draft with experts in particular service areas and their organizations and collect their feedback on the draft. Each service area was assigned to a group of people according to their interest and expertise and each group had a volunteer convener/chair person who agreed to consolidate the feedback to share with the larger group. In April, HCI helped convene a children's workshop in Nairobi to collect the views of children from Kenya's eight regions on the key components of the service standards. These views were later incorporated in the first draft of the service standards.

The OVC Technical Working Group led by the Department of Children's Services convened a two-day review meeting for the draft standards in April 2010, jointly with representatives from all the partner organizations. A review meeting was held in May 2010 with partners including government to consolidate in puts from the regions into the draft service. In June 2010, a team of monitoring and evaluation specialists attended a one-day meeting to identify indicators for the desired outcomes and the essential actions. These indicators were consolidated into the June draft of the OVC service standards. A meeting by the TWG in June endorsed the draft standards for piloting.

The TWG meetings have been critical for defining the direction of implementation and securing government and partner support for the QI process in Kenya. As a result of their engagement in the TWG, different partners have joined HCI staff in visiting the non-performing sites as part of supportive supervision. The TWG also lobbied for the inclusion of other line ministries, including the Ministries of Health and Education, in their forum. The two ministries play a critical role in OVC programming.

### **Gather evidence that standards are making a difference in children's lives**

Plans for piloting in the districts were finalized in the month of June 2010. Four provinces and nine organizations were chosen to participate in the piloting of the OVC QI standards based on the commitment expressed by the organizations to participate in the process to completion. These are: Nyanza Province, where the Academy for Educational Development (AED) and Catholic Relief Services (CRS) are implementers; Nairobi, where AED, the government, and Lea Toto are implementers; Eastern Province, where APHIA Eastern and Maua Methodist Hospital are implementers; and North Eastern Province, where three APHIA Eastern community-based organizations (CBOs) are implementers. Some of these organizations requested to be part of the piloting, while others were invited by the government. The government Cash Transfer project in one of the Nairobi districts also identified for piloting and will participate in gathering evidence.

A national training on QI methods for OVC programs was held in July 2010. HCI facilitated the training with support from two headquarters staff and MEASURE Evaluation. Besides gathering evidence on whether the service standards make a difference in the lives of children, Kenya will also track the costs of mainstreaming QI in OVC programs during the piloting period. HCI developed a tool and is supporting implementing partners in analyzing data collected with the tool.

Support supervision visits to all piloting sites were conducted in August and September 2010 jointly with officials from the Ministry of Gender, Children, and Social Development. The visits helped guide the direction of program implementation in each site. By the end of September, Lea Toto, CRS/Catholic Diocese of Homa Bay, Ripples International, Maua Methodist Hospital, and both of the AED-supported sites had conducted their baseline using the Child Status Index (CSI) tool. HCI also shared and oriented the partners and QI teams on a self-assessment tool developed by HCI to help partners identify their major implementation gaps and define ways of improving service delivery through strengthening effective referrals linkages with other services within their locality.

### **Directions for FY11**

The evidence-gathering process for the draft service standards will continue through March 2011. At that point, the draft service standards will undergo a validation exercise in the four provinces where

piloting took place (Nyanza, Eastern, North Eastern, and Nairobi). A final national level validation exercise will be held before the standards are finalized, launched, and disseminated to all districts. In FY11, HCI will to engage the new USAID partnership in QI (the APHIA Plus projects) in the improvement activities related to OVC services. We will develop QI job aids and a popular version of the service standards to facilitate their application by other partners; document best practices and lessons learned from the Kenyan QI experience; and roll out media campaigns on OVC QI, programming and service standards in collaboration with Population Services International and the Department of Children’s Services.

## 2.3 Mozambique

### Overview of HCI’s Program in FY10

Main QI activities	What are we trying to accomplish?	Scale of intervention
Strengthen the QI Task Force chaired by the MMAS	<ul style="list-style-type: none"> <li>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)</li> </ul>	Countrywide
Finalize the first draft of service standards	<ul style="list-style-type: none"> <li>Harmonizing across implementers and policy makers the development of outcome-based standards for services to mitigate the impact of HIV/AIDS on vulnerable children and families</li> </ul>	Countrywide
Gather evidence on draft service standards	<ul style="list-style-type: none"> <li>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 well being? What are the best practices to implement the standards</li> </ul>	Three regions with key implementing partners as identified by USAID and MMAS: Gaza, Zambézia and Cabo Delgado
Validate the service standards	<ul style="list-style-type: none"> <li>Results from the piloting will be integrated in the final version to be endorsed by MMAS</li> </ul>	Countrywide

### Main Activities and Results

HCI assistance in Mozambique was funded under TO3 for the second six months of FY10.

#### Strengthening the QI Task Force chaired by the MMAS

HCI provided support to the Ministry of Women and Social Affairs (MMAS) MMAS to conduct meetings of the QI Task Force and supported the MMAS in the process of incorporating stakeholder feedback into a revised standards document. In August 2010, HCI organized a QI training workshop for all organizations involved in the piloting of standards, including national and international NGOs and local government representatives.

#### Finalizing draft service standards

Under TO3 funding (beginning in April 2010), HCI supported the MMAS and QI Task Force to assimilate recommendations and feedback from experts and implementing partners and to organize the pilot testing of the standards. During the QI training, the QI Task Force decided to meet several days to revise the draft standards to include recommendation from the QI training participants. The final draft of the OVC standards was approved by the MMAS for pilot testing in September.

#### Piloting the draft standards

The QI Task Force decided to pilot the standards in Gaza, Zambezia and Cabo Delgado provinces (in the northern, central and southern regions of Mozambique) to make the piloting representative of the country as a whole. Gaza was selected because of its high prevalence rate of HIV and being so close to

the corridor; Zambezia, because it is a province in the center, where information about the realities and context of the center can be more easily collected; and Cabo Delgado, because it represents the reality of the northern region of Mozambique. The MMAS and QI Task Force elected to pilot test the standards simultaneously in the three regions. The objective of the pilot is to determine if the standards are doable and if applying the standards makes a difference in organizational practices (community partnership, access, efficiency, etc.), children’s wellbeing, and providers’ engagement and satisfaction. The following organizations were selected to participate in the piloting, using criteria developed by the QI Task Force:

- Gaza Province: Doullérs San Frontiére (Healers without Borders), FDC (Fundação para o desenvolvimento Comunitário) and Habitat for Humanity
- Zambezia Province: Save the Children and World Vision
- Cabo Delgado Province: Aga Khan Foundation

HCI developed a QI journal for use by the teams (based on a similar tool used in other HCI-supported countries) and translated the CSI to Portuguese for use by the teams to monitor child well-being. Following the August QI training, these organizations conducted their baseline assessments using the CSI and then began to build the capacity of the direct service providers to organize for improvement and gather evidence on standards. In addition, they have formed QI teams, made up of volunteers, local NGO/CBOs, and children’s representatives, that will operate at the service delivery level. The QI teams are tasked with implementing the service standards, monitoring their adherence to the standards, and identifying best practices and organizational changes to reach the desired outcomes as delineated in the standards.

### Directions for FY11

In FY11, HCI will work closely with staff of the MMAS and international NGOs (Habitat for Humanity, FDC, Healers without Borders, World Vision, Aga Khan Foundation and Save the Children) to develop their capacity to provide coaching support to districts and QI teams at the point of service delivery. Case studies of improvements made by QI teams will be developed. A national level meeting will be organized with the MMAS to share the results of piloting with other Ministries and organizations working in the area of care for vulnerable children (Ministries of Education, Health, and Justice; UNICEF, Plan International, Handicap International, HACL, HIV/AIDS Alliance, Action Aid, etc.). HCI will support the MMAS to incorporate the findings from the piloting into a revised version of the standards. Training in QI will be provided for implementing partners in three new provinces (Sofala, Manica and Tete).

## 2.4 Namibia

### Overview of HCI’s Program in FY10

Main QI activities	What are we trying to accomplish?	Scale of Intervention
Injection safety and waste management	<ul style="list-style-type: none"> <li>▪ To promote medical injection safety and safe management of health care waste</li> <li>▪ Technical review of the training of trainer manual</li> <li>▪ Train 26 TOTs for all the 13 regions</li> <li>▪ Conduct mentorship sessions for the trained TOTs</li> <li>▪ Conduct joint supportive supervision with the regional and district trainers and/or supervisors</li> <li>▪ Procure buffer stock of safety boxes for use during emergencies/stock-outs</li> <li>▪ Orient Medical Officers in quality assurance in injection safety priority given to rational use of medicines</li> <li>▪ Enhance implementation of behavior change strategies to reduce demand for and prescription of injections: Community involvement</li> </ul>	All regions

	<ul style="list-style-type: none"> <li>▪ Finalize and increase availability of health care waste management policy guidelines</li> <li>▪ Conduct a survey on the current situation of health care waste management to identify specific areas that require strengthening</li> <li>▪ Jointly with MOHSS develop a national and regional waste management plans for health care waste management</li> <li>▪ Establish and/or strengthen committees to monitor implementation of policy at regional, district and facility level</li> <li>▪ Build capacity of all health care workers in health care waste management</li> <li>▪ Ensure compliance/application of safe health care waste management practices in all health care facilities and disposal sites</li> <li>▪ Develop IEC materials and job aids on HCW management</li> <li>▪ Strengthen facility and district level monitoring and reporting systems for medical injection safety and health care waste management</li> </ul>	
Infection prevention and control	<ul style="list-style-type: none"> <li>▪ To improve health worker knowledge on infection control and prevention (IPC) and occupational safety</li> <li>▪ Finalize and ensure availability of infection control guidelines</li> <li>▪ Conduct a survey on the current practices that contribute to Hospital Acquired Infections and develop an IPC strategy</li> <li>▪ Establish/strengthen infection control committees at regional, district and facility level</li> <li>▪ Train health care workers on infection control and occupational safety</li> <li>▪ Strengthen the procurement and supply of IPC commodities</li> <li>▪ Develop IEC materials on IPC</li> <li>▪ Establish, supervise and strengthen site level and district monitoring and reporting systems according to MOHSS requirements for IPC</li> </ul>	Five regions, in 10 facilities (two facilities per region)

## Main Activities and Results

HCI support in Namibia in the first two quarters of FY10 was provided under TO1, and then under TO3 in the second half of the year. During FY10, HCI supported expansion of medical injection safety, waste management, and infection prevention improvements in all 13 regions as well as support for policy development in these areas. Through training, facility audits, and mentorship of District Implementation Teams, HCI has supported the Ministry of Health and Social Services (MOHSS) to create broad-scale awareness among health personnel of appropriate prescription practices, standard precautions for infection control, and the need to reduce the prescription of unnecessary and unsafe injections. HCI also worked with the MOHSS to finalize the national Quality Assurance Policy, which is awaiting completion of the ongoing restructuring of the MOHSS to adapt the policy to the new structure.

### Injection safety and waste management

The National Injection Safety Group (NISG), for which URC serves as the secretariat, is comprised of various stakeholders from the MOHSS, the private sector, and various PEPFAR partner organizations. The group meets quarterly to review progress made toward infection prevention and control, address emerging challenges, and share ideas from other countries. A key NISG accomplishment during FY10 was to incorporate injection safety and health care waste management indicators in the national supervision tool. The first supervision using the revised tool was conducted by MOHSS and other stakeholders in September 2010.

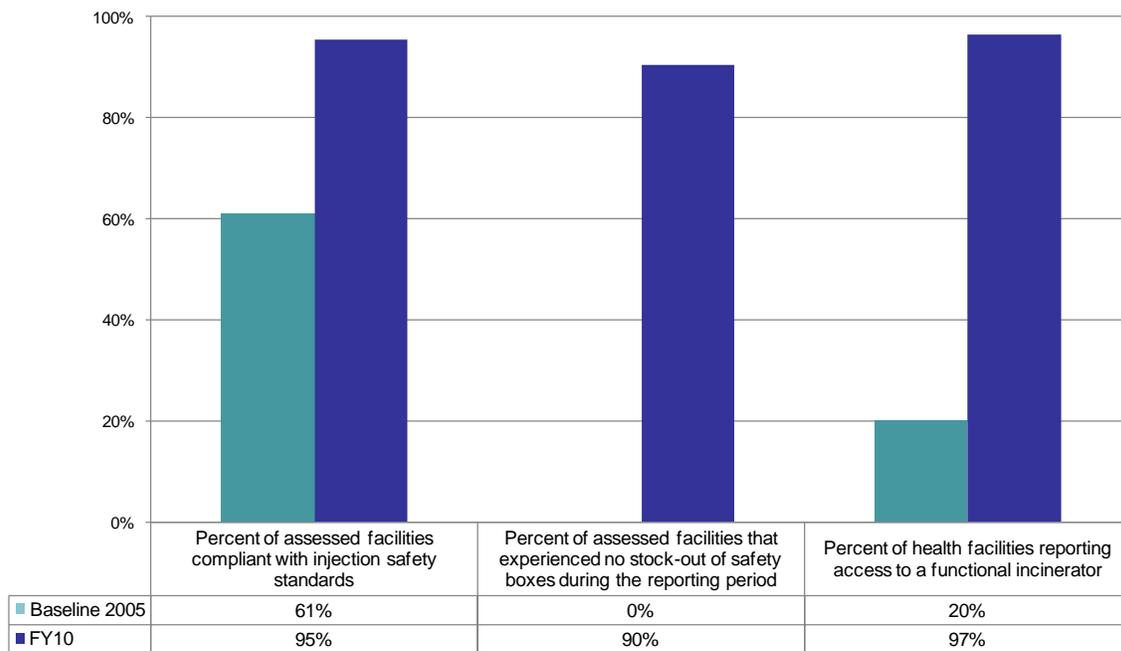
HCI provided support for training health care workers in the monitoring and evaluation of injection safety (IS) and health care waste management (HCWM) efforts, including installation of electronic systems of capturing IS-HCWM data to aid in data computation and facilitate reporting.

The supplies of injection safety boxes, personal protective equipment, and other related items that were formerly procured by HCI have been integrated in the government tendering system. HCI continued to

monitor stock levels of various commodities and strengthen the logistic system through training of health care workers and procurement officers in commodity forecasting, logistics and supply management to ensure continuous supply.

At the beginning of the project in 2004, the average number of doses administered per patient was 14.5. The aim of the project has been to keep this average to two and below and by the end of FY10, the average was 1.68 doses administered per patient. The program has been reaching out to the community and providers to address perceptions of superior efficacy of injections versus oral medications, and the belief that injections are necessary to be cured. Figure 1 shows decreasing number of doses administered per patient since 2005.

**Figure 1. Namibia: Improvement in medical injection safety and waste management indicators, baseline measures in 2005 compared to levels in September 2010**



Baseline 2005	38 facilities reporting out of 96 facilities supported
September 2010	176 facilities reporting out of 339 facilities supported

High levels of compliance with standards have also been maintained in the use of barriers when opening glass vials (90%), and injections are prepared in clean, designated areas in 99% of facilities reporting. Hand washing before and after injection procedures is also being observed by health care workers, with a compliance rate of 86% among facilities reporting. Compliance rates of over 90% were also observed in the discarding of needle and syringe without recapping. Segregation and proper disposal of health care waste is another area of HCI support. By the end of FY10, 97% of facilities reported access to a functional incinerator for disposal of sharps, and no facilities were re-using needle boxes.

HCI also supported training for community educators to conduct community outreach to spread messages related to injection safety, reducing unnecessary injections, and proper disposal of infectious waste produced in the community. HCI also developed posters on hand hygiene, waste management, and post-exposure prophylaxis and distributed them to the facility level. The total number of community members reached with injection safety messages since the beginning of FY10 is 29,387. Over the course of FY10, a total of 85 volunteers were trained to conduct awareness on injection safety and waste management at the community level in Karas and Khomas regions.

The National Waste Management Policy was approved and printed. It is now awaiting launch by the Minister of Health and Social Services in early FY11. The policy aims to prevent and reduce health risks associated with exposure to health care, household, radiation and other waste for health care workers, waste handlers and the public by promoting environmentally sound waste management practices and reducing exposure to toxic pollutants associated with waste combustion processes.

### **Infection prevention and control**

HCI also supported incorporation of infection prevention and control/waste management training into the national health training center curricula with a focus on the National and five Regional Health Training Centers (NHTC and RHCT). The NHTC and the RHCT are responsible for training various cadres of health staff like the nurse midwives, pharmacy assistants, and environmental health practitioners among others. Discussions have been initiated with the Polytechnic of Namibia and the University of Namibia for a similar exercise.

HCI supported the publication and national dissemination of the National Infection Prevention and Control guideline, which was officially launched on July 28, 2010 by the Deputy Minister of Health and Social Services, Ms. Petrina Haingura, and the USAID Mission Director, Mr. G. Gotlieb. This guideline provides standardized best practices for infection control procedures in the Namibian health care setting. The guideline addresses issues like hospital acquired infections, standard precautions, sterilization and decontamination of instruments as well as TB infection control.

### **Directions for FY11**

In FY11, HCI will work at the national level to transition the injection safety program to a technical assistance model that will be co-located at MOHSS. HCI will work with the MOHSS to strengthen integration of injection safety and waste management in pre- and in-service training institutions. The district infection control committees will also be strengthened to spearhead infection control activities at the district level. HCI will also continue to support capacity building of health care workers, concentrating at pre-service training institutions. At the regional level, HCI will work in collaboration with University of Stellenbosch Department of Infection Prevention and Control to conduct trainings for staff from the Central Sterilization Services Department, which plays a key role in IPC in Namibia relative to decontamination and sterilization. HCI will also finalize the review, printing and distribution of post-exposure prophylaxis and waste management guidelines and the quality assurance policy.

## **2.5 South Africa**

### **Overview of HCI's Program in FY10**

<b>Main QI interventions/ activities</b>	<b>What are we trying to accomplish?</b>	<b>Scale of intervention</b>
Increase quality of HIV prevention, care, and treatment services	<ul style="list-style-type: none"> <li>▪ Increase number of health care providers trained in QA/QI methodology</li> <li>▪ Increase number of facilities providing high quality PMTCT services</li> <li>▪ Increase number of facilities providing high quality VCT services</li> <li>▪ Increase number of facilities providing high quality basic health services for HIV-infected individuals</li> <li>▪ Increase number of facilities providing high quality TB/HIV services</li> <li>▪ Increase number of facilities providing high quality ART services</li> <li>▪ Increase compliance with guidelines in PMTCT and ART services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two million total population served by these facilities</li> <li>▪ 550,000 HIV patients covered</li> <li>▪ Five out of nine provinces in the country, serving 214 facilities (9% of all Primary Health Care facilities in the five provinces)</li> <li>▪ Thirteen of 52 (25%) districts covered by HCI staff</li> </ul>

Expand linkages between communities and facilities through work with home-based care organizations	<ul style="list-style-type: none"> <li>▪ Increase number of HBC organizations supported</li> <li>▪ Increase number of HBC workers trained on QA/QI methodology</li> </ul>	<ul style="list-style-type: none"> <li>▪ 10,000 HIV patients provided with home-based care</li> <li>▪ Six home-based care organizations in four provinces</li> </ul>
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## Main Activities and Results

The 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.

In the first six months of FY10, HCI provided direct support under TO1 to 214 facilities in South Africa. This assistance moved to TO3 funding in the third quarter of FY10. In the fourth quarter of FY10, the number of facilities supported was reduced to 203 (including 27 ART sites) due to the retirement of one of the HCI Coordinators. At the end of the year, due to funding shortfalls, the project terminated its direct support to the six home-based care (HBC) organizations and affiliated mobile clinics. By the end of FY10, 187 health facilities were supported by the project, six of which provide ART services.

### Increase quality of HIV prevention, care, and treatment services

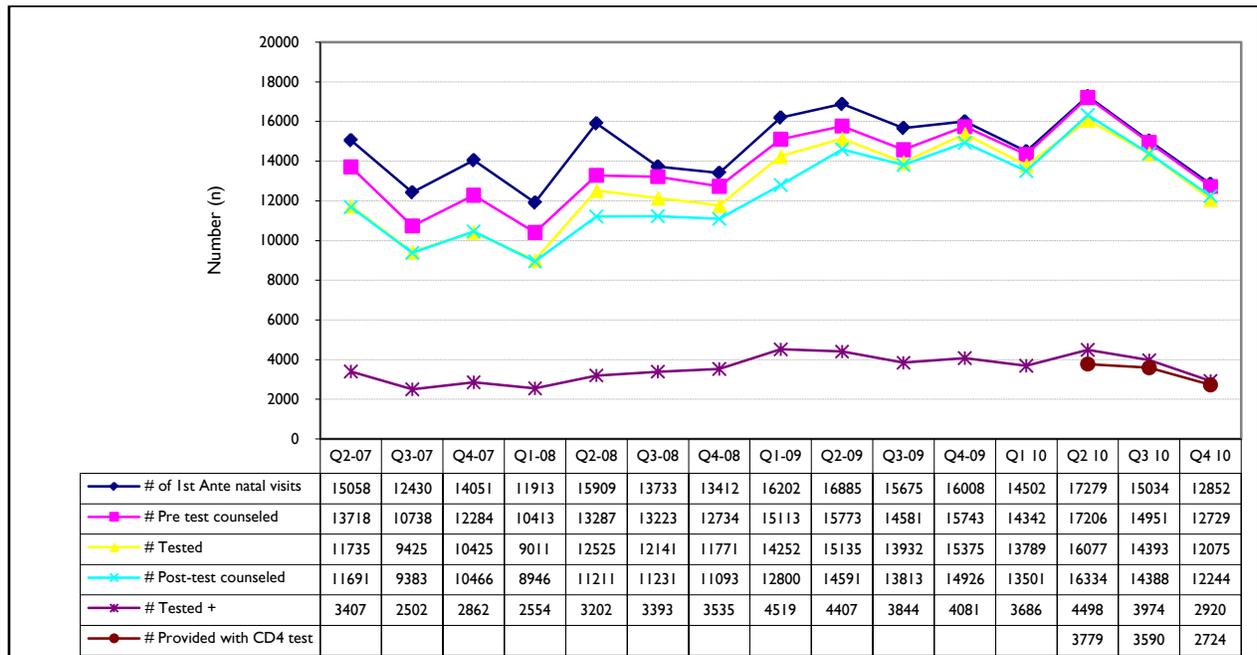
To ensure program sustainability and as previously agreed with the DOH, HCI handed over the ART extension program to the DOH in supported districts. The process was seamless with minimal disruption to service delivery to patients. Quarterly district feedback mechanisms are in place, complemented by monthly progress reports at each supported facility.

By the end of FY10, HCI-supported facilities continued to show excellent overall compliance with national HIV guidelines. The general HIV testing rate was above 95% in assisted facilities. As seen in Figure 2, counseling and testing uptake among first antenatal clients was also more than 95%, and the proportion of HIV-positive antenatal care (ANC) clients provided with a CD4 test increased from 84% to 93%. Furthermore, during FY10, HCI was involved with implementation of quality improvement activities as part of the government's accelerated PMTCT plan. In the last quarter of FY10, more than 91% of babies born to HIV-positive mothers were provided with Nevirapine at HCI-supported facilities.

Another area of improvement in FY10 was increasing TB screening in newly diagnosed HIV-positive patients. By the end of FY10, referrals for TB screening among newly diagnosed HIV-infected individuals in HCI-supported facilities had increased to 87% (n = 13,310), up from 45% (n = 7,372) in Q4FY09, after the introduction of a TB screening tool developed by URC's South Africa TB team. By the last quarter of FY10, almost all HCI-supported facilities had conducted TB risk assessments and were being supported by HCI to develop TB infection control plans. As seen in Figure 3, HIV counseling and testing among TB patients remained steady at around 60% (many TB patients in South Africa already know their HIV status and refuse further testing), but improvement was seen in the proportion of HIV-positive TB patients referred for CD4 count, from 83% in the Q2FY10 to 96% in Q4FY10. Table 2 reports on quality of care indicators that HCI helps facilities to monitor, comparing baseline values with the last value recorded in FY10.

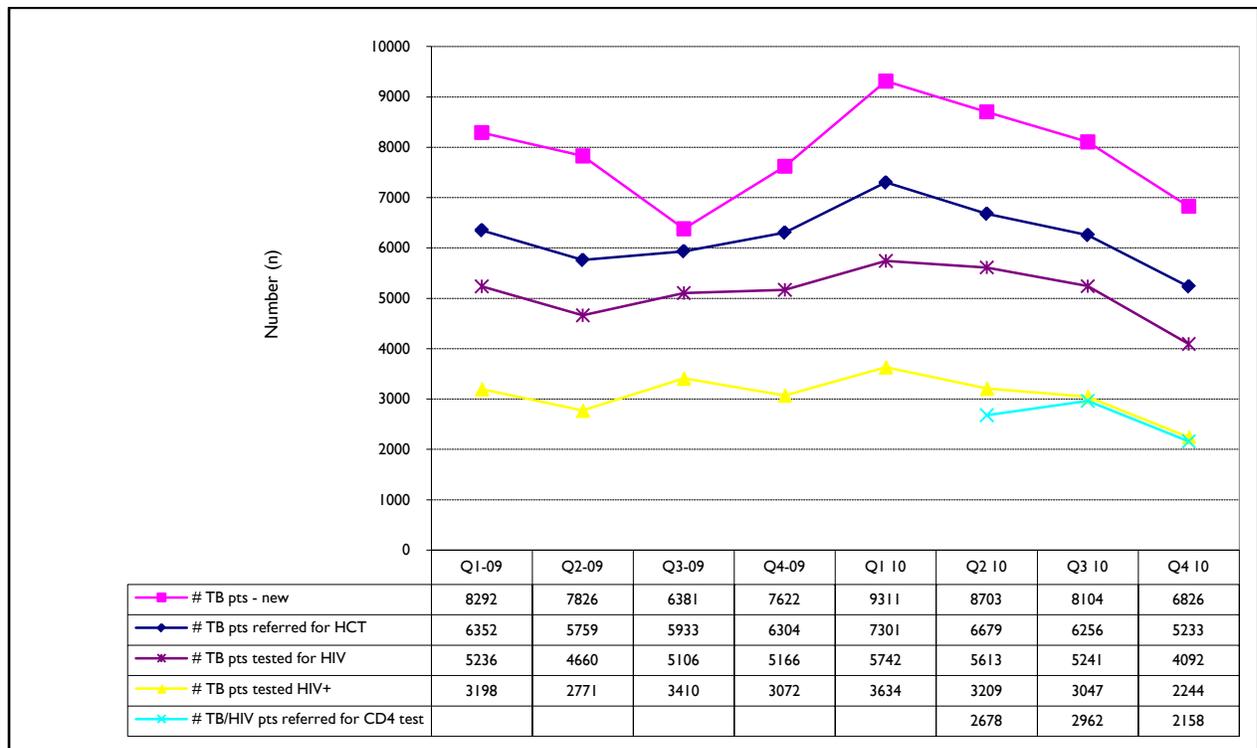
HCI also participated in the national HIV CT campaign, in all five supported provinces. HCI staff facilitated planning committee meetings, developed implementation plans, and liaised with all relevant stakeholders. This ensured that implementation and rapid scale-up of HIV counseling and testing proceeded as smoothly as possible in all supported areas.

**Figure 2. South Africa: Number of antenatal clients receiving HIV counseling and testing services, 2<sup>nd</sup> quarter FY07–4<sup>th</sup> quarter FY10**



\*Decline in number of patients in Q3 of FY10 was due to a reduction in the number of facilities assisted by HCI as a result of the retirement of an HCI coordinator as well as funding shortfalls experienced during Q4.

**Figure 3. South Africa: Number of TB patients receiving HIV counseling and testing services, 1<sup>st</sup> quarter FY09–4<sup>th</sup> quarter FY10**



\*Decline in number of patients in Q3 of FY10 was due to a reduction in the number of facilities assisted by HCI as a result of the retirement of an HCI coordinator as well as funding shortfalls experienced during Q4.

**Table 2. South Africa: Improvement in targeted program indicators**

Program	Indicator	Baseline value (indicate date and number of sites)	Achievement FY10 (indicate date and number of sites)	Difference	Duration of obs. (months)
PMTCT	HIV Pre-test rate ANC clients (%)	91% (120 sites; Q2'07)	99% (196 sites; Q4'10)	8%	45 months
	HIV Test rate among ANC clients (%)	86% (120 sites; Q2'07)	95% (196 sites; Q4'10)	9%	45 months
	CD4 test count rate among HIV+ ANC (%)	84% (196 sites; Q2'10)	93% (196 sites; Q4'10)	9%	9 months
HCT	HIV testing rate (%)	91% (124 sites; Q2'07)	95% (197 sites; Q4'10)	4%	45 months
	HIV tested clients & received test results (%)	99% (124 sites; Q2'07)	100% (197 sites; Q4'10)	1%	45 months
	Referral for TB screening rate among newly HIV-positive clients (%)	45% (198 sites; Q4'09)	87% (197 sites; Q4'10)	42%	15 months
HIV & TB Care and Support	TB screening rate among newly HIV-positive clients (%)	76% (193 sites; Q2'10)	87% (181 sites; Q4'10)	11%	6 months
	Referral rate for CD4 test among TB & HIV + patients (%)	84% (193 sites; Q2'10)	96% (181 sites; Q4'10)	12%	6 months
ART	% of eligible HIV-infected clients provided with ART	5% (12 sites; Q2'08)	80% (27 sites; Q2'10)	75%	24 months

### Other activities

In the second half of FY10, HCI staff continued to be involved with the national program of action, the 1000 Quality Improvement Project initiative, the development of revised National Core Standards for health facilities, and development of an implementation plan for the National Clinical Audit guidelines, which aid health care workers to perform clinical audits at the facility level. HCI staff participated in the Helping Babies Breathe master training workshop in August 2010, and now two HCI-staff members are recognized HBB master trainers. HCI was also involved in the implementation of Community IMCI and antenatal care as part of support to 18 priority districts for the implementation of MCH improvement plans.

### Expand linkages between communities and facilities through work with home-based care organizations

In FY10, HCI contracts with all six HBCs ended and were not renewed due to funding shortfalls. HCI staff worked with the HBCs to hold the gains made and identify alternative sources of funding.

### Directions for FY11

In FY11, HCI will provide support for the development and roll-out of the National DOH chronic disease management model, which will include HIV. The project will develop a partnership with the National DOH to work on health systems strengthening and district level clinical supervision. At the district level, the project will focus on six ministerial priorities and will provide support for the implementation of clinic supervision, implementing the learning system in all districts supported by HCI. At the facility level, the project will strengthen the HIV prevention program, strengthen TB/HIV collaboration at all levels of care and will improve infection prevention & control activities at all supported facilities through conducting risk assessments, developing infection prevention and control plans, and providing ongoing mentoring and support.

## ASIA

### 2.6 Afghanistan

#### Overview of HCI's Program in FY10

Main QI interventions/ activities	What are we trying to accomplish?	Scale of intervention
Support the MOPH in building capacity for improvement nationwide	Adapt and institutionalize the science of improvement in Afghanistan.	<ul style="list-style-type: none"> <li>▪ Nationwide, initially focused on strengthening the MOPH at the central level while demonstrating practical improvement science through a series of improvement collaboratives.</li> </ul>
Maternal and newborn health (MNH) facility collaborative	Reduce maternal and newborn mortality and morbidity through improved quality of care using the improvement collaborative approach.	<ul style="list-style-type: none"> <li>▪ In the demonstration phase, five provinces out of 34 in Afghanistan. The collaborative began in 2009 in Balkh and Kunduz and expanded to Parwan, Bamiyan, and Herat provinces in the third quarter of FY10.</li> <li>▪ In Kunduz Province, one regional hospital, four comprehensive health centers, eight basic health centers, and two subcenters; total estimated catchment population is 477,677 out of the total population of 882,900.</li> <li>▪ In Balkh Province, one regional hospital, one district hospital, one comprehensive health center, six basic health centers, and one subcenter. Total estimated catchment population is 533,518 out of the total population of 1,144,800.</li> <li>▪ The facilities and estimated catchment area for Parwan, Bamiyan and Herat provinces are to be determined.</li> </ul>
MNH community collaborative	Reduce maternal and newborn mortality and morbidity through improved quality of care using the improvement collaborative approach.	<ul style="list-style-type: none"> <li>▪ 5 provinces out of 34 in Afghanistan. The collaborative began in 2009 in Balkh and Kunduz and is expanding to Parwan, Bamiyan, and Herat provinces in 2010. In each province, this collaborative will focus on between 10 and 57 health posts (involving 1-2 CHWs per health post) in Kunduz and Balkh respectively, which are connected with three health centers in each province. Total estimated catchment area is 61,963. The coverage in the three new provinces is to be determined.</li> </ul>
Kabul maternity hospital demonstration collaborative	Reduce maternal and newborn mortality and morbidity through improved quality of care using the improvement collaborative approach.	<ul style="list-style-type: none"> <li>▪ One province of 34 in Afghanistan, Kabul. Four 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.</li> </ul>
Research and Evaluation	<ul style="list-style-type: none"> <li>▪ Scientifically document progress of QI activities in country and assess impact on quality of care.</li> </ul>	<ul style="list-style-type: none"> <li>▪ All 29 demonstration phase health facilities and 67 health posts in Kunduz and Balkh provinces will be invited to participate in the study to maximize cost analysis of collaborative-level QI.</li> </ul>

#### Main Activities and Results

Under TOI funding, HCI launched at the end of FY09 a facility maternal and newborn health (MNH) demonstration collaborative in Kunduz and Balkh provinces in northern Afghanistan. In February 2010, HCI's work in Afghanistan shifted to TO3 funding. Under that funding in FY10, HCI launched two more

demonstration collaboratives with the Ministry of Public Health (MOPH): 1) a community level MNH collaborative in Balkh and Kunduz provinces to complement the work of the facility collaborative, and 2) a maternity hospital obstetric and newborn care collaborative in four public and three private hospitals in Kabul.

### **Support to the MOPH to build capacity for health care improvement**

As part of its technical support to the MOPH as it develops a strategy for quality in health care, HCI organized a one-day Round Table in January 2010 on quality improvement for senior MOPH officials. Participants of the meeting discussed the future of health care quality in Afghanistan and exchanged their views with experts in the field of quality. The meeting suggested establishment of a Unit within the MOPH for coordination of quality-related interventions and, under the leadership of the Unit, development of strategy for improving quality of care.

In March 2010 the Unit for Improving Quality in Health Care was established with the technical and financial support of HCI and started leading the quality strategy development process. To more effectively coordinate efforts for developing the strategy, a Quality Task Force was established, comprised of representatives from key MOPH departments and partner organizations. Partners have met regularly in these forums and exchanged views about quality of care and coordinated their activities.



Minister of Public Health at the inauguration meeting of the MOPH Unit for Improving Quality in Health Care, March 2010. Photo by URC Afghanistan.

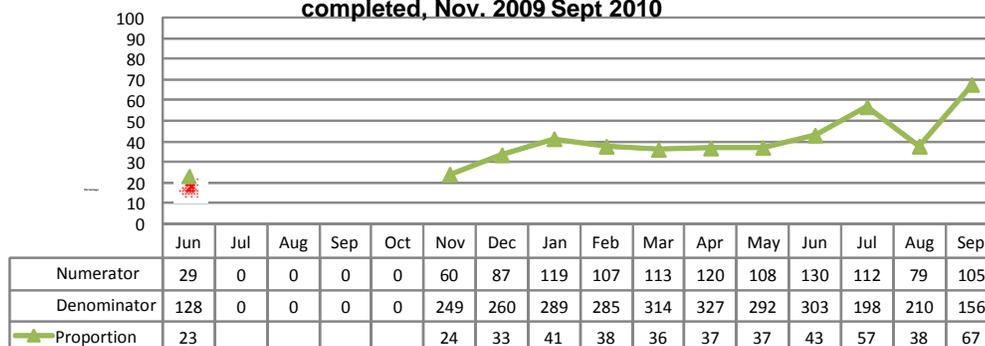
In order to increase awareness about quality improvement and its tools, HCI and other partners convened four senior level seminars for the Deputy Minister and General Directors of the MOPH. In addition, related seminars were held for MOPH staff working at different levels. HCI staff also participated in several provincial forums to make presentations on quality improvement.

HCI staff and consultants have reviewed documents produced by the technical departments of the MOPH and provided comments and suggestions for strengthening them. They have also met directly with different MOPH units to explain quality improvement and potential interventions. HCI is collaborating with Jhpiego to develop a paper explaining QA/QI methodologies which will be distributed to staff of the MOPH to increase understanding of different methodologies.

### **Regional MNH facility collaborative in Balkh and Kunduz provinces**

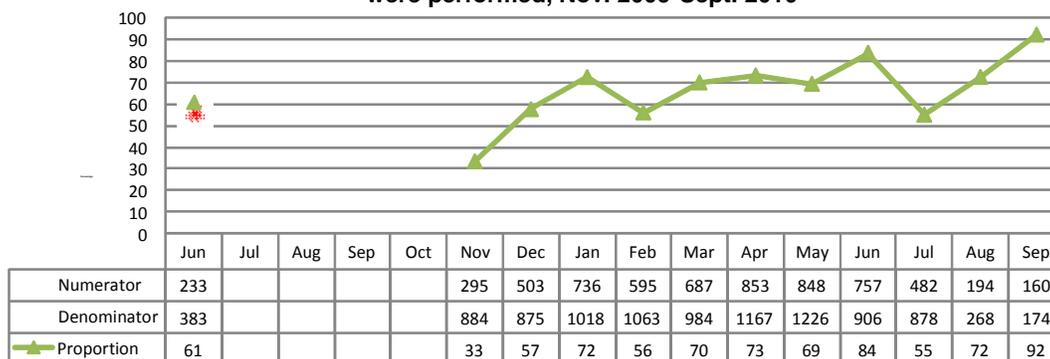
Substantial progress was made in FY10 in both Kunduz and Balkh provinces in the facility MNH collaborative. Figures 4–6 document the gains made in the 25 facilities participating in the MNH collaborative in Kunduz and Balkh with respect to increasing compliance with standards for use of the partograph, active management of the third stage of labor, and essential newborn care (ENC).

**Figure 4. Afghanistan: Proportion of vaginal deliveries for which partogram was completed, Nov. 2009 Sept 2010**



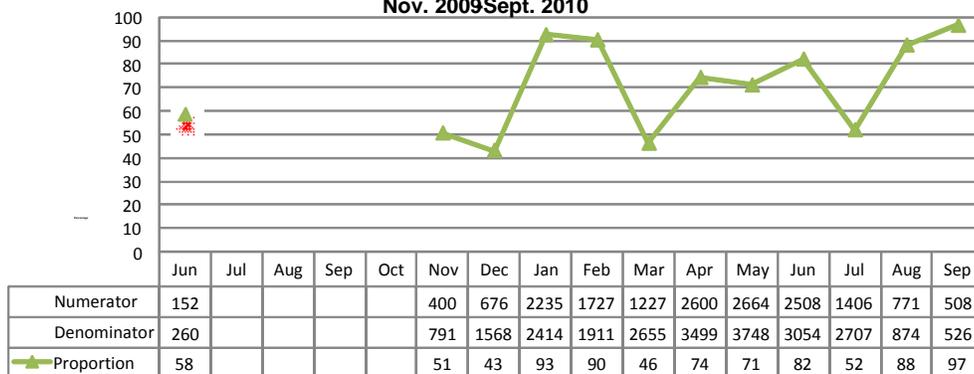
**Numerator:** # of vaginal deliveries for which partogram was completed  
**Denominator:** Total # of vaginal deliveries in last month in Health Facility  
**Source of data:** Partograph review  
**Sites:** 25 health facilities in Balkh & Kunduz Provinces

**Figure 5. Afghanistan: Proportion of vaginal births for which 3 AMTSL elements (Oxytocin given at 1st minute after delivery, cord traction, uterine massage) were performed, Nov. 2009 Sept. 2010**



**Numerator:** # of vaginal births for which 3 AMTSL elements performed  
**Denominator:** Total # of vaginal births within last month  
**Source of data:** Partograph review  
**Sites:** 25 health facilities in Balkh & Kunduz Provinces

**Figure 6. Afghanistan: Average compliance with essential newborn care standards (drying and wrapping, umbilical cord care, and immediate breast feeding), Nov. 2009 Sept. 2010**



**Numerator:** Total # of essential newborn care standards met  
**Denominator:** Total # of applicable essential newborn standards for the cases reviewed  
**Source of data:** Partograph review  
**Sites:** 25 health facilities in Balkh & Kunduz Provinces

HCI staff conducted post learning session coaching visits in both Balkh and Kunduz provinces to health facilities to support QI teams and help them in the analysis of plan-do-study-act (PDSA) cycles and starting developing PDSAs in the new areas. The new areas included skilled birth attendance, hand washing, partograph use, and post natal monitoring.

As part of the gradual delegation of data collection, the HCI team in Balkh succeeded in training the Mazar Regional Hospital QI team in the use of a tool for direct observation of deliveries. The QI team themselves now collect data on AMTSL, ENC, immediate breastfeeding, and partograph use.

### **Regional MNH community collaborative in Balkh and Kunduz provinces**

HCI trained NGO community health officers, community health supervisors, and public health officers from both Kunduz and Balkh provinces on effective teaching and supervisory skills. Following the training, an orientation workshop for the community MNH collaborative stakeholders was convened in Kabul in April. Participants from the implementing NGOs, representing their central and provincial offices, and community health supervisors of the targeted health facilities attended the workshop and were oriented about the community collaborative strategy, the intervention package, and the indicators that will be tracked on a monthly basis. The participants also learned how to apply the model for improvement and other QI methods.

During the workshop the participants identified numerous obstacles in the area of community-based maternal newborn care and suggested interventions to address these obstacles. Subsequent to the workshop, a baseline assessment was conducted to evaluate the quality of counseling provided by CHWs to pregnant women and to review their records. This assessment included community health supervisors of hub health facilities.

Following the baseline assessment, first community collaborative learning session convened in May and June in four different sessions. In all, 88 CHWs (70 female and 18 male) in Balkh and 8 female and 9 male CHWs in Kunduz participated in the learning session. During this session they were oriented on the community collaborative; baseline and household survey results were provided; and gaps, challenges and solutions were identified. A monthly action plan was developed in order to coach CHWs in updating their respective community maps. At the end of the session, CHWs discussed some of the challenges and barriers and sought ways to resolve them.

Lastly, in order to improve the capacity of community health supervisors, a week-long training was conducted from 10-15 April 2010 in Kabul for supervisors from the targeted health facilities in Balkh and Kunduz provinces.

Following the first learning session where CHWs were refreshed on updating community maps, HCI field staff in both Balkh and Kunduz provinces paid coaching and mentoring visits to the health posts, accompanied by the respective health facility community health supervisors. The team reviewed progress on community maps closely with the CHWs and provided them necessary feedback.

In Balkh, HCI conducted two community collaborative monthly meetings for 86 CHWs and community health supervisors of the relevant hub facilities. In the meetings there were simulation exercises and role plays by CHWs to demonstrate their communication and counseling skills and learn from each other. Feedback and technical assistance was provided to CHWs by midwives and community health supervisors. The meetings also had brainstorming and discussion sessions to identify existing gaps in the area of antenatal and postnatal care as well as to refresh them in the mentioned areas. In addition to the monthly meetings there was a three-day training conducted for CHWs in four groups for CHWs in Balkh. CHWs were refreshed on relevant maternal and newborn care and essential communication and reporting skills.

## Kabul maternity hospital collaborative

Four public hospitals (Malalai, Rabia Balkhi, Isteqal and Khair Khana hospitals) and three private hospitals (Afghan, Mehdi and Sheeno Zadawere) are participating in this demonstration collaborative which focuses on applying high-impact interventions to improve maternal and newborn outcomes. In order to develop a comprehensive intervention package and measures for monitoring, a one day session was convened in Kabul in February 2010, where representative of all the participating hospitals and the MOPH relevant officials participated. Intervention areas were prioritized to focus on those listed in Figure 7.

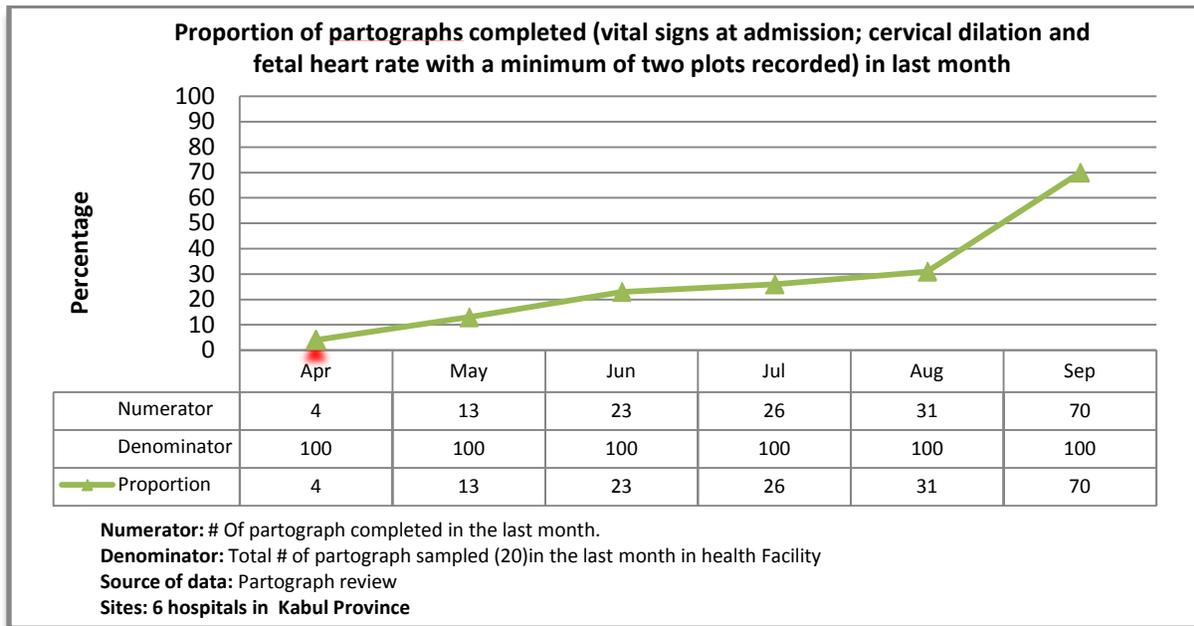
The first learning session of the Kabul maternity hospital collaborative took place in April 2010. In May, the seven hospitals completed their baseline assessments, focusing on maternal and newborn outcomes, complications management, maternal and newborn postnatal care, and medical records. QI teams were established in all seven hospitals and visited regularly by HCI staff, who provided on-the-job training on the correct use of the partogram, early detection of post-partum hemorrhage, active management of the third stage of labor, and essential newborn care. Health facilities were supported in implementing change ideas as well as collecting, compiling, and plotting their data on run charts and analyzing their performance and outcomes. Figure 8 shows progress in correct use of the partogram in six of the seven hospitals.

### Figure 7. Afghanistan: High-impact interventions that are the focus of the Kabul Maternity Hospital Collaborative

1. Improved management of leading causes of maternal and neonatal mortality--improved complications care e.g., focus on improved detection and case management of pre/eclampsia and newborn asphyxia.
2. Improve hospital childbirth care processes by care phase
  - Initial triage: re-organization of care processes for improved detection of risks and complications requiring immediate action to ensure compliance with national hospital standards and minimize “third delay” once woman arrives at hospital.
  - Labor care: (e.g. use of partogram for early detection of obstructed labor--regular monitoring cervical dilation and fetal descent; regular monitoring of fetal heart rate and maternal temperature and blood pressure.)
  - Vaginal Delivery Care/Immediate post-partum care: re-organization of care to ensure compliance with standards.
  - Post-partum and Discharge Care: Re-organize care to promote routine high-impact post-partum interventions (exclusive breastfeeding/prevention of newborn hypothermia/low birthweight infants/kangaroo care); regular surveillance for hemorrhage, maternal or newborn sepsis, special care of low birthweight infants; family planning; pre-discharge counseling (danger signs, follow up, etc.).
3. Cesarean Section Safety: improved decision-making for cesarean section (complications detection and management); decision to incision time; pre-operative and anesthesia care; post-operative care and surveillance, emphasizing improved reliable delivery of high-impact interventions such as pre-operative antibiotics, and the health systems required to support improved cesarean surgical care.
4. Improved routine high-impact childbirth care: Improve compliance with *routine* high-impact interventions during intra-partum period: infection prevention (handwashing, instrument decontamination, high-level sterilization), AMTSL, essential newborn care, family planning, etc.
5. Improved referrals

In the fourth quarter of FY10, HCI provided delivery registers and 5000 partograms to the Regional Hospital in Kunduz Province. The QI team in Kunduz Regional Hospital works on how to improve the partogram use in their hospital. The two items were frequently short in the hospital and negatively affected regular use and continued compliance with partogram completion.

**Figure 8. Afghanistan: Improvement in correct use of the partograph, Kabul Maternity Hospital Collaborative, April-September 2010**



### Expansion of the MNH collaboratives to new provinces

The MOPH, Provincial Public Health Directors, implementing partners, and HCI selected three new provinces for scale up of the MNH collaborative in the second half of FY10: Bamiyan, Parwan, and Herat. Sites were selected in a workshop with partners at each province in March 2010. Ten health facilities in Bamiyan, 10 in Parwan, and 12 in Herat were chosen to represent a slice of the system in each province. QI teams were established at each health facility and then oriented in a one-day session on the improvement collaborative approach and the results accomplished in Balkh and Kunduz. In August 2010, a baseline assessment was conducted in the selected facilities to identify areas most needing improvement.

The first learning session was conducted in each of the three provinces during the last quarter of FY10. QI teams were trained on the HCI improvement model, improvement tools and refreshed on the subject areas selected for phase one of the collaborative work. The change ideas synthesized in the demonstration collaborative already going on in Balkh and Kunduz were shared with the new QI teams to expose them to best practices proven to yield improvement. The new QI teams have begun improvement work at the facility level.

### Directions for FY11

At the national level, HCI will support the “Helping Babies Breathe” initiative and will provide technical support, monitoring, and equipment including job aids for its successful implementation in seven Kabul national hospitals and five provincial/regional hospitals. At the regional level, HCI will fully implement the health facility collaborative in the three new provinces and aim to extend the improvement activities to an additional six provinces by the end of FY11. HCI will also conduct new studies, including community health quality improvement research in Kunduz and Balkh; data validity study design and implementation; and best practices spread strategy design and implementation.

## EUROPE

### 2.7 Russia

#### Overview of HCI's Program in FY10

Main QI interventions/ activities	What are we trying to accomplish?	Scale of intervention
<p>HIV/AIDS Treatment, Care and Support: Support for Regional Roll-out Collaborative: Improvement of Access to Basic HIV/AIDS Care and Detection, Prevention and Treatment of TB/HIV Co-Infection and ART Collaborative</p>	<ul style="list-style-type: none"> <li>▪ Improve system of detection, referrals, and medical follow up of HIV-positive patients for better retention in care and larger enrollment of patients on ART</li> <li>▪ Improve monthly records of patients medical follow up (<i>Dispanserization</i>) at polyclinics and AIDS centers</li> <li>▪ Design activities for better involvement of HIV-positive patients into medical follow up at all stages</li> <li>▪ Define roles of providers in medical follow up, develop algorithms for medical follow up</li> <li>▪ Based on the data, adopt and develop districts plans for patient enrollment on ART</li> <li>▪ Train care providers at polyclinics on clinical management of HIV-positive patients</li> <li>▪ Improve Detection, Prevention and Treatment of HIV-TB Co-Infection</li> <li>▪ Increase coverage of TB testing among HIV-infected patients in polyclinics through the use of microcopy and tuberculin skin tests, in addition to X-ray</li> <li>▪ Improve inter-institutional cooperation among health care and social services facilities and non-governmental organizations for improved detection, prevention and treatment of TB in HIV patients</li> <li>▪ Improve recording of HIV-TB co-infection</li> </ul>	<p>All 18 districts in St. Petersburg; 100% of AIDS and TB facilities and 64% of polyclinics; serving 23,142 PLWHA registered for follow-up in St. Petersburg</p> <p>Two districts of Leningrad Oblast; 100% of AIDS and TB facilities and 100% of polyclinics in the two districts; serving about 2,000 PLWHA registered for follow-up in the two districts of Leningrad Oblast</p> <p>In total, this represents 204 state health facilities, social service organizations, and NGOs in St. Petersburg and 3 such facilities in Leningrad Oblast.</p>
<p>Improvement of Social Support for HIV-infected families collaborative (St. Petersburg)</p>	<ul style="list-style-type: none"> <li>▪ Develop a model for medical and social support for HIV-infected families in order to facilitate institutionalization and sustainability of services developed in the area of PMTCT and child abandonment prevention in St. Petersburg</li> <li>▪ Improve the coordination of services among health and social service providers to provide for the continuity of care for HIV-infected families</li> <li>▪ Establish a continuous information/experience exchange system among social service providers from government and NGO sectors</li> <li>▪ Adapt and implement best practices from NGOs to a municipal system of social services</li> <li>▪ Improve the knowledge and skills of social workers serving PLWHA</li> </ul>	<p>All 18 districts of St. Petersburg; 100% of state centers for individuals' social services</p>

National institutionalization of best practices on HIV care organization	<ul style="list-style-type: none"> <li>▪ Develop a strategic framework for the engagement of HIV patients into care that includes descriptions of targets and gaps in coverage with care, services and resources available to meet the targets, models of care organizations and delivery such as case management, HIV patient’s medical follow up in polyclinic, including screening for TB, and models of social services delivery for HIV patients at a local level</li> <li>▪ Develop federal guidelines on organization of TB screening among HIV patients at a polyclinic level</li> <li>▪ Facilitate development of national guidelines on IPT</li> </ul>	The framework is developed and presented to the federal-level authorities from MOHSD and Rospotrebnadzor, Federal AIDS Center, Federal TB/HIV Center, and regional health authorities and experts
Subcontract with the Eurasia Medical Education Program	<ul style="list-style-type: none"> <li>▪ Improve clinical knowledge of care providers in the area of HIV-related opportunistic infections and TB</li> </ul>	Three Russian oblasts in the Siberia area and the Far East

## Main Activities and Results

All HCI assistance related to HIV and TB/HIV programs in Russia was provided under TO3 in FY10.

### Improving HIV/AIDS treatment, care and support and prevention and treatment of TB-HIV in St. Petersburg

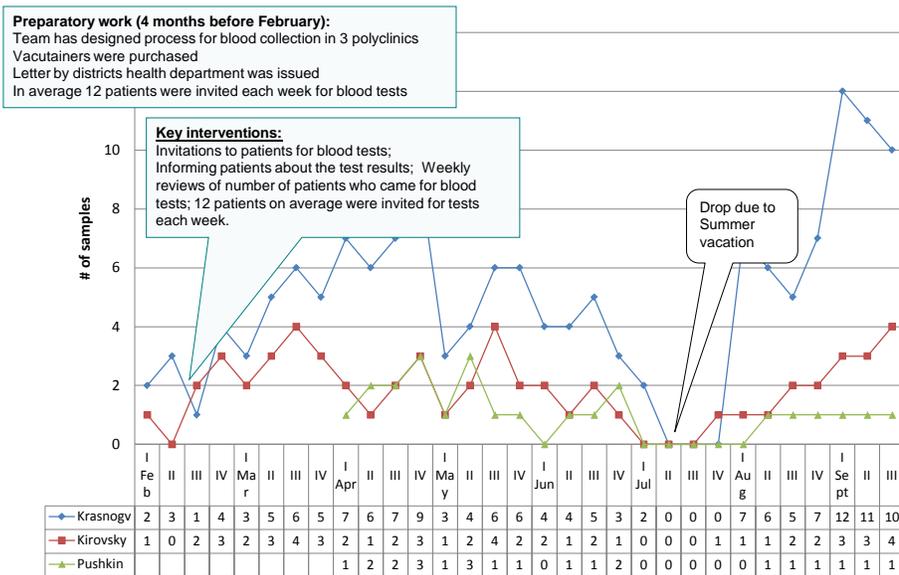
In FY10, the two spread collaboratives in St. Petersburg (HIV treatment, care and support and TB/HIV) were merged to address the common aim of improving the quality of HIV patient follow-up, including detection of TB among HIV-positive patients. HCI continued to provide technical assistance to all 18 districts (rayons) of St. Petersburg to improve medical follow-up of HIV patients at polyclinics. As part of the assistance, HCI facilitated two learning sessions and one meeting of the project coaches with a total of 165 care providers and leaders in attendance. HCI also supported three trainings on early detection of TB in HIV patients at the primary care level for 91 polyclinic infectious disease (ID) specialists, radiologists and primary level laboratory staff in December 2009 and in June 2010.

Teams in St. Petersburg continued to test new changes to improve patient care and outcomes. One innovation they designed this year was a patient diary (a pocket brochure recommending the tests and medical follow-up that HIV patients need), which was produced with HCI support and distributed among the district infectious disease (ID) specialists throughout the city in a learning session in February. HCI gathered feedback from district ID specialists on how patients used the diaries and recommended changes for the next edition. Most patients expressed satisfaction with the booklets, and ID specialists were able to review the diaries when patients came in for their six-month follow-up visits.

Another innovation, developed by the Health Care Department of Krasnogvardeysky district, was to organize a new service of collecting blood samples for immune status at the polyclinic level and ensuring timely reporting back to the polyclinics. The team procured vacutainers in an amount sufficient for blood sampling in three district polyclinics and informed providers of the new service, which will expand access to ART for those who cannot (or do not want to) be examined at the AIDS Center. At the end of September 2010, the weekly average number of examined patients reached 10. QI teams in Pushkinsky and Kyrovsky districts successfully adopted the process tested in Krasnogvardeysky district. As seen in Figure 9, in Pushkinsky the service attracted 24 patients during the April–September 2010 period, 83% of whom had not been examined previously at the polyclinics or AIDS Center. Half of the new patients were immediately referred for ART. In Kirovsky Rayon, 58 patients received the decentralized immune status sampling in the same period.

A group of infectious disease specialists in St. Petersburg, with support from HCI, worked on developing recommendations on organization of HIV patients' medical follow-up at polyclinics. The recommendations are based on achievements of the project-support QI teams in 2007-2009. The document is under review by the City Health Care Committee and AIDS Center.

**Figure 9. Russia: Number of blood samples on CD4 and viral load taken in three districts, St. Petersburg, Feb.–Sept. 2010**



**Improvement of social support for HIV-infected families spread collaborative (St. Petersburg)**

The success achieved by nine “pilot” districts in St. Petersburg in providing social support services for HIV-infected families in 2007-2009 was spread to the other nine districts in the city starting in October 2009. With the technical support of HCI, interdisciplinary teams were established in the new districts, consisting of social workers, psychologists, medical workers from women’s clinics and children’s polyclinics, infectious disease specialists, and representatives of the AIDS Center. Taking into account interdisciplinary basis of the problems to be solved, each of the teams was coached by representatives of both the City Health Care and Social Support Departments. Quarterly meetings are now held among the heads of these two city departments to coordinate these services.

Teams from 18 districts presented their work, achievements, best practices and data analysis during learning sessions in February and June 2010. The technical content of the organization of social follow-up was provided by the staff of the AIDS Center and HealthRight (former Doctors of the World). Specialists of these organizations conducted trainings on HIV-infection and follow-up of HIV patients’ social support needs.

Teams in each district put in place mechanisms to refer HIV-affected families from the medical facilities, and by the end of FY10, two-thirds of the families taken into the social service program had been referred by children’s polyclinics and women’s clinics (referrals that did not occur previously). By the end of FY10, over 500 HIV-affected families had received social services in St. Petersburg. The other significant achievement of this collaborative was the institutionalization of the new process in the form of Decision # 181-r issued by the Committee for Social Policy in October 2010. This decision regulates the establishment of the departments (services) on social follow-up for HIV-affected families, based on the organizational model developed through the collaborative. This decision provides a stable basis for continued social support for HIV-affected families by allocating a specific budget for these services and assigning staff to work with this target group.

Materials related to delivery of social services to HIV-affected families in St. Petersburg were uploaded in late September 2010 to the Committee for Social Policy’s web page at the Government of St. Petersburg web site. This is the first time that a state agency in the Russian Federation has posted HCI-

developed materials on their official web site:  
[http://www.gov.spb.ru/gov/admin/otrasl/trud/demogr/spid\\_info](http://www.gov.spb.ru/gov/admin/otrasl/trud/demogr/spid_info).

### National institutionalization of HIV best practices

An important direction for HCI in FY10 was to not only continue building the capacity of city and district health care leaders to support QI efforts and institutionalization of better care practices for medical follow-up of HIV patients at the polyclinic level, integration of TB and HIV services, and social support for the families of HIV-infected mothers, but also to work with federal level authorities and technical working groups to consider these practices for national dissemination. Key health system changes developed through HCI-supported improvement collaboratives in St. Petersburg are summarized in Table 3.

Table 3. Russia: Key system changes developed in HCI-supported HIV collaboratives in St. Petersburg

Key Changes	Persons responsible and facilities	Institutionalized by
Information exchange on case detection between AIDS Center and polyclinics	ID specialist and epidemiologist in AIDS Center and Chief Rayon ID Specialist Polyclinics	2005, Decision (Rasporyazhenie) of the City's Health Care Committee #461-r on the order of registration and recording of HIV patients in St. Petersburg. This decision was, to a large extent, initiated after the accomplishments of the pilot in Krasnogvardeysky rayon and fosters cooperation between polyclinics, women's consultations, TB and STI dispensaries, and the City's AIDS Center in terms of exchange of patient information
Voluntary CT in primary care	All specialists at Polyclinics Women' Consultations, TB services, Drug rehabilitation services	Letter signed by the of Chief ID Specialist of the City Health Care Committee
Engagement of patients into care in polyclinics	Nurse, ID specialist and epidemiologist in polyclinics	Decision (Rasporyazhenie) of the City's Health Care Committee # 529-r on improvement of organization of medical care for HIV patients at ambulatory-polyclinic facilities of St. Petersburg
Follow-up and examination of HIV infected patients in polyclinics	Polyclinics Women's Consultations, TB services, Drug rehabilitation services	Decision (Rasporyazhenie) of the City's Health Care Committee # 529-r on improvement of organization of medical care for HIV patients at ambulatory-polyclinic facilities of St. Petersburg
Documentation of Follow-up in polyclinics	Nurse, ID specialist in polyclinics	Decision (Rasporyazhenie) of the City's Health Care Committee # 529-r on improvement of organization of medical care for HIV patients at ambulatory-polyclinic facilities of St. Petersburg
Screening for TB in polyclinics (chest X-ray, skin test, sputum smear)	Nurse, ID specialist, X-ray specialist, Lab. Microbiologist in polyclinics	2009, Decision of the City's Health Care Committee (Rasporyazhenie) # 201-r on organization of early TB detection among HIV-positive people. Among other items, the Decision regulates the process of TB screening among HIV patients in ambulatory polyclinics at a district level
Blood sampling for CD4 and viral load in polyclinics	Nurse, ID specialist, and driver in polyclinics in four districts	2009, Decision of the City's Health Care Committee (Rasporyazhenie) # 201-r on organization of early TB detection among HIV-positive people. Among other items, the Decision regulates the process of TB screening among HIV patients in ambulatory-polyclinic facilities at a district level
Patient dairy for recording personal and lab	Nurse, ID specialist, and patients in all polyclinics	

Key Changes	Persons responsible and facilities	Institutionalized by
data		
Information exchange on Follow up between AIDS Center and polyclinics	Nurse and ID specialist in all polyclinics and the AIDS Center	Decision (Rasporyazhenie) of the City's Health Care Committee # 529-r on improvement of organization of medical care for HIV patients at ambulatory-polyclinic facilities of St. Petersburg
Monitoring of follow up in polyclinics	ID Specialist, Chief Rayon ID specialist in all polyclinics and the AIDS Center	Decision (Rasporyazhenie) of the City's Health Care Committee # 529-r on improvement of organization of medical care for HIV patients at ambulatory-polyclinic facilities of St. Petersburg
Social support of HIV-infected mothers and children born to them in Rayon Social Services	Social workers, specialists, and psychologists at Centers of Social Assistance for Families and children in all 18 districts	Decision (Rasporyazhenie) of the City's Committee of Social Policy # 181-r on improvement of social support organization for HIV-affected families
Organizational model, techniques of social follow-up, documentation and monitoring system	Social workers, specialists, and psychologists at Centers of Social Assistance for Families and children in all 18 districts	Methodological recommendations on organizing social follow-up of HIV-infected mothers and their children in St. Petersburg approved by the Committee for social policy in September 2009

In November 2009, HCI hosted the first planning meeting of a working group to develop methodological recommendations on the organization of TB screening among HIV patients at the polyclinic level. The working group includes experienced providers from St. Petersburg, Orenburg Oblast, Samara Oblast, and Saratov Oblast (former HCI-supported regions) who were involved in the initial design and testing of the screening model and the Director of the Federal Center for TB care delivery to HIV-infected. The group finalized their recommendations for the federal level on the organizational model of TB screening among HIV-infected patients at polyclinics at the end of FY10.

In December 2009, HCI organized and supported a round table discussion on best practices in organization and delivery of social support services for HIV-infected people. The purpose of this meeting was to initiate a process for systematizing approaches to delivery of state-run social services to PLWHA and to formulate recommendations for federal level authorities. The round table was attended by representatives of AIDS Centers, departments of social protection, and NGOs from nine regions of the Russian Federation (Kemerovo, Lipetsk, Orenburg, St. Petersburg, Yekaterinburg, Chelyabinsk, Kazan, Izhevsk, Altai region) and representatives of international organizations such as WHO, UNICEF, IFRC, UNAIDS, AIHA, AFEW, Healthy Russia Foundation, and the NGO "Right to Health". The meeting was opened by Ms. Cheri Kamin, Head of the Health Office and Dr. Larissa Dementieva, Deputy Head of the HIV Department of the Federal Service on Surveillance for Consumer Rights Protection and Human Well-being (Rospotrebnadzor), and was led by Dr. Vasily Shakhgildian, Lead Specialist of the Federal AIDS Center. The meeting participants have reviewed most successful current approaches to social care delivery to HIV patients developed in Russia as well as identified bottlenecks in the current legislation. Following the meeting HCI facilitated the creation of a working group with participation of the

December round table attendees, to assist in summarizing best practices in organization and delivery of social support services for HIV-infected people through methodological recommendations as well as development of a system to evaluate the effectiveness of social services to patients with HIV.

During the third quarter of FY10, HCI finalized the Engagement into HIV Care Framework as a basis for forming an effective response of the health care system to the HIV epidemic in St. Petersburg. This conceptual framework maps out the stages of engagement of patients in HIV care and on ART and can be used as an improvement tool for systematic strategic planning of activities and resources to address the needs in delivering care and treatment for HIV patients. The framework covers a range of targets and gaps, and services available and needed for involving most at-risk populations who are unaware of their HIV status into HIV testing, and engagement of HIV-positive patients into HIV-related care (including testing for TB) and of their further enrollment on ART.

In July 2010, the framework was presented at the International AIDS Conference in Vienna as a poster display. It was further communicated to the WHO/Euro Office and was regarded as one of the best examples for countries of the region. In September, it was presented at the meeting of all USAID partners. USAID expressed keen interest in the future use of this framework to plan the USAID response to HIV infection in the Russian Federation.

Recommendations describing how TB detection among HIV-positive people at the primary health care facilities is organized have been developed with the support from the regions previously assisted by HCI: Togliatti of Samara Oblast, Orenburg, Novotroitsk and Gai of Orenburg Oblast, and Engels of Saratov Oblast, and were submitted to O. P. Frolova, Head of TB Care to HIV-positive people, for her review and approval. The document describes techniques of patient management when TB is detected among HIV-positive patients and outlines the organizational model of collaboration between the medical institutions to screen HIV-positive patients for TB.

In July 2010, during the conference conducted by the Russian Health Care Foundation on organization of TB care for HIV-infected patients, HCI facilitated discussions of organizational issues on Isoniazid preventive therapy (IPT) for HIV-infected patients. We presented the summary of the practical experience on IPT organization in four regions of the Russian Federation (Orenburg, Togliatti, Saratov, and St. Petersburg). It was an opportunity for the conference participants to provide their suggestions on the criteria and timeline for IPT prescription to HIV-infected patients. Based on these criteria, HCI staff prepared a draft of the document and submitted it to O. P. Frolova, Head of TB Care to HIV-positive people, for her review and approval.

### **Knowledge management**

The project's internet portal, [www.healthquality.ru](http://www.healthquality.ru), was launched for use by the MCH collaborative participants, collaborators and management, project staff, and consultants in June 2009. Each team has its own page that includes the following sections: a journal to document any changes, membership, links to upload micro/change-specific indicators and design time series charts, list of meetings documenting team gatherings to assist in planning future steps, team-developed materials for uploading, and a message service to communicate with their QI or clinical expert. In February 2010, at the interregional Learning Session, all teams were granted access to the page of all other teams across all regions and clinical areas. A comprehensive user guide for the portal was also presented at this learning session.

Since then, teams started to share on-line the improvements and materials developed within the collaborative. By the end of FY10, teams had uploaded about 320 job aids/materials to their individual pages, including information materials and leaflets, questionnaires for patients and providers, provider job aids, posters, and algorithms. At present, 55 out of 56 total teams from all three regions participating in the MCH/RH collaboratives are filling out the electronic team journal. The general section of the password-protected portion of the web site includes a library, email service, events planner, indicators (including detailed descriptions of project indicators, collection procedures,

automatic chart designer, and annotation), address book, news, and a full list of teams with their ratings. At the end of FY10, the library contained about 250 job aids/materials that were downloaded about 3,500 times.

The public section the [www.healthquality.ru](http://www.healthquality.ru) web site was launched at the end of September 2010 (see Figure 10), and its existence announced at the Mother and Child Forum in Moscow. The expected audience includes care providers, medical students, health leaders, and the public at large. The public portion of the site aims at becoming an information and practical resource for quality health care in Russia. It offers an electronic distance learning course in QI with a certificate issued by the Federal Scientific Center for Health Care Organization and Information (formerly the Central Public Health Research Institute), our main partner for MCH collaborative. The website also provides an opportunity to virtually join the collaborative if applicants meet eligibility criteria (a special questionnaire is under development by HCI staff). The Library of the “open” part of the web site includes information on QI methods and lessons learned from completed projects and reports and resources from the ongoing MCH and HIV collaboratives (such as algorithms of care organization, job aids, scopes of work, orders and decisions, etc.) and information on clinical content like neonatology, obstetrics, and family planning.

**Figure 10. Russia: Public portal launched in September 2010 on [www.healthquality.ru](http://www.healthquality.ru)**



## Research and evaluation

*Perceptions of task-shifting related to care of HIV-positive patients in St. Petersburg:* This study was originally designed to evaluate the perceptions of specialists providing care for HIV-infected patients, HIV-infected patients, and administrative health care managers and heads of polyclinics towards the task shifting that happened as a result of orders facilitated by HCI-assisted teams and adopted by the St. Petersburg City Health Care Committee (# 529-r of October, 20074 and #201-r of April 2009). Those orders expanded access to HIV care through organization of medical follow-up of HIV patients including TB screening at local polyclinics. The research was conducted jointly by the City Health Care Committee, the AIDS Center, and HCI. The study was initiated in September 2009 and completed in September 2010. At the request of the AIDS Center Director at the time of research initiation, HIV-infected patients,

administrative health care managers, and heads of facilities providing care to HIV-infected patients were excluded from the research. The polyclinics from 10 St. Petersburg's 18 districts were chosen by experts to participate in this research. All 37 polyclinics in those 10 rayons and all 83 specialists providing care to HIV-infected patients in those polyclinics (44 ID specialists and 39 nurses) were included in the study.

*Peer-to-peer learning and spread of improvements. Sharing innovations across teams in an MNCH collaborative through an interactive web site:* HCI assessed the results of implementing the password-protected portion of [www.healthquality.ru](http://www.healthquality.ru) 15 months after the start of the improvement collaboratives. We surveyed 23 improvement team leaders about their preferred methods for sharing improvement information. We also asked about how they had first learned about seven specific types of innovations implemented during the first 14 months of the improvement collaborative. Using information documented in the portal journal entered from May 2009 to June 2010, and reported at learning sessions, we calculated the average number of months for a type of innovation to spread from the first site to introduce it to subsequent sites. The portal was overwhelmingly popular among improvement team leaders. Nevertheless, the portal seemed to function as only a supplemental source to learning sessions for spreading innovation. Spread of innovation through these methods was fairly fast, with an average spread time of 2.0 months for neonatology innovations and 2.6 months for reproductive health innovations. Our major conclusion is that information about innovations in health care can be effectively shared through a structured Internet portal, even in countries with low computer literacy. Even Russian professionals with limited prior experience with Internet portals found value and were motivated to use this new technology.

## Directions for FY11

In FY11, HCI will work to establish a formal collaborative relationship between Russian neonatologists and American Academy of Pediatrics and support the US-Russian collaboration on healthy lifestyles and hypertension control. At the regional level, HCI will develop standards of social services for HIV-infected patients, St. Petersburg; develop a practical manual on HIV care delivery to HIV-infected patients in St. Petersburg; and initiate an activity focused on “Accelerating TB detection and improving treatment outcomes” in two new regions to facilitate enhancement of primary health and community-based services in improving TB control programs. HCI will also expand HIV best practices to new two regions and expand MCH activities to three more regions: Ivanovo, Tver, and Ryazan. HCI will implement a number of large and small-scale studies including: survey of the password-protected portion of [www.healthquality.ru](http://www.healthquality.ru) re its usability and usage; survey of the public portion of [www.healthquality.ru](http://www.healthquality.ru) re monitoring of outside users who opt-in to joining virtual collaborative, those signed in for QI distant course, etc; institutionalization studies in Samara, Orenburg, Saratov, Tver, and Tula; economic analysis of spread through [www.healthquality.ru](http://www.healthquality.ru); and spread of HIV best practices to new regions.

## LATIN AMERICA AND THE CARIBBEAN

### 2.8 Bolivia

#### Overview of HCI's Program in FY10

Main QI activities	What are we trying to accomplish?	Scale of intervention
<p>TB spread collaborative: To spread QI methods and lessons learned in the demonstration collaborative conducted in other communities, to five health care networks in El Alto</p>	<ul style="list-style-type: none"> <li>▪ Improve the quality and coverage of TB control activities</li> <li>▪ Increase detection of new TB patients (400 detected in 2008 out of 900 expected)</li> <li>▪ Increase TB cure rates (65% in 2008) and reduce abandonment rates (12% in 2008)</li> <li>▪ Improve the quality of sputum samples (&gt;45% unusable samples at project start) and laboratory activities</li> </ul>	<p>Approximately 900,000 inhabitants in the city of El Alto, which encompasses five Health Care Networks. These networks include 4 hospitals, 43 health centers, and 18 labs. About 900 TB patients are estimated to live in El Alto; the MOH currently detects and treats about 45%.</p>

## Main Activities and Results

In FY09, HCI collaborated with the National TB Control Program (NTCP) and John Snow Inc. (JSI) to organize a TB DOTS collaborative in the city of El Alto (near the capital, La Paz). During the first quarter of FY10, HCI provided continued assistance to the TB spread collaborative in El Alto under TO1; assistance continued under TO3 as of January 2010.

Key problem areas addressed by the collaborative during FY10 were the frequent stock-outs of TB drugs and poor drug supply management, poor quality sputum samples, and low case detection. TB drug stock-outs were addressed through the introduction of DOTS boxes, an approach that reserves the complete course of treatment for each patient from the start of treatment in a plastic box labeled with the patient's name, treatment type, and other key information. Sputum sample quality was improved through better patient counseling and use of expert patients to teach patients how to produce a good sputum sample. By the end of FY10, the proportion of saliva samples (unusable for TB diagnosis) had fallen to 13%, well below the baseline level of 38%. This trend is important since increasing the proportion of good quality sputum samples helps facilities to increase detection of new TB cases. The key innovations in TB care than have been developed and spread through the collaborative in El Alto are summarized in Table 4.

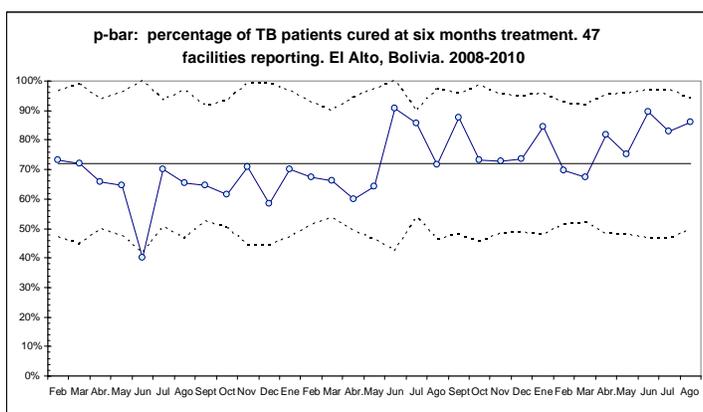
**Table 4. Bolivia: TB program improvements developed in El Alto in FY10**

TB program area	Improvements introduced by the collaborative
Drugs and supplies	DOTS boxes; logistics training
Increasing detection of new TB cases	Working with patients and families Active search among persons consulting for other causes at facility Active search in the community with support of community groups Incentives for facility-based personnel
Quality of sputum sample	"Good sputum sample" expert patients "The cough teacher"
Increasing compliance with treatment, improving cure rates and reducing abandonment	Organization of patient cards for early identification of non-compliers Early home visit to non-compliers Allowing patient direct access to his/her own DOTS box in the facility Supervision visits to facilities
Managerial capacity of health networks/districts	Monthly monitoring and analysis of key indicators of compliance with standards Periodic share of data and improvement experiences among facilities Meetings among departments (regions) to search for patients who have moved

During the third quarter of FY10, HCI and the MOH trained staff in all 47 facilities in the use of a new TB database developed by the NTCP to facilitate monthly monitoring of TB indicators. Average cure rates across the 47 facilities continued to be high, reaching 86% in August, surpassing the NTCP's goal of 85% (see Figure 11). The rate of treatment abandonment also declined to 2% by the end of FY10.

In September 2010, contacts were established with four facilities that belong to the Social Security system and that operate in El Alto, to start activities towards integrating them to the TB Improvement Collaborative. Based on the results obtained in El Alto, USAID/Bolivia decided to scale-up improvements, methods and lessons learned to two of the most important cities in Bolivia: Santa Cruz and Cochabamba. Initial visits were made to the regional MOH offices in both cities,

**Figure 11. Bolivia: TB cure rate after six months of treatment**



together with a USAID official, to establish contact and coordinate. Improvement activities in Cochabamba will be supported by HCI, while efforts in Santa Cruz will be led by JSI.

HCI also completed the revision of five distance-learning modules developed jointly with the NTCP at the MOH. These modules will be published and distributed nationally.

## Directions for FY11

In FY11, HCI will work to support the National TB Program to develop, test, and scale up a database for TB monitoring and planning and implement a strategy for training MOH personnel. At the regional/district level, we will spread the improvements in TB control that were learned at El Alto to the cities of Santa Cruz and Cochabamba. The work in El Alto will be continued with a focus on case detection and management of HIV/AIDS and TB co-infection and MDR TB. We will also work to strengthen the capacity of the El Alto regional MOH team to manage the TB program. At the service delivery level, we will test and disseminate the use of the updated CD-ROM coupled with incentives to promote self-training. We will strengthen QI teams' use of documentation, analysis, and synthesis tools.

## 2.9 Guatemala

### Overview of HCI's Program in FY10

Main QI interventions/ activities	What are we trying to accomplish?	Scale of intervention
Basic Promotion of Essential Obstetric and Newborn Care (ProCONE) collaborative	<ul style="list-style-type: none"> <li>Reduce maternal and neonatal mortality by scaling up EONC best practices at the primary and secondary levels</li> </ul>	<ul style="list-style-type: none"> <li>8 of 29 health areas</li> <li>165 of 581 facilities in the 8 health areas, including: 16 hospitals, 67 24-hour care centers, and 78 health centers and posts</li> <li>1,850 of 6,215 service providers in the 8 areas</li> <li>Of 5.85 million population in the covered region, 1.7 million benefitted (14 million in the whole country)</li> </ul>
Community ProCONE collaborative	<ul style="list-style-type: none"> <li>Reduce maternal and neonatal mortality by scaling up EONC best practices at the community level</li> </ul>	Prioritized communities per health area: <ul style="list-style-type: none"> <li>Quetzaltenango = 3</li> <li>Solola = 18</li> <li>Chimaltenango = 7</li> <li>Totonicapan = 8</li> <li>Huehuetenango = 20</li> <li>Quiche = 5</li> <li>Ixil = 8</li> <li>Total = 69</li> <li>San Marcos = 439</li> </ul> (Alta Verapaz is not participating in the Community ProCONE collaborative)
Complications ProCONE collaborative	<ul style="list-style-type: none"> <li>Reduce maternal and neonatal mortality by scaling up EONC best practices at the secondary and tertiary levels</li> </ul>	Hospitals per health area: <ul style="list-style-type: none"> <li>Quetzaltenango = 2</li> <li>Solola = 1</li> <li>Chimaltenango = 1</li> <li>Totonicapan = 1</li> <li>Huehuetenango = 2</li> <li>Quiche = 4</li> <li>Ixil = 1</li> <li>San Marcos = 2</li> <li>Alta Verapaz = 3</li> <li>Total = 16</li> </ul>
Family Planning Collaborative	<ul style="list-style-type: none"> <li>Improve access to and quality of FP services</li> </ul>	<ul style="list-style-type: none"> <li>1 hospital and 11 health centers in the Zacapa health area</li> </ul>

Conditional Cash Transfer Program (CCTP)	<ul style="list-style-type: none"> <li>Improve quality of health service delivery, bring about behavior change in municipalities participating in the CCTP, and document impact</li> </ul>	<p>9 health areas out of 29</p> <ul style="list-style-type: none"> <li>Total municipalities in priority health areas = 157</li> <li>Total CCTP municipalities (priority 1 and 2) = 130</li> <li>Total CCTP municipalities = 100 in 9 priority health areas with HCI support (77%)</li> <li>Total municipalities in the country = 333</li> </ul>
Quality Management Systems (QMS)	<ul style="list-style-type: none"> <li>Implement the QMS in the MOH based on ISO 9001:2008 certification requirements</li> </ul>	<ul style="list-style-type: none"> <li>MOH headquarters, San Marcos Health Area Directorate, and three pilot facilities in San Marcos Health Area</li> </ul>

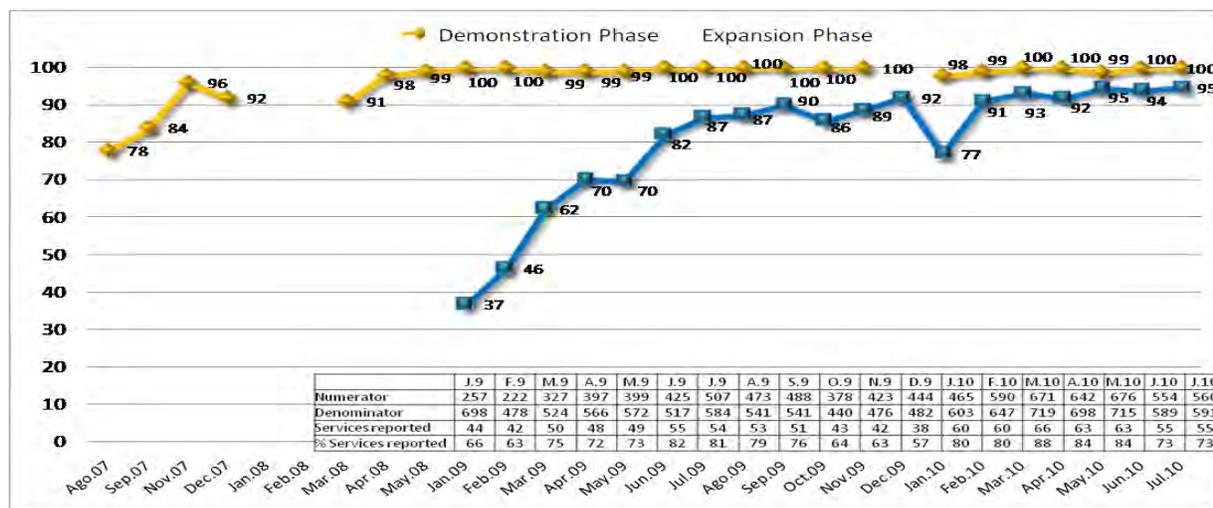
## Main Activities and Results

During the first six months of FY10, all HCI assistance in Guatemala was funded through TOI; beginning in April 2010, all HCI assistance was funded under TO3.

### Basic ProCONE collaborative

The health areas participating in the Basic ProCONE Collaborative have continued to improve their compliance with maternal and neonatal care standards as evidenced by measurements collected on all indicators during the year. Both the demonstration phase that started in 2007 in San Marcos and the expansion phase to seven additional health areas initiated in 2009 have maintained levels above 85% compliance with all nine quality indicators monitored for more than six months. Figures 12 and 13 show the high levels of AMTSL and immediate newborn care sustained in the demonstration and spread areas.

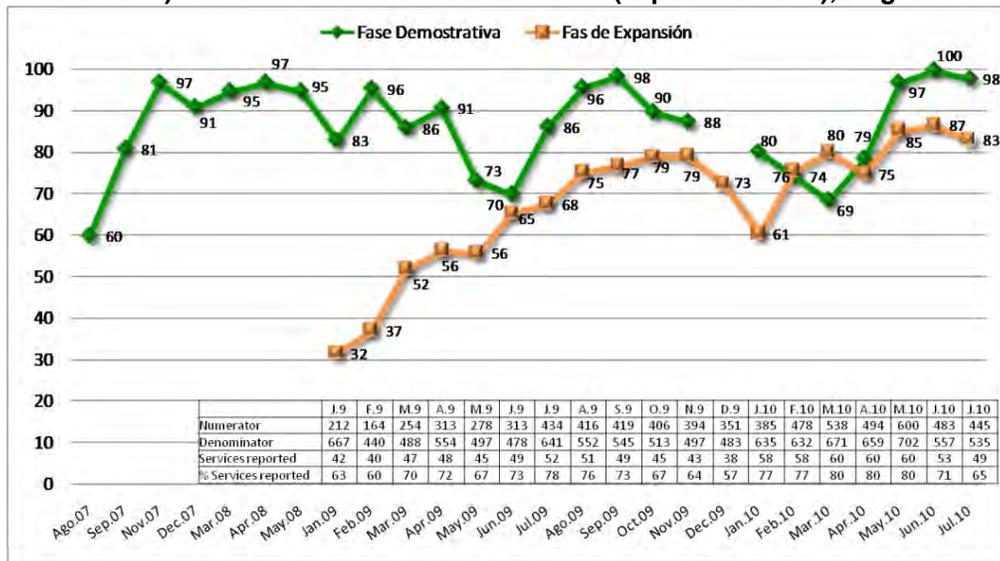
**Figure 12. Guatemala: Compliance with AMTSL in San Marcos (demonstration sites) and seven additional health areas (expansion sites), Aug. 2007–July 2010**



143 services reported ambulatory care. 67 services reported partum to 2009;  
75 services reported partum to 2010

Several interventions have contributed to quality improvement, including training of all health personnel in national norms for prenatal, postnatal, and newborn care, and improved supervision and coaching by MOH health area staff. Advocacy has helped ensure better stock levels of much needed micronutrients for prenatal and postpartum care.

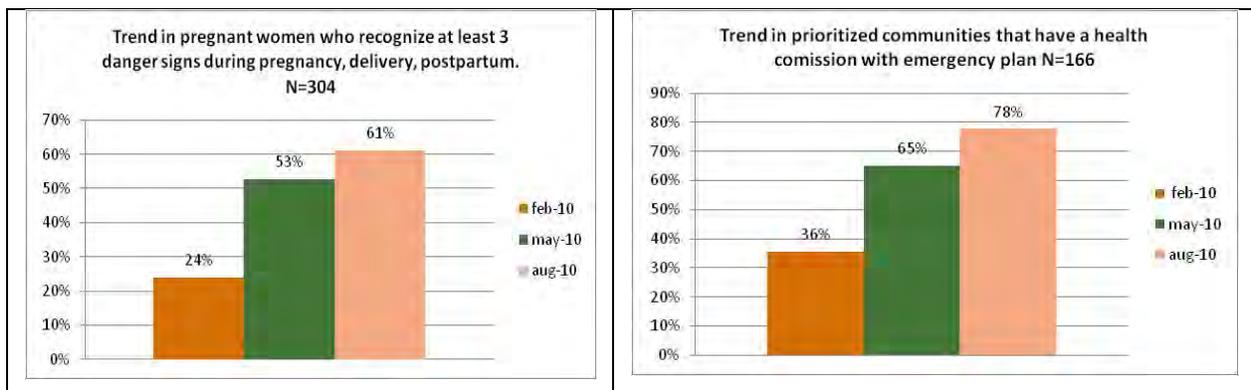
**Figure 13. Guatemala: Compliance with immediate newborn care standards in San Marcos (demonstration sites) and seven additional health areas (expansion sites), Aug. 2007–July 2010**



**Community ProCONE collaborative**

The community ProCONE collaborative that began as a demonstration in San Marcos health area spread its interventions to improve recognition of danger signs and birth preparedness to seven more health areas in January 2010, when the first learning session of the expansion phase was held with teams from the seven new health areas. This collaborative uses Lot Quality Assurance Sampling (LQAS) to measure results, sampling pregnant women in selected districts of the seven health areas. Baseline data were collected in February through interviews with samples of 19 women in each district (n=304), followed by repeat sampling in May and August. Women were asked about their recognition of danger signs in pregnancy, delivery, and the postpartum period, recognition of danger signs in the neonate, and presence of family and community birth emergency plans. Figure 14 shows improvements in recognition of danger signs among pregnant women and in the proportion of communities that have a health commission with community birth emergency plans, respectively.

**Figure 14. Guatemala: Trends in community ProCONE indicators in 16 prioritized districts in seven expansion health areas (304 interviews with pregnant women and 166 interviews with community representatives in 180 communities)**



The second learning session was held in March 2010. Advocacy with authorities and local leaders has played a major role in improvements in these indicators as well as community mobilization through assemblies where members of health committees were identified and trained in the development of

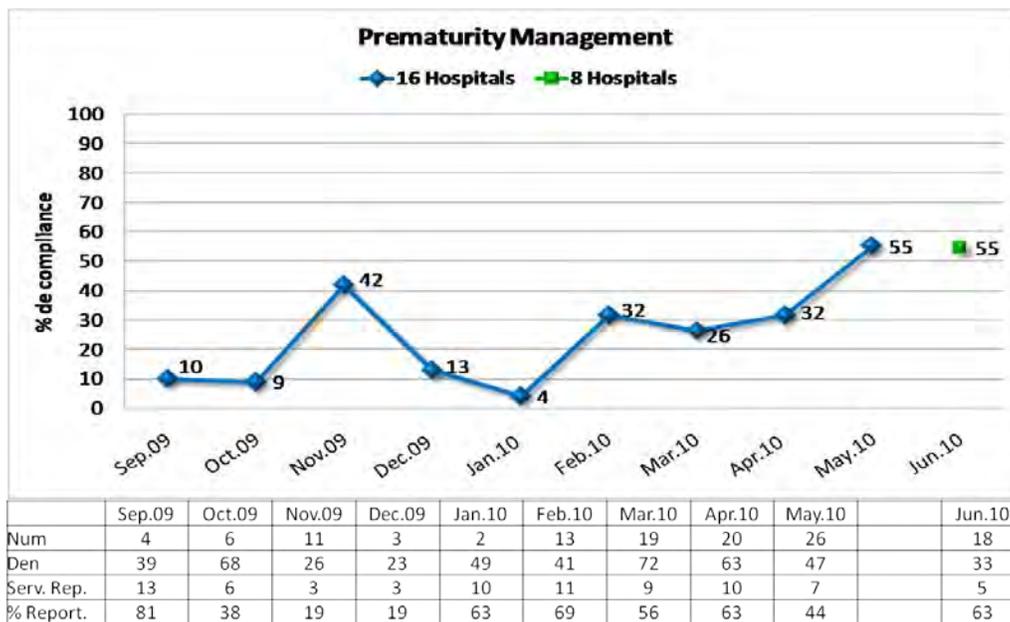
birth emergency plans. HCI worked closely with the MOH in the implementation of a behavior change communication strategy that included improved counseling in health facilities, home visits, mass media campaigns, radio spots, group talks, pregnant women clubs, and distribution of educational brochures in public locations such as buses, pharmacies, stores, and bars.

### Complications ProCONE collaborative

The complications ProCONE collaborative, initiated in 16 hospitals at the end of FY09, has started to show subtle yet important improvements. After the third learning session in November 2009, teams began to improve their compliance with case management standards for pre-eclampsia and eclampsia, reaching compliance in almost half the cases examined (see Figure 15). Other indicators being monitored include management of sepsis and obstetric hemorrhage as well as the management of neonatal infection, asphyxia and prematurity.

Contributing to these results has been the advocacy work that has helped increase the level of motivation among staff, although room for improvement remains. In order for project advisors to better support hospital QI teams and due to lack of motivation among some hospital staff, the number of hospitals participating in the collaborative was reduced from 16 to eight in June. It is expected that this focus on fewer hospitals will yield better results.

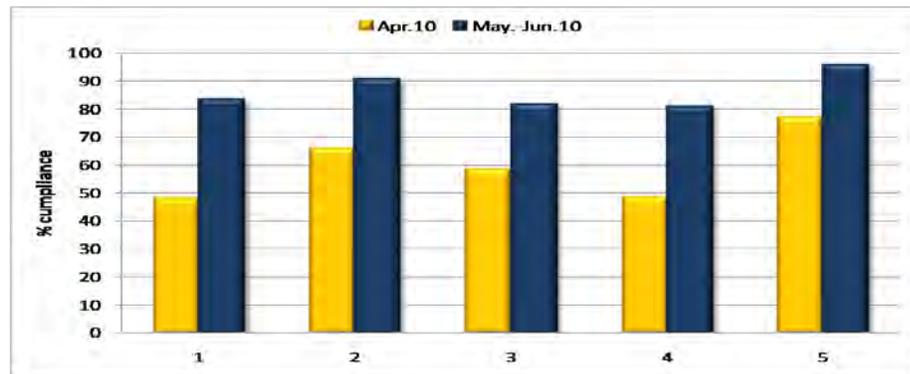
**Figure 15. Guatemala: Compliance with case management standards for premature infants, 16 hospitals through May 2010 and 8 hospitals in June 2010**



### Family planning demonstration

The new demonstration collaborative launched in February 2010 in one hospital and 11 health centers in Zacapa Health Area is focusing on training health personnel in family planning counseling and contraceptive technology. Results from the first two measurements demonstrate gains in expanding method choice and improving counseling as well as user satisfaction (Figure 16).

**Figure 16. Guatemala: Improvements in family planning indicators in the new demonstration collaborative in Zacapa health area, April 2010 versus May–June 2010**



	Sistematyc Offer		Received information on all methods		Received the method of choice		Quality Counseling		User Satisfaction	
	Apr. 10	M.-J.10	Apr. 10	M.-J.10	Apr. 10	M.-J.10	Apr. 10	M.-J.10	Apr. 10	M.-J.10
Percentage	48	84	66	91	59	82	49	81	77	96
Numerator	53	117	49	100	41	91	34	90	54	97
Denominator	110	140	74	110	70	111	70	111	70	101
No. Services reported	7	8	7	8	7	8	7	8	7	8
% services reported	64	73	64	73	64	73	64	73	64	73

### Conditional Cash Transfer Program

Throughout FY10, HCI worked closely with the MOH to implement, in 100 priority municipalities in nine health areas, a quality improvement component to support *Mi Familia Progres*a (My Family Is Making Progress), the conditional cash transfer program (CCTP) headed by the First Lady. In 45 assisted municipalities, HCI has supported behavior change communication interventions and quality improvement of basic maternal and child services provided in health centers and posts. In order to evaluate the added value of the QI component, HCI conducted this year an operations research study to observe compliance with key quality standards in preventive health services for children in facilities in 45 CCTP municipalities, comparing levels in facilities that received additional QI support (CCTP+QI) with those in facilities that only participated in CCTP (CCTP-only). The results of the study, summarized in Table 5, show that the facilities receiving QI support had 21–74 percentage points higher compliance with preventive child care standards than those that did not. This finding demonstrates the importance of taking steps to improve the quality of health care services provided in a program that seeks to dramatically increase the demand for health care services.

### Quality Management System

The fifth QI intervention supported by HCI in Guatemala during FY10 was continued support for the implementation of the MOH’s Quality Management System (QMS) to introduce International Organization for Standardization (ISO) 9001:2008 quality management standards to administrative and financial processes at the central, health area and district levels throughout the country. As part of the QMS, the application of ISO standards to clinical care for women and young children was piloted in the San Pedro Sacatepequez health center in San Marcos health area. Internal and external audits of the central level financial and budgeting processes were completed, resulting in a recommendation for ISO 9001:2008 certification, which took place in October 2010. In August 2010, the San Pedro health center received certification in financial,



Dr. Guillermo Echeverria, Administrative Vice-Minister presenting the ISO certificate to Dr. Anibal Orozco, San Pedro Sacatepequez Health Center Director. Photo by Monika Gonzalez, URC

administrative, and maternal and neonatal care processes after passing preliminary internal and external audits by ICONTEC, an international organization authorized to issue ISO 9001: 2008 certification. The official certification was an important event for Guatemala, making it the first health center in Central America to receive such recognition for quality of services.

**Table 5. Guatemala: Comparison of compliance with child preventive health care standards in CCTP+QI and CCTP-only health centers, 2010**

Action observed	CCTP + QI n <sup>a</sup> =104 encounters observed		CCTP-only n=32 encounters observed		p value
	n <sup>b</sup>	%	n <sup>b</sup>	%	
Administered vitamin A, if applicable (n=19; n=8)	14	73.7	0	0	<0.001 **
Provided ferrous sulfate, if applicable (n=20; n=10)	13	65	1	10	0.004 **
Provided folic acid, if applicable (n=20; n=10)	13	66	1	10	0.004 **
Weighed and plotted weight for age on graph	80	76.9	4	12.5	<0.001 **
Evaluated feeding problems	98	94.2	11	34.4	<0.001 **
Classified growth (based on weight gain)	73	70.2	6	18.8	<0.001 **
Verified and applied vaccine, if applicable (n=101; n=32)	93	92.1	21	65.6	<0.001 **
Counseled on feeding, appropriate to age	94	90.4	22	68.8	0.002 **
Filled out infant/ child clinical record	73	70.2	10	31.3	<0.001 **

\*Statistically significant, p<0.05

\*\*Statistically significant, p<0.01

<sup>a</sup> n refers to the number of health centers where provider-client interactions were observed and compliance recorded.

<sup>b</sup> Is the number of observations that complied with the norm.

## Directions for FY11

In FY11, HCI will scale up work in family planning and integrate it into the Basic and Community ProCONE collaboratives. In addition, efforts will focus on helping the MOH achieve higher levels of institutionalization of its improvement work and achieve ISO 9001:2008 certification for 10 additional health facilities. In keeping with Feed the Future and the Global Health Initiative guidelines, the project will focus on reducing chronic malnutrition.

## 2.10 Honduras

### Overview of HCI's Program in FY10

Main QI interventions/ activities	What are we trying to accomplish?	Scale of intervention
To guarantee the quality of EONC services through the institutionalization of the CQI approaches and tools	Consolidate EONC improvements in the 11 health regions participating in CQI activities Begin CQI activities in EONC in the Metropolitan Health Region (12 <sup>th</sup> region)	<ul style="list-style-type: none"> <li>▪ 166 out of 904 health facilities in 11 of 20 health regions</li> <li>▪ 15 hospitals (out of 28 at national level)</li> <li>▪ 26 maternal clinics (out of 40 at national level?)</li> <li>▪ 125 health centers (out of 836 at national level)</li> <li>▪ These 166 facilities provide services to 56% of the total population (3.7 million out of 6.6 million)</li> </ul>
Pneumonia and diarrhea demonstration collaborative in the Health Region of La Paz	Improve the quality of pneumonia and diarrhea care for children under five	<ul style="list-style-type: none"> <li>▪ One health region (La Paz) out of 20</li> <li>▪ Nine health service networks</li> <li>▪ One hospital</li> <li>▪ One maternal clinic (Marcala)</li> <li>▪ 23 health centers</li> <li>▪ Population benefited: 156,560 persons</li> </ul>

Referral system collaborative in the Health Region of Comayagua	Improve the referral of obstetric and neonatal emergencies towards the Santa Teresa Regional Hospital	<ul style="list-style-type: none"> <li>▪ One health region (Comayagua) out of 20</li> <li>▪ One hospital</li> <li>▪ Four infant maternal clinics</li> <li>▪ One emergency clinic</li> <li>▪ Population benefited: 352,881 persons</li> </ul>
Quality assurance and Health Sector Reform	Strengthen external quality assurance within the health sector reform process of the Secretariat of Health	<ul style="list-style-type: none"> <li>▪ Five health regions</li> <li>▪ 27 public facilities: 5 hospitals, 9 maternity clinics, and 13 decentralized facilities</li> <li>▪ Population benefited: 1.4 million persons</li> </ul>

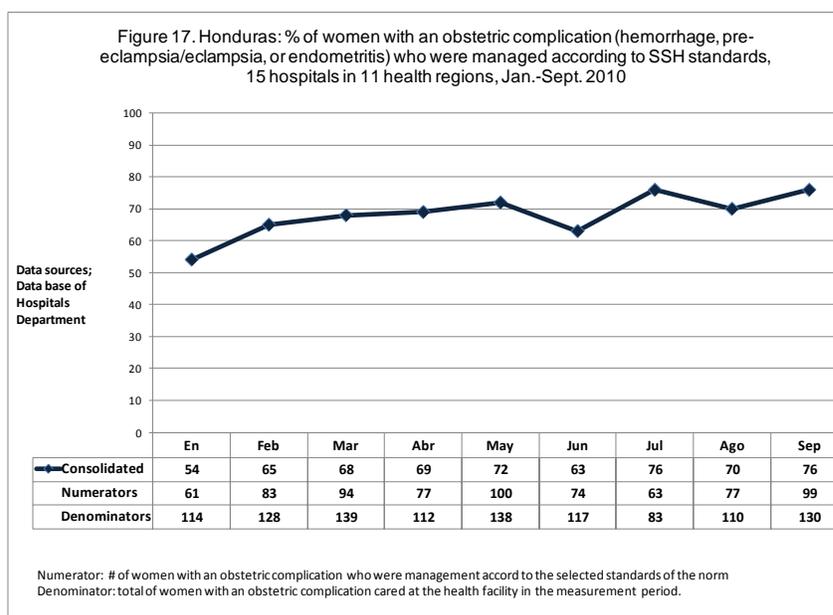
## Main Activities and Results

During the first six months of FY10, all HCI assistance in Honduras was funded through TO1; beginning in April 2010, all HCI assistance was funded under TO3.

### Support continuous quality improvement in maternal, newborn, and child health

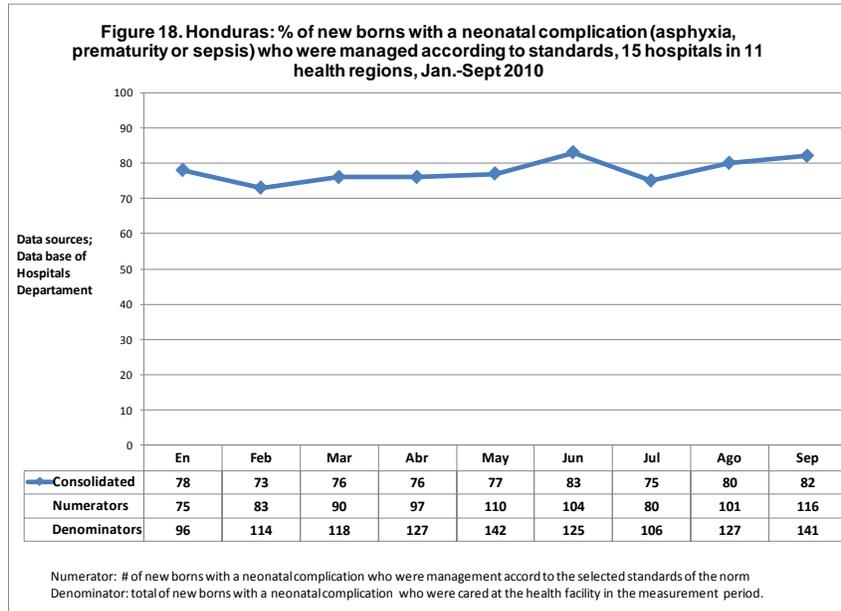
In FY10, HCI provide technical support to 11 of the country's 20 health regions, helping 166 health facilities to implement CQI for maternal, newborn, and child health services, working in close collaboration with the Quality Assurance Department of the Secretariat of Health (SSH). USAID requested that HCI begin providing technical assistance to the Metropolitan Health Region to incorporate it into the ongoing maternal, newborn and child health improvement work HCI is supporting in 11 health regions. HCI organized three learning sessions with eight health facilities of the Metropolitan Region to share successful practices of experienced sites.

Data collected by the facilities and regions and reported to the SSH as part of required quality monitoring show that facilities in the 11 regions assisted by HCI since 2007 have sustained high levels of compliance with standards for use of the partograph and AMTSL, with performance maintained above 95% since April 2010. Figures 17 and 18 show progress made in 2010 in the 15 hospitals of the 11 regions receiving support for CQI in improving compliance with standards for the management of obstetric and newborn complications, respectively. While overall compliance with essential obstetric and newborn care standards has been high, HCI convened a workshop in September 2010 on the management of obstetric emergencies for the six hospitals with the lowest performance to discuss practices applied in higher-performing hospitals. The impact of high turnover among hospital personnel, particularly during the past year of political crisis, was telling, as 80% of the participants in the workshop did not have prior experience with QI activities.



## La Paz Region pneumonia/diarrhea collaborative

The final learning session for the collaborative was held in February 2010 under TOI funding. Plans to expand the use of CHWs to all health facilities in the La Paz region have been impeded by lack of sufficient drugs to provide to all community volunteers and a freeze on training funds. The SSH has requested funding from the Spanish Government to scale up the better care practices developed in La Paz to other health regions in 2011.



## Comayagua referral collaborative

This collaborative began in FY09 with the obstetric services of the Santa Teresa Hospital, the regional referral center for Comayagua, and the region's five maternal clinics. In the first quarter of FY10, the region's 30 health centers were incorporated into the collaborative, which seeks to improve the referral process and strengthen the continuum of care in the region by standardizing the two-way flow of information about referred patients. The focus of efforts to improve the referral and counter-referral processes were also expanded from labor and delivery services to other services, such as emergency and ambulatory services. All staff in the facilities were trained in referral procedures and in the use of forms designed to record key information about each referral. "Referral boxes" were introduced in each facility to register incoming referrals and prompt staff to follow up on them. The most important achievement this year in referrals was that the National Referral Hospital in Tegucigalpa, to which Santa Teresa Hospital refers patients, has begun to send back information on the referred cases to Santa Teresa.

## Quality assurance and health sector reform

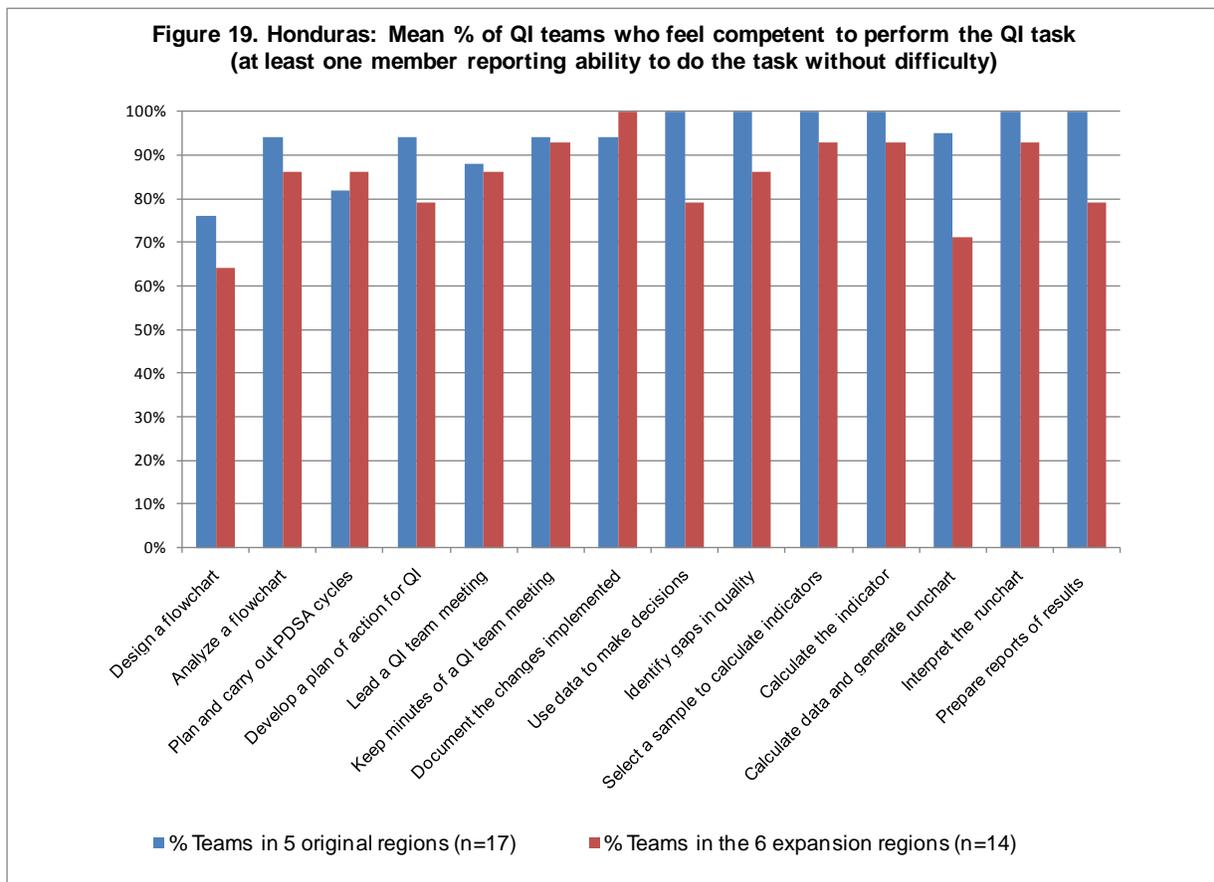
Together with PAHO and Management Sciences for Health (MSH), HCI assisted the SSH to review and update the indicators and instruments used to measure the quality of MCH services to align them with the changes made in the national standards in 2009. We prepared six documents this year to support the CQI work: 1) an updated version of the CQI team workbook; 2) CQI documentation and evaluation guidelines; 3) a report on successful experiences in improving prenatal and post partum care; 4) a report on successful experiences in improving labor, partum, immediate post partum and basic newborn care; 5) a report on successful experiences in handling obstetric complications in the Hospital of Lempira; and 6) a report on successful experiences in the management of pneumonia and diarrhea in the La Paz region.

As part of the national health sector reform program, HCI provided support to the SSH to prepare two policy documents: the National Quality Policy on Health and the Conceptual Framework for the National Quality Health System. The former focuses on facility-level certification and quality monitoring using a CQI approach. The latter has been approved by an SSH technical team including representatives of the Quality Assurance Department, the Human Resources Department, the Legal Department, and

the Planning, Management and Evaluation Unit. The documents were reviewed with the health sector reform implementing partner, MSH, to ensure consistency with the health reform process.

## Research

HCI worked with the Quality Assurance Department of the SSH to collect and analyze data on the institutionalization of QI and EONC best practices in the demonstration and expansion regions of the EONC collaborative. The study is comparing levels of quality in facilities that have been implementing CQI for several years with those in facilities that only began monitoring quality indicators in 2008. Data were collected from 31 facilities, using structured surveys and individual and group interviews, sampled from the five health regions of the collaborative’s demonstration phase and the six health regions to which CQI activities expanded in 2007. Preliminary results from the study show that 87% of teams studied in the 11 health regions continue to implement a broad range of QI activities, as seen in Figure 19. This analysis will be the basis of a synthesis document that will guide the introduction of the EONC CQI process in the eight health regions that have not yet been engaged in QI initiatives.



## Directions for FY11

In FY11, HCI will provide follow-up to the new obstetric emergencies collaborative. We will provide support to the SSH to design and implement new collaboratives focused on neonatal health and reducing nosocomial infections, and we will provide follow-up to the Comayagua referral collaborative to synthesize lessons and assist the region to apply them in all facilities in the region. HCI will provide follow-up to the pneumonia and diarrhea collaborative to systematize what has been learned and assist the SSH to apply the lessons in other districts of La Paz Region and in other health regions. HCI will provide support to the SSH for the implementation of the national quality system in health.

## 2.11 Latin American Kangaroo Mother Care

### Overview of HCI's Program in FY10

Main QI interventions/activities	What are we trying to accomplish?	Scale of intervention
Introduction and spread of Kangaroo Mother Care in Guatemala, El Salvador, Nicaragua, and Ecuador	<ul style="list-style-type: none"> <li>▪ Introduce and implement Kangaroo Mother Care in one leading teaching hospital in each country</li> <li>▪ Reduce hypothermia and infections in low-weight newborns</li> <li>▪ Increase breastfeeding practices in low-weight newborns</li> <li>▪ Spread kangaroo care to additional hospitals in each country</li> </ul>	<ul style="list-style-type: none"> <li>▪ Initially, one leading teaching hospital in each country: 1) Bertha Calderón hospital, Managua/Nicaragua; 2) Maternidad hospital in San Salvador; 3) Quetzaltenango regional hospital, Guatemala.</li> <li>▪ Scale of spread TBD in each country</li> </ul>

### Main Activities and Results

HCI began the year planning activities for the Latin American Regional Kangaroo Mother Care (KMC) Initiative and studying the experience of BASICS in implementing KMC in the Dominican Republic. Visits were made to the Kangaroo Care Foundation and two hospital programs in Bogota, Colombia to discuss logistical and technical aspects of KMC.

Upon the approval of the MOH in Nicaragua, the Bertha Calderon hospital in Managua was chosen to participate, and the Neonatologist, Chief Nurse and Psychologist from the hospital were selected to attend the KMC training in Bogota. HCI's Chief of Party in Nicaragua, Dr. Ivonne Gomez, also attended the KMC training during the second quarter of the year. In the last quarter of FY10, the Bertha Calderon Hospital team in Nicaragua began the intra-hospital phase of Kangaroo Mother Care implementation; 12 newborns have started to receive Kangaroo Mother Care in the hospital, including pre-birth KMC training for parents. The Kangaroo Care Foundation Technical Manual is being adapted to the Nicaraguan context.

The Ministry of Health of El Salvador approved its participation in the program in the third quarter of the year, and selected the maternity Hospital "Alfonso Rosales" in San Salvador to participate. Three professionals (Chief Neonatologist, Psychologist and Chief Nurse) from the "Alfonso Rosales" Maternity Hospital were trained for two weeks by the Kangaroo Care Foundation at the San Ignacio, San Jose, and MEDERI hospitals in Bogota in September. HCI El Salvador Deputy Director Dr. Patricia de Quinteros and Dr. Yanira Burgos of the Salvadoran MOH were trained on organizational, administrative, logistical, and clinical aspects of KMC implementation.

From these early experiences of KMC in Nicaraguan and Salvadoran hospitals, a methodological pathway seems to be emerging to organize the introduction of this evidence-based practice: 1) a hospital-based phase, in which the KMC unit and basic hospital process are organized and premature babies start to receive KMC; 2) an ambulatory phase where an outpatient KMC unit is organized in the main hospital to provide follow-up care for premature babies who are discharged with KMC; and 3) organization of a network of satellite hospitals or maternities where premature babies can be followed up after being discharged from the main hospital.

We have begun preparations with HCI Guatemala to send a team from Quetzaltenango hospital to participate in an upcoming training in Bogota in January 2011. For this purpose, a geographic waiver was obtained from USAID in order to be able to contract training and assistance services from the Kangaroo Foundation.

### Directions for FY11

HCI Guatemala will sponsor a team from Quetzaltenango Hospital for training in Bogota in the first quarter of FY11. The HCI regional office will organize and coordinate activities aimed at sharing

experiences from the three countries already trained and implementing KMC: Nicaragua, El Salvador and Guatemala. This support activity will use methods and tools from the Improvement Collaborative approach. HCI will also support a team from the child survival project in Cotopaxi, Ecuador to be trained in Bogota.

## 2.12 Nicaragua

### Overview of HCI's Program in FY10

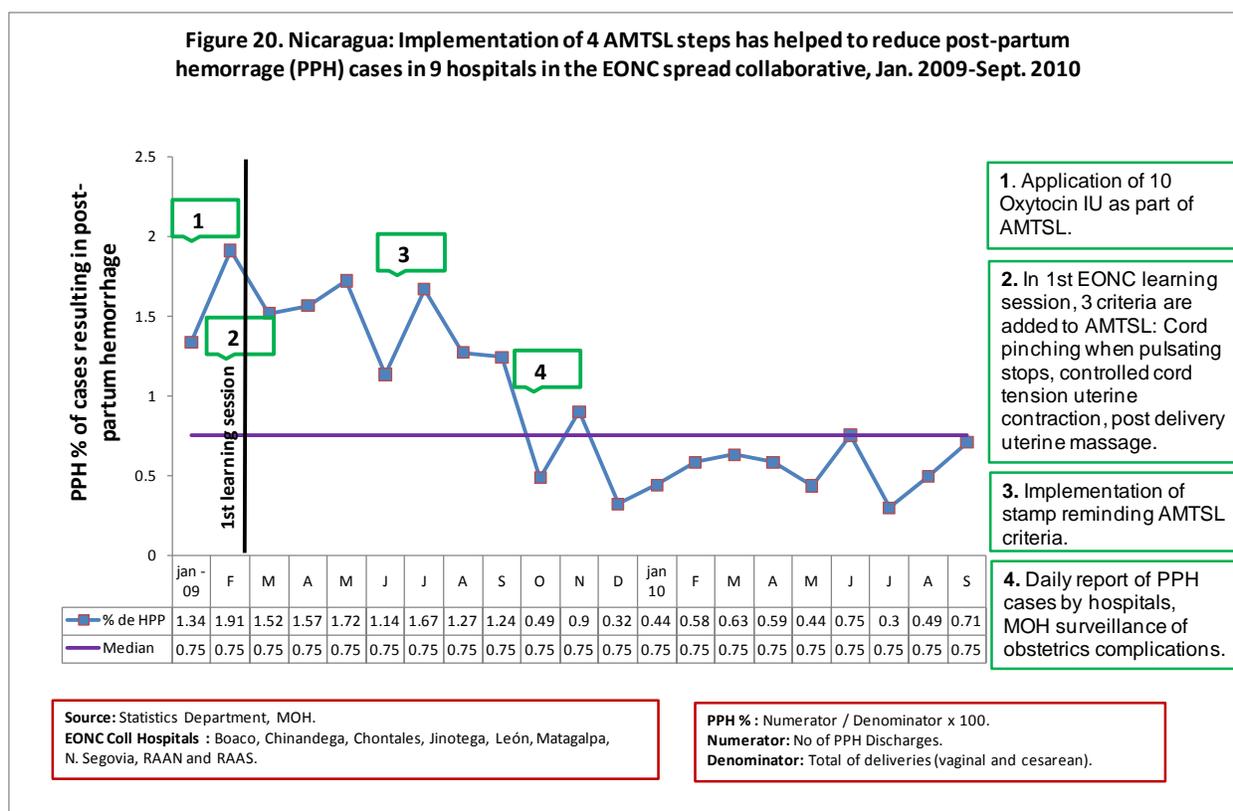
Main QI interventions/ activities	What are we trying to accomplish?	Scale of intervention
Maternal Neonatal Complications Spread Collaborative	<ul style="list-style-type: none"> <li>▪ Improve the approach to essential obstetric and neonatal complications: gestational hypertension, postpartum hemorrhage, puerperal sepsis, neonatal sepsis, birth asphyxia and hyaline membrane disease</li> </ul>	<ul style="list-style-type: none"> <li>▪ Nine hospitals, 29 health centers in nine SILAIS</li> <li>▪ Chinandega, León, Matagalpa, Jinotega, Chontales, Boaco, Nueva Segovia, RAAS, RAAN.</li> <li>▪ 90,041 expected pregnancies</li> </ul>
Family Planning Collaborative	<ul style="list-style-type: none"> <li>▪ Support the USAID population activities in Ministry of Health (MINSa) facilities, health training institutions, private health care clinics financed by the Nicaraguan Social Security Institute</li> </ul>	<ul style="list-style-type: none"> <li>▪ 17 hospitals and 86 primary health facilities in 16 out of 17 SILAIS</li> <li>▪ Madriz, Nueva Segovia, Masaya, Rio San Juan, Matagalpa, RAAS, RAAN, Jinotega, Carazo, Chontales, Estelí, Rivas, Chinandega, Managua, León, and Granada.</li> <li>▪ 932,229 people</li> </ul>
Infection Prevention and Control	<ul style="list-style-type: none"> <li>▪ Improve prevention and control of infections in order to reduce newborn mortality by sepsis associated with nosocomial infections</li> </ul>	<ul style="list-style-type: none"> <li>▪ 21 hospitals, 29 health centers in 17 SILAIS (Madriz, Nueva Segovia, Masaya, Rio San Juan, Matagalpa, RAAS, RAAN, Jinotega, Carazo, Chontales, Estelí, Rivas, Chinandega, Managua, León, Boaco and Chontales)</li> </ul>
Improve quality of care of children under five years old with pneumonia or diarrhea	<ul style="list-style-type: none"> <li>▪ Improve case management of severely ill children under five and reduce pneumonia and diarrhea fatality rates</li> </ul>	<ul style="list-style-type: none"> <li>▪ 16 national SILAIS out of 17 and 18 hospitals out of 22</li> <li>▪ 640,421 children under five years old</li> <li>▪ SILAIS: Madriz, Nueva Segovia, Masaya, Rio San Juan, Matagalpa, RAAS, RAAN, Jinotega, Carazo, Chontales, Estelí, Rivas, Chinandega, León, Boaco and Chontales.</li> </ul>
Spread of better practices in HIV counseling and testing	<ul style="list-style-type: none"> <li>▪ Support the organization of high quality services for prevention of mother-to-child transmission of HIV (PMTCT), counseling, voluntary testing, recruitment, and treatment of people with sexually transmitted diseases (STDs) and HIV/AIDS including support for the reduction of stigma and discrimination</li> </ul>	<ul style="list-style-type: none"> <li>▪ 74 health centers in 14 SILAIS Granada, Carazo, Masaya, Nueva Segovia, Chinandega, RAAN, Rio San Juan, RAAS, Chontales, Jinotega, Boaco, Matagalpa, Estelí, Madriz</li> <li>▪ 2,345,019 people</li> </ul>
ART collaborative	<ul style="list-style-type: none"> <li>▪ Improvement of quality of care for HIV-positive people</li> </ul>	<ul style="list-style-type: none"> <li>▪ 655 HIV-positive patients</li> <li>▪ 17 hospitals and three health centers in 15 SILAIS: Chinandega, León, RAAS, RAAN, Rio San Juan, Masaya, Granada, Chontales, Rivas, Carazo, Matagalpa, Jinotega, Nueva Segovia, Madriz, Estelí.</li> </ul>

## Main Activities and Results

In FY10, HCI supported a broad program of technical assistance to the Nicaraguan Ministry of Health (MINSa) at the central level, to the two national referral hospitals and in all 17 local integrated health systems (SILAIS) in the country, providing support for two collaboratives (maternal and neonatal complications spread and ART demonstration) and other activities to spread better care practices and improve HIV counseling and testing, case management of diarrhea and pneumonia in children under five, family planning, and infection prevention and control. All HCI assistance was provided under TO3.

### Maternal and neonatal complications spread collaborative

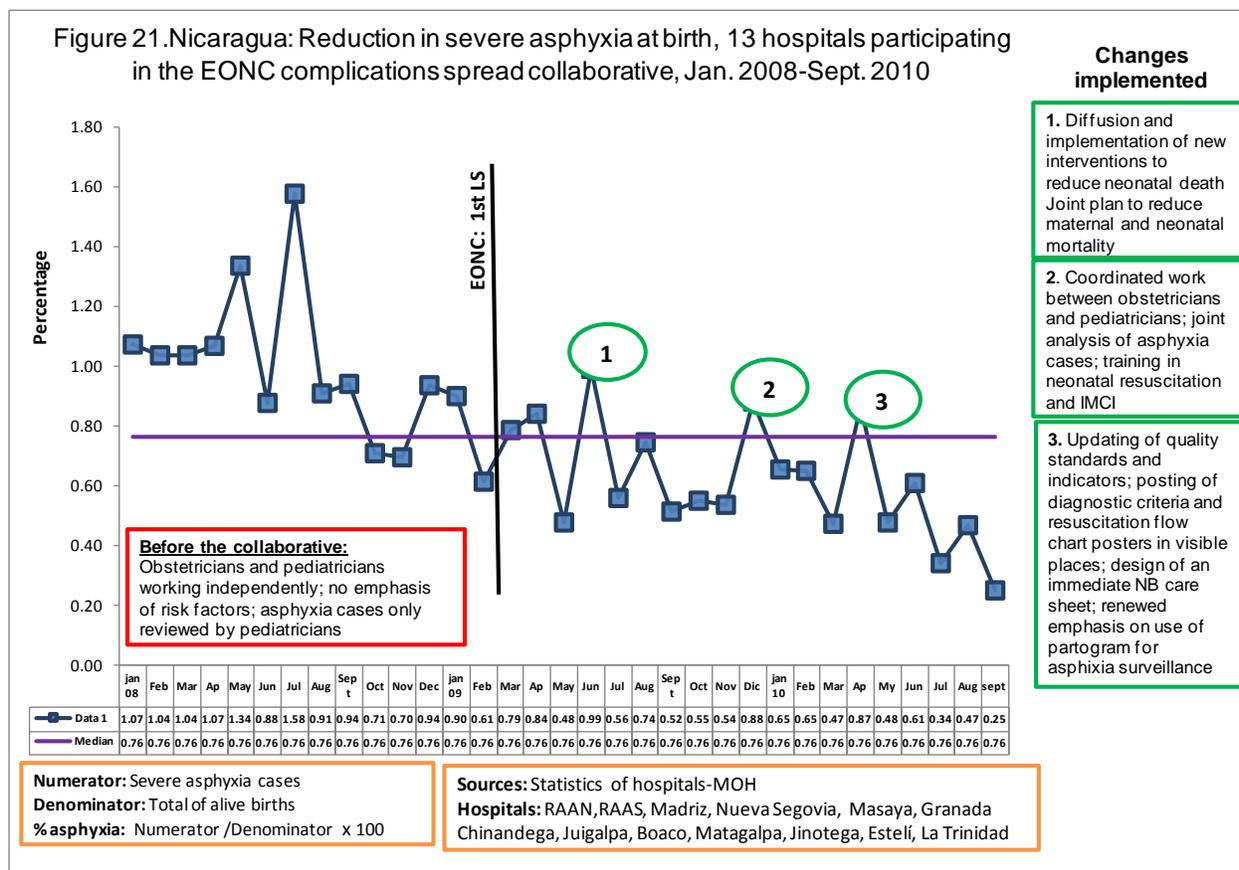
In September 2010, HCI organized the third and final learning session of the maternal and neonatal complications spread collaborative, which was initiated in February 2009 and involved nine hospitals and 29 health centers in nine SILAIS. This collaborative sought to spread and refine better care practices that had been developed in a multi-year essential obstetric care collaborative implemented under QAP. A key result of the complications collaborative was a 57% reduction in the number of post-partum hemorrhage (PPH) cases, which declined from 536 cases in 2009 to 232 in 2010; the corresponding rate of PPH declined from 1.3% in FY09 to 0.7% in FY10 (see Figure 20). Interventions that contributed to this reduction were: application of AMTSL both for vaginal and cesarean deliveries, incorporating three other elements of AMTSL in addition to oxytocin administration, improvement in case classification, timely identification of PPH risk factors, and better surveillance of these women in labor. Another important change instituted by improvement teams was to require that women stay in the same area for two hours of immediate postpartum surveillance. This action is also now recorded in the postpartum segment of the Basic Perinatal Clinical History.



Gains were also made in the management of preeclampsia and eclampsia. We observed a decline in the eclampsia case fatality rate from 5.1% in FY09 to 3.6 in 2010. Changes made by teams in the collaborative include more active screening for risk factors for preeclampsia and eclampsia, promotion

of calcium and aspirin use, clearer guidelines for health personnel on diagnostic criteria (proteinuria and blood pressure data) and actions to take, and making urinalysis reagent strips and initial treatment for preeclampsia available at all MOH health facilities providing pre-natal care.

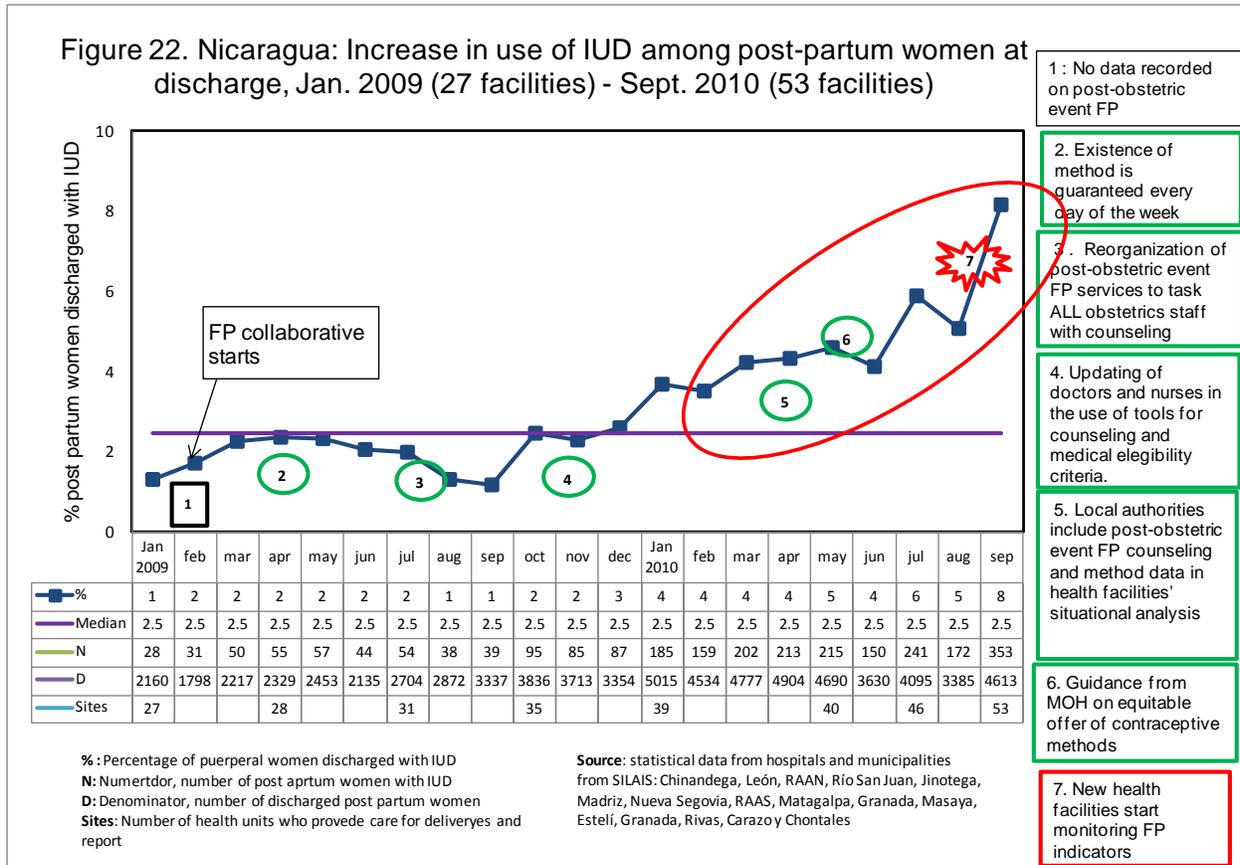
Regarding newborns, teams in the collaborative improved the identification, recording, and interpretation of maternal risk factor for asphyxia, especially during labor and delivery, through the use of the partograph; better coordination and handoffs between obstetrics and pediatrics staff, assuring that the most qualified staff are assigned to provide care for newborns with asphyxia; and joint analysis of asphyxia cases by pediatricians and obstetricians, including review of the partograph record. All of these changes have contributed to a 26% decrease in the asphyxia rate of, which declined from 0.69% in FY09 to 0.51% in FY10 (see Figure 21). Declines were also seen in deaths from newborn sepsis: there has been a 61.4% decrease in deaths, reduced from 70 deaths in 2009 down to 27 as of September 2010. This decrease is due to better identification of maternal risk factors for newborn sepsis; higher compliance with antisepsis protocols, hand hygiene, and disinfection; and to improvements in the diagnosis and treatment of urinary tract infections in pregnant women.



## Family planning

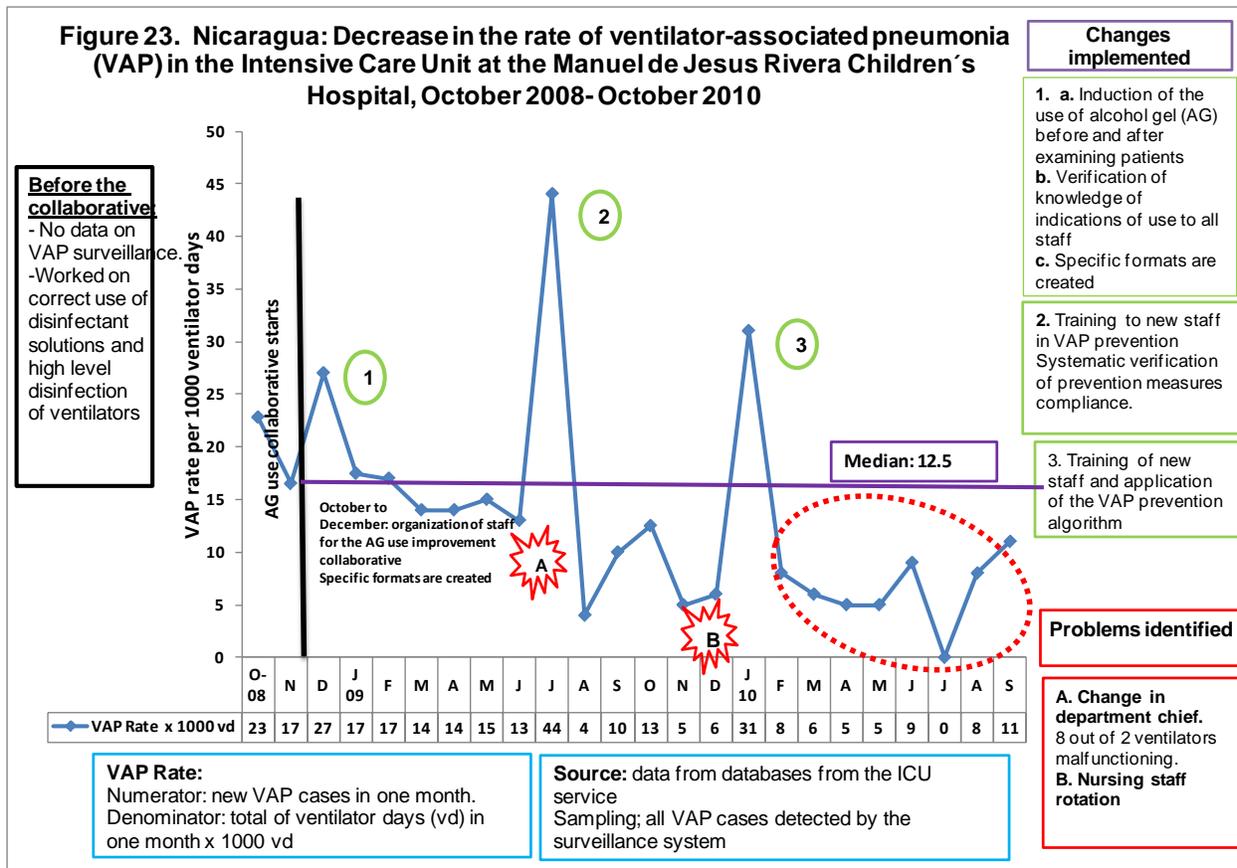
HCI's support for improvement in the availability and quality of FP services in FY10 focused on both MOH and Social Security providers and addressed counseling and use of post-obstetric event contraception, promotion of clinical eligibility criteria established in national norm, assuring balanced offering of contraceptive methods, and integration of FP and HIV counseling. Interventions supported by HCI included training in contraceptive technology and counseling, monitoring of compliance with FP standards, and job aids for counseling that emphasize informed choice. The proportion of women postpartum who were discharged with a modern contraceptive method increased from 72% in January 2009 in 27 facilities to 80% in September 2010 in 53 facilities, while the proportion discharged with any

method (natural or modern) increased from 78% to 92%. As seen in Figure 22, the rate of IUD acceptance increased from 1% in January 2009 to 8% in September 2010. Improving the quality of counseling also resulted in an increase in the proportion of clients who received information on the dual protection afforded from consistent condom use, providing both contraceptive protection and preventing sexually transmitted infections, from 69% compliance with this standard in January 2009 among 12 health facilities to 88% compliance in September 2010 among 53 health facilities.



## Infection prevention and control

Based on better care practices developed in a small demonstration collaborative on rational use of antiseptics, disinfectants and hand hygiene (ADaHH) implemented in FY09, HCI worked with 19 hospitals, 27 health centers, and four Social Security provisional medical clinics to expand surveillance of compliance with ADaHH standards and guidelines, provide training for personnel, and spread recommended operational changes for the adequate use of antiseptics and disinfectants. HCI also worked with six hospitals to implement international best practices for the prevention of catheter line-associated blood stream infections and with the intensive care unit (ICU) of the national children's referral hospital (Manuel Jesus de Rivera) to implement measures to prevent ventilator-associated pneumonia (VAP). The key VAP intervention was the introduction of an algorithm for care of children on mechanical ventilation which includes proper disinfection of ventilators, endotracheal aspiration with antiseptic techniques as well as hand hygiene with alcohol gel. As shown in Figure 23, the ICU saw a 40% drop in the infection rate, from 12.0 cases per 1000 ventilator days in FY09 to 7.2 cases in FY10. VAP case fatality was also reduced by 8%, from 23.3% in FY09 to 21.4% in FY10.



### Spread of HIV counseling and testing practices

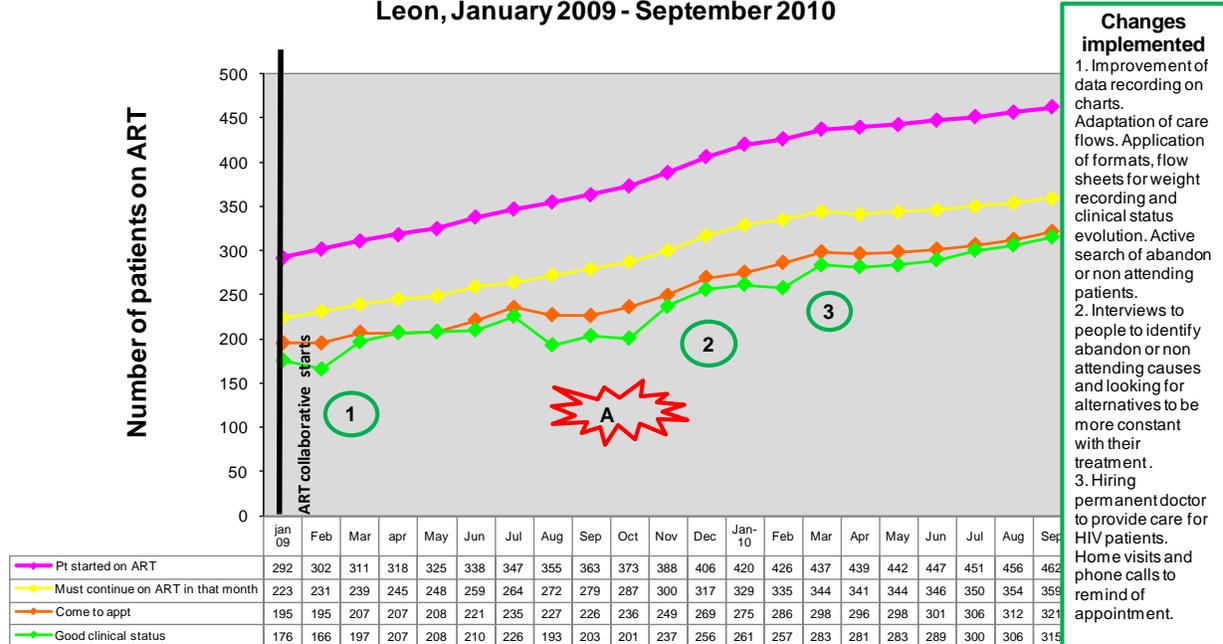
Another key area of HCI technical support in FY10 was to strengthen HIV VCT for at-risk groups, working with 74 health facilities in 14 SILAS (Granada, Carazo, Masaya, Nueva Segovia, Chinandega, RAAN, Rio San Juan, RAAS, Chontales, Jinotega, Boaco, Matagalpa, Estelí, and Madriz), including people with STIs, pregnant women, and TB patients. Across these facilities, HIV testing among people with STIs rose from 9.6% in 2008, when a demonstration collaborative was carried out on this topic, to 37% in September 2010. Higher compliance was not achieved due to shortages of HIV test reagents in the first months of 2010. Among pregnant women, HIV testing has been maintained at 78%. HIV testing among TB patients—a new area of intervention in FY10—was increased in 17 health facilities in six SILAIS (RAAN, RAAS, Chinandega, Matagalpa, Boaco, and Chontales) from 52% in February 2010 to 95% in September by raising awareness of health personnel of the increased risk of HIV infection among TB patients and giving priority to TB patients for rapid testing.

### ART demonstration collaborative

Finally, HCI completed in August 2010 a demonstration collaborative begun in January 2009 with hospitals in five SILAIS (Masaya, Chinandega, Leon, Rivas, and RAAS) with the highest rates of HIV infection to improve coverage of eligible patients with ART, retention in care, and clinical outcomes. Multidisciplinary teams in the hospitals implement improvements and monitored quality indicators for 18 months. Changes introduced by the teams include greater coordination between hospitals and health centers, closer follow-up of patients started on ART, engagement of mothers of HIV patients to support treatment adherence, use of peer counselors, self-help groups, and active search for patients who fail to return for appointments. Patient retention on ART in the five hospitals increased from 75.1% in October 2009 to 78.5% in September 2010, and the number of patients who abandoned treatment

decreased from 31 cases in December 2009 to 22 cases in September 2010 (see Figure 24). The proportion of ART patients with good clinical status improved from 90% in September 2009 to 98% in September 2010. Municipal QI teams have also emphasized integrated care and follow-up for PLWHA at the primary care level and raising health personnel awareness of HIV stigma and discrimination.

**Figure 24. Nicaragua: Applying the ART framework for improving care of people with HIV, ART collaborative sites in Chinandega, Rivas, Masaya, RAAS and Leon, January 2009 - September 2010**



Source: Data base from each hospital.  
Hospitals: Chinandega, Rivas, Masaya, Bluefields, Leon.  
Sample selection: Monitoring of 100% of charts.

A. Between July and November of 2009, the clinical status gap opens for people on ART, at the expense of the Masaya hospital patient group. part of the integrated care unit staff was absent due to health problems and administrative changes.

### Directions for FY11

HCI assistance in Nicaragua in FY11 will emphasize the general areas of technical assistance but with some new activities and an overall emphasis on strengthening capacity for quality improvement. At the request of USAID, we will support MINSAs in reactivating the Mother and Baby Friendly Hospitals Initiative in eight hospitals. We will support the national pediatric referral hospital to strengthen care for premature newborns through Kangaroo Mother Care and will initiate the ambulatory phase of the program. A new demonstration collaborative to reduce unnecessary cesareans will be implemented in the four hospitals (Chontales, Chinandega, Jinotega, and Leon) that record the highest cesarean rates. Because USAID will graduate Nicaragua from family planning assistance, HCI technical support will focus on assisting MINSAs and Provisional Medical Clinics (financed under Social Security) to reduce unsatisfied demand for family planning services and assure provision of contraceptive methods in accordance with MINSAs regulations as well as strengthen the delivery of long-term contraceptive methods. In the area of infection prevention, we will assist three hospitals to monitor and prevent hospital-acquired infections and expand the rational use of antiseptics and disinfectant solutions in health centers in Chinandega, Matagalpa, and RAAN SILAIS. We will also provide support to MINSAs to develop standards for hospital-acquired infection surveillance. We will continue to support expansion of HIV counseling and testing among vulnerable and higher risk populations (pregnant women, patients with STIs, TB patients) and integrated care of people with HIV-TB co-infection in those municipalities with higher TB incidence. We will also work with health training institutions to develop curricula in areas assisted by the project as well as in the application of CQI methods.

## 3 USAID Global Health Element and Core-funded Activities

### 3.1 Maternal, Newborn, and Child Health

#### Overview of HCI's Program in FY10

Main QI activities	What are we trying to accomplish?	Scale of intervention
Provide technical leadership, partnership and knowledge management	<ul style="list-style-type: none"> <li>▪ Contribute to the Helping Babies Breathe (HBB) global initiative with USAID and its partners</li> <li>▪ Support the introduction of HBB in Uganda, Afghanistan, and Guatemala</li> <li>▪ Lead the coordination of USAID QI partners' effort in MNCH in USAID priority countries</li> <li>▪ Participate in developing and testing WHO Checklist for Safe Childbirth</li> </ul>	<ul style="list-style-type: none"> <li>▪ Global</li> </ul>
Technical support to HCI maternal, newborn, and child health (MNCH) country programs	<ul style="list-style-type: none"> <li>▪ Provide technical support to ongoing HCI programs in MNCH</li> <li>▪ Share state-of-the-art information and guidelines in MNCH with country programs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Afghanistan</li> </ul>
Develop innovative programs for applying QI models to improve quality and scale up high impact interventions to reduce maternal, newborn and child mortality in priority countries and strengthen the links between facility and community levels	<ul style="list-style-type: none"> <li>▪ Mali MNH Facility Collaborative: Increase maternal and newborn survival by improving the quality of EONC at health facility level</li> <li>▪ Mali MNH Community Collaborative: Improve maternal newborn practices/care-seeking and access to quality skilled maternal newborn care through behavior change communication and birth-preparedness interventions at community and facility levels and through improved referral/counter-referral practices</li> <li>▪ Cambodia: Link national newborn resuscitation efforts with the Global HBB Initiative</li> <li>▪ Senegal: Improve community case management of childhood illness</li> <li>▪ Uganda: Improve the effectiveness of essential newborn care (ENC) including newborn resuscitation and prevention of post-partum hemorrhage through an MNH facility collaborative</li> <li>▪ Uganda: Improve ENC and referral/counter-referral practices at the community level through an MNH community collaborative</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mali MNH Facility Collaborative: Kayes Region (1/9), covering 40 facilities (40/57) in two districts (2/7) for 577,000 inhabitants (out of 1,687,116)</li> <li>▪ Mali MNH Community Collaborative: Kayes Region (1/9), Diema Rural Circle, working with half of the 3 community health zones in the district</li> <li>▪ Cambodia: National</li> <li>▪ Senegal: 2 districts (30 health huts and 26 health posts)</li> <li>▪ Uganda: 2 districts (2/58)</li> </ul>
Finalize the tool to evaluate the functionality of community health worker (CHW) programs in support of USAID's MCH strategy	See <i>Health Workforce section 3.3</i>	<ul style="list-style-type: none"> <li>▪ Nepal, Benin, Ethiopia, and Zambia</li> </ul>
Conduct selective MCH operations research	<ul style="list-style-type: none"> <li>▪ Conduct cost-effectiveness analysis (CEA) of QI approaches applied to maternal and child health and operations research on the effectiveness of QI approaches at the community level</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mali CEA of facility and community collaboratives</li> </ul>

#### Main Activities and Results

HCI's work supported by the USAID Maternal and Child Health Division was funded under TO1 through May 2010 and thereafter under TO3. Described below are the project's MNCH activities in FY10 that were funded through TO3.

## Global technical leadership

HCI completed the joint paper with USAID and other MCH partners on “Finding Common Ground: Harmonizing the Application of Different Quality Improvement Models in Maternal, Newborn and Child Health Programs” and circulated the final version for review by other partners. Work began on a new paper to articulate the potential value of QI in accelerating the achievement of MDG 4 and 5. The paper examines gaps in the quality of MNCH programs that hinder the achievement of the MDGs and presents examples of QI programs that have successfully closed such gaps.

In June 2010, HCI participated in the launch of the HBB Initiative in conjunction with the Global Health Council meeting. Based on interviews with other partners, HCI developed a private website to support sharing and information exchange among implementers of HBB using the K4Health Project’s Toolkit function. The site was launched in September 2010 with members of the HBB Advisory Committee. In addition, HCI supported the introduction of HBB in Afghanistan, Uganda, and Guatemala.

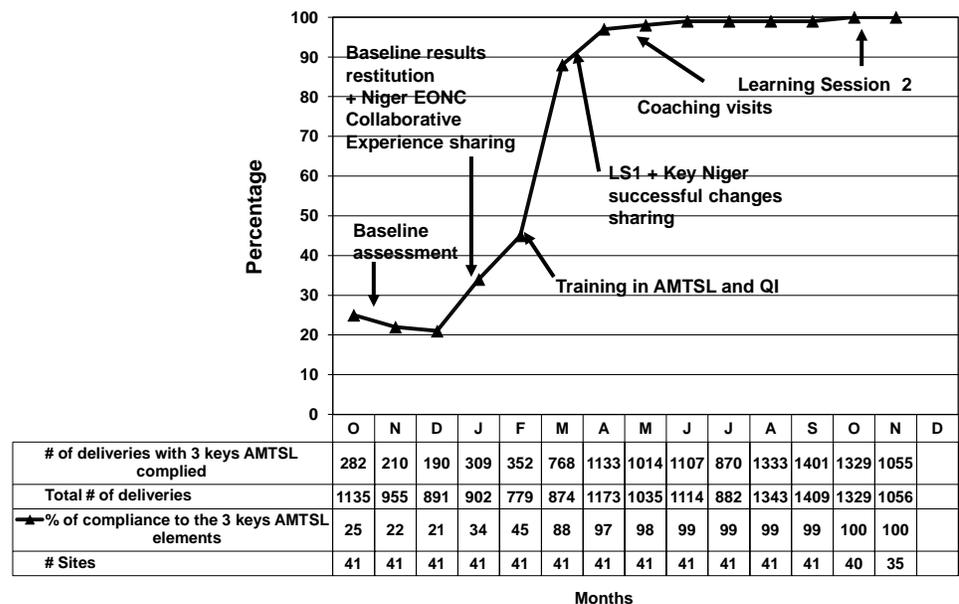
## Apply QI models to improve quality and scale up high-impact interventions to reduce maternal, newborn, and child mortality

### Mali

In June 2010, HCI’s Niger team returned to Mali to meet with MOH coaches in Kayes to review the data collected by the teams and the changes teams had introduced, including changes in the organization of care, building staff technical competency, and ensuring the availability of key inputs. In August 2010, the HCI Niger team visited Kayes to mentor coaches in both Kayes and Diema districts through joint field visits to quality improvement teams in the participating health facilities. HCI also supported the MOH to plan the second learning session, which was held in November 2010.

Data collected through November 2010 (see Figure 25) show that facility teams in Kayes and Diema districts in Mali have been able to replicate the results achieved in Niger with the same intervention package. In August 2010, HCI worked with the Diema District Health Team to select the sites for the community collaborative. The demonstration phase will include two communes covering three health areas with about 34 villages and involve both community health workers and traditional birth attendants who are active in the villages.

Figure 25. Mali: Percentage of deliveries receiving all three key elements of AMTSL in 41 sites participating in the facility MNH collaborative in Kayes Region, October 2009–November 2010



### Uganda

Discussions were initiated in March

2010 with the Ministry of Health in Uganda to apply collaborative improvement to newborn health at the health facility and community level in two districts (Masaka and Luwero). A planning visit took place in July 2010. In August, HCI worked with the MOH to design a newborn care and post-partum

hemorrhage prevention collaborative in two districts of Uganda, and supported a national orientation workshop for the roll-out of Helping Babies Breathe.

### Senegal

The joint HCI-ChildFund project to apply the improvement collaborative approach to improve community case management of child malaria, pneumonia and diarrhea through community-based health huts in Senegal was launched in September 2010 with an orientation workshop for staff of the MOH, ChildFund, and other implementing partners.

The strategy developed calls for the implementation of a demonstration improvement collaborative in two districts; Tivaouane, with 11 health posts and 15 health huts, and Mbourg, with 15 health posts and 15 health huts, for a total of 26 health posts and 30 health huts. A national steering committee for the collaborative was formed, made up of MOH, USAID and some international partners such as IntraHealth and FHI, as well as ChildFund and HCI. The spread strategy for the collaborative is to develop an intervention package that can then be scaled up to all 13 of the regions in which ChildFund’s program in Senegal is operating.

### Conduct operations research on priority MNCH topics

Cost-effectiveness studies were initiated in FY10 in Mali and Afghanistan in collaboration with HCI’s Research and Evaluation team.

### Directions for FY11

In FY11, HCI will expand the package of interventions being implemented in Kayes Region of Mali to include care for pre-eclampsia and eclampsia. HCI will launch the newborn health improvement collaborative in two districts of Uganda and expand its technical focus to include maternal health. In collaboration with ChildFund, HCI will launch the community case management of childhood illness collaborative in Senegal. HCI will support further testing of the Safe Childbirth Checklist at a large scale and will develop and test a QI model to improve newborn infection detection management. HCI will support learning within the Global HBB Initiative through leadership for scale-up of HBB in Afghanistan, Guatemala, and Uganda and management of the HBB Community of Practice private website. We will also publish papers on the role of QI in accelerating the achievement of MNCH MDGs and synthesize the HCI experience in applying QI models in MNCH across several countries. All activities will be conducted under TO3.

## 3.2 HIV/AIDS

### Overview of HCI’s Program in FY10

QI interventions and other activities	What are we trying to accomplish?	Scale of intervention
Develop a quality improvement framework to guide HIV care and treatment programs in: facilitating universal access, maximizing retention, and achieving optimal clinical outcomes for people living with HIV/AIDS	<p>ART Quality Improvement Framework</p> <ul style="list-style-type: none"> <li>▪ Refine ART quality framework and monitoring dashboard</li> <li>▪ Create Instructional Guide for framework</li> <li>▪ Support ongoing activities to improve coverage, retention and optimal clinical outcomes for patients on ART</li> <li>▪ Compile best practices from various programs that result in improved care</li> <li>▪ Prepare to integrate with HIV care and treatment system redesign for chronic care</li> </ul>	<ul style="list-style-type: none"> <li>▪ Various implementing partners (AIDS Relief, FHI, etc.)</li> <li>▪ Sites piloting complete framework in Cote d’Ivoire, Nicaragua, and Tanzania</li> <li>▪ Coverage, retention, and clinical outcomes collaboratives in Uganda</li> </ul>
Design an effective care and treatment system model for chronic conditions care in low-	<p>Chronic Care Model</p> <ul style="list-style-type: none"> <li>▪ Determine design features necessary and prepare recommendations for applying chronic conditions care, using HIV/AIDS as a</li> </ul>	<ul style="list-style-type: none"> <li>▪ Committee of experts, including local MOH officials from Uganda</li> <li>▪ One district in Uganda</li> </ul>

<b>QI interventions and other activities</b>	<b>What are we trying to accomplish?</b>	<b>Scale of intervention</b>
resource settings, including best practices for palliative care	model Palliative Care Collaborative	for prototype <ul style="list-style-type: none"> <li>Two districts in Uganda</li> </ul>
Develop a set of globally agreed upon indicators and performance criteria to monitor and improve HIV/AIDS services; and develop HIV service program assessment tools that effectively inform decisions on quality improvement programming	OGAC-Global Fund Indicators <ul style="list-style-type: none"> <li>Develop a set of globally agreed upon indicators and criteria to monitor and improve HIV/AIDS services. Field test the proposed criteria and measurement mechanisms to assess their feasibility and relevance and their relationship to existing in-country indicators in five countries with variable HIV epidemics (TOI activity)</li> </ul> HIV Quality Assessment <ul style="list-style-type: none"> <li>Refine quality assessment tools developed for HIV/AIDS program assessments in Cote d'Ivoire and Uganda and apply them in a country where HCI has not been active to identify gaps in care that could be addressed by quality improvement interventions</li> </ul>	<ul style="list-style-type: none"> <li>Three countries in Africa (Uganda, Namibia and Cote d'Ivoire), one in Asia (Vietnam), and one in Eastern Europe (Georgia)</li> <li>Sample of 20 sites in Malawi (FHI)</li> </ul>
Contribute to the growing body of evidence on the validity and effectiveness of quality improvement science in HIV/AIDS	Sequential Validity Study <ul style="list-style-type: none"> <li>Evaluate the validity of QI team self-assessment data and how it changes over time</li> </ul>	<ul style="list-style-type: none"> <li>Three hospitals and six health centers in the Mtwara Region of Tanzania</li> </ul>
Apply quality improvement principles to strengthen the multilaterally supported global effort to maximize HIV-free survival of children.	Prototype application of WHO PMTCT and Infant Feeding Guidelines <ul style="list-style-type: none"> <li>Apply quality improvement principles to guide roll-out of the latest PMTCT and infant feeding guidelines by examining and developing solutions for operational issues arising from their implementation</li> </ul>	<ul style="list-style-type: none"> <li>2 or 3 sample sites in the Lindi Region in Tanzania</li> </ul>
Health Workforce Collaborative	<i>See Health Workforce section 3.3</i>	Tahoua Region, Niger
Provide Global Technical Leadership in HIV/AIDS program development	<ul style="list-style-type: none"> <li>Provide technical assistance to HCI country programs in HIV/AIDS</li> <li>Disseminate learning</li> </ul>	<ul style="list-style-type: none"> <li>All HCI HIV/AIDS programs</li> </ul>

## Main Activities and Results

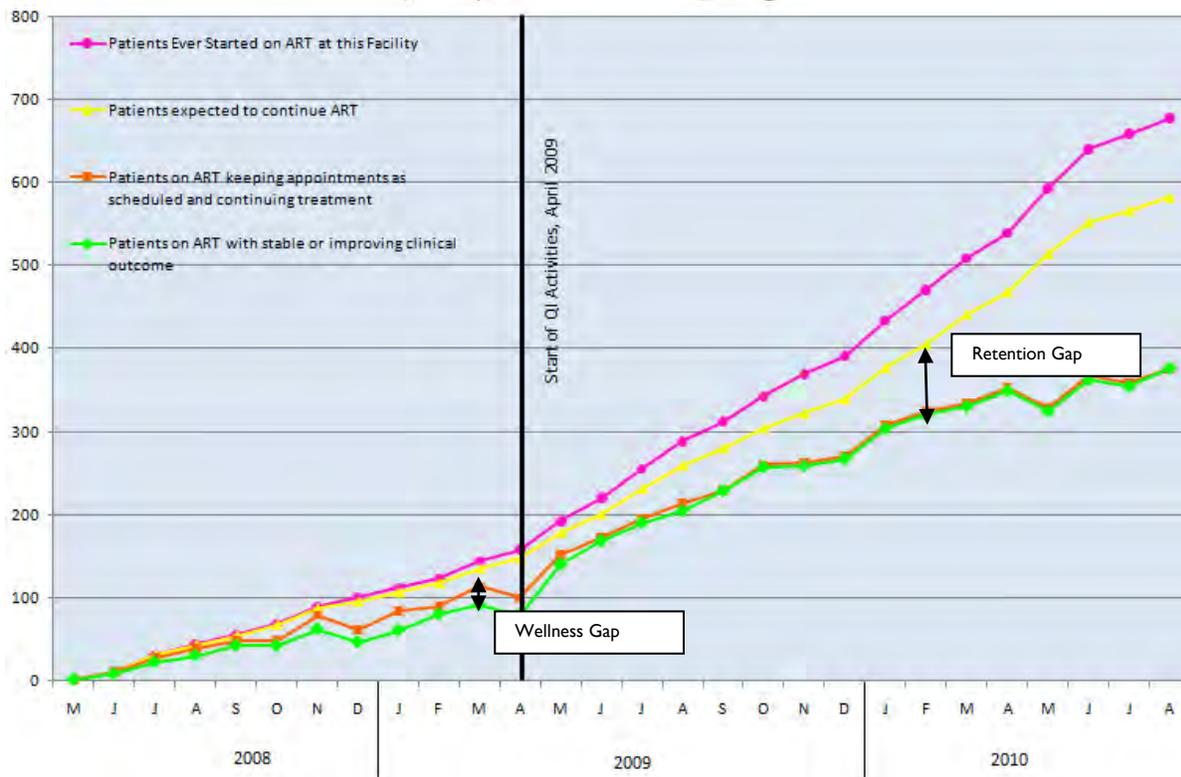
HCI's work supported by the USAID Office of HIV/AIDS (OHA) was split between TO1 and TO3 funding throughout FY10. All work related to the OGAC-Global Fund quality of service indicators was carried out under TO1 funding throughout the year. Activities related to the ART Framework, Global Technical Leadership, and other HIV/AIDS research were carried out under TO1 funding through June 2010 and thereafter under TO3. Activities related to the HIV quality assessment in Malawi and lab improvement work were carried out under TO3 funding throughout FY10. Described below are the project's HIV/AIDS activities in FY10 that were funded through TO3.

### ART Framework

During the last quarter of FY10, HCI drafted an instructional manual that describes the process of collecting baseline data and setting up data systems for ongoing monitoring of the gaps in coverage, retention, and clinical outcomes. This instructional manual will be published and made available on the HCI Portal in FY11. An internal review of our experience to date applying the Framework was also

conducted by gathering feedback and recommendations from coaches who have been implementing the approach in their respective countries. Since the implementation strategy and contexts vary in the three countries, many lessons can be gathered from these experiences. In Tanzania, first pilot site for application of the Framework, Sabasaba Clinic in Morogoro Region, has greatly increased coverage and improved documentation to demonstrate good clinical outcomes but still struggles with the retention gap (see Figure 26). Because this facility is in an urban area which has seven other HIV care and treatment centers amongst which patients are known to circulate, it is possible that much of this retention gap is actually a result of self-transfers. In 2010, the Framework was introduced in new sites in Morogoro. These sites began collecting data on retention and clinical outcomes and focused their efforts on the gaps which the QI teams believed needed the most attention. In Uganda, sites were divided up into three collaboratives that each addressed a single quality gap in ART care. In Nicaragua, a country with a concentrated HIV epidemic and relatively small numbers of HIV-infected people, sites with some experience in QI collected data on all the gaps, and chose which gaps to address. A report on the Framework's applications to date, with recommendations for next steps, will be finalized early in FY11.

**Figure 26. Implementation of the ART Framework, Sabasaba clinic in Tanzania (May 2008 – August 2010)**



The changes that have been tested in the various sites implementing the Framework are also being compiled into a document to be shared among the different sites. Examples of changes implemented are included in Table 6.

**Table 6. Change concepts being applied in field testing of HCI's ART Framework**

Quality Gap	Changes to improve quality
<b>Coverage</b>	<ul style="list-style-type: none"> <li>• Relocate the HIV clinic to a different location which has a private waiting area</li> <li>• Expand waiting area space to accommodate more patients</li> </ul>
<b>Retention</b>	<ul style="list-style-type: none"> <li>• Dispense 2 months supply of ART to decrease #visits for patients with history of good adherence</li> <li>• Send a relative / friend to collect ART on behalf of patient</li> <li>• Home based care services</li> <li>• Educate patient about importance of adherence</li> <li>• Share appointment schedule with “treatment buddy”</li> <li>• Return to clinic on an earlier date than next appointment when more convenient</li> <li>• First attend to patients with scheduled appointment</li> <li>• Centralize supply chain management of ARVs at the regional level to prevent stock-outs at the facility-level</li> </ul>
<b>Wellness</b>	<ul style="list-style-type: none"> <li>• Allocated funds for opportunistic infection medications</li> <li>• Inform patient to return before pills run out regardless of scheduled appointment date</li> <li>• Assigned a medical records assistant to HIV clinic to help pull files on clinic days</li> <li>• Redesigned patient flow and introduced task-shifting to facilitate clinical management</li> </ul>

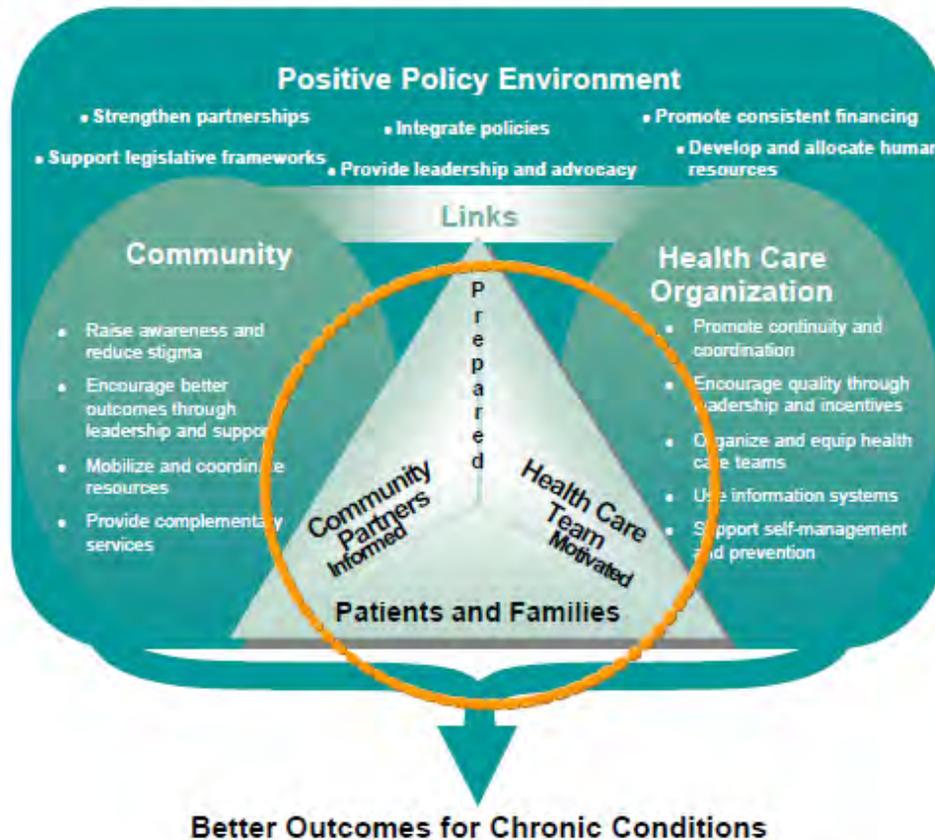
### **Chronic conditions care**

HCI and the Ministry of Health of Uganda hosted the Chronic Conditions Design Meeting May 26-28, 2010, in Kampala, with some 40 participants, including experts from the Uganda MOH and partner organizations, in addition to staff and consultants from HCI Uganda and headquarters. The meeting was framed by the WHO Model for Chronic Care which centers on the core triad of Patients and Families, Community Partners, and the Health Care Team (see Figure 27). The meeting included presentations on chronic care versus acute care and the need to adapt health care systems to chronic conditions, site visits to a hospital and two health centers providing HIV services, and breakout sessions to discuss the different components of the chronic care model in light of how care delivery in Uganda has been adapted to chronic illnesses and what further changes are needed to optimize care for chronic diseases. During the design meeting, participants defined what good chronic care would look like in Uganda and adapted the WHO model for Uganda by putting the patient at the center of the triad. An important outcome of the meeting was the decision of the Uganda MOH to support a pilot activity to re-design the system of chronic care service delivery and to focus on overall health system changes needed to support optimized chronic care delivery by Ugandan health facilities and communities. Changes proposed will be reviewed further by the MOH, and based on the changes selected, a prototype care model will be developed and tested in selected sites.

In the week following the Chronic Care Design Meeting, HCI, the MOH, IHI, and the British Medical Journal sponsored a four-day conference to share the conclusions of the Chronic Care Design Meeting, present key sessions from the 2010 International Forum (combining videotaped sessions with live presentations), and hold a day-long skill-building workshop on applying the HCI Gap Analysis Framework to improve care for ART patients. This conference was attended by over 250 participants from 10 different African countries (Cote d'Ivoire, Nigeria, Ethiopia, Rwanda, Kenya, Tanzania, Namibia, Malawi, South Africa, and Uganda), in addition to participants from USAID and several partner organizations. The conference served as a call to action to strengthen health systems in support of sustainable, high quality care for HIV/AIDS and other chronic illnesses.

Figure 27. WHO Chronic Care Model

*Innovative Care for Chronic Conditions Framework*



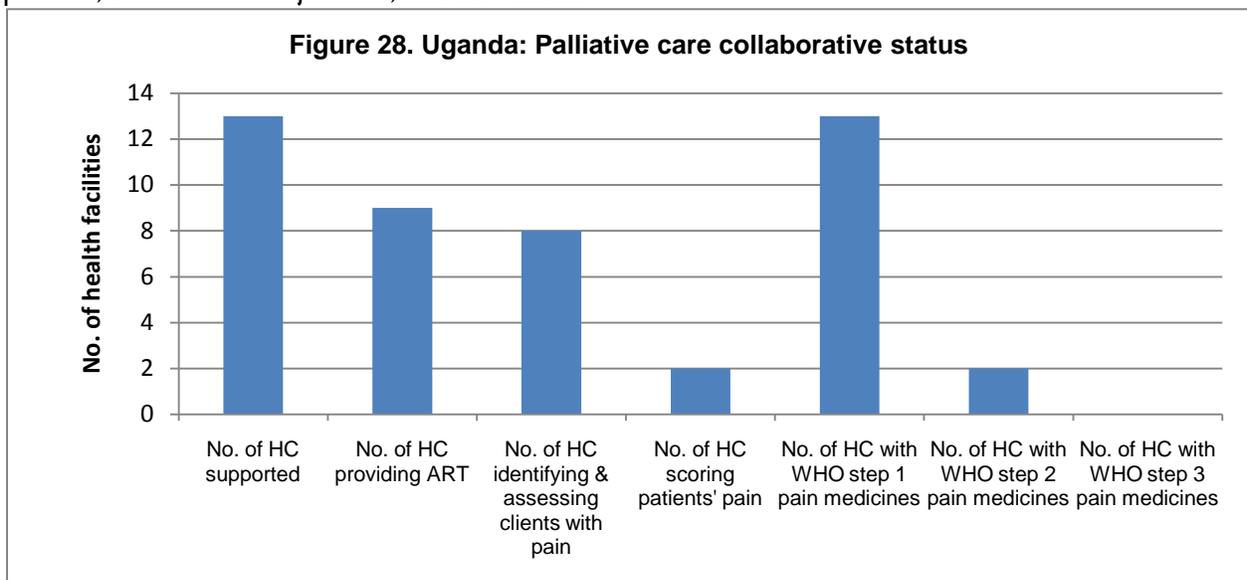
**Palliative care collaborative**

Uganda has become a leader in palliative care in sub-Saharan Africa since the founding of Hospice Africa Uganda in 1992. Palliative care is included in Uganda’s Basic Package for Essential Clinical Care with the aim of ensuring that palliative care services are provided throughout the national health system. Nevertheless, an audit report of palliative care services in 2009 revealed that palliative care services were only being offered in 32 out of the 80 districts and that these services were mainly offered in the Regional referral Hospitals, District hospitals, Missionary hospitals and by some NGOs. In Uganda a large majority of the population (85%) lives in rural areas far from such facilities, and palliative care therefore remains inaccessible even in districts where some palliative care is available.

To address the widespread neglect of palliative care in the national health systems of low-income countries, HCI has launched in July 2010 a demonstration QI collaborative for palliative care targeted toward HIV/AIDS patients in Uganda. This project will complement and contribute to the Chronic Care redesign prototype and focuses on pain and symptom management at HIV/AIDS treatment facilities. This collaborative is engaging district health teams, facility health providers, and community support structures in strengthening support for palliative care and establishing a sustainable system for identification, referral, and follow-up of patients with pain. Challenges in providing palliative care are being addressed while the lessons learned will be used in scaling up palliative care services to other districts. Ultimately, best practices in palliative care will be incorporated into the Model for Care of Chronic Conditions also being developed in Uganda.

The collaborative involves 13 health facilities (one district hospital, three health center IVs, and nine health center IIIs) in two Ugandan districts (Mayuge and Namatumba). The technical working group for this project includes representatives from the Uganda Ministry of Health, the African Palliative Care Association, the Palliative Care Association of Uganda, Hospice Africa-Uganda, and the STAR-EC Project.

The baseline assessment in the two districts participating in the collaborative was conducted in August. The assessment showed minimal availability of pain management services and medications, especially morphine, in Mayuge and no availability of palliative care services in Namatumba. Furthermore, knowledge of palliative care among health care providers in both districts was very limited. As shown in Figure 28, all facilities were deficient in their practices regarding documentation of pain management, and QI teams agreed to work on improving documentation so that data could be properly tracked. This will allow assessment of the success of future QI interventions. Additional interventions being planned by various facilities include: monthly continuing medical education on pain management clinical mentoring, working with community volunteers, introduction of HIV clinic days, pain management education for patients, documentation journals, and HIV clinics.



### HIV quality assessment

HCI partner Family Health International (FHI) carried out a comprehensive HIV care quality assessment in Malawi, based on tools adapted from the quality assessments applied by the project in 2008 in Uganda and Cote d'Ivoire. Assessments with the revised tools were completed in April and May at 20 sites in Malawi. The assessment served the dual purpose of testing the refined assessment tools and providing a baseline assessment of HIV services in a country where HCI has not been active.

Results from the Malawi assessments reveal that areas needing significant improvement in Malawi's HIV/AIDS service delivery include systems for patient referral, supply management, and record keeping. Many important referral systems are weak or nonexistent, such as: systems for referring patients for CD4 testing, systems for linking patients to support groups and community-based organizations for people living with HIV, establishment of home-based care for eligible patients, and follow-up of mothers and infants after delivery. Facilities visited for the assessment reported frequent stock-outs of ARVs, Cotrimoxazole, HIV test kits, lab reagents, and condoms. Many facilities were not using mandatory registers and thus were not capturing information vital to the management and follow-up of HIV patients. The final report and tools from the assessment were presented to the MOH and USAID Malawi in November.

## **Sequential validity of self-assessment study**

This study evaluated the validity of QI teams' self-assessments of their own performance as part of the ART/PMTCT improvement collaborative in Mtwara, Tanzania. Baseline data for this study were collected in August 2009, and during FY0, four rounds of data collection evaluated how well QI teams were able to perform eight key activities in the self-assessment process that can influence the validity of self-assessments. The eight self-assessment activities include: writing the records; storage and retrieval of records; selection of records from which data are abstracted; abstraction of data from the selected records; summarization of the abstracted data; agreement of computer and written records; quality and use of computer records; and communication of summary data to other members of the QI team and to the clinical staff. The study found significant upward trends in measurement scores occurred in record writing, sample selection, communication of results, and correctness, completeness, understanding, and use of computer results. Overall, the validity of teams' self-assessments improved over the course of their participation in the improvement collaborative. Validity either improved or stayed the same for most of the self-assessment activities. Low end-of-study validity was observed for storage and retrieval of records and communication of results, suggesting the need to reinforce these elements of the self-assessment process early in a collaborative improvement intervention.

## **PMTCT and infant feeding guidelines prototype**

HCI Tanzania Country Director Davis Rumisha and HQ Senior HIV/AIDS Advisor Suzanne Gaudreault attended the June 2010 WHO Africa Regional Workshop on Implementation of the new WHO PMTCT Guidelines as part of the Tanzania delegation. This was one of three implementation workshops (one for Francophone countries in Africa and one for each of two groups of non-Francophone countries in Africa) held by the WHO to guide countries in decision-making and implementation planning regarding the new guidelines. Dr. Rumisha continues to be engaged in decision-making discussions and implementation planning with the Tanzania Ministry of Health and Social Welfare (MOHSW), which is committed to implementing a prototype once a final decision has been made about country-wide adoption of the new WHO guidelines. HCI also met with EGPAF, WHO, FANTA, and the USAID Technical Working Group on Nutrition and Infant Feeding to discuss ideas for a larger scale prototype in two or three countries, with multiple districts in each, to occur later in 2011.

## **Directions for FY11**

HCI is currently synthesizing feedback from all sites using the ART Framework in order to complete a review of its application. This will inform the finalization of a manual for its implementation and guide refinement of the Framework to incorporate it with the Chronic Care Model. At the ART Framework pilot sites in Tanzania, key elements of the Chronic Care Model will be incorporated into quality improvement activities. In Uganda, HCI will assist the MOH to incorporate principles of chronic care into national policy and implement a prototype of selected chronic care design features at the district and facility level. Prototyping activities will be ongoing and will include quality monitoring using ART Framework monitoring tools. Changes leading to good chronic care practices will be harvested over time in preparation for spread. HCI will also support a palliative care demonstration collaborative in Uganda and will work with the Ugandan MOH to assure the integrity and efficacy of palliative care policies by strengthening supply chain, especially for morphine. The 2010 WHO guidelines will be prototyped at a minimum of 2–3 sites in one district of Tanzania. HCI will also launch a new activity to apply QI principles to quantify and improve retention of HIV-positive women and their infants across the PMTCT continuum. This activity will likely take place in Kenya or Tanzania. With the similar aim of improving retention of women and children along the PMTCT continuum, HCI will pilot the establishment of a standard referral system between PMTCT and OVC programs. In Kenya, HCI will partner with AIDSTAR to apply QI methods to enhance coverage and quality of nutrition services for HIV patients. Lastly, HCI will work to apply QI methods to make injection practices safer in an Asian country.

### 3.3 Health Workforce Development

#### Overview of HCI's Health Workforce Development Program in FY10

Main QI activities	What are we trying to accomplish?	Scale of intervention
<b>HIV-funded activities</b>		
CHW/HW Engagement	<ul style="list-style-type: none"> <li>▪ Apply engagement survey with CHWs (Zambia, Ethiopia) and facility health workers (Niger, Tanzania)</li> <li>▪ Conduct interviews to validate results of survey and get feedback on comprehension</li> <li>▪ Based on results, revise the engagement survey instruments for CHWs and facility health workers</li> <li>▪ Develop action planning items based on results of survey to see if targeting specific areas can result in higher scores</li> <li>▪ Field test the revised versions</li> <li>▪ Produce finalized surveys and develop guidance for their use by other organizations</li> </ul>	Engagement tool and approach to improve engagement for CHWs and HWs will be tested in 4 different countries
HR QI Collaborative Tanzania: Integrate HRH into ongoing ART/PMTCT Partner Improvement Collaborative	<ul style="list-style-type: none"> <li>▪ Apply quality improvement methods to the improvement of human resources for health (HRH)</li> <li>▪ Improve health worker productivity (efficiency/effectiveness), engagement and retention (intent to stay), and performance management</li> <li>▪ Improve HR management capacity of the MOH from the local to the central levels by applying best practices through working teams and involving stakeholders at all levels</li> </ul>	A 12 site demonstration collaborative was started in Tandahimba district of Mtwara Region, to cover a pop. of 20,000, with adult HIV prevalence of 3.6%
CHW AIM Operations Research in Zambia	<ul style="list-style-type: none"> <li>▪ Assess the effectiveness of the CHW AIM for improving program functionality, CHW engagement and CHW performance</li> </ul>	5 NGO partners in Zambia <ul style="list-style-type: none"> <li>▪ Salvation Army</li> <li>▪ World Vision</li> <li>▪ MOH</li> <li>▪ Mothers to Mothers</li> <li>▪ Churches Health Association of Zambia</li> </ul>
Uganda Expert Patient Study	<ul style="list-style-type: none"> <li>▪ Conduct assessments in a sample of 12 sites in Uganda that use Expert Patients to carry out a variety of tasks</li> <li>▪ Findings from this study will inform how best to refine and implement HR policies and processes that support effective and consistent inclusion of Expert Patients into facilities providing HIV/AIDS services</li> </ul>	Uganda: 12 sites in 4 collaboratives 36 expert patients 83 health workers
<b>MNCH-funded Activities</b>		
Testing/Application of CHW tool in Benin	<ul style="list-style-type: none"> <li>▪ Measure the functionality of CHW programs based on WHO task-shifting guidelines and document best practices</li> </ul>	100 CHWs working in the Zou Collines district in Benin
CHW AIM Dissemination	The final CHW AIM tool package will include: <ul style="list-style-type: none"> <li>▪ AIM scoring guidance</li> <li>▪ User materials (soft copy for online publication)</li> </ul>	Test the CHW tool in two other countries for validation and finalization. Once tool is finalized, introduce tool to USAID missions and offer distance technical support

#### Main Activities and Results

HCI's work in the area of health workforce developed, supported by both OHA and the USAID MCH Division, received funding through both TO1 and TO3 throughout FY10. All work related to the Niger

human resources collaborative, the Uganda human resources baseline assessment, the Benin field test of the CHW program assessment tool, and the HIV training evaluations was carried out under TO1 funding. Activities related to the refinement and further testing of the CHW tool in other countries and the development of a human resources collaborative in Tanzania were funded under TO3. Described below are the project’s health workforce activities in FY10 that were funded through TO3.

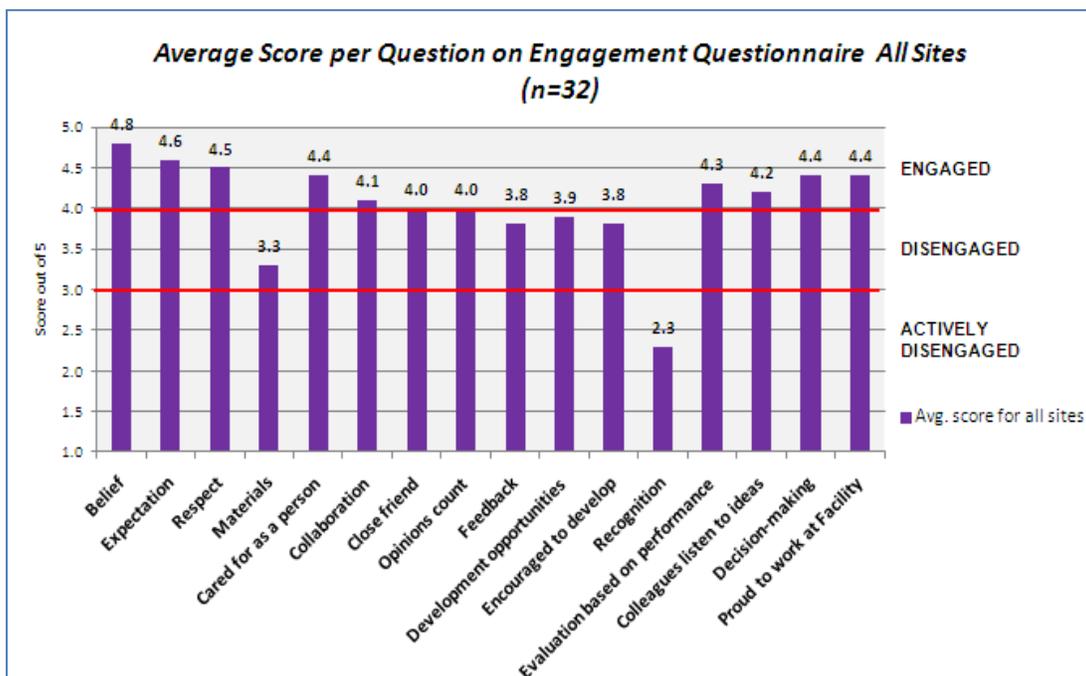
**Integration of HR activities into ART/PTMTCT Improvement Collaborative in Tanzania**

Building on the approaches and findings of the Niger HR collaborative and the application of the health worker engagement and productivity tools in Uganda under TO1 in FY10, HCI launched one new HR collaborative with TO3 funding in FY10: the Mtwara HR collaborative in Tanzania, which also builds on the ongoing Mtwara regional ART-PMTCT collaborative that HCI is supporting. In June and July 2010, a baseline assessment of health worker engagement and productivity and client flow was conducted in six sites delivering ART services in Mtwara. A seventh site was assessed in August.

The assessment found that the majority of health workers (75%) do not have written job descriptions with clear roles and tasks. In addition, the assessment found that performance evaluations are rare, with only 27% of health workers having received one. Client flow analysis showed that clients waited for an average of 112 minutes for 24 minutes of provider contact time. While a large percentage of health workers had received training within the past year, 80% do not feel that they receive adequate training on a regular basis. Areas in which providers felt they were lacking in capacity included: PMTCT, CD4 tests, and management of antiretroviral therapy. Although health workers are being supervised, they do not appear to be receiving feedback about their performance on a regular basis.

The engagement tool was applied in seven sites with a total of 32 health workers. Scores were analyzed by site, by provider and by question. There was little variation in scores between sites with average scores ranging from 4.4 (engaged) to 3.6 (disengaged). The analysis of employee engagement by question revealed more detail on specific areas where engagement is low. Figure 29 shows that recognition (2.3) and materials (3.3) scored lowest, highlighting areas where improvements can clearly be made. Other areas scored quite high, such as belief in their job being important (4.8), clarity of expectations (4.6), and respect (4.5), signaling areas of achievement.

**Figure 29. Tanzania: Baseline health worker engagement scores in Mtwara region, July 2010**



Following the baseline, a change package for the Mtwara HR Collaborative was developed, based on the Niger HR collaborative and an expert meeting was held in September 2010. About 30 participants attended the meeting with representation from the MOH, regional health management team, and partner organizations (EGPAF, Clinton Foundation, and PharmAccess). A learning session with 25 participants was held in Mtwara on September 27-28, immediately after the expert meeting. There are currently 12 sites participating in the demonstration phase of integrating HR activities into the ART/PMTCT collaborative. QI teams are currently working on Improvement Objective I for the collaborative: ensuring that all health workers delivering ART/PMTCT services have clear tasks and goals aligned to the overall goals of the facility/region.

### Employee Engagement in OVC programs (HIV funds): Ethiopia

In January 2010, the employee engagement tool was adapted for CHWs working with vulnerable children affected by HIV in Ethiopia. In February, it was administered to 50 CHWS in two sites supported by ChildFund under the Strengthening Communities and Safety Nets Project in the Oromiya region. Results of the employee engagement tool were discussed with CHWs and project staff as a group to determine why certain scores were low. Based on the results from the tool, the sites decided to undertake the actions outlined in Table 7 to improve engagement.

**Table 7. Ethiopia: Actions planned to improve CHW engagement**

<b>Driver of Engagement</b>	<b>Reasons for Low Score</b>	<b>Actions for Improvement</b>
<b>Belief in ability to succeed</b>	CHWs in the program did not feel they had the tools they needed to do their job well nor certain skills	<ol style="list-style-type: none"> <li>1. Arrange training on basic tools like psychosocial services, facilitation skills, and community management</li> <li>2. Establish a method of transportation to referral facilities for emergencies</li> </ol>
<b>Relations with Organization/Community</b>	While the average score was fairly high for this driver, ChildFund thought there was room for improvement since CHWs did not feel they always worked closely with the community Communication between different levels of staff i.e. CHWs, project officers and management needs improvement	<ol style="list-style-type: none"> <li>1. Develop a contact schedule and increase frequency of contact with community members</li> <li>2. Hold a workshop for team-building skills and training for staff on communication skills</li> </ol>
<b>Opportunity for Advancement</b>	No opportunities	<ol style="list-style-type: none"> <li>1. Conduct discussion at different levels to increase opportunities for further learning</li> </ol>

### Studies to test and evaluate QI interventions in human resources management

#### *CHW AIM operations research in Zambia*

In September 2010, HCI launched a study in Zambia to assess the effectiveness of the Community Health Worker Assessment and Improvement Matrix, Approach and Toolkit (CHW AIM) for improving program functionality, CHW engagement and CHW performance. The operations research will apply the tool to measure program functionality and will conduct surveys to assess CHW engagement and performance. Repeat applications of the tool, CHW engagement surveys and CHW performance assessments will take place nine and eighteen months following the initial assessments in order to measure change and analyze relationships among programmatic improvements and outcomes in CHW engagement and performance. Costs associated with implementing the tool and improving programs will be measured over a period of twenty-four months to assess the cost effectiveness of the process. The study began with a baseline assessment conducted with the MOH and four NGO partners in

Zambia (Salvation Army, World Vision, Mothers to Mothers, and Churches Health Association of Zambia to measure functionality (CHW AIM), engagement (employee engagement tool), CHW performance (observation of tasks) and costing effectiveness.

*Expert patient study in Uganda*

Tools and a protocol for an Expert Patient Study to be conducted in 12 sites in Uganda were finalized in and submitted to the Ugandan Ministry of Health Institutional Review Board, and was approved in September 2010. The objective of this study is to explore and document the concept of task-shifting to Expert Patients and provide a basis for more extensive and large-scale activities. It presents an opportunity to learn from sites currently using Expert Patients in order to understand both what has worked and where opportunities for improvement exist. The study is scheduled to take place in February 2011.

**Testing and refinement of the CHW Program Assessment and Improvement Matrix (AIM)**

Benin was identified as the second country for a field test of the tool, which was carried out in February 2010 jointly with the PISAF Project. Based on the findings from the high-level stakeholder meeting, assessment workshop and field validation visits, some key changes were made to the tool and process, including strengthening the facilitator’s guide, providing clearer guidance on how interventions should be assessed, and revising some criteria within the 15 components.

The tool was revised after Benin and presented at the Second Regional Child Health forum in Uganda during March 2010 and subsequently to other organizations working with CHWs. These presentations included a brown bag in May at Management Sciences for Health (MSH) and a presentation at the CORE Group 2010 Spring Meeting in Baltimore in April.

**Directions for FY11**

In FY11, teams in the Niger HR collaborative will complete work on Objectives 4-7 (evaluation, reward and recognition, development opportunities, safe and supportive work environment) in the HR collaborative. In Tanzania, we will work with the regional health authorities and implementing partners in Tanzania to implement a human resources quality improvement collaborative to improve the productivity and engagement of HIV/AIDS care providers in Mtwara region. We will implement a new HIV human resources improvement collaborative aimed at CHWs in Ethiopia. HCI will launch a new community of practice website called CHW Central to provide technical resources and support for Ministries of Health, CHW programs, and NGOs wishing to strengthen, develop, or expand CHW programs.

**3.4 Tuberculosis**

**Overview of HCI’s Program in FY10**

<b>QI interventions and other activities</b>	<b>What are we trying to accomplish?</b>	<b>Scale of intervention</b>
<p><b>Vietnam:</b></p> <ul style="list-style-type: none"> <li>▪ Strengthen TB and TB-HIV integration at the provincial, district and facility levels</li> <li>▪ Increase referral linkages with ART service providers for TB-HIV co-infected patients</li> <li>▪ Improve public-private collaboration in TB control</li> <li>▪ Building capacity through participatory training</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase access to comprehensive, decentralized and quality TB-HIV services</li> <li>▪ Increase access to quality ART services among TB-HIV co-infected patients</li> <li>▪ Increase TB case detection by improving collaboration and referral of TB suspects between non-TB and TB health care facilities in both public and private sectors</li> <li>▪ Strengthen institutional capacity of provincial and district health facilities</li> </ul>	<p>HCI is covering two out of 63 provinces 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.</p>

## Main Activities and Results

### Vietnam

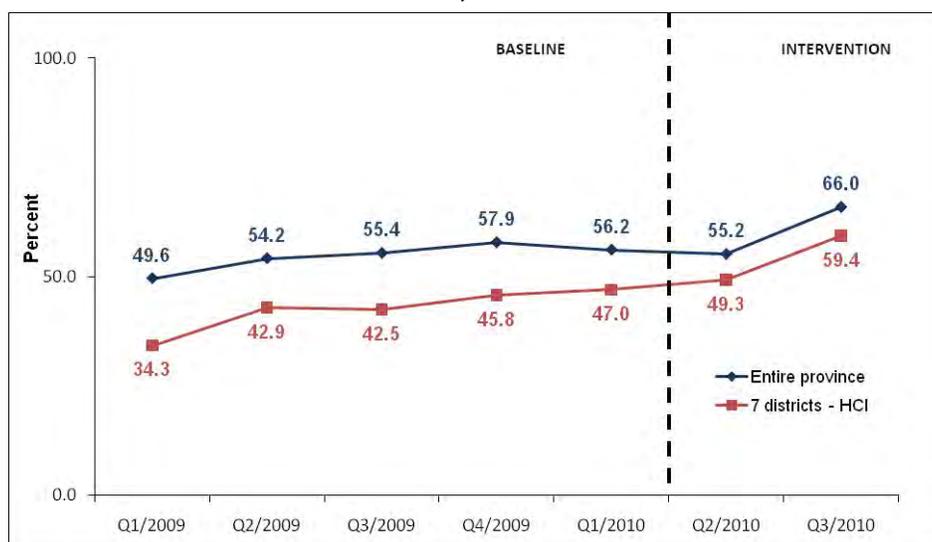
Building on a two-year intervention in Thai Binh Province to improve TB case detection and treatment and strengthen the integration of TB and HIV services, in FY10, HCI introduced the successful model of improved TB detection and management of TB-HIV coordinated services developed in Thai Binh to Hai Duong and Nam Dinh provinces.

As a first step, HCI conducted a rapid assessment in Hai Duong and Nam Dinh provinces that identified gaps in the linkage of services between public and private TB and HIV providers and in the quality of case management. HCI is collaborating with two main provincial partners—the Provincial Hospitals of TB and Respiratory Diseases (PHTB & RD) and the Provincial HIV/AIDS Centers (PAC)—to engage District Health Offices, District Health Centers, District General Hospitals, the private medical practice association, and non-TB public and private health care facilities in improving TB case detection and TB-HIV integration services.

#### *Strengthen TB and TB-HIV integration services*

HCI supported efforts to increase the availability and accessibility of HIV counseling and testing services for TB patients in districts that did not receive other projects' support. The increased HIV counseling and testing percentage in HCI-assisted districts contributed to gains in HIV counseling and testing among TB patients in the two provinces as a whole: from 84% in the 1<sup>st</sup> quarter of FY10 to 97% in the 3<sup>rd</sup> quarter of FY10 in Nam Dinh Province and from 56% to 66% in Hai Duong Province in the same period (see Figure 30). Integration of TB and HIV services in both provinces has been strengthened through routine evaluation by the provincial monitoring and evaluation teams and meetings organized by HCI to review service delivery indicators among key stakeholders at both district and provincial levels. HCI's emphasis on good case management using simple but effective databases has facilitated regular program data analysis, and the reporting and analysis of key indicators in quarterly meetings with all stakeholders has ensured that such data are discussed and used to identify actions for improvement.

**Figure 30. Vietnam: Increased HIV counseling and testing among TB patients in Hai Duong Province, 2009-2010**



#### *Increase referral linkages with ART service providers*

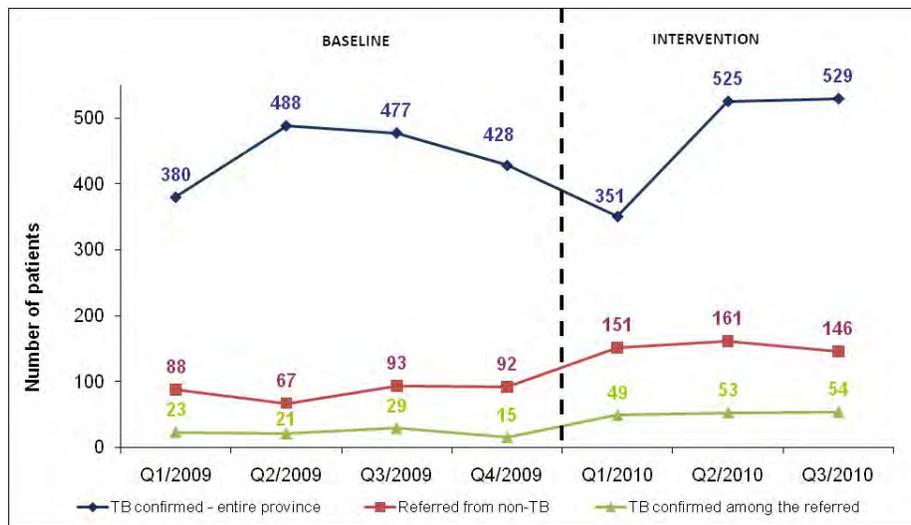
HCI supported the Hai Duong PAC to increase active TB screening at the district health center and commune health station levels among persons living with HIV and AIDS. They found that most PLWHAs who were screened for TB in the districts with outpatient centers were on ARVs compared

to only 69% of PLWHA screened for TB in district without an outpatient clinic. Moreover, the proportion of HIV patients found to be co-infected with TB was higher among those patients who were not on ARVs (31% compared to 8%). These important findings suggest a need for better management of PLWHAs from provincial to communal levels and a focus on TB screening for PLWHAs who are not currently on ARVs.

*Improve public-private collaboration in TB control*

A particular focus of HCI assistance has been to strengthen public-private linkages for TB control. The number of TB suspects referred from non-TB health care facilities to the PHTB & RD in Nam Dinh Province has increased dramatically from 2009 to 2010 (see Figure 31). Over 11% of the diagnosed TB cases in the entire province have been attributed to these referrals in 2010, compared to 5% in 2009. The 19% increase in the number of TB cases detected at the district level in the first nine months of 2010 was partly attributed to the public-private collaboration, compared to the number of case detected in the same period in 2009 in Hai Duong Province.

**Figure 31. Vietnam: Increased TB suspect referral and case detection from non-TB health care facilities to the Provincial TB and Respiratory Disease Hospital, Nam Dinh Province, 2009-2010**



*Build capacity*

HCI supported capacity-building of public and private sector health care staff through participatory training on TB-HIV co-infection prevention, provider-initiated HIV counseling and testing, case referral, diagnosis and management, and TB infection control. A team of five core staff have been trained in each PHTB & RD on data collection, recording and analysis, greatly improving each PHTB & RD’s capacity to process data on TB-HIV and public-private collaboration.

**Directions for FY11**

In FY11, we will increase the sharing of our results and best practices in national workshops in Vietnam to encourage replication at the national level. We will continue work in Hai Duong and Nam Dinh provinces through March 2011 to improve TB case detection and TB-HIV integration services with focus on TB screening for PLWHA who are not currently on ARVs, referral linkages with ART service providers for TB-HIV patients, and case management and follow-up of TB suspects, TB and TB-HIV patients, and PLWHA at the provincial, district, commune and facility levels. HCI activities in Vietnam will transition to other funding during the second quarter of FY11.

## 4 Common Agenda Activities

### 4.1 Project Management

#### Overview of HCI's Program in FY10

##### Objectives

During Year One of implementation of HCI Task Order 3, project management activities focused on the transition from Task Order 1, including closeout of the few TO1 activities that were not continuing to TO3, transition to TO3 of those activities that are continuing with new funds, and start-up of new TO3 activities. While the administrative burden of contract transitions can be a distraction from technical work, especially with the majority of activities ongoing and requiring continuous operation throughout the transition to succeed, URC also took this as an opportunity to further streamline management and administration. By closing out financial operations, staffing contracts, memoranda of understanding, and other agreements issued under TO1, many activities were able to not only review their mid-term status on the IQC, but to actually tie up all loose ends and start with new trackers, budgets, and contracts along with their new TO3 funding.

At the same time that HCI was transitioning most activities over to the new global Task Order contract, the overall size of activities under the IQC continued to grow from previous years:

- Activities took place in 28 countries, up from 20 in Year One of the IQC.
- Annual expenditures for TO1 and TO3 combined were \$28.7 million, up from \$14 million in Year One and \$22 million in Year Two.
- Global fulltime staff members currently exceed 300, up from approximately 200 in Year One and 250 in Year Two.

Throughout this increase in budget, number of field activities, and corresponding scope of work, URC has maintained its efficient management structures in human resources, finance, accounting, contracts, and general administration. Both financial and technical reporting have been streamlined and improved. Internal processes have undergone scrutiny and updating. Specific improvements made in FY10 include:

- Further standardization of budgeting and expense review process to allow budgets to be monitored against expenditures monthly with little extra work load;
- A concise new staff orientation provides even technical managers with a working understanding project management and administrative systems;
- Convening of field office administrators in Latin America and Africa for management and finance training as a group as well as encouragement of south-to-south exchange between project countries. This training was provided by HQ project managers, accountants, and contracts staff as a cost-effective group-training conducted in each major HCI region;
- Conducted monthly priority-setting meetings, quarterly technical reviews, and other regular meetings;
- Completed work planning and budgeting for FY11 ahead of contract deadlines using an inclusionary process to decentralize ownership of activity-level financial responsibilities.

#### Main Activities and Results

##### Project staffing

At the headquarters, senior technical advisors hired in FY09 and FY10 to guide HCI's work in HIV/AIDS, MNCH, and cost-effectiveness analysis received additional training and support in order to fully advance the work in each of their respective areas. Junior and mid-level technical advisors and support staff were also recruited in last year in order to complete the scopes of work that the new technical

leadership subsequently developed. A new senior technical advisor for community health, Mr. Ram Shrestha, was also recruited and hired during FY10.

Similar growth in technical advisors, management, and support staff occurred at the field level throughout the year. While these are too numerous to detail in this report, the scale up of staffing has occurred in a similar planned manner to that of the HQ office in response to expanding scopes of work for Mission-funded field activities.

In addition, HCI has continued its focus on prioritizing the hire of local national staff in countries where we work. In that manner, the new offices in Mozambique and Mali as well as the expansion into new technical areas of work in Cote d'Ivoire and Kenya, are exclusively staffed by well qualified local recruits.

### **Coordination of technical activities**

Ongoing project progress has been monitored and managed through a group of recurring meetings. During the third week of each month, integral project meetings are held, which allows not only for consistent scheduling with USAID and partners, but also improves coordination among the headquarters technical teams. The Quarterly Review Meeting (QRM), held on the third week of every third month, continues to be the primary forum in which the COTR receives updates from technical groups and all field offices. Each month without a QRM, an HQ level staff meeting allows for all announcements, updates, and priority setting to be done across all teams at HQ. Also on those months, a global staff meeting with a new technical focus provides a forum for global discussion on pertinent technical themes and salient programmatic trends, encouraging discussion and south-to-south exchange beyond the borders of countries, regions, and continents. By maintaining the schedule for these three meetings on the third week of each month, HCI project staff are able to schedule their activities around them in a predictable manner.

### **Budget management**

Financial management systems for the HCI Project were fully established during Year One and have continued to be used through Years Two and Three. The process for streamlined yet detailed variance analyses for activity line items established in previous years was further streamlined to make use of better formats and cleared accounting once each activity closed out under TO1 and started up under TO3. This allowed the quarterly realignment of all budgets to be done more efficiently. Forecasts can be updated more quickly and funding streams used more efficiently throughout the year for each individual country and global initiative. The redesigned annual budgeting process itself was conducted again during the preparation of FY11 work plans and budgets with a dual focus on decentralization (delivering complete knowledge of and responsibility over activity budgets to country and global initiative directors) and cooperation (allowing countries and global initiative groups to harmonize their budgets in order to best use both individual and pooled resources across the entire project). As the global IQC budget and number of different activities continues to grow, this efficient and participatory annual budgeting process is increasingly important in establishing good management of budget lines each year and in leveraging all of the activities with each other to make the best use of combined funding (such as combining international technical assistance trips across multiple activities).

### **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 performance monitoring reports, trip reports, research and technical reports, the annual project report, the annual self evaluation report, and financial and other deliverables. Contributions from technical groups and countries are delivered to the communications team using standardized templates that allow for efficient compilation of all contributions. In addition, many informal reports are delivered to Missions and Element Groups at USAID/Washington. These are also overseen centrally, yet prepared and delivered locally, to ensure

the quality of the reports delivered, the efficiency in which they are produced, and the internal usefulness of them in sharing information across the HCI Project. During FY10, HCI has expanded the dissemination of quarterly reports originally prepared for the COTR in order to share them with Missions and other activity managers. This has improved communication with other USAID activity managers without adding any new reporting burden.

### Directions for FY11

As TO3 proceeds into its second year, the transition of TO1 activities is nearly complete. The few remaining TO1 activities in FY11 will be closed out independently of TO3. The amount of funds budgeted for management and administration in FY11 decreased from previous years in terms of percentage of project expenditures. However, due to the overall increase in funding under HCI, the funds available for project management are higher in terms of dollar amount. This will allow HCI to hire additional administrative staff, make more administrative visits to countries, and bring in better in-country support to operations, which is all intended to achieve the long-term goal of spending an ever-decreasing share of project funds for management and administration.

## 4.2 Knowledge Management

### Overview of HCI’s Program in FY10

QI Interventions and Other Activities	What are we trying to accomplish?
Promote the use of the Health Care Improvement Portal, <a href="http://www.hciproject.org">www.hciproject.org</a>	<ul style="list-style-type: none"> <li>Establish the HCI KM web site as a well-known source of useful information to support health care improvement in USAID-assisted countries</li> </ul>
Manage and develop new content for the HCI Portal	<ul style="list-style-type: none"> <li>Continue to bring in new content, especially drawing on work outside HCI</li> <li>Continue to bring in new content, especially drawing on work outside HCI and on activities funded under TO3</li> </ul>
Conduct studies to inform ongoing enhancements to the HCI KM system, validate selected submissions, and evaluate field applications of system content	<ul style="list-style-type: none"> <li>Get user feedback to improve the usefulness and acceptability of the HCI KM site; validate submissions to assure that accurate information is posted by users outside HCI; and understand how users are using site content to improve the site and make it more useful and user-friendly</li> </ul>
Manage the Spanish maternal newborn KM web site, <a href="http://www.maternoinfantil.org">www.maternoinfantil.org</a> , and strengthen linkages with other parts of the HCI KM system	<ul style="list-style-type: none"> <li>Ensure that the results and experiences from HCI work in Latin America are reflected on the HCI KM site and on the <a href="http://maternoinfantil.org">maternoinfantil.org</a> site and that content is shared and linked between the two sites</li> </ul>
Finalize and launch the Newborn Alliance web site, <a href="http://www.alianzaneonatal.org">www.alianzaneonatal.org</a>	<ul style="list-style-type: none"> <li>Create a web site to support and disseminate the activities of the Newborn Health Alliance</li> </ul>
Develop a private community of practice web site for the HBB Global Development Alliance	<ul style="list-style-type: none"> <li>Create a private web site for sharing experiences and best practices among HBB implementers</li> </ul>
Document the key features of the HCI KM system and measure its reach in FY10	<ul style="list-style-type: none"> <li>Document the key features and capabilities of the HCI KM system and portal web site</li> </ul>

### Main Activities and Results

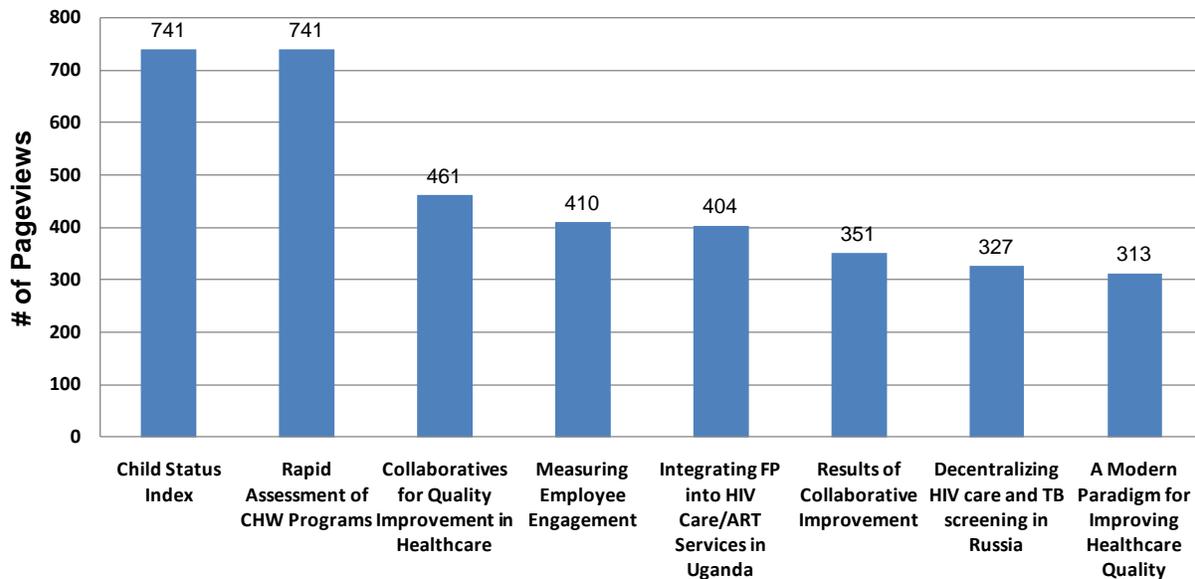
During most of FY10, HCI knowledge management activities were implemented under TO1, but shifted to TO3 funding in the fourth quarter of FY10, with the exception of the KM studies, which continued under TO1 funding.

#### Continue to develop the content of the HCI Portal and promote usage

During its first year of operation, visitors to HCI’s knowledge management web site, the Health Care Improvement Portal, [www.hciproject.org](http://www.hciproject.org), grew each quarter, with 25,321 total visits to the site in FY10.

Of these visits, 27.3% were return visits. Most visitors (68.4%) to the site came through search engines; 18.0% of visitor came directly to the site's address, and another 13.6% were referred from other sites. Figure 28 shows the region of origin of visitors to the HCI Portal during FY10. Over the course of the year, visits to the HCI Portal from developing regions grew steadily, from 2008 visitors in the first quarter of FY10 (33% of total visits) to 3048 (45% of total visits) in the fourth quarter. The top eight resources most often viewed by visitors to the HCI Portal in FY10 are shown in Figure 32.

**Figure 32. Resources most often accessed on the HCI Portal in FY10**



Activities to promote the use of the HCI Portal by users outside the Task Order that were implemented under TO3 funding in FY10 include the display of the HCI Portal at a table at the CORE Group's Fall Meeting in Washington, DC, on September 15-16, 2010. One new Collaborative Profile was added to the HCI Improvement Database from outside the project as a result. Plan International uploaded a profile on the Benin community malaria prevention collaborative it implemented from 2007-2009. The profile is posted at: <http://www.hciproject.org/node/1612>.

In order to help review our knowledge management strategies and results, we developed a plan in the last quarter of FY10 for convening a "Knowledge Management Deep Dive" in the second quarter of FY11. KM authority Dr. Nancy Dixon, who participated in the HCI July QRM, has agreed to work with us to design a two-day meeting in March to bring together KM experts from within and outside the global health field to identify best practices and approaches in knowledge management that could be applied by HCI.

### **Manage and promote usage of the Spanish maternal newborn KM site**

In March 2009, the HCI Ecuador team launched a Spanish language MCH knowledge-sharing web site, [www.maternoinfantil.org](http://www.maternoinfantil.org). The site features information and related resource documents in Spanish on key evidence-based practices for maternal and newborn care and allows users to upload to the site technical materials, implementation experiences related to improvement of maternal and newborn care, and news items. Usage statistics for the July 1-September 30, 2010 period for the Spanish language MCH knowledge management site showed a continued increase in number of unique visits to the site. The site received 17,494 unique visits (up from 13,573 in the previous quarter), from 15,711 unique visitors. Each visitor viewed on average 1.6 pages in the site. Total visitors to the site surpassed 48,000

by the end of FY10. The site has been a primary conduit for HCI's Latin American teams to share improvement experiences and results but has also attracted contributors from outside the project, as well as requests for information on QI and MCH topics.

Due to difficulties with the company in Quito that developed the [maternoinfantil.org](http://maternoinfantil.org) web site, URC terminated the contract in September. New contracts were negotiated with another web hosting firm based in Quito (Panchonet) and a separate computer services firm (Kipikuna), to provide site design and maintenance support for the site. In addition to changing hosting and maintenance service providers, the site will also be redesigned to reorganize the content and add new functionality for E-Learning. The planned E-Learning courses for the [maternoinfantil.org](http://maternoinfantil.org) site will draw on translations of selected courses now offered on the USAID Global Health E-Learning site that were made by HCI's Guatemala team, with support from USAID/Guatemala.

### **Promote the dissemination of information on applications of QI methods to specific topic areas and regional audiences through other HCI-supported web sites**

During the year, HCI's Russia team completed the development of a public portal in Russian on QI methods and their applications in the Russian Federation. The public site went live in September 2010 on the [www.healthquality.ru](http://www.healthquality.ru) site which had served as the private knowledge management and data sharing site for teams participating in the MCH improvement collaboratives in three Russian oblasts. The password-protected portion of the site will continue to operate through a link from the home page. The public portal in Russian now provides a channel for broader dissemination of results, tools, and learning from improvement activities supported by HCI in Russia. The new portal is managed by the Russian Central Scientific Research Institute for Health Care Organization and Information (formerly known as the Federal Public Health Institute), with support from HCI.

### **Launch the Newborn Health Alliance web site**

The basic content of the Latin American Newborn Alliance web site in Spanish and English was completed in December 2009 and sent to the firm in Ecuador that is hosting the site. The site went live in May and was presented to the Newborn Alliance Steering Committee at its meeting in Washington in June. Due to the delays in getting the site's content launched and other problems with the hosting firm, URC has contracted with a different firm to provide ongoing maintenance for site. Transfer of the site was completed in November 2010, and the site will be re-launched in 2011. A new contract will be developed with Kipikuna to provide maintenance support and some limited redesign of the [alianzaneonatal.org](http://alianzaneonatal.org) site.

### **Develop a knowledge management site to support a newborn breathing community of practice**

Lani Marquez conducted interviews with partners in the Global Development Alliance (GDA) for Newborn Breathing on needs and options for a web site to support knowledge management around newborn breathing. A meeting was held at URC on May 3 to discuss options with partners and plan the way forward. It was agreed that the GDA will use the K4Health Project's Toolkit Application to create a private community of practice web site to enable sharing and information exchange among partners in the GDA and global roll-out of the Helping Babies Breathe training program.

During the fourth quarter of FY10, HCI developed the structure for the private community of practice site. It was launched at [www.hbb-community.org](http://www.hbb-community.org) in September. The site will be co-managed by HCI, USAID, the American Academy of Pediatrics (AAP), MCHIP, and Save the Children.

### **Directions for FY11**

We will continue to add reports on current HCI-supported collaboratives and improvement reports to the HCI Improvement Database but test interventions to encourage other groups outside the Task Order to contribute content to the HCI Portal. The Improvement Database interface of the HCI Portal

will be launched in French, Spanish, and Russian. We will conduct surveys related to the HCI Portal, the Spanish maternal and newborn health KM site, and the Russian public portal to inform enhancements to these sites. We will convene a “Knowledge Management Deep Dive” to identify new strategies for making improvement information available to practitioners globally, when they need it and in forms they can readily use. The [www.maternoinfantil.org](http://www.maternoinfantil.org) and [www.alianzaneonatal.org](http://www.alianzaneonatal.org) sites will be redesigned and relaunched in 2011. Based on the completed OVC QI Road Map document and E-Learning modules, we will work with MSH to update and refresh the content on QI for OVC programs on the OVCsupport.net web site. We will support the HBB community of practice site and work with partners to extract key learning from implementation experiences and make it available on the site.

### 4.3 Research and Evaluation

#### Overview of HCI’s Program in FY10

Activities	What are we trying to accomplish?	Scale of intervention
Generate and synthesize learning on priority areas related to QI: institutionalization, spread, cost-effectiveness of QI, peer-to-peer (shared) learning, and QI team performance and coaching	Advance learning globally on QI implementation, and strengthen strategies to spread and institutionalize improvements and QI implementation	<ul style="list-style-type: none"> <li>▪ Support studies in Afghanistan, Ecuador, Guatemala, Honduras, Mali, Nicaragua, Niger, Russia, Tanzania, and Uganda</li> <li>▪ Niger Institutionalization study: sample of 20 of 51 teams, in 6 regions</li> <li>▪ Ecuador spread study: sample of 13 sites of 51 sites targeted for spread (which represent 39% of total sites)</li> </ul>
Complete field testing of Standard Evaluation Systems (SES) tools to document, analyze, share, and synthesize learning from improvement activities; support country programs to implement and use the SES	Strengthening documentation, analysis of tested changes by QI teams, and sharing and synthesizing this learning across teams and to new sites	<ul style="list-style-type: none"> <li>▪ Currently, over 500 QI teams are using SES tools in Afghanistan, Cote d’Ivoire, Guatemala, Honduras, Niger, Russia, Swaziland, Tanzania, and Uganda: total 185 teams – 115 demonstration, wave 1 and wave 2; 70 district strategy teams (32 wave 2 sites used synthesis form).</li> </ul>
Support country teams (and element groups) to answer their questions	Improve functioning of QI interventions	<ul style="list-style-type: none"> <li>▪ Worked with 7 countries on 17 studies under TO3</li> </ul>

#### Main Activities and Results

The role of research and evaluation in the HCI Project is to support a learning system in which project staff, country counterparts, and the broader international community can draw lessons from experiences in quality improvement. With very limited exceptions, funding coming into the project is not designated for research; rather, HCI has worked to strategically identify key research priorities that meet both the task order objectives and Global Health Element groups and country teams’ objectives and learning needs. During FY10, some HCI studies were carried out exclusively under TO1, others exclusively under TO3, and still others under both task orders. All activities under HCI’s research and evaluation program moved to TO3 funding in June 2010.

In FY10, 22 studies were completed, initiated or designed with TO3 funding (see Table 8). Most were new studies addressing critical issues for the HCI Project and the larger field of quality improvement. These studies addressed the same core topic areas addressed by TO1-funded studies: spread of improvements and shared learning; institutionalization and sustainability of improvements and QI; increasing the cost-effectiveness of QI; applying QI methods at the community level; QI team performance and coaching; and the added value of QI. These areas reflect both the key performance targets of the contract and implementation challenges in the field.

**Table 8. HCI research and evaluation studies carried out under HCI TO3 in FY10**

<p><b>Afghanistan:</b> Cost-effectiveness of quality improvement in the context of EONC</p>	<p>This study proposes to examine the costs associated with implementing a collaborative improvement approach for both facility and community –based maternal and newborn interventions in Afghanistan. The broad objectives of the study are : 1) To examine the costs and cost-implications 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. This will be a prospective cohort study, using monitoring data on quality from the collaborative, and estimating costs related to implementation through interviews, record and budget review. (To be completed in FY11)</p>
<p><b>Afghanistan:</b> Strengthening the application of quality improvement for community level services for EONC</p>	<p>For maternal and child health in Afghanistan, a majority of “care” takes place at the community level. This study, to be implemented in FY11, proposes to 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 Afghanistan. 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 on the QI process, community health worker engagement, and community engagement in QI.</p>
<p><b>Ecuador:</b> Spread of EONC practices and QI</p>	<p>This study includes both a descriptive and analytical component, and focuses on the spread strategy currently being implemented by the Ministry of Health 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 priority provinces. Using several rounds of data collection, this study will examine how well new facility-based teams, supported by provincial spread teams, are able to monitor indicators of quality, and implement changes in their process to ensure compliance with standards in order to achieve effective EONC services. Data collection continued through June-July 2010, and a final report will be completed in the first half of FY 2011.</p>
<p><b>Global:</b> Synthesis of Findings and Learning from the Field Testing of Learning System Tools: The Standard Evaluation System (SES) Team Documentation Journal, Team Synthesis Form, and Excel Results Databases</p>	<p>This evaluation completes the testing of the Standard Evaluation System QI team tools introduced in 6 countries in the Summer 2008: Benin, Honduras, Niger, Russia, Tanzania, and Uganda. Endline data were collected in the Summer 2009, including qualitative interviews with QI teams, coaches and collaborative managers, and quantitative opinion surveys (QI teams and coaches) and performance scoring of QI documentation, analysis and sharing activities. Evaluation of performance related to documentation, analysis, and sharing at the QI team level revealed some variations: Some tasks were completed well and others not, even after 6-12 months of use. Some tasks that were performed by less than 60% of teams are key to the collaborative improvement goal of producing rapid and significant improvements in care. Such tasks include documenting changes, annotating time series charts with changes implemented, discussing possible explanations for trends in results, deciding on actions on the basis of data, evaluating the effects of changes on results by examining time series charts, and sharing changes with other staff at the site and at other sites. Yet QI teams, coaches, and collaborative managers almost unanimously support continued use of these tools: They reported that the tools had helped teams improve in documenting, analyzing, synthesizing, and sharing key learning about changes that result (or not) in improvement. The respondents also reported that over time, they found the tools easier to use. This study was completed in FY10.</p>
<p><b>Global:</b> Sample size for time-series chart sampling</p>	<p>This paper develops a methodology for determining sample sizes for time series charts using repeated measures statistical determination. It lays out the rationale for sampling over time and provides tables for determining sample size for time series charts with varying months of pre and post intervention data. The final report is expected in the first half of FY11.</p>
<p><b>Guatemala:</b> Strengthening performance of CQI teams through</p>	<p>This study will investigate what the ProCONE collaborative actually did; how it functioned and the role that coaching played, including such issues as how often they met, characteristics and roles of team leaders and coaches, team changes over time compared to coaching provided, and team success. A short, closed-end survey will be completed by all</p>

shared learning and coaching	QI team members, and group discussions will be conducted, taped and analyzed. These data will be analyzed in light of data on monitoring of results achieved through community base QI interventions. This study will be completed in the first quarter of FY11.
<b>Guatemala:</b> Evaluating a system for incentives to TBAs for referrals of obstetric complications to health facilities	The ProCONE strategy being implemented by the Guatemala Ministry of Public Health and Social Action, and the HCI supported ProCONE collaborative promotes quality obstetric and neonatal care, and includes components in communities, essential care for normal deliveries and newborn care, and for complications. To increase the rate of TBA referrals of potentially complicated cases to appropriate health facilities, this “case-control” study will measure 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. This study will be completed in FY11.
<b>Guatemala:</b> 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) and in the community, in linking these services to EONC facilities, and in related behavior change communication and community participation activities. It will use a qualitative methodology of in-depth interviews and quantitative analysis by record review of the ProCONE EONC community project that made adaptations to the improvement collaborative approach.
<b>Honduras:</b> Institutionalization of better care practices and CQI in Demonstration and Replication Regions of Honduras	This study began its design in FY09 but due to travel restrictions, was postponed until FY10. The study seeks to assess the level of institutionalization of CQI and better care practices in the a sample of sites in the 5 demonstration regions where QAP/HCI has been working since 2004 and in a sample of sites in the 6 replication regions where the Ministry of Health implemented a similar package. The findings of this study will be used to determine further actions needed to strengthen institutionalization, as well as identify key strategies for facilitating institutionalization as part of the spread process to the additional 9 regions. This report will be finalized in the first half of FY11.
<b>Mali:</b> Strengthening the application of quality improvement for community level services for EONC	Much of delivery and newborn care in Mali takes place at the community level. This study proposes to 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. Due to delays in implementation of the community level work, this study was moved to FY11.
<b>Mali:</b> Cost-effectiveness of quality improvement for EONC services	This study proposes to examine the costs associated with implementing a collaborative improvement approach for both facility and community –based maternal and newborn interventions in Mali. The broad objectives of the study are : 1) To examine the costs and cost-implications 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. This will be a prospective cohort study, using monitoring data on quality from the collaborative, and estimating costs related to implementation through interviews, record and budget review. It will be implemented in FY11.
<b>Nicaragua:</b> Institutionalization of MNCH better care practices and QI	This institutionalization study seeks to determine whether gains in quality of care are sustained over time and what characteristics of facilities are associated with maintaining their gains. It is also examining whether QI processes have spread to other domains, whether site-level QI activities are provided for regional coordinators, and whether policies and practices, organizational structures, and financing at the central level have been created to develop a culture of quality, clear norms, and accountability for quality of care. The goal of the study is to help define a focused institutionalization strategy that the MOH will implement. This study will be finalized in the first half of FY11.
<b>Nicaragua:</b> Expanding the learning: Spread of innovations in	This study will document the changes considered and changes adopted by new facilities in the MNCH spread collaborative, categorized by whether or not they are uptakes from the improvement collaborative and by their characteristics. As in the study of learning within the demonstration collaborative, the study will document characteristics of the adopted

MNCH to new teams	changes and adoption processes, speed of adoption, and team perceptions of factors influencing adoption, and compare the results to those of the demonstration collaborative.
<b>Nicaragua:</b> Evaluating the institutionalization of QI in AMOCSA, a non-profit that serves clients insured by the Social Security Institute and the public in general. Provided technical assistance for 4 years, but lately only sporadically visited.	This study plans to evaluate the institutionalization of QI in one of the local NGOs that HCI has worked with. This study originally planned to evaluate ProMujer, a community NGO providing micro-credit and health services to 31,000 poor women in Nicaragua, but now plans to evaluate AMOCSA, a non-profit that serves both clients insured by the social security institution and the paying clients. AMOSCA has attempted to implement a QI approach, and make it a permanent part of its processes. AMOSCA received technical assistance from QAP III and HCI for four years, but has recently only been visited sporadically by HCI staff. This study will evaluate how well they have institutionalized capacity for QI. The study will document the process by which QI was implemented in AMOCSA, including awareness, skill building and support for updated quality standards and protocols, improved tools for clinical training, monitoring and quality improvement, types and characteristics of the success AMOCSA achieved at various stages of its life, and lessons it thought it learned. In light of these findings, the study will probe whether and how quality management mechanisms were built into the macro features of AMOCSA. Specific indicators, data collection procedures and sample selection, such as in-depth interviews with key informants and review of organizational records, will be developed with AMOCSA. This study will be initiated in FY11.
<b>Niger:</b> Evaluation of the effects of the Pediatric Hospital Improvement collaborative on malaria care	This study examined the effect of a multi-faceted quality improvement 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 final report will be completed in the first half of FY11.
<b>Niger:</b> Assessment of Health Workforce Practice, QI and Employee Engagement	This baseline study examined performance management practices at all levels of the health care system in Niger (clear expectations, skills development, feedback, fair evaluation, reward and consequence, professional development). It also measured key results related to the performance management cycle: employee engagement, productivity, and retention. Productivity was measured through provider time use analysis and through examination of patient flow (for contact and waiting times). The results of this baseline study were used to develop improvement objectives for a human resource collaborative operating in the Tahoua region with 16 facilities. Final report expected in FY11.
<b>Niger:</b> Institutionalization of EONC Better Care Practices and QI	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 of the 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 a 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. A follow-up assessment was completed in August/September 2010 to measure the effects of the change package. The final report will be completed in FY11.
<b>Russia:</b> Using learning -- Spread of innovations across teams in an MNCH collaborative – effects of an	Recognizing logistical and financial constraints related to travel and attendance at learning sessions and in an effort to make available and accessible all information generated through the collaborative process, the HCI team in Russia has developed a web communicator system for the maternal and child health collaborative. This system is an electronic version (intranet) of the HCI Standard Evaluation System (SES) accessible to all QI teams within the collaborative. This study aims to document the process through which this system was developed, assess the use and acceptance of such a system as a means of presenting and

interactive website	sharing ideas across teams within a collaborative, and to evaluate its effectiveness as a means to share learning and increase uptake of ideas generated by other teams. Data will be collected through in-depth and semi-structured interviews with QI team members, coaches and collaborative managers, and a tracking system within the web communicator system to track use and other aspects. The final report will be completed in the first half of FY11.
<b>Tanzania:</b> Networking and linkages between facilities and communities for HIV care and treatment in Kibaha District (Tumbi Region)	This descriptive study, completed in FY10 at the request of the USAID Mission, examined the linkages between health facilities and communities for HIV/AIDS care, treatment and support in one district of Tanzania, with the goal of identifying strengths to build on and areas for improvement. The study used individual and group interviews with providers at various levels of the system, local non-governmental organizations, associations of people living with HIV/AIDS, and other community groups. Findings showed that linkages and referral systems within and between HIV/AIDS care institutions in Kibaha district, however, exhibit a number of gaps in the continuum of care. Among them are: the use of no standardized tools, lack of referral guidelines in some institutions and lack of linkages to other non-medical services and clients. The referral systems are in place but with inadequate feedback mechanisms. At the community level, the community leaders and community health workers lack the knowledge of the referral mechanisms. All in all the system is viable, but needs improvements. Recommendations include decentralizing care to dispensary level to reduce referral and transport costs to patients, strengthen referral processes and standardize tools, and increase collaboration with people living with HIV/AIDS and local non-governmental and community based organizations.
<b>Tanzania:</b> Partnership for Quality Improvement to Improve PMTCT and ART Services in Tanzania: Assessment of results, capacity and potential for institutionalization	This study, completed in FY10, focused on evaluating the ability of the partner collaborative strategy to build capacity among MOH counterparts and PEPFAR implementing partners to effectively introduce quality improvement and spread effective changes through their catchment areas. This report discusses both the strengths and weaknesses of PQI. In just over two years, PQI has achieved results in almost all clinical indicators in at least one of the three demonstration regions studied. Quantitative and qualitative results from the study showed high levels of engagement at all levels of PQI, especially among QI teams in health facilities. The pace of PQI in covering the remaining regions of Tanzania remains slower than the Ministry of Health and Social Welfare prefers. Several areas to consider for future applications of the PQI methodology are also discussed throughout this document. These results represent the significant knowledge generated not only by health facilities and their corresponding Council Health Management Team/Regional Health Management Team, but also by the PQI implementing partners, the National AIDS Control Program, and the Ministry in terms of executing a complex quality improvement program. The findings from these three regions provide encouragement that PQI has been effective in building a harmonized QI approach.
<b>Uganda:</b> Using learning -- Spread of innovations across teams in an HIV/AIDS collaborative	The goal of this study is to better understand the way and extent to which ideas from one team are spread to other teams and what accepts drive or best facilitate the effective uptake of ideas. This study will assess the extent to which teams adopt ideas from other teams and the process through which they adapt the ideas presented by other teams within the collaborative, to better serve their own context. Data for this study will be obtained using the SES tools being applied in Uganda. Additional qualitative interviews with QI team members, coaches and collaborative managers to assess barriers and facilitating factors to sharing of ideas across sites will be conducted. This study will be initiated in FY11.
<b>Uganda:</b> Effect of coaching on QI team performance: costs and effects of two coaching	Uganda is currently implementing two different approaches to coaching teams within a collaborative: 1) coaching by the District management structures and 2) coaching provided by technical experts outside the administrative hierarchy. The objective of this study, to be implemented in FY11, is to examine and compare how alternate QI support structures might influence QI team performance and results as well as institutionalization of better care practices and QI processes. This study will also examine the cost implications associated with these two coaching strategies. Data from two groups of teams (one group from the District Strategy collaborative and one group from the ART collaborative) will be gathered prospectively, using the HCI SES tools, interviews, record and budget review, and quarterly coaching visits (for QI team performance data).

## **Institutionalization and sustainability of improvements and QI**

### *Niger*

HCI conducted four studies on institutionalization of QI under TO3 in FY10. The major study was conducted in Niger to document the extent of institutionalization of maternal and newborn better care practices and QI after the conclusion of the EONC collaborative in 2008. HCI leveraged the tools and conceptual framework developed in Niger to conduct institutionalization studies in Honduras, Nicaragua, and Tanzania.

FY10 activities related to the Niger institutionalization study were initially focused on finalizing and disseminating the “Institutionalization Change Package” that was drafted during workshops where baseline results were presented in August 2009. The institutionalization change package consisted of specific improvement objectives for each level of the health system (facility, district, region and central levels), indicators to monitor progress, change concepts, and specific ideas to test. The regional health office in each region organized a workshop to share results and plan out activities to include in the 2010 Action Plans and Budgets.

The national Directorate of Health Care Organization in the MOH and six of the eight Regional Health Management teams planned QI and/or QI institutionalization activities in their 2010 work plans. Most of these activities involved spreading gains from the EONC, pediatric hospital improvement, and nutrition collaboratives, and conducting QI training. Funding for these activities came from the MOH itself, UNICEF, WHO, World Bank, Belgium Cooperation, international NGOs (Project Concern, Medecins du Monde, Save the Children, Helen Keller) and USAID (through HCI’s workforce collaborative activities).

In April-June 2010, the Ministry of Health worked on finalizing its five-year work plan, in which it identified several key strategies from which all central and decentralized structures will develop their plans. QI is one of these major strategies – this represents a large step forward for QI and a clear declaration of the MOH’s intent on institutionalizing QI.

Due to the political situation in Niger which delayed obligations of funds to regions and districts for their 2010 work plans until May, final data collection was postponed until August 2010 to allow at least initial implementation of regional work plans. Data collection instruments from the baseline were reviewed and revised, and new instruments were developed to capture the extent to which sites, districts, regions, and the central level of the Ministry of Health had implemented their respective action plans related to the Institutionalization Change Package and to capture which change ideas contained in the package were actually tested.

The endline data collection was completed, entered, cleaned and analyzed in August and September 2010. The final report is in development. In the meantime, the Ministry of Health has signaled its intention to continue to scale up best practices in EONC, pediatric care, and human resources, and to integrate QI into all of these strategies. The Ministry has formed a working committee to support this process.

### *Other institutionalization studies*

Tanzania’s study is an evaluation of the Partnership for Quality Improvement (PQI) strategy and describes the degree of implementation of QI activities and perceived competency among regional and district health management teams and PEPFAR implementing partners in three regions. At the request of USAID, Nicaragua designed their study to examine the degree of institutionalization in various SILAS having participated in collaborative improvement to be able to identify which SILAS still need support and which are ready to continue on their own. The Honduras descriptive study, designed to be started in FY09 but delayed due to the political situation, examines the degree of institutionalization of QI at

participating facilities in the original demonstration regions (led by QAP/HCI) and the subsequent replication regions (led by the MOH), and factors that led to institutionalization.

Data were collected in the January-March quarter in Honduras and Tanzania and in the April-June quarter in Nicaragua. In the July-September quarter, the Tanzania study report was completed, and the Honduras qualitative and quantitative analyses from Honduras were completed and the study report drafted. The data for Nicaragua's institutionalization study were collected and analyzed, and the report was drafted.

#### *Other activities*

HCI convened a session with IHI staff to discuss institutionalization of QI in June 2010.

### **Spread and shared learning**

Spread of improvements and shared learning were key topics of research in FY10. The major study supported under TO3 during FY11 was the study of the spread of evidence-based EONC practices and quality improvement in Ecuador. This long-term study on the spread of evidence-based EONC practices and QI in Ecuador began in FY09. It sought to evaluate the process, effectiveness and cost-effectiveness of the Ministry of Health's strategy to spread QI and best practices from the EONC demonstration phase to the rest of the country, with a focus on five priority provinces.

This study involved three rounds of data collection – a baseline done before provincial teams began their work, one after five months, and one 12 months. The last round of data collection occurred in July-August 2010. Preliminary results have indicated that the level of compliance with evidence-based standards of care increased significantly, reaching levels of 80% in prenatal care; 88% in use of the partograph; 97% in AMTSL compliance; 96% in postpartum care; 80% for management of preeclampsia; 70% for management of hemorrhage; 88% for management of obstetric infection. However, compliance with newborn management standards is lower, proving to be the most difficult area to improve.

During the spread phase, these levels of improvement were reached in shorter times than in the demonstration phase of the collaborative. These successes took place because QI teams at the 51 facilities (mostly hospitals) targeted for the spread of maternal and newborn best practices continued to be active throughout the period. One indicator of QI teams' activity is monthly reporting on compliance with standards. From an initial 67% of QI teams reporting in Jan-March 2009, this percentage increased to 100% in the same period of 2010.

Further demonstrating the strengthening of the teams, by the April-June 2010 quarter, coaching by HCI and MOH central and provincial coaches was no longer concentrated on measurement or reporting issues, but mostly on supporting QI teams in planning and implementing PDSA cycles. The coaching provided by the MOH also improved. At the beginning of FY10, coaching provided by provincial MOH was weak, and HCI began to directly coach the weakest QI teams. By March 2010, all five provincial MOH offices were providing follow-up and support to QI teams in target hospitals.

These high levels achieved by QI teams in measuring and reporting standards, planning and implementing PDSA cycles, as well as implementing best clinical practices based on evidence all suggest that the spread effort has been successful. The final report will be written in the first half of FY11. Meanwhile, the Ministry of Health is planning to extend the successful experiences from this effort to additional programs, such as senior citizen health programs, oral health, adolescent health, and child health.

### **Cost-effectiveness analyses**

HCI began planning for a number of cost-effectiveness studies that will be continued in FY11.

### **Community-level QI**

Guatemala developed a protocol for a case study of their community QI work in San Marcos since 2008, but the study was postponed to FY11. Conceptual designs for studying QI at the community level were

developed at pace with the development of community strategies in Afghanistan and Mali. Afghanistan's process evaluation of community QI was approved by the ethical review board, and instruments were being finalized at the end of FY10. Mali's community QI study will start in FY11.

### **QI team performance and coaching**

Guatemala and Uganda conducted studies on QI team performance in FY10. Both of these studies were completed by September and will be finalized in the first quarter of FY11. Uganda's study examined the differences between the district strategy and more traditional central-level coaching and includes a costing component. Additionally, data from the 2009 survey on institutionalization in Niger were used to create a study of QI team performance in the "post-collaborative" period. This study examined the level of QI activities and the quality of care at six months post-collaborative to understand what teams continue to perform when their performance remains high over time. The results indicate that teams who are not actively pursuing a new topic tend to meet less frequently, but many continue to monitor the indicators, ensure that new staff are oriented and trained to carry out the clinical tasks and organizational best practices. Concerns remain about diminishing QI competency due in large part to staff mobility.

### **Comparison of QI intervention areas to those with no QI intervention**

Under TO3 funding, HCI planned for comparison studies that will begin in FY11, expanding on the learning from the TO1 comparison studies in Guatemala and Cote d'Ivoire.

### **Standard Evaluation System**

During the year, the R&E team completed analysis of data from the SES endline evaluation and wrote the final report which summarizes the results of testing these SES tools to strengthen documentation, analysis, and sharing of QI team efforts to improve care through testing of changes. Evaluation of performance related to documentation, analysis, and sharing at the QI team level revealed some variations: Some tasks were completed well and others not, even after 6-12 months of use. Some tasks that were performed by less than 60% of teams are key to the collaborative improvement goal of producing rapid and significant improvements in care. Such tasks include documenting changes, annotating time series charts with changes implemented, discussing possible explanations for trends in results, deciding on actions on the basis of data, evaluating the effects of changes on results by examining time series charts, and sharing changes with other staff at the site and at other sites.

Despite uneven performance with the SES tools, QI teams, coaches, and collaborative managers almost unanimously supported continued use of the tools. They reported that the tools had helped teams improve in documenting, analyzing, synthesizing, and sharing key learning about changes that result (or not) in improvement. The respondents also reported that over time, they found the tools easier to use. The evaluation concluded that critical learning system skills in documentation, analysis, and sharing, particularly related to specific changes, need strengthening at both the QI team and collaborative levels. It concluded that any tool used to strengthen documentation, analysis, and sharing at the QI team level needs to be integrated into QI team processes and coaching activities and aligned with other documentation/ reporting tools.

The SES Endline report was finalized in August. The SES tools were shared and preliminary endline findings presented at the GBH M&E Working Group meeting in May 2010. Based on the experiences of many years in the field and on the results of the SES evaluation, HCI has proposed moving forward with a set of seven standards for an effective learning system: three standards for the QI team level and four standards for the collaborative or QI intervention level (see Figure 33). These standards represent a set of "simple rules" that can be applied in any setting or context in which we work and provide flexibility to define them more specifically in the specific environments in which they are being applied.

The following seven standards represent our expectations for every QI team and every collaborative or large-scale improvement intervention in order to successfully generate better care practices (changes) shown to work from collective experiences that are ready to be shared to new sites in the context of spread and scale up.

**Figure 33. HCI learning system standards**

*Key QI Team Tasks:*

1. Maintain a record of changes being tested (dates and description)
2. Graph indicators on time series chart and annotate with changes tested regularly
3. Share tested changes and results with others

*Key Collaborative Tasks:*

4. Maintain up-to-date inventory of changes being tested at each site
5. Aggregate and analyze results in light of tested changes across sites
6. Regularly consolidate and share learning about changes being tested within the collaborative
7. Package and share learning about effective changes to those outside the collaborative, both at national and global level (HCI Portal)

**Directions for FY11**

In FY11, HCI will complete studies on institutionalization in Niger, Nicaragua, and Honduras and spread and shared learning studies in Ecuador, Guatemala, Nicaragua, Russia, and Uganda. Studies on QI team performance and coaching will be completed in Guatemala (ProCONE CQI teams), Mali (factors that inhibit performance), and Uganda (comparison of two coaching strategies). We will also carry out several studies related to adapting and implementing QI for community-level EONC programs: Afghanistan, Benin, Guatemala, and Mali. New cost-effectiveness studies will be carried out in Afghanistan (community and facility EONC collaborative), Mali (EONC), and Uganda (comparison of two coaching strategies). Finally, the R&E team will continue to support countries and element groups in implementing studies to answer their questions: Guatemala (TBA referrals), Niger (PHI malaria collaborative), and Niger (health workforce practice, QI, and employee engagement).

**4.4 Technical Leadership and Communication**

**Overview of HCI’s Program in FY10**

<b>Activities</b>	<b>What are we trying to accomplish at global scale?</b>
Advocate for adoption of QI approaches, policies, and programs by international, regional, and national health care organizations	<ul style="list-style-type: none"> <li>▪ Expand the use of QI approaches in USAID-assisted health care systems</li> <li>▪ Expand awareness of the evidence for modern QI approaches through presentations at regional and international events</li> </ul>
Produce technical reports and submit articles to peer-reviewed journals that describe QI interventions and measure their impact	<ul style="list-style-type: none"> <li>▪ Develop and disseminate evidence for the cost-effectiveness and benefits of applying modern QI approaches in USAID-assisted health care systems</li> <li>▪ Demonstrate the results of USAID’s investment in health care quality improvement</li> </ul>
Facilitate articles and broadcasts in mass media that describe QI activities and results	<ul style="list-style-type: none"> <li>▪ 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</li> </ul>
Provide global technical leadership for USAID’s worldwide efforts to improve health care in developing countries	<ul style="list-style-type: none"> <li>▪ Expand the use of modern QI approaches in USAID-assisted health care systems and by USAID cooperating agencies</li> <li>▪ Demonstrate the results of USAID’s investment in health care quality improvement</li> </ul>

Support the development of new graduate training programs in QI as applied to low- and middle-income countries	<ul style="list-style-type: none"> <li>▪ Develop QI capacity in the next generation of health care providers and help to standardize the teaching of modern QI approaches</li> </ul>
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## Main Activities and Results

### Advocate for the adoption of QI approaches

HCI technical leadership activities passed to TO3 funding in June 2010. Under TO3 funding, HCI staff participated in the technical program of seven international, regional, and national conferences in FY10, making 26 presentations on QI approaches and results to inform larger professional audiences of the effectiveness of QI approaches and advocate for their broader application. The conferences and presentation topics are detailed in Table 9.

**Table 9. HCI TO3 participation in national, regional, and international conferences, FY10**

Conference, Date and Location	Presenter(s), Topics and HCI Participation
Transforming Care for Chronic Conditions in Africa, May 31-June 3, 2010, Kampala, Uganda	<p>As part of the Chronic Conditions Care Workshop:</p> <ul style="list-style-type: none"> <li>▪ Nigel Livesley presented “The challenge of acute vs. chronic disease and the need for a new approach”</li> </ul> <p>As part of the International Forum Satellite Conference:</p> <ul style="list-style-type: none"> <li>▪ M. Rashad Massoud presented “Improving Health Care Quality”</li> <li>▪ Nigel Livesley and M. Rashad Massoud presented “Improving Care for Patients on Antiretroviral Therapy”</li> <li>▪ Maina Boucar presented “Applying QI to Human Resources for Health”</li> <li>▪ Jean Nguessan presented “Improving HIV care in Cote d’Ivoire”</li> <li>▪ Francis Ocen presented (with Brandon Bennett of IHI) “Achieving System Level Results”</li> </ul> <p>As part of the “Improving Care for Patients on ART” Skill-building Workshop:</p> <ul style="list-style-type: none"> <li>▪ M. Rashad Massoud presented “Improving care for patients on ART using gap analysis”</li> <li>▪ Nigel Livesley presented “Estimating the number of patients requiring treatment and setting up data collection and analysis system”</li> <li>▪ Suzanne Gaudreault presented “Understanding causes and closing gaps”</li> </ul>
Global Health Council 2010 Annual Conference, June 14-18, 2010, Washington, DC	<ul style="list-style-type: none"> <li>▪ HCI conducted, in partnership with the Institute for Healthcare Improvement (IHI) a full-day skill-building workshop, “Implementing a Gap Analysis Framework to Improve Quality of Care for Your Patients. Case Study: Improving Care for Patients on ART”. The workshop was led by M. Rashad Massoud, Suzanne Gaudreault, Shawn Dick, Fazila Shakir, Pierre Barker, and Brandon Bennett.</li> <li>▪ Fazila Shakir presented “Estimating Quality Gaps in ART Care”</li> <li>▪ Kathleen Hill presented “Accelerating Progress for Mothers and Newborns in Niger”</li> <li>▪ M. Rashad Massoud presented “A Framework for Improving Care for Patients on Antiretroviral Therapy”</li> <li>▪ Jean Nguessan presented the poster, “Assessing and Improving HIV Care Documentation and retention”</li> </ul>
Good, Better, Best: Moving to Excellence in Health Care: Middle East Regional Quality Conference, June 28-30, 2010, Amman, Jordan	<ul style="list-style-type: none"> <li>▪ M. Rashad Massoud, Jorge Hermida, Mirwais Rahimzai, Shawn Dick, and Jason Leitch of NHS Scotland led a pre-conference skill-building workshop on June 28 entitled, “Getting Your Quality Improvement Project Started.”</li> <li>▪ M. Rashad Massoud gave the plenary presentation “Safe, Quality Care: Global Perspective” and moderated a plenary session on “Governance and Leadership”</li> <li>▪ M. Rashad Massoud moderated a Policy Seminar on “Quality Improvement at the National Level”. Jorge Hermida, Mirwais Rahimzai, Shawn Dick, and Jason Leitch also participated in the seminar.</li> </ul>
2010 International AIDS Conference July 18-23, 2010	<ul style="list-style-type: none"> <li>▪ Wondwossen Hailu presented the poster, Applying the Science of Improvement to Programs for Orphans and Vulnerable Children</li> <li>▪ Marie-Eve Hammink presented the poster, Why not listen to us before designing</li> </ul>

Vienna, Austria	<p>programs for us?: the voices of children in OVC programs in Côte d'Ivoire and Mozambique</p> <ul style="list-style-type: none"> <li>▪ Danilo Nuñez presented the poster, Early mortality of HIV-patients on ART from a low-prevalence country in Latin America: Results from Nicaragua</li> <li>▪ Victor Boguslavsky presented the poster, The “Framework for Engagement into HIV Care”: a tool for strengthening the health system’s response to the HIV/AIDS epidemic in St. Petersburg, Russia (A second poster from the HCI Russia team, “A new model for integrated, state-supported, social service case management for HIV-infected mothers and their children in St. Petersburg, Russia” was accepted as an electronic poster on the IAC 2010 web site</li> <li>▪ Juliana Nabwire presented the poster, “How Can We Stop Wasting Client’s Time?”</li> </ul>
First Symposium on Patient Safety and its Impact on Health, July 21, 2010, Mexico City, Mexico	<ul style="list-style-type: none"> <li>▪ Jorge Hermida participated and presented on “Patient safety and quality improvement.” The Symposium was convened by the Latin American Society for Quality in Health Care (SOLACASA) and the Mexican Society for Quality in Health Care (SOMECASA).</li> </ul>
CORE Group Fall Meeting, September 14-15, 2010, Washington, DC	<ul style="list-style-type: none"> <li>▪ Lani Marquez organized a session where she presented on QI and collaboratives; Judy Chang from Plan USA presented on the Benin malaria collaborative (funded by QAP), and Nicole Richardson of Save the Children presented on the Ethiopia OVC collaborative. David Shanklin of ChildFund made remarks about the plans ChildFund has with HCI to implement a collaborative in Senegal on community case management of sick children.</li> <li>▪ Lauren Crigler present as part of a session organized by World Vision on “Trends in Community Health Worker Programs – Perspectives of WHO and USAID”</li> <li>▪ Whitney Isenhower staffed an HCI table at which she demonstrated the HCI Portal.</li> </ul>
Consortium of Universities for Global Health (CUGH) annual meeting, Sept. 21, 2010, Seattle, WA	<ul style="list-style-type: none"> <li>▪ M. Rashad Massoud presented “Applying Improvement Science to Strengthen Health Systems”</li> </ul>

### Produce technical reports

Five articles were prepared and submitted for publication under TO3 funding in FY10. In addition, the project published three research reports, six technical reports, two QI workshop participant manuals, and eight short reports/flyers. These publications are detailed in Table 10.

**Table 10. HCI TO3 journal articles, reports, and informational materials submitted or published in FY10**

<b>Journal Articles—Submitted for Publication</b>
Franco LM and Marquez L. Effectiveness of collaborative improvement: evidence from 27 applications in 12 less developed and middle-income countries. Submitted 2 June 2010 to <i>Quality and Safety in Health Care</i> . MS: 2010-044388
Cost-effectiveness of a pediatric care improvement intervention in Nicaragua. E. Broughton, I. Gomez, O. Nuñez, J. Wong. Submitted 10 October 2010 to the <i>Pan American Journal of Public Health</i> , Manuscript ID 2010-00600
Economic analysis of a pediatric ventilator-associated pneumonia prevention initiative in Nicaragua. Edward Broughton, Sergio R. López, María Nela Aguilar, María Mercedes Somarriba, Magaly Pérez, Nieves Sánchez. Submitted 30 September 2010 to <i>Infection Control and Hospital Epidemiology</i>
Cost-Effectiveness of Collaborative Improvement for Essential Obstetric Care. Edward Broughton, Zakari Saley, Maina Boucar, Dondi Alagane, Kathleen Hill, Aisha Marafa, Yaroh Asma, Karimou Sani. Submitted 12 October 2010 to the <i>Bulletin of the WHO</i> .
Validity of quality performance indicator self-evaluation for maternal and newborn health in Ecuador J Hermida, E Broughton & LM Franco. Submitted 2 September 2010 to <i>Int J Quality in Health Care</i> , Manuscript INTQHC-2010-09-0281

<b>Research and Evaluation Reports (Date Published)</b>
Luseno W, Nyambo M, Burkhalter B, Ngonyani M, Rumisha D, and Ntoga B. 2010. Evaluation of scale-up of the PMTCT infant feeding counseling training program in Tanzania. HIV Training Evaluation. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC). (September)
Burkhalter B. A Summary of Results and Lessons from HIV Training Evaluations. 2010. Technical memo submitted to USAID (September 2010)
Burkhalter B. Review of Selected Literature: HIV Training Evaluation & Performance Measurement. 2010. Technical memo submitted to USAID (September 2010)
<b>Technical Reports (Date Published)</b>
Kyeyagalire R, Burkhalter B, Livesley N, Namuwenge N. 2010. A Rapid Evaluation of the Uganda MoH Training Program on the Use of HIV Patient Monitoring Tools. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (June 2010)
Hiltebeitel S, Green C, Goodrich E. 2010. Round Table Meeting on the National Improvement Strategy and Infrastructure for Improving Health Care in Afghanistan. Proceedings. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (June 2010)
Franco LM and Marquez L. A Learning System to Support Health Care Improvement: Guidance on Learning System Standards (6 page technical guidance) (September 2010)
Jaramillo L. 2010. Decline in Human Fertility: 1950-2007. <i>Technical Report</i> . Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC). (September 2010)
Wittcoff A, Furth R, Nabwire J, and Crigler L. 2010. Baseline Assessment of HIV Service Provider Productivity and Efficiency in Uganda. <i>Technical Report</i> . (September 2010)
Zeribi KA and Franco LM. Guidance for Analyzing Quality Improvement Data Using Time Series Charts (14 page research tool) (September 2010)
<b>Workshop Participant Handbooks (Date Published)</b>
Bennett B. 2010. Quality Improvement Advisor Training for Programs Serving Orphans and Vulnerable Children (OVC). June 7-9, 2010, Kampala, Uganda. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (June 2010)
Dick S, Gaudreault S, Shakir F. 2010. Implementing a Gap Analysis Framework to Improve Quality of Care for Your Patients. Case Study: Improving Care for Patients on ART. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (June 2010)
<b>Short Report and Flyers (Date Published)</b>
The USAID Health Care Improvement Web Portal (2 page flyer) (June 2010)
Improving the Quality of HIV and AIDS Care and Related Services in Cote d'Ivoire (4 page flyer) (June 2010)
How to Obtain Technical Assistance through the USAID Health Care Improvement Contract (2 page flyer) (June 2010)
Reaching Maternal and Newborn Care Standards in Santa Rosa de Lima Hospital (El Salvador) (2 page flyer) (September 2010)
Cumplimiento de los Estándares de la Calidad en la Atención Materna Neonatal en el Hospital Santa Rosa de Lima (El Salvador) (2 page flyer) (September 2010)
The Framework for Engagement into HIV Care: A Tool for Strengthening the Health System's Response to the HIV/AIDS Epidemic in St. Petersburg, Russia (2 page flyer) (July 2010)
A New Model for Social Service Case Management for HIV-infected Mothers and their Children in St. Petersburg, Russia (2 page flyer) (July 2010)
PEPFAR   Care that Counts: Improving the Quality of Programs for Orphans and Vulnerable Children (4 page flyer) (July 2010)

### **Facilitate articles and broadcasts in mass media**

HCI facilitated three mass media articles under TO3 in FY10 addressing the nature of QI activities and their results. HCI's team in Bolivia facilitated the publication of an article in a leading national newspaper, *La Prensa*, published in La Paz, on the quality improvement efforts in El Alto to control tuberculosis. The article was published April 11, 2010.

In August 2010, HCI's team in Guatemala facilitated television, radio, and newspaper coverage of the ISO certification of the San Pedro Health Center in San Marcos. The quality certification was televised

on the national TV Channel, *GuateVision*, and the certification event was publicized the next day in the local newspapers. The significance of the certification was also addressed during a talk show on the *Emisoras Unidas* radio station.

### **Provide global technical leadership for USAID’s efforts to improve health care**

During FY10, HCI staff contributed to a number of international expert technical meetings convened by the WHO, the World Alliance for Patient Safety, the Global Health Workforce Alliance, and other agencies. HCI staff conducted five technical briefings for USAID and cooperating agency staff under TO3 in FY10 to demonstrate the results of USAID investments in health care improvement and encourage greater use of modern QI approaches in USAID-assisted countries (see Table 11).

**Table 11. Briefings and presentations for USAID, international donor, and cooperating agency staff under HCI TO3, FY10**

<b>Date and Venue</b>	<b>Presenter(s) and Topic</b>
June 10, 2010, USAID, Washington, DC	M. Rashad Massoud, Jim Heiby, consultant David Gagnon. Simon Hildebeitel, and Lani Marquez met with a delegation from the Russian Federation led by Dr. Gennadiy Sukhikh, Director of Russia’s Kulakov Federal Center for Obstetrics, Gynecology and Perinatology, to brief them on HCI activities in Russia and globally.
June 30, 2010, URC, Bethesda, MD	Lani Marquez, Stacy Kancijanac, Amy Stern, Kim Ethier, and Sonali Vaid met with Shams Syed of the WHO Alliance for Patient Safety/African Partnership for Patient Safety to discuss HCI and URC patient safety activities in Africa.
September 29, 2010, JHU Bloomberg School of Public Health	M. Rashad Massoud and Jim Heiby taught at the JHU QA course at JHSPH
September 16, 2010, Ronald Reagan Building, Washington, DC	HCI sponsored the presentation by Sir Liam Donaldson, Chair of WHO Patient Safety, on “The Role of Improving Safety and Quality in Addressing the Millennium Development Goals”
July 28, 2010, OHA. USAID, Washington, DC	M. Rashad Massoud, Suzanne Gaudreault and Kathleen Hill joined with Jim Heiby to provide a briefing on the Uganda Chronic Care Meeting--highlights and next steps

### **Support the development of QI training programs**

During FY10, HCI supported the development of graduate level training in QI in two countries. The first training is a permanent training course on QI with the Afghanistan Public Health Institute (APHI) of the MOPH. During April and June 2010, training on QI was conducted in two sessions for the APHI Extensive Public Health Pre-service Training Course for new graduates of Kabul Medical University.

The second is a QI curriculum that is being introduced in a new medical school in Kenya: the Kenya Baptist Medical School. This new medical school will be opened in 2011. We are working with senior faculty of the school to build in coursework on health care quality improvement in QI as part of the school’s core curriculum.

### **Directions for FY11**

All HCI technical leadership activities will be implemented under TO3 in FY11. We will continue to prioritize in FY11 the development of manuscripts for submission to peer-reviewed journals and the development of technical publications and articles in mass media describing QI results and impact.

## 5 Performance Tracking Plan

Cumulative progress in meeting HCI TO1 performance targets is summarized in Table 12 by task order objective.

**Table 12. HCI TO3 performance tracking: Cumulative achievements through FY10**

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
<b>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</b>	
<b>Performance target 1.1:</b> <i>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.</i>	<ul style="list-style-type: none"> <li>▪ The SES Endline Evaluation report was completed and submitted to the COTR on September 30, 2010.</li> <li>▪ The learning system standards were communicated to all HCI country teams through guidance issued by the HCI Director in September 2010.</li> </ul>
<b>Performance target 1.2:</b> <i>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.</i>	<ul style="list-style-type: none"> <li>▪ A report summarizing the learning system standards and how they are implemented in all countries was submitted to the COTR on September 30, 2010.</li> </ul>
<b>Performance target 1.3:</b> <i>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</i>	<ul style="list-style-type: none"> <li>▪ A plan for ongoing analysis and synthesis of quantitative results from the learning system was submitted to the COTR on September 30, 2010. Several comparative analyses of results across HCI-funded QI programs are outlined in the plan for completion in FY11:               <ul style="list-style-type: none"> <li>– Comparative analysis of shared learning</li> <li>– Comparative analysis of institutionalization of QI approaches and of QI team performance</li> <li>– Comparative analysis on spread of improvement, including review of the status of HCI-supported spread collaboratives</li> </ul>               These analyses will summarize results across countries, including comparison of indicators, analyze interventions, and identify promising approaches that merit wider application in QI programs.             </li> </ul>
<b>Performance target 1.4:</b> <i>Beginning with the submission of the Year One annual report for Task Order #3, the contractor will provide a comprehensive summary of supported QI activities and the quantitative results of these activities, including analysis with follow-on recommendations.</i>	<ul style="list-style-type: none"> <li>▪ The section on each HCI-assisted country in the TO3 FY10 Annual Project Report includes a comprehensive summary of supported QI activities and quantitative results with analysis and next steps for implementation in FY11.</li> <li>▪ 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. Recommendations for follow-on actions are presented to each funding Mission and USAID Washington office through country- and activity-specific end-of-year reporting, Country Operational Plans (COPs), and HIV/AIDS Operational Plans (HOPs).</li> </ul>
<b>Objective 2: Institutionalize modern quality improvement approaches as an integral part of health care in USAID-assisted countries</b>	
<b>Performance target 2.1:</b> <i>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</i>	<ul style="list-style-type: none"> <li>▪ Steps taken and progress to date in institutionalizing QI approaches in all 12 countries assisted under HCI TO3 were summarized in the HCI TO3 FY10 Self-Evaluation Report.</li> <li>▪ In FY11, drawing on institutionalization studies conducted to date, HCI will develop standard indicators of QI institutionalization that all HCI-support country programs will be asked to begin applying in</li> </ul>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
<p><i>institutionalization of QI.</i></p>	<p>FY11. Studies that will inform the development of institutionalization indicators include:</p> <ul style="list-style-type: none"> <li>– Niger: Effects of an institutionalization change package on maintaining gains and institutionalizing QI</li> <li>– Honduras: Status of institutionalization of QI activities in demonstration and replication regions</li> <li>– Nicaragua: Status of institutionalization of QI</li> <li>– Ecuador: Status of institutionalization in demonstration sites</li> </ul> <ul style="list-style-type: none"> <li>▪ All HCI-supported countries will conduct self-assessments using these standard indicators during FY11. Results of these self-assessments and summaries of HCI efforts to support institutionalization in each country will be included in the HCI TO3 FY11 Annual Project Report.</li> <li>▪ New studies on institutionalization will be developed in FY11, including: <ul style="list-style-type: none"> <li>– Nicaragua: Institutionalization of QI in ProMujer</li> <li>– Niger: Drivers and costs of institutionalizing quality in regional health system</li> <li>– Russia; Institutionalization of QI in previous HIV collaborative areas</li> <li>– Russia: Institutionalization of QI in MNCH sites</li> </ul> </li> </ul>
<p><b>Objective 3: Expand the evidence base for the application of QI to human resources (HR) planning and management</b></p>	
<p><b>Performance target 3.1:</b> <i>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.</i></p>	<ul style="list-style-type: none"> <li>▪ Six-month progress reports on the Niger HR collaborative were submitted to the COTR on March 31, 2010 and September 30, 2010.</li> <li>▪ Subsequent six-month progress reports will be submitted to the COTR on March 31 and September 30, 2011.</li> </ul>
<p><b>Performance target 3.2:</b> <i>During the first year of Task Order #3, the contractor 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.</i></p>	<ul style="list-style-type: none"> <li>▪ The FY10 TO3 Self-Evaluation Report included (in section 2.2.3.2) a discussion of the formal field testing of the CHW Assessment and Improvement Matrix (AIM) tool in Nepal, Benin, Ethiopia, and Zambia in FY09 and FY10. A revised version of the tool was published in April 2010 on the HCI Portal and disseminated among members of the CORE Group.</li> <li>▪ Further revisions have been made to the tool following its fourth application in Zambia in September 2010; the final version of the tool will be published in the second quarter of FY11, including finishing the 15th component on country ownership and developing supporting documentation and guidance for applying the tool.</li> </ul>
<p><b>Performance target 3.3:</b> <i>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.</i></p>	<ul style="list-style-type: none"> <li>▪ During FY10, the CHW AIM tool was disseminated widely, and HCI has been 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.</li> </ul>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
<p><b>Performance target 3.4:</b> 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>	<ol style="list-style-type: none"> <li>1. HR Collaborative in Tanzania</li> <li>2. Other high-burden country TBD</li> <li>3. Other high-burden country TBD</li> </ol>
<p><b>Performance target 3.5:</b> 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>Six studies have been developed to date:</p> <ol style="list-style-type: none"> <li>1. Russia Task Shifting study</li> <li>2. Niger documentation of HR collaborative's impact on quality of care</li> <li>3. Study of incentives for traditional midwives in Guatemala</li> <li>4. Study of the sustainability and impact of the PMTCT infant feeding counselor training program in Tanzania</li> <li>5. Uganda expert patient study</li> <li>6. Zambia CHW Functionality Tool study</li> </ol>
<p><b>Objective 4: Expand experience with the improvement collaborative approach in USAID-assisted countries</b></p>	
<p><b>Performance target 4.1:</b> During the course of Task Order #3, the contractor will develop and support 20 Phase I (improvement) collaboratives, including those begun under Task Order #1, for an average of two and a half years. These collaboratives will document an average level of improvement in the selected quality indicators of greater than 10% within 18 months.</p>	<p>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 the end of FY10, four additional phase I improvement collaboratives were launched under TO3:</p> <ol style="list-style-type: none"> <li>1. Afghanistan maternal and newborn health community demonstration collaborative in Balkh and Kunduz provinces</li> <li>2. Afghanistan Kabul maternity hospital demonstration collaborative</li> <li>3. Uganda maternal-newborn care demonstration collaborative</li> <li>4. Uganda palliative care demonstration collaborative</li> </ol> <p>As part of the project's documentation of QI interventions, baseline indicators and improvement achieved through the end of FY10 were included in the TO3 FY10 Self Evaluation Report. Collaborative profiles on the new phase I collaboratives started under TO3 will be posted on the HCI Portal.</p> <p>At least five new demonstration improvement collaboratives have been planned for FY11:</p> <ol style="list-style-type: none"> <li>1. Senegal community case management demonstration collaborative with ChildFund</li> <li>2. Tanzania PMTCT prototype to operationalize the new WHO guidelines</li> <li>3. Tanzania Most Vulnerable Children Programs demonstration collaborative in Pwani Region</li> <li>4. Russia TB demonstration collaborative in three new regions</li> <li>5. Honduras demonstration collaborative to reduce the rate of intra-hospital infections</li> </ol>
<p><b>Performance target 4.2:</b> 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>	<ul style="list-style-type: none"> <li>▪ The Niger HR collaborative addresses performance management and other health care planning and monitoring functions at the district level.</li> <li>▪ The HR collaborative launched at the end of FY10 in Mtwara, Tanzania also addresses management processes of the district health team (Council Health Management Team)</li> </ul>
<p><b>Performance target 4.3:</b> 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</p>	<p>Four collaboratives that were initiated under TO1 and continue with HCI support under TO3 are implemented by a partner organization:</p> <ol style="list-style-type: none"> <li>1. Tanzania AIDS Relief Tanga Region ART/PMTCT collaborative</li> <li>2. Tanzania Clinton Foundation/EGPAF Mtwara ART/PMTCT collaborative</li> <li>3. Tanzania Clinton Foundation/EGPAF Lindi ART/PMTCT collaborative</li> </ol>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
training and support to the partner organization.	<p>4. Tanzania FHI Morogoro ART/PMTCT collaborative</p> <p>In FY11, we will support a fifth partner collaborative in Tanzania, in Pwani Region, with 10 implementing partners:</p> <p>5. Tanzania MVC Program demonstration collaborative in Bagamoyo District in Pwani Region</p>
<p><b>Performance target 4.4:</b> <i>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.</i></p>	<p>Collaboratives developed under TO3 that address the chronic care of HIV across the continuum of care:</p> <ol style="list-style-type: none"> <li>1. Nicaragua ART</li> <li>2. Uganda palliative care</li> <li>3. Uganda chronic care</li> <li>4. Cote d'Ivoire ART/PMTCT spread collaborative</li> </ol> <p>In FY12, HCI will prepare a report summarizing the application of the chronic care model to AIDS in African countries.</p>
<p><b>Performance target 4.5:</b> <i>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.</i></p>	<p>Six studies have been developed or planned as of the end of FY10:</p> <ol style="list-style-type: none"> <li>1. Tanzania: Evaluation of the Partnership for Quality Improvement (partner collaborative) strategy (completed in FY10)</li> <li>2. Afghanistan: Strengthening the application of quality improvement for community level services for EONC (to be carried out in FY11)</li> <li>3. Guatemala: Strengthening the application of quality improvement for community level services for EONC (to be carried out in FY11)</li> <li>4. Guatemala: Descriptive study of QI team performance (to be completed in FY11)</li> <li>5. Uganda: Effectiveness of different coaching strategies on QI team performance (to be completed in FY11)</li> <li>6. Mali: Strengthening the application of quality improvement for community level services for EONC (to be carried out in FY11)</li> <li>7. Tanzania: Strengthening the application of QI methods at the community level (to be carried out in FY11)</li> </ol>
<p><b>Objective 5: Expand experience with the spread collaborative approach in USAID-assisted countries</b></p>	
<p><b>Performance target 5.1:</b> <i>The contractor will develop 20 spread collaboratives adapted to the needs of the involved health system, including those developed under Task Order #1, and support them for an average of two and a half years. In reporting on these collaboratives, the contractor will provide an estimate of the total population in catchment area of the participating facilities, with a target of at least 100,000 for the average population served. The contractor will also provide a count of the number of facilities reached by the spread collaborative, with a target average number of facilities of at least 50. Reports will also summarize the level of quality attained for each collaborative indicator, with comparison values from the corresponding Phase I (improvement) collaborative.</i></p>	<p>HCI supported 10 phase II spread collaboratives under TO1. Four phase I improvement collaboratives were developed or carried out under TO3 in FY10:</p> <ol style="list-style-type: none"> <li>1. Bolivia TB DOTS spread collaborative in El Alto, La Paz Province, serving a population of 900,000</li> <li>2. Afghanistan Maternal and newborn health facility spread collaborative in Parwan, Bamiyan and Herat provinces, serving a population of over 690,000</li> <li>3. Afghanistan Maternal and newborn health community spread collaborative in Parwan, Bamiyan and Herat provinces, serving a population of over 690,000</li> </ol> <p>Ten additional spread collaboratives are planned for FY11:</p> <ol style="list-style-type: none"> <li>4. Tanzania Clinton Foundation/EGPAF Arusha ART/PMTCT spread collaborative</li> <li>5. Tanzania FHI Iringa ART/PMTCT spread collaborative</li> <li>6. Tanzania AIDS Relief Mwanza ART/PMTCT spread collaborative</li> <li>7. Bolivia TB spread collaborative in the city of Cochabamba</li> <li>8. Russia partograph/labor optimization spread collaborative in Ivanovo, Ryazan, and Tula oblasts</li> <li>9. Russia prevention of hypothermia and respiratory disorders among neonates spread collaborative in Ivanovo, Ryazan, and Tula oblasts</li> </ol>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
	<ol style="list-style-type: none"> <li>10. Russia breastfeeding spread collaborative in Ivanovo, Ryazan, and Tula oblasts</li> <li>11. Russia prevention of unwanted pregnancies and STDs among teenagers spread collaborative in Ivanovo, Ryazan, and Tula oblasts</li> <li>12. Spread of MCH/RH successes to the entire Tambov Oblast</li> <li>13. Spread of MCH/RH successes to the entire in Kostroma Oblast</li> </ol>
<p><b>Performance target 5.2:</b> <i>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.</i></p>	<p>HCI supported 6 studies on spread under TO1. In addition to these, Four more studies were carried out under TO3 in FY10:</p> <ol style="list-style-type: none"> <li>1. Tanzania: Evaluation of the Partnership for Quality Improvement, the strategy for developing regional partner collaboratives</li> <li>2. Ecuador: Spread of EONC better care practices and CQI</li> <li>3. Russia: Spread of innovations in MCH collaboratives through a web portal</li> <li>4. Uganda: Process of shared learning in the outcomes collaborative</li> </ol> <p>Eight new studies on spread have been planned for implementation under TO3 in FY11:</p> <ol style="list-style-type: none"> <li>5. Cote d'Ivoire: Cost effectiveness of spread of innovations in PMTCT and ART to new teams</li> <li>6. Cote d'Ivoire: process evaluation of the spread strategy</li> <li>7. Nicaragua: Expanding the learning: Spread of innovations in MNCH to new teams</li> <li>8. Afghanistan: Process evaluation of the spread strategy</li> <li>9. Afghanistan: Process evaluation of the process for synthesis of learning</li> <li>10. Mali: Cost-effectiveness of spreading a change package from one country to another</li> <li>11. Niger: Spreading HR improvements</li> <li>12. Russia: Expanding QI to new regions (MNCH and HIV)</li> </ol>
<p><b>Performance target 5.3:</b> <i>By the end of the second year of Task Order #3 (September 2011), the contractor will submit a report summarizing the status of spread activities to date, including the findings of studies and evaluations and major knowledge gaps</i></p>	<ul style="list-style-type: none"> <li>▪ Drawing on the findings of the 18 spread studies that will have been carried out by HCI by the end of FY11, we will prepare an analytical report synthesizing our findings on spread and shared learning and submit it to the COTR by the end of FY11.</li> </ul>
<p><b>Objective 6: Expand the experience base for other specific QI approaches</b></p>	
<p><b>Performance target 6.1:</b> <i>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.</i></p>	<p>Six applications or evaluations of other QI approaches were completed by the end of FY10 under TO1. Ten additional studies and applications have been started or planned under TO3 by the end of FY10:</p> <ol style="list-style-type: none"> <li>1. Field testing and evaluation of the Framework for improving care and outcomes of patients on ART</li> <li>2. Malawi HIV/AIDS quality of care assessment (data collection completed in FY10)</li> <li>3. Documentation of impact of OVC standards in Tanzania with Pact (initiated in FY10)</li> <li>4. Documentation of impact of OVC standards in Strengthening Community Safety Nets Project in Ethiopia with ChildFund (initiated in FY10)</li> <li>5. Documentation of the ISO 9001:2008 certification for administrative, financial, and clinical services in Guatemala (to be carried out in FY11)</li> <li>6. Documentation of the impact of OVC standards development and piloting in Cote d'Ivoire (to be carried out in FY11)</li> <li>7. Documentation of the impact of OVC standards development and</li> </ol>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
	<p>piloting in Mozambique (to be carried out in FY11)</p> <ol style="list-style-type: none"> <li>8. Documentation of the impact of OVC standards development and piloting in Kenya (to be carried out in FY11)</li> <li>9. Development of a How-to Guide for Applying the ART Framework (initiated in FY10)</li> <li>10. Cote d'Ivoire: Cost-effectiveness of strategies for disseminating prevention norms (to be carried out in FY11)</li> </ol>
<p><b>Performance target 6.2:</b> Under Task Order #3, the contractor will carry out at least two comparative evaluations of the performance of providers participating in a collaborative, and that of a similar group, receiving traditional supervision for the same quality indicators.</p>	<p>Two studies have been proposed to the COTR for approval:</p> <ol style="list-style-type: none"> <li>1. A comparison of the effectiveness of collaborative improvement plus content training vs. content training with regular supervision. Intervention sites would be those that are participating in a collaborative, while control sites would receive clinical training from HCI trainers but not receive any QI training and not participate in a collaborative.</li> <li>2. The second study proposed would compare the effectiveness of collaborative improvement vs. non-collaborative quality improvement. This would involve comparing sites which are participating in collaborative improvement with sites that are not participating in collaborative improvement but are doing quality improvement at the facility level. Thus the control group would receive QI training but would not benefit from peer-peer/shared learning, learning sessions, or other collaborative interventions.</li> </ol>
<p><b>Objective 7: Improve the cost-effectiveness of QI in USAID-assisted countries</b></p>	
<p><b>Performance target 7.1:</b> 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>	<ul style="list-style-type: none"> <li>▪ A report summarizing the design, features, and capabilities of the HCI KM system was submitted to the COTR on 30 September 30, 2010.</li> </ul>
<p><b>Performance target 7.2:</b> During the course of Task Order #3, the contractor will carry out 20 evaluations and studies addressing the design of the knowledge management system, user applications of system content for QI and validation of submissions, including those carried out under Task Order #1.</p>	<p>In addition to the 15 KM studies that will be completed under TO1, six additional KM intervention studies are planned for completion in FY11 under TO3:</p> <ol style="list-style-type: none"> <li>1. Descriptive study of the interactive features of other development web sites.</li> <li>2. Study of best practices in the management of communities of practice and how they can be applied by HCI</li> <li>3. Analysis of options for HCI for using social media such as Facebook and, Twitter, etc.)</li> <li>4. Survey of potential users of the CHW Central community of practice site to inform the design and content of the CHW Central site.</li> <li>5. Survey of users of the public portal of the Russian Web Communicator site.</li> <li>6. Evaluation of the Helping Babies Breathe community of practice site.</li> </ol>
<p><b>Performance target 7.3:</b> During the course of Task Order #3, the contractor will carry out 15 studies and evaluations related to improving the cost-effectiveness of specific QI approaches or methodologies, including those carried out under Task Order #1.</p>	<p>Ten cost-effectiveness studies were carried out under TO1. Fifteen new studies to improve the cost-effectiveness and efficiency of QI have been proposed under TO3:</p> <ol style="list-style-type: none"> <li>1. Uganda: Cost-effectiveness of central level vs. District coaching strategy</li> <li>2. Ecuador: Cost implications of spread strategy</li> <li>3. Russia: Cost-effectiveness of an interactive website for sharing innovations</li> <li>4. Mali: Cost-effectiveness of spread of quality improvement for EONC services from Niger to Mali</li> </ol>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
	<ol style="list-style-type: none"> <li>5. Afghanistan: Cost-effectiveness of quality improvement in the context of EONC collaboratives in Balkh and Kunduz</li> <li>6. Afghanistan: Cost-effectiveness of quality improvement in the context of hospital level improvement in Kabul</li> <li>7. Cote d'Ivoire: Cost-effectiveness analysis of spread strategies</li> <li>8. Cote d'Ivoire: Cost-effectiveness analysis of dissemination strategies for HIV prevention norms</li> <li>9. Nicaragua: Cost-effectiveness analysis of kangaroo mother care interventions</li> <li>10. Nicaragua: Cost-effectiveness analysis of QI interventions for family planning</li> <li>11. Nicaragua: Cost-effectiveness analysis of QI interventions for HIV</li> <li>12. Kenya: Cost-effectiveness analysis of OVC standards piloting</li> <li>13. Tanzania: Cost-effectiveness analysis of OVC standards intervention</li> <li>14. Guidance on sample size for time series charts</li> <li>15. Synthesis of learning on data validity</li> </ol>
<p><b>Performance target 7.4:</b> <i>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.</i></p>	<ul style="list-style-type: none"> <li>▪ By the end of FY10, the HCI Portal had received 18,500 unique visits, 28% of whom were returning visitors.</li> <li>▪ The Spanish maternal and child health web site (<a href="http://www.maternoinfantil.org">www.maternoinfantil.org</a>) has had over 48,000 unique visits since its launch in FY09.</li> <li>▪ While the number of users who have accessed the HCI knowledge management system has far exceeded the target set by USAID, the number of submissions of content from outside the task order is well below the target set by USAID: only 18 outside submissions by the end of FY10. In FY11, various interventions have been planned to stimulate outside submissions to the HCI Portal.</li> <li>▪ By the end of FY10, HCI had received and responded to approximately 125 requests for further information or assistance through the knowledge management websites: 75 received through the HCI Portal, and 50 received through the maternoinfantil.org site.</li> </ul>
<p><b>Performance target 7.5:</b> <i>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.</i></p>	<p>This is a task will be carried out in FY12.</p>
<p><b>Objective 8: Provide global technical leadership for QI in USAID-assisted countries</b></p>	
<p><b>Performance target 8.1:</b> <i>By the end of Task Order #3 received written confirmation from no fewer than five international organizations with objectives in health systems strengthening that they will incorporate language that explicitly endorses QI as a strategy for achieving these objectives.</i></p>	<p>Organizations being explored as candidates QI policy development:</p> <ul style="list-style-type: none"> <li>• ChildFund International, with whom we are developing a community IMCI improvement collaborative;</li> <li>• The East, Central, and Southern Africa Community (ECSA), with whom URC's senior QI Advisor, Dr. Stephen Kinoti, has engaged for the past several years to deliver keynote addresses at their annual meetings; and</li> <li>• Social Welfare Associations in Africa, with whom we are discussing involvement in an African Partnership for Quality Improvement in OVC Programs.</li> </ul>
<p><b>Performance target 8.2:</b> <i>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</i></p>	<p>HCI had published 10 technical reports and three journal articles describing QI interventions and measuring their impact by the end of FY10 and prepared another five manuscripts which we expect will be accepted for publication in peer-reviewed journals. New technical reports planned under TO3 in FY11:</p> <ol style="list-style-type: none"> <li>1. Niger HR Collaborative Technical Report</li> </ol>

HCI TO3 Performance Target	How the target has been met in FY10 or will be met
<i>journals, as well as those produced under Task Order # 1.</i>	2. ART Framework testing final report New articles for submission to peer-reviewed journals planned under TO3 in FY11: 3. Ecuador AMTSL spread 4. Niger EONC Collaborative 5. Niger institutionalization study
<b>Performance target 8.3:</b> <i>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.</i>	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. We are on track to meet this performance target.
<b>Performance target 8.4:</b> <i>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.</i>	We currently have two courses in development: 1. A permanent training course on QI with the Afghanistan Public Health Institute 2. A QI curriculum is being introduced in a new medical school in Kenya: the Kenya Baptist Medical School. This new medical school will be opened in 2011. We are working with senior faculty of the school to build in coursework on health care quality improvement in QI as part of the school's core curriculum.



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